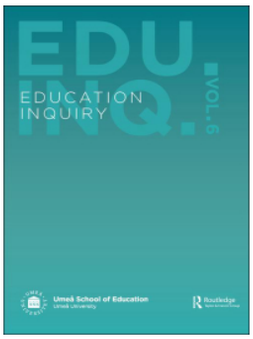

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Translating assessment for learning to work in groups of students with intellectual disabilities

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ABSTRACT

The potential of using Assessment for Learning (AfL) is well established, but studies of AfL practice in groups of students with intellectual disabilities (ID) are rare. The respondents in this study were assistants and teachers working in compulsory school for students with ID. In a two-year project they had worked with translating five AfL key strategies (KSs) to fit their context. The study aimed at exploring this translation to depict the use of AfL KSs in the classes of students with ID and reveal opportunities and challenges. The AfL KSs were used to structure interviews and classroom observations, and an ensuing thematic data analysis. The overall conclusion confirms the potential of using AfL in this context. Three themes depict the overall use of AfL: a whole-class focus, a team approach, and the integrated use of the AfL KSs. Various themes characterise the implementation of each KS, and the opportunities and challenges. The findings implicate benefits for the students, and advantages as well as concerns for the staff. The findings are expected to be of value inside and outside the study's context. The study demonstrates how contextual variation can contribute to new insights and questions for the AfL research field.

KEYWORDS

Assessment for learning; formative assessment; compulsory school for students with intellectual disability; special school; intellectual disability

Introduction

The potential of using Assessment for Learning (AfL) is well established (e.g. Black & Wiliam, 1998; Hattie, 2009; Wisniewski, Zierer, & Hattie, 2020), but implementing this practice is challenging (e.g. Black, 2015), and little is known about using AfL in groups of students with intellectual disabilities (ID). This lack of knowledge is unfortunate, because the staff in compulsory school for students with ID would need guidance for how to implement AfL into their practice (Butler & Schnellert, 2015), in a way that benefits the students in terms of motivation, independency and becoming active learners. The basic principle of AfL is to use information about student learning needs to adapt teaching and learning to those needs (e.g. Black & Wiliam, 1998; Wiliam & Thompson, 2008). Though intuitively easy to grasp, the practices of both eliciting information (Wylie & Lyon, 2015) and responding appropriately (Heritage,

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Kim, Vendlinski, & Herman, 2009) can be challenging. Moreover, involving students in assessment and learning processes adds further challenges (e.g. Black, 2015). Principles, theories, and strategies of AfL have been developed in regular schools, and their applicability in other educational contexts, such as classes of students with ID, remains underexplored (Butler & Schnellert, 2015). This article is intended to fill that gap.

This study was conducted in a Swedish compulsory school for students with ID (grades 1–9). Before the study, staff conducted a two-year project of translating AfL key strategies (KSs, see below) to fit the school's context. The study aimed at exploring this translation guided by the following research questions: How were the AfL KSs implemented in the classes of students with ID?; and What opportunities and challenges are exposed when using AfL in the compulsory school for students with ID?

Assessment for learning (AfL), principles, theories, and key strategies

The Wiliam and Thompson (2008) framework presents three questions related to teaching and learning concerning where the learner is going, where the learner is right now, and how to get there (see also Hattie & Timperley, 2007; Sadler, 1989) and three agents, i.e. teachers, peers, and learners. Figure 1 shows how these elements form five key strategies (KSs).

The integrated continuous use of all these strategies embedded in ordinary classroom practice makes AfL efficient (Black & Wiliam, 2009). Crucial aspects of such practice are: the interactive feedback process (e.g. Black, 2015); the focus on answering the three teaching and learning questions (Hattie & Timperley, 2007; Sadler, 1989); and the active involvement of students (Carless & Boud, 2018; van der Kleij, Adie, & Cumming, 2019). The ultimate aim of AfL is that students should develop autonomy and competence to self-regulate their learning when they are provided the opportunity and support to be involved in assessment and feedback processes (e.g. Black & Wiliam, 1998; Butler & Schnellert, 2015; Clark, 2012; Hattie & Timperley, 2007; Heritage & Wylie, 2018; Panadero, Andrade, & Brookhart, 2018). Self-regulated learning (SRL) competence

<table>
<tr><th></th><th>Where the learner is going</th><th>Where the learner is right now</th><th>How to get there</th></tr>
<tr><td>Teacher</td><td>1 Clarifying learning intentions and criteria for success</td><td>2 Engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding</td><td>3 Providing feedback that moves learners forward</td></tr>
<tr><td>Peer</td><td>Understanding and sharing learning intentions and criteria for success</td><td colspan="2">4 Activating students as instructional resources for one another</td></tr>
<tr><td>Learner</td><td>Understanding learning intentions and criteria for success</td><td colspan="2">5 Activating students as the owners of their own learning</td></tr>
</table>

Figure 1. The relation between key strategies, instructional processes and agents in the classroom (After a figure in Wiliam & Thompson, 2008, p. 63).[1]

includes making use of resources available in the learning context (Andrade & Brookhart, 2020), for example, seeking help from peers, and such "life-long learning" strategies (e.g. Black, 2015; Butler & Schnellert, 2015) are supported when SRL becomes an additional learning goal besides the academic subject in AfL practice (Andersson & Granberg, 2022).

Education for students with ID in Sweden

In Sweden, education for students with ID is governed by its own curricula (e.g. Klang et al., 2020). This education is offered in regular school settings, although alternate settings are more common. Teaching in compulsory school for students with ID has been criticised for overemphasising students' social care and well-being, with negative effects on their academic learning (Swedish Schools Inspectorate, 2010). In response, curriculum reform in 2013 put a stronger emphasis on learning goals (Swedish National Agency for Education, 2016), although this reform has not yet been realised in practice (Östlund & Hanreddy, 2020). Besides an unbalanced focus on care and low involvement of students in assessment and learning processes (Östlund & Hanreddy, 2020; Swedish Schools Inspectorate, 2010), other drawbacks are low expectations for students' academic learning (Klang et al., 2020) and the absence of student interaction as part of the learning (Östlund, 2015). Strengths have also been identified, such as frequent support for participation (Klang et al., 2020) and interaction (Östlund, 2015) in social situations. It can be concluded that assistants working in these classes have a complex task because of their multiple responsibilities related to students' academic learning, social development, and wellbeing (Östlund, Barow, Dahlberg, & Johansson, 2021).

Classes of students with ID and AfL

Using AfL in classes of students with ID entails both opportunities and challenges. For example, the usually low numbers of students and high numbers of adults in the classes can – in line with AfL – facilitate adapting teaching and learning to students' individual needs, but with the risk of adult dominance. Moreover, such learning risks giving rise to individual tracks rather than joint learning in which students are resources for each other.

Previous studies have examined the learning of the assistants and teachers (Anderson & Östlund, 2017; Östlund, 2019), but still indicate the further potential of using AfL in the compulsory school for students with ID context. Student involvement in assessment and learning processes can help the adults better identify the students' learning needs, and when video-recording was used, the adults' competence to identify learning needs and provide feedback increased. There were indications of students being more proactive in their learning and of increased confidence, trust, and interactive learning among the students. Challenges were also reported concerning, for example, getting all students involved, huge variations in students' learning needs, and finding alternative ways of communication.

A study in an upper-secondary school for students with ID identified the possibility of using AfL to support SRL (Andersson & Granberg, 2022). The two teachers in the study handled the subject learning goal and the goal of developing SRL competence

differently, either *in parallel* or as *integrated goals*. One teacher used the AfL KSs and, in parallel, provided opportunities for the students to solve problems by themselves. She provided social support, such as role-modelling and feedback, and non-social support in terms of scaffolding routines and structures. The other teacher used the metaphors of being a pilot or passenger to communicate the two goals as integrated. Similarly, she talked about co-pilots in relation to students helping each other. Challenges reported from this study were experiences of low expectations and caretaking hampering students from viewing themselves as future independent problem-solving adults, and students' reluctance to admit mistakes and request help due to experiences of being deemed deficient. There were also challenges related to traditions in schools for students with ID, for example, the focus on activities or products rather than on learning goals and learning processes. Interestingly, the authors suggested that using AfL might counteract such drawbacks of tradition.

Method

The present study concerns the translation of Assessment for Learning (AfL) key strategies (KSs) to work in groups of students with ID. The study has a qualitative approach gathering data from observations and interviews to arrive at detailed classroom examples describing that translation and expose opportunities and challenges of using AfL in the compulsory school for students with ID.

Participants and context

The assistants and teachers participating in this study were both inspired and provoked by an in-service AfL training for all compulsory schools in the municipality. While the staff agreed with the principles and theories of AfL, they lacked guidance on implementing them in the compulsory school for students with ID context. Consequently, they decided to establish a complementary two-year project focusing on translating the AfL KSs. A starting position was the necessity of involving both teachers and assistants in AfL practice. It was also decided to include all age groups and classes of students with both moderate and severe ID.

A mind map with guiding questions was produced as a tool to clarify the meaning of each KS (see the sub-sections of "Findings"). During project meetings, the mind map was commonly used to identify the use of a KS in video sequences from the classrooms. This general approach of identifying existing applications of AfL was intended to inspire development and facilitate experience transfer between teaching contexts (i.e. various grades/teams) as a means to facilitate the translation of AfL to fit the compulsory school for students with ID context.

Table 1 provides an overview of the classes and the professions of the 13 respondents. The classes varied in student age, degree of disability, and number of students (i.e. 4–7). One to three 40–90-minute observations were conducted per class. The interviews were generally individual, but in two cases the respondents preferred a pair/group interview. In three classes, the staff declined to participate due to, for example, unconfident students and other tasks; nobody declined due to lack of interest.

Table 1. Overview of classes and respondents.

Class 1–3A	*Class 4–6A*	*Class 6–9A*
2 assistants, 1 teacher	2 assistants, 1 teacher	1 assistants, 1 teacher
Class 1–3B	*Class 4–6B*	*Class 6–9B*
1 assistants, 1 teacher	1 teacher	1 assistants, 1 teacher

Most teachers had long experience of working in compulsory school for students with ID, but there was considerable variation in experience among assistants.

Data collection

The researcher had extensive experience in studying the implementation of AfL in various contexts, and the observation protocol and interview guide were inspired by previous tools used for characterising AfL practice (e.g. Andersson & Granberg, 2022), including qualitative aspects regarding the implementation of each AfL KS (see Appendix). For example, effective eliciting of evidence of learning (KS2) requires all students' inclusion, strategic and continuous eliciting, and that the information should be useful for the intended purpose.

The observations were conducted in advance to facilitate the semi-structured interview by providing joint examples of AfL practice. The interview was also facilitated by the respondents' familiarity with the AfL framework. The respondents were told that the interview would "create a picture" of how AfL was used, and that they should describe the situation, their role, and the reasons for their actions. For each KS and AfL as a unit, the respondents were asked to reflect on certain opportunities and challenges related to the context of compulsory school for students with ID. The researcher reviewed the field notes the same day as the observation was conducted and the interviews were transcribed verbatim.

Data analysis

A thematic analysis was completed starting with a deductive analysis followed by an inductive and iterative analysis. First, indicators of AfL practice were identified as chunks of data that were categorised in relation to the five KSs. Second, the material was read iteratively to identify, initially tentatively, the themes constituting the whole picture (see Braun & Clarke, 2006) of how the five AfL KSs were implemented and of opportunities and challenges. This analysis followed the steps of generating initial codes; searching for themes; reviewing themes; and defining and naming themes for the implementation of each KS. Also three overarching themes of the AfL implementation were constructed. A theme did not require supporting utterances from all respondents, but did require a pattern of consistent data. The themes are presented and exemplified in the findings. The quotations were selected to illustrate how AfL was translated to the compulsory school for students with ID context and to deepen our understanding of why the picture turned out as it did. The findings have been validated by the teacher project manager.

Ethical considerations

Swedish Research Council (2002, 2011) ethical requirements concerning beneficence, non-malfeasance, informed consent, and anonymity were considered in planning and conducting the study. No recordings of or notes on students' utterances were made during the observations. References to individual classes are avoided; rather, grade levels are cited if needed or excluded if unimportant.

Findings

The findings show how the staff made the translation of Assessment for Learning (AfL) work for them and their students, as expressed by one respondent: "We worked hard to break down [i.e. translate] [the key strategies] to our level and apply them in our work, find ways to proceed from this [i.e. the respondent pointed to the AfL mind map]". The narrative below was based on the most salient themes of the translation of AfL and the key strategies (KSs), that is, themes reflecting opportunities and challenges.

Three overall themes bridge the KSs. First, the emphasis on involving the students in assessment and feedback processes shifted the focus to the teaching and learning of the whole class, rather than on individual students. Second, all actors – namely students, assistants, and the teacher – were seen as members of a team and as resources in AfL. In other words, the respondents saw the implementation of AfL as dependent on the contribution of all actors. Third, the KSs were utilised in an integrated manner. This integration is reflected in the following sections, which are titled in accordance with the AfL mind map, and describing the details for the implementation of each KS.

KS1. Sharing learning goals: how can I help students know what the goal is?

To help the students know what the goals are, the staff made the learning goals and success criteria *concrete*, *visible*, and *accessible*. This accessibility helped *remind the adults and students* of the goals and made them *easy to refer to and communicate about*.

Making the learning goals and success criteria concrete, visible, and accessible

When working on a common theme or activity, the learning goals were presented and concretised, for example, as lesson goals. In grades 1–3 one theme was "flowers in the botanical garden". One goal was to finish a painting, in this case, of flowers. One adult modelled this goal and clarified the success criteria: "This is how it should look later and everything that is white should have disappeared. So you should paint the whole paper".

In grades 7–9, sub-themes of a common theme were presented on the wall and made accessible via students' digital devices as sub-goals. One example of a clarifying success criteria is "templates for high-quality presentations". By providing steps for planning a presentation and questions from the audience perspective, they helped the students monitor their learning:

> The template for a presentation, where it is good for the student to see that I was able to plan, I was able to select a digital tool to use, I was able to carry out the presentation. So based on such a template, they can act as a self-resource. (KS5)

One assistant emphasised the importance of reminding the students about the learning goals:

> These are the goals or this is the path you should take … for our students, it is important to do it all the time … so that they can connect that to, this is why we will do that [activity].

Students in all classes had individual goals based on their strengths, needs, interests, and what was possible for them to learn next. A focus on students' weaknesses was deliberately avoided: "I always start from the students' strengths … the goals are not generally what they have difficulty with, rather things where they are on the way [to making progress]".

The individual goals were presented with text, voice, pictures, photos, and/or video sequences in different places, such as the students' desks, their individual boxes of materials, and/or in their analogue or digital portfolios. The students worked towards the individual goals in thematic activities or dedicated lessons.

Students' learning in relation to both individual and common goals was documented in an analogue or digital way (e.g. in a photo calendar or portfolio) and sometimes online (e.g. in a blog). During the observations, the adults often took photos or made videos of activities connected to the learning goals to be used for such documentation. These and other tools (see also KS3) were used regularly, to concretise and visualise for the students what they were aiming for and the progress made (see also KS5):

> We use pictures, and using the iPads [it is] also possible to use videos, where you see that the student is performing the goal … and here we see how he is active in this, then he can see that, this was my goal and here I see that I can do that.

Adding a voice to this documentation meant that "then you as a student can both look at it [i.e. the picture] and listen".

Reminded of the goals, they are easy to refer to and communicate about

The presence of the goals at various places and with various representations reminded the adults and the students about the goals and made them easy to refer to and communicate about:

> These five goals, with pictures on the desks so you can point them out to the children … But it's just as much for us adults, because it's quite difficult, with five goals per student, to remember what their goals really are, so they help us remember what we are working towards.

KS2. Classroom work that makes visible the knowledge to be developed: how do I find out what the students really know?

The project activities resulted in *a stronger capacity* to get information about the students' learning, and *the clarity of the goals* and *team approach* facilitated finding

out what the students knew. Yet, the staff were challenged to *engage the students*, *make the sometimes vague signs of learning visible*, and *ensure that the students had a chance to demonstrate their knowledge.*

A stronger assessment capacity, clear goals, and a team approach

One experienced assistant said that the video analysis during the project "was revolutionary", and several respondents talked about their enhanced assessment competence as "having glasses" to observe student learning as a team:

> The glasses are on ALL the time. And because we work as a team … more people are wearing those glasses, so then we can discuss it all the time. I can get help from my colleagues, because they see other things than what I see. Together, it will be a completely different picture than if one person makes the assessment.

The clear learning goals were helpful: "By knowing what the goals of the activities are, it is easier for us to open our eyes … we can discuss together, what we have seen, what we should develop".

The teams shared information about students' learning, formally at staff meetings, informally during the day, and, at the best, with the students:

> We do not talk over the heads of the children. They [i.e., the assistants] consciously think about what they, together with the children, should say about what they did. We do that quite often. With the help of the children you talk about what happened during physical education class, or what I did when I worked on my workbox material … it provides feedback that is positive on several fronts: it gives me feedback, but it also gives the child feedback.

Challenges of engaging the students, making signs of learning visible, and ensuring students' chances of demonstrating their knowledge

The observations made it clear that the staff had a wide repertoire of strategies to make the students engaged, often using their body and small dramas. This engagement was furthered by making video-recordings: "The video is not only a way to make competences visible or to give feedback; the video is also something that can get the children engaged". Still, the staff said that engaging the students was an ongoing challenge.

Students' expressions of learning were often vague, but the assistants helped by adopting the student's perspective:

> Because we work so close [to the students], as I said, the small signals … it is because you get to know each other … we often have quite similar experiences as the students whom we really know, and they can be quite different from the teacher's experience.

The use of photos and videos facilitated noticing and sharing signs of learning: "For example, when a student has talked a lot, then you want someone to be video-recording that moment, so you can go back and tell [the other staff members]".

The staff found that the circumstances of the assessment situation were crucial: "Then we realised that if we also used the pictures of her in certain activities, certain situations, then suddenly we got a completely clear answer". Students' chances to

demonstrate their knowledge depended on communication and interaction, including adults' actions:

> How do I make sure that it is not me who has solved the task … it is very easy for me to solve a task, small things, [like] looking at the right answer, [that are] clues in one way or another.

KS3. Effective feedback: how can I get students to think from my feedback?

The staff consciously used feedback to *stimulate thinking*, and the clear learning goals (KS1) were seen as facilitating such feedback. The feedback was reinforced by the use of *photos and videos*, and the staff decided to apply a *salutogenic approach* (see below) to motivate the students.

Targeted feedback to stimulate thinking

The staff aimed to provide goal-targeted feedback that stimulated thinking:

> We clearly talk about what was good and where we are … this also means that everyone has a clear idea of what goals we are working on, so that you can give feedback directed towards those goals … If I want the student to point to the numbers in the right place, I encourage that when he does it.

Goal accessibility facilitated such feedback: "Because the students had them [i.e. the goals] in front of them, we highlighted them more and more for the students … so this was the goal, and now you're on your way, now it [i.e. the goal] is achieved".

Using photos and video to reinforce feedback

The staff found that a photo or video was useful to reinforce the feedback: "Looking at the pictures or videos, going back, when the student mumbles – here you stood with your back to your peers, look what happened, now you stand with your face towards your peers [talking] in a loud voice"; and to motivate the next step of learning: "Look, you almost got to the gymnasium, next time maybe you can go all the way to the door – to create carrots [i.e. motivation]".

Watching the photo or video prompted the students to comment: "But if you look now, you have managed to understand the whole concept and [also have been able to] explain to your friends … I try to make them see for themselves, so that they [i.e. the students] say it".

A salutogenic approach

A salutogenic approach means that the feedback focuses on what has already been accomplished. By communicating what the student has already done well, the student gets a concrete example of what "do well" means in this situation. Moreover, recognising the success may reinforce the student to continue doing well: "I video-recorded when that student dared to let go and walk [by himself] … we looked at it several times. It became very clear how it prompted him to do it again".

A salutogenic approach does not mean using praise, which risks being counter-productive: "Because I'm good if I succeed in doing something, then I'm bad if I do not succeed, then maybe I should not challenge myself". Instead feedback should explain what the student did well: "[It's] so easy to get caught up in that good thing [i.e. praise], but rather to show, yes, it's good that you now have reached this, you did not do this last time, continue like this".

The staff avoided feedback pointing out what the students should *not* do, although making it clear when something was unacceptable: "Because it is difficult to perceive, because then you perceive what you should not do instead. So in feedback, I try to be salutogenic and encourage positive actions". Instead of pointing out what was wrong, the staff member might suggest examining, with the student, whether the student was right or wrong.

The approach of using feedback to stimulate thinking was linked to having expectations of the students and providing them the opportunity to be active, giving them time to think and space for their initiatives.

KS4. Peer-resource: how can the students function as resources for each other?

Helping students function as resources for each other was the KS most appreciated by respondents:

> Then it [i.e., peer-resources] began to build themselves, and we saw that a student could help himself both by helping another student and by showing how to do [something], and they listened to each other more than they listened to us, and they became each other's role models, so it's only positive.

Although enthusiastic, the respondents noted that interaction between the students did not necessarily appear spontaneously, and that there were several steps before the students could function as resources for each other:

> [In general] they look at each other – in fact this is also an aspect of the special school, that students with intellectual disabilities do not always look at each other. They are not really interested in each other, [do not] think that they can ask questions about, for example, "what did you do at the weekend?" So we also work on that … to make them conscious. [of each other]

To facilitate peer-resource, the staff members planned for whole-class instruction: *allowing students to experience and perceive each other as resources*; *facilitating interaction and communication*; *modelling and supporting how to act as peer-resources*; and *allowing the students to take a step forward*.

Allowing students to experience and perceive each other as resources

Routine activities provided opportunities for students to notice each other: "I think the first step is for them to see each other, and be aware of each other, and you work on that a lot, say good morning to each other in the morning [and so on]". With a sense of connection and group spirit, the students could motivate each other:

> It is important to do activities so that the students become more connected … here I am, who are we missing, who usually sits in this place … so that you become more of a group … if someone is more driven, you want to get them to bring everyone else along.

The students could recognise each other as role models to imitate: "Then maybe I also want to do it [the same], maybe we can do it together, so the peer-resource is a good way to highlight it [i.e. the goal], [for example], that you can drink [by yourself]". The adults supported this by pointing out the learning goal:

> Look how he drinks by himself, look how he does it, you should try! We have seen that it generates desire, much more than if I nag him to drink. But now he sees his friend, who is a bit of a role model of drinking.

In another example, a video concretised the goal:

> I used [student] B as a model. I video-recorded student B, then student A watched [the video] … This time it was about a student jumping on his own … Then student B and I jumped together, and we held each other's hands … So student A can look at this [video] and see the difference between being able to jump with support and without someone else as support. Then immediately afterwards, student A went out and did it [i.e., jumped alone]. He had understood. Then it became peer-resource, but with the help of a video.

Video became a facilitative medium: "It's not obvious that I can tell student B what to do and demonstrate, nor is it obvious that student A will imitate student B".

The staff also encouraged students to seek help: "Also, you can prompt them – you can do this together, ask [your peer] and your peer might know – you try to get them to take the step of seeking help". The staff then provided support until the help situation was completed and became a peer-resource experience.

Facilitating interaction and communication

As a first support for interaction and communication between the students, the adults avoided sitting between the students, thus supporting any initiative for interaction: "All the time, if one student seeks attention from another, it is not certain that the other student perceives this". Students may need help in establishing contact with peers: "That interaction, just asking a question, is not always easy … and how the other student receives it – even that little interaction is very important".

Some students used verbal communication, while others used alternative communication techniques. This variation called for a certain amount of support for interaction and communication: "In our class, it is not obvious that the classmates understand the student who does not speak. I don't think they understand his signs, but we do".

Modelling and supporting how to act as peer-resources

To support peer-resource, the adults also used small spontaneous or planned dramas between two adults or with one student. The aim was to model behaviours that were difficult for the students to emulate. For example, during one observation, the teacher modelled how to ask for help by asking one student to help her select objects from

a box. Furthermore, the adults recognised and gave feedback when the students successfully helped each other:

> When it happens spontaneously, it's a hallelujah moment, when they spontaneously ask each other … for them it is not obvious … "Look now, you asked her for help and look how well she could help you" – you have to put words to that.

Sometimes video-recording was used to reinforce such feedback: "I video-recorded even the smallest little help they gave each other. Then right after entering the classroom, I showed it [i.e. the video-recording] … So they started to help each other". This motivated the students:

> Bring an iPad, and if a child helps another child, project it on the board to constantly reinforce what is going well … there is success in that. As I said, my students love to see themselves, especially when they do something well.

One teacher described talking about and practising how to give clues as a way of helping each other:

> They have started to learn the concept of a clue, what a clue is. It's not answering the question, but giving a clue – it can be a colour, it can be a shape, [for example,] if it is a car, it is something that has wheels.

Allowing the students to take a step forward

Several respondents noted the importance of "taking a step back" to give the students more space in interactions: "Student competence increases if I take a step back, so I have a clearer role – here is my place as a teacher, it is you who are students, it is you who are the resources for each other". One assistant instead described the students taking a step forward:

> Now that we have worked with AfL, I have really grasped this. It is not me who should take a step back, really, but it is the student who should have the time and opportunity to take a step forward.

In any case, giving the students more time and space provided opportunities for them to take the initiative, be active, and interact with each other on their own terms: "A lot depends on us stepping back and watching. So instead of dragging the students, we kind of wait and let them interact with each other". In practice, this meant balancing between being passive and actively helping the students to step forward:

> We might be passive, but at the same time we might help … I feel responsible, that if he [i.e., the student] cannot [do it] on his own, he can [do it] with my help, then he will be helped to find a friend, then maybe you [i.e., the adult] can back off more and more.

Some of the respondents identified peer-resource as important for the sense of belonging to a community, "to be able to interact, to be able to get help, to be able to find a community".

KS5. Self-resource: how can I get my students to see what they have learned or not yet learned?

Peer-resource (KS4) was viewed as an advantage for "self-resource". This view was clarified in the following descriptions of how self-resource is supported by: *expecting and allowing student initiative and responsibility*; *using self-resource feedback*; *providing structure, routines, and tools*; and *supporting student help-seeking*.

Expecting and allowing student initiative and responsibility

Allowing the students to take a step forward (see KS4) conveyed expectations that students would have ideas and strategies of their own:

> It is fun to discover that when I'm silent, my first thought is to correct [the student]. No, do not say anything. I'm glad I thought about that … let the students take their own initiatives, [have] several choices.

Not intervening too quickly gave the students time to think about what they wanted and how to move forward, to realise that they could ask for help, and overcome problems on their own.

The staff teams in grades 1–6 put up a picture reminding them about how to support peer-resource and self-resource: the label stating "The group" reminded the staff to think about the students as a class; "Do it yourself" reminded them to allow the students to take the initiative and act on their own; and "Adult talk" reminded them to talk *with* rather than *about* the students – that is, bringing them into conversations and "talking through the children":

> To let school be the students' time. There are a lot of strengths of being many adults, but also risks … I mean that it tends to be a lot if there are four to six adults in a group, of course it is easy to be tempted to start interacting.

Using self-resource feedback

As described above, the staff used feedback (KS3) to help the students recognise and communicate about their learning – in a salutogenic motivating manner – using photos and videos that facilitate communication about students' learning:

> This strengthens the students' learning … Each student has an iPad that they can use. There are usually pictures and videos in them that they then can go back to and look at. This also gives them the opportunity to communicate, by looking at the pictures and videos, for example: "What am I doing here" … "What should I do now?"

The staff members asked questions to prompt the students to reflect:

> I can ask the question, "What happens next?" … So I looked at him, "But are you finished now?" Then he looked [at himself, and said,] "Noooo" … So instead of me immediately saying, "No, you are not finished", I turned the question to him, he had to check [himself].

The staff provided feedback helping the students to link progress to their use of feedback, and to recognise and use successful strategies. For example, when comparing their paintings with a finished painting: "'Look, now it is really finished!' … Then

I usually try to give feedback, 'Oh, how good that you listened, it was meant that you should listen and then [you could finish your painting']".

The adults tried not to give more feedback than necessary. One assistant described watching a video and realising that her feedback consisted of a small knock on the table intended to help the student focus on choosing an instrument:

> I thought, how can I help the student understand the goal … in some way it led to … here and now, this is what we do. Instead of showing all the instruments, just clearly [show] this is the focus now, you [i.e., the student] are the one who chooses.

During the observations it was obvious that the assistants often strove to direct the students' attention to the teacher's instructions or feedback, either repeating the feedback or discussing it with the students.

Providing structures, routines, and tools

Structures and routines provided recognition and predictability, making it easier for students to know what was expected of them: "Everything looks very similar … You know what to do and then you also know what happens, then you are also involved in another way … you know what to do to be active". Repetitions can function as feedback to the student: "I repeat this many, many times, then it becomes a hint in itself, then the student understands more and more each time, this is what we should do, this is what is expected of me".

Accessible goals prompted the students to reflect on their learning:

> Because we have the goals on their desks, they provide an opportunity for the students to point, look at the pictures. For example, most recently today, a student pointed spontaneously, and I asked, "What is on that picture, what are you going to do here?", and then he told me … This gave the student the opportunity to check what he [i.e., the student] should be able to do.

Other tools used to make it easier for the students to reflect on and communicate about their learning were, for example, a big weekly calendar, video-recordings, a photo calendar, a blog, and individual analogue or digital devices. For example, in the photo calendar, the adults and students documented and discussed activities and learning goals during the week. The blog facilitated the students' communication about their learning with parents, relatives, and friends. In grades 7–9, templates and daily or weekly evaluations were used for reflection and self-assessment, individually and in the whole class.

Supporting student help-seeking

The clear learning goals guided the students in reflecting on their learning and determining whether they were finished or needed help. The adults avoided providing unnecessary help or giving help before the students asked for it, although they sometimes prioritised students' help-seeking behaviour: "Maybe you [even] help her with something she could have done on her own, just because she [indeed] asked for help".

Discussion

The aim of this study was to explore the translation of Assessment for Learning (AfL) key strategies (KSs) for the compulsory school for students with ID context, capturing opportunities as well as challenges. In what follows, the conclusions and implications from the study are presented, as well as final remarks and avenues for future research.

Conclusions

The findings show that the overall use of AfL is characterised by a whole-class instruction in which all actors (i.e. assistants, teachers, and students) are seen as team members and resources in the assessment and learning processes. An integrated continuous use of the AfL KSs appear, and the quotations indicate that the staff as a group understood and used the strategies with awareness and consideration. The overall conclusion is that the AfL KSs are relevant also in this context, in accordance with indications from previous studies (Anderson & Östlund, 2017; Andersson & Granberg, 2022; Östlund, 2019).

Both opportunities and challenges when implementing AfL in groups of students with ID were concluded, and drawbacks in the compulsory school for students with ID context seemed to be counteracted by the use of AfL (see also Andersson & Granberg, 2022). Indeed, the central position of the learning goals (KS1) in relation to all the other KSs certainly put the focus on academic learning, as desired (Östlund & Hanreddy, 2020; Swedish Schools Inspectorate, 2010). Notably, the respondents only refers to opportunities of making the learning goals and success criteria concrete, visible, and accessible. No direct challenge was disclosed.

Eliciting information about students' learning (KS2), however, was associated with opportunities as well as challenges. Working as a team created opportunities to better make the students' learning visible and involved the students in the assessment. The challenges had to do with issues of engagement, vague signs of learning, and the chance for students to demonstrate their knowledge.

Using feedback to cause thinking (KS3) was another key strategy where opportunities dominated. Challenges of students' motivation, understanding and use of feedback were implicitly indicated in the strategies (e.g. a salutogenic approach) and tools (e.g. photos and movies) used by the staff.

Peer-resource (KS4) was the key strategy with most appreciated opportunities reported. Students helping each other, acting as motivating models for each other, and a sense of belonging to a community are some of the gains reported. However, there were also challenges, and the staff had identified several necessary steps for the students to take before they could function as proactive resources in their peers' learning.

Similarly, self-resource (KS5) was not expected to come easy. Challenges to break habits and remember to give space to and involve the students as resources of the whole group are indicated from the strategies the staff used. The opportunities reflect possibilities for the students to become actively involved in their learning.

Implications

The findings implicate benefits for the students, such as knowing how to use available resources as part of being self-resource (Andrade & Brookhart, 2020) and experiencing community belonging as part of being peer-resource. Offering the students experience of others counting on them, and making their initiatives and participation important and useful resources are other benefits. Such experiences would likely reinforce their development of self-regulated learning (SRL) competence, being beneficial for them from a life-long learning perspective (e.g. Black, 2015; Butler & Schnellert, 2015) and crucial for how they view themselves as adults.

Looking at the findings from the staff point of view reveals advantages, as well as concerns. All team members were aware of the learning goals, likely reducing risks of counteracting each other and enhancing joint efforts to reach those goals. Nonetheless, the AfL practice depicted in the findings was complex, going beyond using assessment to form an adapted plan for each individual student's learning. Regarding the assistants, their diverse responsibilities (Östlund, Barow, Dahlberg, & Johansson, 2021) may merge when becoming team members using AfL. Interestingly, none of the respondents talked about care and learning as contradictory phenomena; rather, the findings suggest that student well-being may be supported by the focus on assessment and learning and raised expectations of the students. The impact and appreciation of peer-resource were somewhat surprising. Implementing this KS was found to be demanding in other contexts (e.g. Black, 2015), and student interactions as part of learning are rare in compulsory school for students with ID (Östlund, 2015). Notably, peer-resource was singled out as a driving force of AfL.

The study indicates that the use of AfL in compulsory schools for students with ID has the potential to raise access to general education and curriculum, and to promote an enhanced quality of life for this group of students. Moreover, the findings indicate that the staff used strengths of the tradition in compulsory school for students with ID when implementing the AfL KSs. For example, they may have used their knowledge and experience of how to support participation (Klang et al., 2020) and interaction (Östlund, 2015) in social situations to support these in learning situations as well. Indeed, the steps the respondents said that students should take before drawing on peer-resource illustrate great insight.

Final remarks and future research

The study demonstrates the possibility of transferring knowledge and insights about AfL between different contexts, as well as the necessity of making contextual adaptations. The findings are thus expected to be of interest and value beyond the compulsory school for students with ID context. A main contribution of the study is its demonstration of how contextual variation can contribute to new insights of value for the research field. A limitation of the study is that the findings were validated only by the teacher acting as project manager. A member check conducted by all respondents would have enhanced the study's trustworthiness.

This study uncovered suitable avenues for future research. Future studies should include the students' voices, views, and benefits, and a picture painted with that data incorporated would certainly be more complete. Moreover, all the potentials depicted in

the present findings merit further investigation, but how AfL can affect the SRL competence, motivation, and learning of students with ID should be a prioritised research subject. Lastly, the study raises several questions about the prerequisites for the sustainable use of AfL.

Notes

1. With kind permission from Dylan Wiliam 231103.
2. The interview had the character of a conversation. The sections of the interview guide and the specific questions were introduced with adaption to the course of the conversation and with adapted wording. The questions capture the aspects of the formative activities that the researcher wants information about, but the wording of the questions were adapted to work in varying teaching situations. Teaching students in year 1 with severe intellectual disabilities is very different from teaching students in year 9 with mild intellectual disabilities.
3. Similar question were used for KS 2, 3, 4, and 5.
4. Similar question were used for KS 2, 3, 4, and 5.

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Disclosure statement

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

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Appendix

Interview guide questions

This is the interview guide questions used for interviewing the teachers.[2] Slightly different questions were used when interviewing the assistants.

The researcher continuously asked for details and examples.

Initial general questions

(1) What is your general experience of using Assessment for Learning in compulsory school for students with ID?
(2) Are there any Assessment for Learning activities that you find particularly useful, that you would like to share with others?

Questions related to each key strategy (The researcher pointed to the relevant field of the school's mind map when introducing each key strategy)

KS1. Sharing learning goals: How can I help students know what the goal is?

(1) How do YOU work to share learning goals and make them more easily understood and accessible to students?
(2) How do you ensure that you and the students have the same interpretation of what it means to make progress towards the goal? (whole/part area and lessons)

(Ex, follow-up: oral, written, are there examples given, student discussions, modify/co-formulate/co-negotiate goals?)

(3) How do you think the students perceive the goals? Are those the same goals as yours?
(4) Do you usually check how the students perceive the learning goal and what it means to make progress in relation to that goal?
(5) If we think about lesson goals, how do you usually start the lesson and tell the students about the goals? (question only for the teachers)
(6) Sometimes we express goals as something the students are about to learn and sometimes as something they should do. How do you usually express yourself?
(7) Do the students ever formulate and set up goals for their own learning?

In what situations are students allowed to do this? What could such a goal be?
How is this carried out?
(8) Do the students sometimes get or make their own plans?
(9) Do students use goal descriptions in any way to make assessments?

If so: Do you usually give the students any feedback on such assessments?

(10)[3] Have you encountered challenges when working in the class to share learning goals and make them understandable and accessible to students? What challenges? What are the reasons for those challenges?

(11)[4] Does the compulsory school for students with intellectual disabilities offer specific opportunities for making students understand learning goals and what it means to make progress towards the goals?

KS2. Classroom work that makes visible the knowledge to be developed: How do I find out what the students really know?

1. In what way do you collect information about the students' knowledge?

(Ex. follow-up: Any other ways you use as well? … written, oral, practical tests, diagnoses, homework, workbooks, questions in the classroom, observation of the students when they work)

Note! For each KS 2 activity:
- How is the information used?
- What is the purpose of the information elicitation?
- When are collections made/How often?
- How are tasks selected/designed?
- How are observations and questions used?

2. When you collect information in this way – is it possible for students to be able to see their progress? Do the students get the opportunity to compare their current learning against the goals and see the next step in learning?
3. Would you say that the purpose of gathering information is more for your sake or for the sake of the students?
4. When you work in the whole group:

- How do you create engagement among the students?
- Do all students have the opportunity to answer? If not, how are students chosen to answer?
- How do the students answer (orally, in writing, via computer/mobile etc.)?
- When someone has answered – Are follow-up questions asked to other students in the class?
- Have you considered the time you provide after asking the question until the students know who is going to answer?
- Have you considered the time from when the student receives the question to the time the student needs to answer?

KS3. Effective feedback: How can I get students to think from my feedback?

1. In what situations do you give feedback to students?

For each situation, ask the respondent to describe how.
- How is the feedback given? *(Ex. body language, oral, written, other …)*
- Why in this way?
- The content characteristics: Goal-specific, concrete, hint/clue, just enough, person/task/process/SRL etc.
- Concrete examples!
- Are there specific opportunities or challenges in these situations?

Follow up if feedback is also given: in the whole group, in a smaller group/or pairs/ students individually?

2. Are students given time and opportunity to work with the feedback they receive? When? How? To what extent?
3. Do you follow up on the use of the feedback in any way? When? How? To what extent?

KS4. Peer-resource: How can the students function as resources for each other?

1. Do your students usually work together and help each other?
   - In what ways?
   - How do you organise such situations?
2. How do you support students to help each other in a way that is good for their learning?

(Ex. encourage, motivate/describe the purpose, describe, provide opportunity to practice)

3. When students act as resources for each other - do you usually give students feedback on how the situations works? What do you say/do?

KS5. Self-resource: How can I get my students to see what they have learned or not yet learned?

1. How do you support the students so that they can be a self-resource, a resource for themselves in their learning process?
   - When/In what situations?

(Ex. encourage, motivate/describe the purpose, describe, provide opportunity to practice, feedback on how it works, feedback that connects back to the purpose)

2. Would you say that "being a self-resource" is a formulated and shared learning goal in the classroom?
3. Do the students think about how they are doing? How do you notice this?
4. Do you experience that the students have their own driving force and strategies to take responsibility for and have control of their learning in some sense?
5. How do you make the students notice what they have learned and not learned yet?
   - When/In which situations?
6. Do the students assess their own knowledge and skills in some way?
   - When/In what way?
   - How do they react if they notice that they have learned or not learned something?
7. How do they use information about the current situation to take the next step in learning? Strategies?

Final questions:

(1) Is there anything that you have come up with that you would like to add for any of the five key strategies?
(2) Is there anything that you would like to comment on when looking at Assessment for Learning as a whole unit?
(3) Do you have anything to add regarding the use of Assessment for Learning in compulsory school for students with ID looking at the organisation and tradition? Specific opportunities or challenges?
(4) Do you have anything to add regarding the use of Assessment for Learning in groups of students with ID? Specific opportunities or challenges?