

Voices in and beyond speech

Vocational students' experiences of special needs support in Sweden

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Abstract

This paper aims to explore and develop an understanding of special needs support from the student's perspective in upper secondary vocational education and training (VET). Research has shown that students in vocational programs are in high need of accommodation and require increased special needs education (SNE), especially in activities and subjects with an academic focus. Recent research reviews focusing on special education show that more inclusive assessment practices are needed as well as more research in the area of special needs education in vocational education. This qualitative study was inspired by a phenomenological approach interested in understanding social phenomena from the participants' perspectives and lived experiences. Following this approach, the analysis uses Interpretative Phenomenological Analysis (IPA) as a tool to map and interpret participants' expressions in their daily context. The empirical material is drawn from seven semi-structured interviews with students in special needs support, undertaken in two upper secondary vocational schools in two separate municipalities and regions in Sweden. To analyse and widen the understanding of the informants' descriptions of their possibilities and hindrances to participate in their educational activities, the following theoretical perspectives are used: Klafki's critical constructive Didaktik, Persson's categorical and relational perspectives on special education, and Lawy's theorized concept of voice. The analysis shows that the students' experiences of special needs support are ambivalent. The results display not only a division between the teaching of vocational and academic subjects and support in upper secondary VET, but the analysis leads to a need for further exploration of SEN in vocational education and the role of didactics that include students' voices.

Keywords: Vocational education and training (VET), special educational needs (SEN), special needs education (SNE), interpretative phenomenological analysis (IPA), didactics.

Introduction

Student: I'm an easy learner but always work better physically

Interviewer: yes

Student: so I do much better practical work

The interview extract above is quite representative when students in upper secondary vocational education and training (hereafter labeled upper secondary VET) give their perspective of themselves and their learning. "Practical" refers to subjects with embodied actions and materiality common in vocational programs, whereas "theoretical," as the following text will show, associates more abstract academic subjects in their education, such as mathematics. An ambiguity can also be discerned in the initial interview extract above, in which the student positions herself as being an "easy learner" as well as someone doing better in "practical work". This shows, on the one hand, an apparent division between vocational education and preparatory for higher education, and on the other hand, a narrowly defined vocational education as simply physical performance. Such a gap and apparent division between the "academic" and the "vocational" is sought to be transcended in higher education in England, for example, with so-called "Degree Apprenticeships" in which the academic and vocational education is blended (Laczic et al., in press). Research from a Swedish context shows that when it comes to experiencing difficulties and special needs, it is typically in the academic subjects they appear in (Yngve et al., 2019; Öhman, 2023). Limiting constructions of students in vocational education can also be found in others' labelings, such as "students regarded as 'practical'" or as "students with 'practical learning styles'" (Berglund & Henning Loeb, 2013, p. 137 and p.147) suggesting some kind of essential or innate properties regarding students in VET and their capabilities. The division between the 'academic' and 'vocational' in upper secondary VET, in turn raises further questions related to what a special need is and where the need is to be found. Vocational education may be a way for students who have experienced failures in school to find a way in education, as vocational programs demand fewer merit points to enter than programs preparatory for higher education (Gilberg, 2024). However, it does not necessarily mean that the reason is that the students have special educational needs. It could be an expression of ableism as a way to "other" students instead of engaging with their variability (Boardman et al., 2024).

Even if students with special educational needs (SEN) are the subjects being studied, they rarely carry the role of informants (Keles et al., 2022). However, when students themselves are interviewed or studied in conversations with their teachers, various experiences of inclusion and exclusion emerge from their narratives (Uthus & Aas, 2024). In an earlier paper of this interview project with students in SEN, a student in the preparatory for higher education (academic) program and a student from upper secondary VET were asked about their experiences of the provision of special needs support (Öhman, 2023). Their answers showed that support demands much more than placement such as in special support classes (SSC) or individual special educational training. Teaching and learning need to be provided about relational aspects such as trust and security and be accessible to everyone in a variety of local contexts (Öhman, 2023). In this, the question of assessment is of great importance, whether the students get the possibility to learn what is being assessed and what forms assessment takes (Öhman, 2022).

Classroom-based assessment (CBA) has been shown to provide an inclusive learning process for all as it considers the teaching and learning process and not only the result or product (Jungjohann & Gebhardt, 2023; Öhman, 2018, 2022). By further exploring students' accounts of special needs support, this study develops knowledge about special needs and special support, primarily focusing on students' experiences in upper secondary VET and the role of the learning environment and vocational didactics, even if memories from earlier school years may appear. Whether the special need is within the individual student or in the didactical organization of the teaching and learning environment is not easily discerned but is important to explore and consider.

Central concepts in this study are *special needs education*, *special educational needs*, and *special needs support*. The needs of students for special support vary in scope, time, and measures and can involve some form of disability or psychosocial issues. According to the Education Act (SFS 2010:800, Chapter 3), special support is provided if an investigation shows a need and other support is deemed insufficient. Special support is not dependent on any medical diagnosis, only a pedagogical investigation, and applies to students who are at risk of not meeting the knowledge requirements or have other difficulties in their school situation. The starting point is the student's education as a whole, which means that not only the course knowledge requirements are in focus but also the knowledge goals in the curriculum that address fundamental democratic values (SFS 2010:800, Chapter 1 Section 4). The measures of support have to be documented in a *student action plan*, and it is also stated in the same chapter (SFS 2010:800, Chapter 3) that teaching outside the mainstream classroom, in so-called *special support classes*, can be used if this is seen as the best support for the student's needs.

The meanings and conceptualizations of special educational needs are thus complex and multifaceted. To get a picture of what this looks like in practice, studies are needed that highlight the experiences of those involved, which are presented in the following section. When the students in this article describe different forms of support and groupings, it is rarely with the above concepts, nor is this the intention of the study. It is the student's own experiences of what they perceive as special support that are examined and described.

Research into expectations shows that students with SEN are assigned negative stereotypes and may experience a 'status quo' despite succeeding at levels comparable to regular students (Stanczak et al., 2023) and lower levels of life satisfaction when measuring socio-emotional outcomes (Blanck et al., 2024). In an interview study with students in upper secondary school, only 25 percent experienced adaptations to their needs (Yngve et al., 2019). When students are not given the support they need, they are not given equal possibilities to develop vocational knowing and access to workplace-based learning (Paul, 2022). Listening and giving voice to the students themselves, with their unique experiences of special educational support, is thus necessary and important (Keles et al., 2022; Lawy, 2017; Uthus & Aas, 2024; Öhman, 2023). *Therefore, this paper aims to explore and develop an understanding of special needs support from the perspective of upper-secondary VET students.*

Research questions:

- *How do the students describe their experiences of special needs support?*
- *What kind of teaching and learning emerges from the students' accounts?*
- *How can students' experiences of special needs support be understood and conceptualized within perspectives of special needs education, critical didactics, and voice?*

Background with an educational context

In Sweden, upper secondary vocational education consists of 12 programs and lasts for three years. It is school-based, including 15 weeks of internship at a workplace, and prepares either for professional work or continued university studies if eligible. The Swedish VET can be classified as a further qualification in the sense that the three years of studies at school combined with workplace training lead to a specific qualification for professional work. Vocational education does not qualify for higher education though, but it can be added to the given program as university preparatory courses. According to statistics from the Swedish National Agency for Education (SNAE, 2024) about the number of students finishing lower secondary school in spring 2023, of the 27 percent of students beginning in upper secondary vocational education in autumn 2023, 31 percent were boys, and 23 percent were girls. Most students (60 percent) chose university preparatory programs, 11 percent chose an introduction program, and the rest (2 percent) did not select any upper secondary education. From 2022 to 2023, the amount of students choosing vocational education has increased by 1 percent for boys as well as girls (SNAE, 2024).

Previous research

Research in vocational education has shown that students in need of support and special educational support more specifically are highly represented in upper secondary VET (Björk-Åman et al., 2021; Paul, 2022), especially in educational activities and subjects with an academic focus (Yngve et al., 2019), also shown in another recent interview study with students about environmental fit in vocational education where academic school activities had the most identified needs (Mårtensson et al., 2023). Despite the importance of gaining knowledge about the students' perspectives, their voices are seldom given room (Keles et al., 2022). However, there are some recent studies giving students' perspectives such as a study from Finland with vocational students' perceptions of special support showing the students' modest demands, limited subjective growth, and a need for more social belonging and communality (Ryökkönen, 2023). An increase in students' capability and agency such as having influence and acting independently, are thus important issues to avoid power imbalance and promote understanding (Uthus & Aas, 2024).

Furthermore, there is a need to balance institutional structures and staff that daily interact with the students to provide holistic support measures. In this, collaboration is essential between staff as well as teacher/student (Björk-Åman & Ström, 2022). This focus on needs and support has to be seen concerning the need for a holistic concept of competence, making vocational education relevant and coherent, and not only as an education system measuring outcome in the narrow terms of academic learning. Instead of a sharp division, theoretical and practical

learning arenas and subjects must be integrated, making the meaning of theory about practical performance explicit (Hiim, 2020). This can be seen in a study of team teaching when a subject like mathematics is integrated into the vocational subjects with a learning space promoting discussions and encouraging self-confidence (Frejd & Muhrman, 2022) and motivation as self-determination in vocational-integrated mathematics (Muhrman, 2022). The use of so-called mini-companies as part of vocational education and training has shown an increased motivation and sense of relevance as the students experienced that their knowledge came to use in real situations (Gilberg, 2024).

As for research in the field of vocational didactics in upper secondary VET, it is scarce. However, a recent study from vocational high schools and teachers' narrated experiences, the concept of vocational didactics is displayed as highly multifaceted, context-bound, and changing according to the labor market (Asghari, 2024). This is in line with the dynamic conceptualization that Klafki (1995, 1998) elaborates on in his *Critical Constructive Didaktik*, a perspective on didactics further explored in the following.

Theoretical perspectives

In the following, the study's three theoretical perspectives are presented that were used as levers to design the study, analyse and discuss the findings.

Relational – categorical perspectives in special needs education

Special needs education can be understood from different theoretical perspectives. In this paper, SEN is mainly seen from two extremes: the categorical and the relational perspectives. Persson (2019) describes the categorical perspective as understanding special needs as individual and innate, whereas the relational perspective focuses on special needs in interaction with the pedagogical environment as a whole. The actions of support will therefore be radically different in the two perspectives; the categorical will involve a special educator or teacher to work directly with the student's displayed difficulties in segregated formats or SSC, whereas the relational perspective will focus on adapting and differentiating the teaching and learning environment. In the latter, the difficulties are understood contextualized and locally adjustable/amendable in the mainstream classroom. This is in line with regarding teaching and learning as situated, influencing as well as being a part of a specific context (Illeris, 2015).

Critical-constructive Didaktik

When Klafki (1995) conceptualizes *Didaktik* as a kind of general pedagogical knowledge (and not specifically subject-related), he describes it as critical as well as constructive. *Critical* in the sense of social criticism, which constantly reflects on relations between school and instructions on the one hand and the social conditions and processes on the other. The *constructive* is seen concerning practical conditions and interest to act and change present objectives, content, as well as didactical aspects such as methods in education (Klafki, 2014). Furthermore, teaching and learning, according to Klafki (1995), have to be understood as processes of interaction in which relational aspects between teacher and students play a central role in subject matter as well as social learning. Klafki's model of didactics as both critical and constructive thus clearly involves

more than just a locality, subject matter, or discipline. When it comes to the concept of Didaktik, Klafki (2014) describes it as a science from praxis to praxis, showing and sharing the responsibility for present as well as coming generations in their learning. According to Klafki, the interpretative and critical perspective needs to draw on empirical research methods such as interviews and observations in the field. In Critical Constructive Didaktik, the students' own will to learn is vital thus planning with them is of great importance. Democratic values such as self-determination and co-determination are central and mutually conditional characteristics of Critical-Constructive Didaktik involving individual independence as well as a responsibility to contribute together with others (Klafki, 1998). Klafki's (1995) view on education and its didactics encompasses the processes of interaction with relationships between people as well as the content of teaching and learning in the form of goals and methods.

Theory of voice

In Lawy's (2017) theorized conception, *voice* is not only about speaking but implies the use of voice and whether it is listened to. Furthermore, voice is connected to structures of power and stands at the intersection of language and the body. This is of particular interest in vocational education, where the body and practical activities are central. The concept of voice is also connected to different social movements, such as disability rights and access to education. Lawy turns to dominant language ideologies to reveal issues that affect and exclude voice, which may underwrite hierarchies and power relationships between groups. This is of interest in this study in exploring and understanding the students' experiences of special needs support.

Methodology

The data presented in this paper is drawn from a bigger empirical material and project consisting of 16 interviews in total with students in special needs support in their last year of upper secondary education. An application of ethical review to the Swedish Ethical Review Authority has been approved in advance and the participants have given their consent to take part in the study and to be represented with pseudonyms in papers/presentations.

The data collection was carried out between October 2019 and January 2020 in three different upper secondary schools (vocational and preparatory for higher education) in three municipalities and two regions in Sweden. The participants were recruited through contact with the school's Special Educational Needs Coordinator (SENCO). The seven interviews in this paper with its focus on vocational education and special needs support are from two upper secondary VETs in two different municipalities and regions, including one girl and six boys. Their chosen programs varied between vocations such as electricity and energy technology, building and construction, vehicle and transport, or industrial technology. The students were interviewed face-to-face by the author individually with a semi-structured interview schedule used flexibly. Examples of questions were constructed from three main themes: *Need of special support* with questions like «In what situations do you have special support?», *Learning environment* with questions like «In what subjects do you need special support?» and *Participation and influence* with questions like «Have you participated in decisions in a student action plan?» The interviews were audio-recorded, and their lengths varied between 30 minutes to an hour. An assistant

carried out the transcription. The procedure of transcription follows the speech, first in original Swedish and then translated into English, the latter as represented in this text.

The empirical material is approached with an interpretative phenomenological analysis (IPA) (Smith et al., 2009), an inquiry that takes an interest in how people make sense of their major life experiences. Needing special educational support can be seen as such a major experience and thus as a comprehensive unit of larger significance to be accounted for and analyzed. IPA has a phenomenological side, 'going back to the participants themselves' and their experiences, as well as a hermeneutical side, which is the interpretation and sensemaking of what is happening to them and in second-order the researcher's understanding of the participant's account. A third influence in IPA is the idiographic side, which is concerned with the particular – treating each participant as an individual in a particular context in detail and depth (Smith et al., 2009). Methodologically, this means a design of a small sample, as in this case, seven participants, opening for analysis of similarities and differences across cases as shared themes and distinctive voices. With the aim of this paper to explore the meaning and develop the understanding of special needs support from students in upper secondary VETs' perspective, the analytic focus of IPA, with its grounding in phenomenological and hermeneutic theories, will enable some subjective experiences to be heard in its own terms rather than according to predefined category systems and themes. Experience is a complex concept and is used in line with Smith et al. (2009) "as what happens when the everyday flow of lived experience takes on a particular significance for people" (p. 1). In this paper, the everyday flow is limited to experiences within the school context and its everyday education.

Analysis

The process of analysis involved the following steps (Smith et al., 2009):

- Reading and re-reading of transcripts.
- Initial noting with descriptive and conceptual comments.
- Developing emergent themes with color-coding resulting in three main themes.
- Searching for connections or differences across emergent themes finding six subthemes.
- Use of data as a lever to evaluate existing theories from Klafki's (1998) critical constructive didaktik, Persson's (2019) categorical/relational perspectives, and Lawy's (2017) theorized voice.

Table 1. Analytical process with data excerpts

Research questions	Analytical questions	Themes (bold) and subthemes	Data excerpts
How do students describe the provision of special needs support during their schoolyears?	What aspects of support can be discerned from the students' answers?	<p>Policy documents and organization Student action plans focused on unattained grades The special needs support provided individually or in special support classes</p>	<p>"But when you say special needs support is it only that I've had a student action plan or? /.../ I've had a student action plan in almost all schools" "Yes, I have...since no one else has math so I have math with.. with...alone with a person then"</p>
What kind of teaching and learning emerges from the students' accounts?	How is the learning environment described by the students?	<p>Vocational education and teaching Preference for vocational courses with more time with their teachers Highly valued practical courses with embodied learning and modeling Academic subjects and teaching Difficulties in theoretical courses such as mathematics</p> <p>The role of concentration in motivation</p>	<p>"One has them quite often /.../ see them every day" "Say we're going to weld something new, a...a new weld /.../ or then for example Pelle shows, we get to stand beside and then he shows exactly how we're going to do". "In maths /.../ I know we did then were lots of tasks in the maths book/.../ it gets quite sluggish just to work in the maths book". "We have social sciences, I like it a lot /.../ we had it last year with politics and the like /.../ there I could concentrate very well"</p>
How can students' experiences of special needs support be understood and conceptualized within perspectives of special needs education, critical didactics, and voice?	<p>What perspectives of special education are in the foreground?</p> <p>How can didactic be discerned in the students' accounts?</p> <p>What aspects of voice are manifest?</p>	<p>Categorical and relational perspectives on special needs education.</p> <p>Critical Constructive Didaktik in teaching and learning</p> <p>Students' voices heard</p>	<p>«<i>I didn't want to...I didn't want to...it felt wrong to be with one teacher, felt like being stupid</i>». "Here, we just have these workshop teachers/.../ say that you sit and weld and you need help with something so it's just to tell one of them /.../ you don't need to tell a certain person". "Because one doesn't talk so much with other students/.../ well one doesn't know anyone so, one sits mostly by oneself but- /.../so it didn't feel like someone got something extra". "Attending a vocational school dominated by men easily pushes you to be a boy to understand."</p>

Validity

In qualitative methods, it is necessary to find the appropriate criteria to assess the value of the research. Yardley (2000) suggests the following open-ended and flexible principles to guide the quality to which this study adheres as added to the concepts in italics from Yardley:

- *Sensitivity to context* – an awareness of the socio-cultural setting, such as in this case special needs education and students' possible vulnerability. This is taken into consideration before, during, and after the interviews.
- *Commitment and rigor* – as a researcher, I have a prolonged engagement with the topic studied and professional knowing of adequate data in the field.
- *Transparency and coherence* – in my writing, I describe the research process with thick descriptions and conduct meaningful analysis, giving voice to the participants.
- *Impact and importance* – the study is of theoretical worth with new ways of understanding the topic as students' voices and experiences are at the center of the study, as well as giving practical examples to the professional community with the findings.

These principles are used here to display trustworthiness, which is important in evaluating interpretative research such as this. To secure credibility and confirmability for the analysis, the findings have been presented underways in various seminars and conferences. Furthermore, the study is small in scale but can nevertheless be compared to other qualitative studies with similar designs and research questions as a matter of transferability.

Findings

This section presents the results from the seven interviews in three main themes identified with two subthemes in each. They are analyzed and represented in I, II, and III, of which the first research question is "How do students describe the provision of special needs support during their schoollyears?" is answered in I. The second research question, "What kind of teaching and learning emerges from the students' accounts?" is answered in II and III. Each has a headline representing the main themes and subthemes considered in more detail alongside participants' utterances in quotations. The subthemes are thus not separated in the representation since they overlap mostly in the material.

The third research question, "How can students' experiences of special needs support be understood and conceptualized within perspectives of special needs education, critical didactics, and voice?" is treated in IV as a lever to evaluate the theories of Klafki (1995,1998), Persson (2019), and Lawy (2017) by drawing theoretically informed analysis from the results in I, II and III.

Themes and subthemes

Before getting into the details of the findings and to give a sense of the whole, an overview is presented of the following three themes, each with two intertwined sub-themes and, at last the theoretical evaluation.

- I. Policy documents and organization
 - Student action plans focused on unattained grades.
 - Special needs support is provided for individually or in special support classes.
- II. Vocational education and teaching
 - Preference for vocational courses with more time with their teachers.
 - Highly valued practical courses with embodied learning and modeling.
- III. Academic subjects and teaching
 - Difficulties in 'theoretical' courses such as mathematics.
 - The role of motivation for concentration.
- IV. Theoretically informed evaluations
 - Categorical and relational perspectives on special needs education.
 - Critical constructive Didaktik in teaching and learning.
 - Students' voices to be heard

Representation of participants

The seven students are represented with pseudonyms in order not to be identified:

Sebastian, Jonas, Maja, Axel, Jesper, Tommy, and Alexander, as well as a teacher: Pelle.

The extract is a one-line transcript, with the participant's first language, Swedish, translated into English, quoting the students' own words.

I. Policy documents and organization

In the following, the findings show how the students describe the provision of special needs support as segregated into small groups and mostly focused on catching up on failed grades from previous years. The concept and use of a student action plan is familiar to some, but others don't know what it's about or recognize the wording. Special education is constructed in terms of locality, temporality, and volume. The special needs support is located in a separate room, scheduled at a specific time, and is given individually or in a group with a limited amount of students from various classes.

When Sebastian is asked about special needs support, he wonders if it is only about the support connected to a student action plan and continues that he has had such a plan in almost all of the schoolyears:

But when you say special needs support is it only that I've had a student action plan? /.../ I've had a student action plan in almost all school...schools.

He seems to understand the formal document student action plan as steering the content of his support and continues by explaining that it is because of his diagnosis as he easily gets restless. He also says that the information in the document doesn't reach all teachers, so the help is limited. On the one hand, Sebastian seems to find internal explanations for his difficulties, on the other hand, he seems to think about something that is not included in the student action plan.

When asked if maths is the subject of special support, he answers with some hesitation:

Yes, I have...since no one else has math so I have math with.. with...alone with a person then.

The provision of special needs support is not only segregated, but it is even almost lonely, as the word "alone" connotes. Even if he says that it works well when he continues the interview, there

is a delay in his answer, and he uses the neutral wording “person” instead of a teacher to describe this individual support, which displays a lack of relation. He doesn’t say anything about a special pedagogy, only about its segregated locality and individual provision.

As for *Tommy*, he doesn’t remember any student action plan but talks about having had special support in Swedish, English, and Mathematics in his first year of upper secondary VET. These are the so-called ‘core subjects’ in compulsory school, which are mandatory to become qualified for and in upper secondary education. When asked about the teaching and special needs support in these subjects, he describes it as organized in small separate groups with students from different classes: “Group of four people /.../ maybe we were five.” It is thus a limited amount of students, which should extend the possibility to ask the teacher when needed as well as more time for the teacher with each student. On whether there was any difference from the ordinary teaching in the whole class, he replies: “Nothing, I think /.../ it probably was the same just in a smaller group.” There is a mixed critical evaluation of the support though since Tommy later adds that it differed between the subjects and teachers, of which maths didn’t work, but English did since the teacher was explaining well and gave him tasks to do.

Jonas describes vocational education as the easiest to learn since he needs special support. When asked about the student action plan, he answers he had one before to catch up with failed grades in Swedish in the last year of compulsory school. “But it was like this that I thought I wanted to get ready with the Swedish though since I failed in ninth grade.”

He continues to say that it gave him someone to help if he needed, such as reading aloud and asking questions in between the texts, as well as prolonged time for assignments. His account further on also indicates how special needs support is organized differently in the various schools he has attended.

When it comes to *Jesper* having had special needs support in mathematics since ninth grade in compulsory school, he doesn’t remember having had a student action plan and says: «What does student action plan even mean? ” He doesn’t know or recognize the reference or wording of a student action plan. However, he is aware of having had special needs support in compulsory school and first year of upper secondary, organized in a smaller group: “And I think ... I think it’s nice with small groups /.../ it’s easier to concentrate then.”

Jesper appreciates the small group as a help to concentrate but says nothing about how the teaching is done or any special pedagogy except for the size of the group.

Axel remembers having had a student action plan in the second year to catch up on failed courses: “But it was like they guided me like this so yes ... I started following /.../ now I have grades in those subjects so.”

It seems to have been something he in posterity sees as a needed guidance that he now is satisfied with since he describes himself as very confused in these situations.

Alexander doesn’t have a student action plan anymore but has experiences from last year of compulsory school: “When I understood that I needed to get approved to get into some upper secondary school.”

It was a matter of getting the merits to be accepted in further education, not a matter of special needs support as such. Earlier on, Alexander talked about how he had refused it in

the beginning and his bad feeling of having separate support in a small group as something negative: "I didn't want to...I didn't want to...it felt wrong to be with one teacher, felt like being stupid."

The quotes show the ambiguity between, on the one hand, the need to be qualified for upper secondary and, on the other hand, what this process means to the student, as here the feeling of being different or even "stupid". Having finally accepted it, Alexander even talks about the separate education as «very good».

When asked about special needs support, *Maja* remembers that she had a student action plan in her first year in upper secondary to catch up in Swedish as it was the only subject Maja didn't have passed grades in. On the question, if she influenced the content of the plan and its special needs support, she replies:

No, it wasn't really...it was more that I needed to change class because it doesn't work to sit in...what was it, about 40 students in a small classroom and try to concentrate /.../ and then it was...fell natural that I asked for a smaller study group or whatever.

For her, it was her choice to get a calm and quiet place with fewer people to study for the grade, which she mostly managed on her own. When asked about her experiences with the support, she replies:

Because one doesn't talk so much with other students/.../ well one doesn't know anyone so, one sits mostly by oneself but- /.../so it didn't feel like someone got something extra.

She describes a learning environment without any special pedagogy and in which there were a few students from different classes working individually, lacking interaction between themselves or with the teacher. If they asked the teacher, they would get explanations. For her, it was a matter of getting away from the ordinary class to a calm locality, which the ordinary classroom didn't provide her with: "But it's just that they run around and ravage." "They" alludes to her classmates, and it is clear from her account that she has different ambitions: "I'm very concerned not to waste my time." Maja positions herself as being concerned about her time.

II. Vocational education and teaching

The reasons for the unanimous valuing of the vocational courses, as shown in the following, can probably partly be explained by the student's own choice of educational program. From the interviews, it is clear that not everyone got their first choice though. Nevertheless, they are mostly satisfied with the teaching and learning environment in VET. Only one student mentions needing special support related to vocational courses and training. In the text below, the students' accounts of what they appreciate about vocational education are presented.

When asked about her choice of upper secondary VET *Maja* replies: "So. Probably chose it because it was easy... or a job to get...or, what's it called, a simple education so I /.../easier to get work later."

It is not quite clear if the ease or simplicity she repeats regards the education itself or the future vocation and labor market that determined her choice. Further on in the interview, one understands that she doesn't have any outspoken learning disabilities, as quoted initially in this paper when she positions herself as "an easy learner" but also someone who always works better physically, something she thinks the vocational education provides her with. There is a certain critical view to be discerned though, in Maja's further account when she considers the vocational program she has chosen as dominated by men, both teachers and fellow students: "Attending a vocational school dominated by men easily pushes you to be a boy to understand."

At the same time as the interview goes on, she shows herself well aware that being a girl gives her some priority in the labor market: "One has some priority."

Overall, Maja's reasoning in countering displays her skill to analyze the complexity as well as ambiguity in the education she takes part in, such as the inherent division between practical and theoretical as if vocational education is merely practical and therefore easier instead of better adapted to her needs from the outset, despite the gendered side of it.

When asking *Alexander* about a good day at school, he answers: "Eh. Yes, having a workshop /.../ is when one has industrial and welding and the like, that's what one has chosen so to say." For him, the possibility to participate in the program's vocational subjects and work-related activities is important as they are his choice.

Another factor that makes the vocational courses valued is the time spent with the teachers, as accounted for, such as by *Tommy*: "One has them quite often /.../ see them every day".

Not only the extended time but also the number of different teachers play a role. There seems to be a closer relationship between the vocational teachers and the students as the vocational teachers don't differ as much among the subjects as in the more academic courses. This is something that *Sebastian* takes up as well about the kind of teaching and relation to the teachers in the vocational courses:

Here, we just have these workshop teachers /.../ say that you sit and weld and you need help with something so it's just to tell one of them /.../ you don't need to tell a certain person.

The teachers work in pairs or teams but know all the students well, so it doesn't matter which student needs help, they are there for the whole class and everyone.

How teaching is done has an impact on the learning. Sebastian explains how it works in welding: "Say we're going to weld something new, a...a new weld /.../ or then for example Pelle shows, we get to stand beside and then he shows exactly how we're going to do."

Sebastian refers to a way of teaching that uses modeling to demonstrate visually with embodied activities common in vocational education. Sebastian continues to explain: "How you weld is a bit more difficult to explain." Sebastian seems to mean that welding is something that has to be demonstrated and shown in action, not only explained verbally. It is an embodied teaching visibly displayed.

Jesper is also in favor of the experiential and embodied aspects of vocational courses, which he describes with how he learns best, answering without hesitation: "Practically, when I get to do things /.../ then I learn best actually." Jesper explains that it is by performing actions that he

learns best and the reason why he chose the vocational program: "I chose it because I wanted to work with the body /.../ not sit like still." He likes working with his body and being active, not just sitting there.

III: Academic subjects and teaching

The reason for the students above to have had special needs support is connected to so-called academic subjects such as Swedish, Mathematics, or English, either to catch up on failed grades from compulsory school or as failed grades earlier in the first year of upper secondary VET. In the following, the students give their account, as represented below, of various aspects of these difficulties in academic subjects understood or described as "theoretical."

Maths teaching by book is spelled out in *Jesper's* account: "In maths /.../ I know we did then were lots of tasks in the maths book /.../ it gets quite sluggish just to work in the maths book."

This way of describing the teaching in maths as 'bookish' can also be heard in *Tommy's* account when he says: "In maths, it was more like we just fed through chapters one to six," not relating it to any activity or interaction other than the book.

When asked about how he likes his courses in the school, *Sebastian* describes it as a good place on the whole, but he still has a subject from earlier years to complete: "There are particular courses like... I still have math /.../ you only have math in the first year but I haven't finished /.../ two chapters left or something."

In this case, it is the upper secondary maths course from the first year he is doing, and now, in the last year, he still has not reached the goals to attain the missing grades. The 'theoretical' character can be understood when he refers to chapters as what is still missing: "Two chapters left or something". One understands from his description (in line with *Jesper* and *Tommy*) that the teaching in math has been closely connected to the math book in contrast to the teaching with modeling and demonstrations in the vocational courses that he talked about previously.

Later in the interview with *Sebastian*, it seems that the teaching in maths has changed towards more interaction though:

It's a lot of oral now /.../ lots on the board /.../ we don't work straight off the book anymore... we do a little in the book and then the tasks from one, which is like the tests that can come and the like.

Finally, he seems to get a teaching that is more adapted to his needs of demonstrations and talk now that he is in the final year of his education. However, it is also a teaching for the test.

Axel explains that subjects need to be understood as useful to motivate him, and he cannot see the usefulness of theoretical courses such as in mathematics:

Yes, it could be these subjects that I don't perceive that I need /.../ Yes, but it can be for example... yes, math was like this. /.../ lessons... there was a lot one learned that was good /.../ but it was also a lot of things that I wouldn't... use at all /.../ such as integrals.

If and how he will need the skills in maths in his future vocation is completely absent in his reception of the subject, which displays how the teaching can be understood as theoretical and distant from what he sees as useful. There is no integration of maths into the vocational subjects.

Maja talks about teachers in general: «...they don't understand that one doesn't understand /.../but think that everyone has to be on the same level". She expresses a critical view of the teaching, but there are exceptions: "Female teachers have it easier to speak out for everyone." In her experience, this has a gendered side to it, and the subject she refers to is religion with a female teacher.

As for *Alexander* the theoretical courses can be very different depending on the teaching, and he explains how he likes social sciences with politics: "We have social sciences, I like it a lot /.../ we had it last year with politics and the like /.../ there I could concentrate very well."

The fact that he likes the subject seems to help him concentrate in contrast to natural sciences, which he finds difficult and boring. What he likes is: "it's the subjects you talk about" such as in social sciences, which he experiences that he succeeds as he likes talking about the subject and content.

When *Jesper* describes the other more theoretical/academic subjects, he connects them to the teachers: "And then in the other subjects... have... we're not so close to those teachers /.../ so then the theoretical courses /.../ so it's not that fun then but."

The relational aspects regarding the teachers are important, and this is something he misses when it comes to the more theoretical subjects. It influences how he experiences the teaching.

However, *Jesper* has experience with different ways of teaching in academic subjects such as religion and natural science, which he describes as follows:

Well, I think you have half of the lesson teaching /.../ and then half of the lesson you do a task/.../ I think it's quite good/.../ we used to have a bit like that in religion actually/.../ and natural sciences

This shows that it is not the 'theoretical' courses or subjects in themselves that cause problems but how they are organized and taught, and that theoretical and practical courses are separate entities and not combined for the benefit of the students with adaptations and variation.

IV: Theoretically informed findings

In this last part of the findings section, the third research question of how students' experiences of special needs support can be understood and conceptualized within perspectives of special needs education, critical didactics, and voice, more precisely analyzed within relational and categorical perspectives in special needs education (Persson, 2019), critical constructive didaktik (Klafki, 1995, 2014), and theorized voice (Lawy, 2017).

All the students except for *Maja* describe the provision of special needs support in academic subjects from a categorical perspective, putting the lack of attained grades on themselves and not the teaching and learning environment. None of them talk about any special pedagogy or special didactics other than a local and temporal organization with a smaller volume, albeit some adaptations are accounted for in a few subjects. The segregated provision of support is experienced as positive as well as negative.

The maths subject, as described by the students as strongly bookbound, can be seen as something that increases the categorization of the student as a carrier of the problem instead of looking at the teaching and the learning environment (Persson, 2019). From a critical constructive perspective of didactics as developed by Klafki (2014), teaching and learning are interactive in the sense of social processes opening for participation and influence as well as increasing students' confidence and solidarity. Planning with the students is therefore important; this is not told in the students' accounts.

On the other hand, some students give examples or suggestions of what works for academic subjects, such as teaching that mixes oral discussions with listening and assignments. In the vocational courses, there seems to be no need for special needs support or adaptations; the teaching of modeling and interaction is already provided to everyone. This is in line with Klafki's (1995) view of the importance of interaction between teacher and student as well as between students to create a constructive teaching and learning environment. In this sense, Klafki's (1995) Didaktik is holistic as it is not focused on subjects as such but on the subject as done: how it is practiced as part of education. The experiences displayed in students' accounts show an overrepresentation of categorization and segregation in certain subjects such as maths. The vocational subjects, on the other hand, mostly give examples of how teaching and learning can be relational in construction, didactically as well as socially. It is not the individual who is adapted but the activities and the environment (Persson, 2019).

Voice at the intersection of language and the body (Lawy, 2017) is present in various parts of the student's accounts, such as when the students describe how they learn best or how the teaching is theoretical. However, voice also displays an absence of being listened to, such as Maja's description of the lack of gendered concerns in the learning environment or the more distant relationship to the teachers in academic subjects described by Jesper. We can hear the voice connected to identity when Jesper explains that he learns best in doing things practically or when Maja describes herself as an easy learner who works better physically and is concerned about not wasting her time. There are also examples where voices have been heard and acted upon, such as Maja's need for a quiet space or Sebastian's experience of more oral interaction and tasks in maths. However, the descriptions do not clearly display students' voices in special needs education, critical didactics, or special needs support.

Discussion

This paper aimed to explore and develop an understanding of special needs support from the perspective of upper-secondary VET students.

The themes in I and the answers to the first research question about how the students describe the organization of special needs support display the provision of special needs support as organized individually or in small groups in segregated localities and extended time in some academic courses to reach the missing goals and grades. What is special is that it is separate from the ordinary class with fewer students in the group. Apart from the possibility of more 'teacher-time' for questions and explanations, there is no special needs support. This is in line with earlier research where support in academic subjects in vocational education was scarce (Yngve et al., 2019) The students frequently talk about having problems with their concentration and even

about getting a diagnosis to help the teachers' understanding. The student action plan is thus seen as a consequence of diagnosed disabilities, but no one explicitly mentions any form of special pedagogy.

The themes in II and the answers to the second research question about what kind of teaching and learning emerges from the students' accounts give the students' view of the teaching and learning in vocational education with processes of participation in embodied and modeled activities. The students appreciate spending more time with their teachers, something which has a relational value as the teachers know the students and their needs. The classes are organized as smaller for everyone, and they have some teachers simultaneously who are there for the class as a whole. Special needs support, or SNE, is not mentioned, which can be because of more holistic support measures in vocational subjects (Björk-Åman & Ström, 2022).

The themes in III, answering the second research question as well, and what kind of teaching and learning emerges from the students' accounts reveal a learning environment in academic subjects with little interaction or practical aspects. One subject stands forth as especially hard: mathematics, a subject which almost all of the students in this study express difficulties with either from compulsory school or from previous years in upper secondary. They seem to see it as their individual problem since they describe having difficulties concentrating and need to see the practical usefulness of the subject. The students describe the importance of getting motivated as in one of the extracts, a sense of utility, as also shown by Muhrman (2022) and Gilberg (2024). Their description of the teaching in academic subjects seems to be mainly focused on attaining failed grades and completing chapters in a book, not on any special provision of support other than mere localization and time. There were some exceptions though, where oral interaction and temporal adaptations were used, such as described by Alexander and Jesper in subjects such as social sciences, religion, and natural sciences. What also comes forth is the importance of relational aspects (Ryökkinen, 2023), which is missing in the academic subjects. Integration of math into the vocational program is not described by any student, despite its place in the curriculum and research showing its benefits (Frejd & Muhrman, 2022).

The themes in IV and the answers to the third research question about how students' experiences of special needs support can be understood and conceptualized within perspectives of special needs education, critical didactics, and voice, show how the categorical perspective (Persson, 2019) dominates the provision of special needs support as segregated and individualized. Relational aspects such as an inclusive learning environment and contact with teachers are mostly found within the vocational courses. The dichotomy between academic and vocational education is something Klafki (2014) has raised as an issue in his discussion about Didaktik as critical and constructive. He suggests a stronger integration of vocational education with a renewed form of academic education and a stronger focus on society and the individual. Klafki sees the mission of Didaktik primarily as a question of and for society in a strongly democratic and ethical sense where the individual has the right to participate and influence with the potential to change practices critically and constructively to give everyone an education that includes in present and prepares for the future. Voice in the sense of being heard and listened to (Lawy, 2017) is thus an important step towards an inclusive education in which the focus is on improving the learning environment for everyone.

A holistic perspective (Hiim, 2020) on special needs support is thus needed, dynamically changing according to time and context (Asghari, 2024).

Conclusions

The students' experiences of special needs education that we can see in the results are that academic subjects such as maths are given more attention in the construction of special needs support compared to vocational subjects and workplace-based learning. However, the support provided is not special in a didactical or pedagogical sense, as shown in the students' accounts; it is merely localized outside the regular class and schedule with a smaller amount of students. This is not contrary to educative norms as spelled out in The Swedish Education Act (SFS 2010:800, chapter 3), but it raises the question about the relationship between didactics and students' special needs since it is only in the academic courses the special needs support is used as a concept.

What about giving the students a stronger voice (Uthus & Aas, 2024) through listening and giving them a space of agency (Lawy, 2017)? As Hodkinson(2024) suggests, a right discourse should displace the ableist discourse of needs and instead hear to act upon the voices of those labeled SEN. We have a lot of learning to do if we collaborate and interact!

Notes on contributor

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