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# Norwegian teachers' efforts in preparing students with mild intellectual disability for working life

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## ABSTRACT

People with intellectual disability are only marginally represented in the labour market, and research has identified several school-related barriers to their labour market participation. This study uses a qualitative method triangulation with eight teacher interviews and nine individualised educational plans (IEPs) to explore how teachers prepare students with mild intellectual disability (MID) for future employment in Norway. Document analysis illustrates which work-related goals teachers incorporate in students' IEPs. In-depth interviews with teachers provide additional information about teachers' efforts about helping their students become valued employees. Findings from this study indicate wide variation and room for improvement in how schools prepare students with MID for employment. Recommendations for research and practice are discussed in the article.

## ARTICLE HISTORY


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## Introduction

Article 23 in the UN Declaration of Human Rights (1948) states that everyone has the right to work. According to the World Health Organisation (2022), people with mild intellectual disability (MID), i.e. with intellectual and adaptive functioning situated two to three standard deviations below the mean, will generally be capable of achieving employment if support is provided. While international contexts and statistics vary, it is estimated that only between 9 and 40% of people with intellectual disability (ID) have some form of paid employment (Ellenkamp et al. 2016). In Norway, where this study was conducted, merely 5.6% of people with ID are employed, most of them in sheltered employment (Wendelborg, Kittelsaa, and Wik 2017). In comparison, 22.4% of adults with ID are employed in Sweden (Arvidsson, Widén, and Tideman 2015). Thus, internationally and perhaps in Norway in particular, most people with ID stand on the periphery of the labour market, and they miss out on the benefits that employment may offer, such as greater financial independence, a sense of purpose, increased autonomy, larger social networks, and enhanced quality of life (Grant 2008).

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Various obstacles can prevent an effective school-work transition for young people with ID. This includes barriers at the workplace, such as negative attitudes, lack of support, or insufficient finances (Dean et al. 2022; Wendelborg et al. 2022), but school-related factors may also impact employment opportunities of young adults with ID. In a scoping review of Nordic research on employment for people with ID, Garrels and Sigstad (2021) identified the following school factors that affect post-school employment: class placement, i.e. being educated in an inclusive rather than in a segregated classroom (see e.g. Myklebust and Båtevik 2014); choice of educational programme, i.e. being enrolled in vocational rather than in general education (see e.g. Arvidsson et al. 2016); coordination between the educational system and the labour market (see e.g. Tholén, Hultkrantz, and Persson 2017); and teachers' expectations towards students with ID (see e.g. Rosenqvist 1990). Moreover, international research has consistently identified early paid work experience during the school years as a significant predictor of employment (Qian et al. 2018), and students with ID who have a job when leaving school are likely to still be employed one-year post-school (Rabren, Dunn, and Chambers 2002). In addition, having vocational skills as a primary IEP goal is associated with increased odds for post-school employment (Carter, Austin, and Trainor 2011). Thus, what happens during the school years may have a significant impact on later work opportunities for people with ID.

However, in Norway, Wendelborg, Kittelsaa, and Wik (2017) reported that teachers in secondary education struggle with preparing students with ID for work in an uncertain labour market. According to this study, students' curriculum often seemed based on the kind of life that teachers believed awaited their students with ID post-school, i.e. the idea of a life with disability pension in a day-care centre or sheltered workshop, rather than on students' potential for academic achievement and future employment. Hence, Wendelborg, Kittelsaa, and Wik (2017) express concern about the risk of low teacher expectations, as teacher attitudes have often been linked to student achievement, cf. the Pygmalion effect (see e.g. Klehm 2014). A study by Holwerda et al. (2015) provides further support for this concern, as it underscores the importance of teacher expectations for post-school employment for people with ID.

Internationally, various transition programmes have been implemented for students with ID. Joshi, Bouck, and Maeda (2012) found that students with MID who participated in school-based employment-related transition activities improved their post-school employment outcomes. A literature review conducted by Southward and Kyzar (2017) examined transition-related activities associated with securing competitive employment for youth with intellectual and developmental disabilities, and they identified seven transition-related predictors of post-secondary competitive employment: paid employment while attending school, vocational skills instruction, family expectations, high school completion, IEP goals relating to competitive employment, self-determination, and participating in postsecondary education. Self-determination skills have been particularly emphasised as a predictor of post-school employment (Shogren et al. 2013). Indeed, self-determination skills, such as understanding individual strengths and needs, goal-setting, and planning, may play a role in whether people with ID gain employment (Dean et al. 2017), and student-participation has been identified as a means of enhancing these skills (Garrels and Palmer 2019).

Training specific working skills has also been highlighted as valuable in transition programmes. Robles (2012) refers to ten soft skills that may be relevant training objectives

in secondary school, namely integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic. Thus, it may be worthwhile to include these skills in student IEPs.

### *Education for students with ID in upper secondary school – the Norwegian setting*

In Norway, all students have the right to upper secondary education (Ministry of Education 1998). Students choose between two study trajectories: a general studies programme or a vocational education programme. The general studies programme lasts for three years and prepares students for higher education. Students who receive special education may apply for an additional two years, if this is considered beneficial for the attainment of their educational objectives (Ministry of Education 1998). The vocational education programme consists of two years of mainly school-based education followed by two years of apprenticeship, and it leads to a professional trade certificate within a specific profession (e.g. hairdresser, plumber, car mechanic, etc.). For those students who do not have the prerequisites to obtain a trade certificate, the apprentice candidate scheme can provide opportunities to obtain partial competence within a profession.

According to Norwegian law, students who cannot benefit satisfactorily from ordinary education have the right to special education (Ministry of Education 1998). This typically includes students with ID. The Pedagogical-Psychological Service (PPT) assesses whether a student requires special education, and gives a recommendation to the county authorities, who then take a juridically binding decision concerning the student's right to special education. For those students who receive special education, an individual education plan (IEP) must be developed. The IEP shows learning objectives and instructional methods, based on PPT's expert assessment. Students with a right to special education may enrol in a general studies programme, a vocational education programme, or an adapted programme, which combines practical and theoretical subjects with some focus on vocational training.

Wendelborg, Kittelsaa, and Wik (2017) found that three out of ten students with ID in Norway attend the general studies programme, even though higher education is rarely relevant for this student population, because they will not meet the requirements for enrolment in higher education. In a general studies programme, the focus lies mostly on competence acquisition within main subjects, such as languages, mathematics and sciences. Compared to a general studies programme, vocational training has shown to provide better opportunities in the labour market for people with ID (Arvidsson et al. 2016). Vocational study programmes focus primarily on working life; they include opportunities for work practice at school, and there is usually collaboration with local companies for work training and apprenticeships. For people with ID, upper secondary school is the education that practically prepares them for employment. Thus, the development of work skills during these years is essential. In Norway, no systematic school-work transition programmes for students with ID are in place. Hence, it remains unclear how Norwegian schools prepare students with ID for employment. Therefore, this article aims to examine this in more detail.

## Aim of the article

In this article, we explore participation in working life as a goal for upper secondary education for students with MID in Norway, and we examine teachers' efforts in achieving this goal. Within this study, we focus on educational goals in secondary school, as well as on teachers' experiences with preparing students for employment. The following research questions guided this article:

- *How is participation in working life expressed as a goal in students' IEPs?*
- *Which factors influence the pedagogical actions that teachers take to prepare students with MID for employment?*

Findings from this study may prove valuable to teachers who are responsible for educating students with MID during secondary school. The results provide examples of what the school's focus on working life entails, and, at the same time, they illustrate what teachers in secondary school do to prepare students as best as possible for employment. Findings may inspire policy makers and school leaders to undertake action to bridge the research-practice gap. Moreover, this study contributes to the research field by identifying areas in need of intervention.

## Methods

### *Study design*

This study is part of the project 'Effective school-work transitions for students with mild intellectual disability', funded by the Norwegian Research Council (project number 301510).

The present article focuses on teachers' efforts in preparing students for employment. The article is based on a qualitative data triangulation, combining document analysis of IEPs and analysis of in-depth interviews with teachers who are responsible for the education of students with MID in secondary school. The teacher interviews and IEPs concern the same sample of students with MID. In this article, the combined results from these two data sources provide answers to the article's research questions.

### *Ethical considerations*

The study was approved by the Norwegian Centre for Research Data (NSD) (approval number 380880). We used easy-to-read information sheets with visual support to obtain informed consent from former students with MID, asking them for permission to contact their teachers from upper secondary school for an interview and to access their IEPs. Prior to the qualitative interviews, teachers also received information and a consent form. In the present article, participants' statements are anonymised in terms of names, positional information, and other recognisable characteristics. The IEPs were also anonymised.

## *Recruitment and sample description*

The overarching study is centred around a sample of ten former students with MID who transitioned successfully from school to work. We obtained their consent to interview their teachers from upper secondary school and to access their IEPs. Nine teachers (one of the teachers represented two students) were invited for an interview and asked to provide access to the students' IEPs. Eight of them responded positively to our request. The teachers (six female and two male) were employed in six different schools in South-Eastern Norway. All were special educators with several years of experience of working with students with ID.

## *Data material*

The first data set in this study consists of student IEPs. For seven students, we gained access to their IEPs, and for two students we received an educational report. An educational report is a written assessment at the end of the school year, showing goal attainment for the goals described in the IEP. For brevity, we hereafter refer to all documents as IEPs. The nine IEPs represent various educational trajectories for students with ID, including vocational and general studies programmes as well as individually adapted programmes.

The second data set consists of eight in-depth interviews with the students' special educators from upper secondary school. All interviews were performed at the participants' schools, mostly with two researchers present. In one case, two teachers, who represented three students, participated together. We used a semi-structured interview guide with predefined ideas, and follow-up questions were continuously developed, based on participants' responses. The interviews were centred around aspects that participants identified as important for the training of students with ID in their preparation for employment. The average duration of the interviews was 58 minutes (range 43–73). All interviews were audiotaped and transcribed verbatim after completion. With eight interviews, data saturation was achieved.

## *Data analysis of IEPs*

a) To answer our first research question, namely 'How is participation in working life expressed as a goal in the students' IEPs?', a qualitative content analysis of the IEPs was used (Schreier 2012). Qualitative content analysis is a systematic method for describing the meaning of qualitative material, in which data is categorised according to a particular coding framework. The coding framework for our categorisation of IEP content was developed based on the following three themes that together illustrate our first research question: i) job training at school or in a company as a focus area in the IEPs; ii) presence of generic work skills, i.e. soft skills, as educational goals in the IEPs; and iii) presence of technical skills, i.e. hard skills, as educational goals in the IEPs.

For the first theme, each IEP was examined for information about the amount of time scheduled for explicit job training for each of the students. In this analysis, we identified IEP content that contained information about theoretical work training at school and practical training either at school or in a company. For the second and third themes, all IEP

**Table 1.** Examples of thematic structural analysis.

Meaning unit	Condensation	Subtheme	Theme
'In order to get him through school, I had to tailor a plan for him. . . Because he wanted to mix and match competence goals from different areas, so that he could learn the skills he needed to get a job'.	Individually tailored training to prepare for employment.	Flexible approach with individual follow-up	<b>School's ability to provide individual adaptation</b>
'I think it depends on goodwill from the companies. It depends entirely on who the leaders are'.	Goodwill from the company's management as a success factor.	Personal network and goodwill	<b>School-workplace collaboration</b>

goals were screened for whether they fitted into the categories of generic work skills/ technical work skills or not. Then, the work-related goals were grouped into two tables to present a systematic overview of generic and technical work skills that were integrated in the students' IEPs. For technical work skills, the results were categorised according to which employment sector they prepared for. Both researchers analysed the IEP content independently and then discussed the categorisation of content until full agreement was reached.

### *Data analysis of interviews*

Data analysis was conducted through an inductive data-driven process. A thematic, structural analysis was used to identify themes in the data (Brinkmann and Kvale 2015). By using condensed descriptions from the interview transcripts, the essential meaning of text fragments was captured. Meaning units were condensed into subthemes, which were then assembled into themes (see Table 1). To strengthen the study's reliability, two researchers collaborated during the entire analytical process. In this analysis, the researchers agreed on all subthemes and then combined these into final themes together.

## **Results**

This results section presents findings that address the two guiding research questions for this study, namely i) How is participation in working life expressed as a goal in students' IEPs, and ii) Which factors influence the pedagogical actions that teachers take to prepare students with ID for employment? Qualitative content analysis of the students' IEPs provides an answer to the first question. Thematic analysis of teachers' interviews provides an answer to the second.

### *Qualitative document study*

Document analysis of the IEPs revealed that some students received extensive job training with both practical training in a company and theoretical and/or practical training at school, while others did not receive such training at all. Most IEPs included a variety of generic work skills that may help students function adequately at the workplace. Furthermore, some technical work skills were present in most IEPs. These technical work skills seemed to prepare students for employment within particular sectors, namely the

hospitality industry; construction industry; and childcare sector. The results are described in further detail underneath.

### *Job training at school or in a company as a focus area in the IEPs*

Qualitative content analysis shows that job training appeared in various degrees in the IEPs, ranging from not present at all to comprehensive training. In two IEPs, a focus on job training was altogether absent. In these cases, we did not identify learning goals that could be directly related to job training. Nonetheless, both IEPs presented an overarching goal of 'preparing the student for independent functioning in future employment'. In three IEPs, the focus on job training was partially present, i.e. some goals related to employment were incorporated in the IEP through theoretical and practical training at school. Finally, four IEPs had extensive focus on job training, combining practical job training in a company or at school with specific training of work skills in one or several subjects. [Table 2](#) illustrates the scheduled job training in each of the IEPs, arranged by the amount of time that was allocated for job training in a company and at school.

### *Presence of generic work skill goals in the IEPs*

All IEPs in our study included generic work skills goals. In some IEPs, generic skills were only incorporated into learning outcomes for general subjects, such as Norwegian or social studies. In other IEPs, generic skills were included in both general subjects and in subjects that focused particularly on employment. In case of the latter, these school subjects were not part of the general curriculum, but instead, the subjects were part of a specially designed curriculum for students with special needs. For instance, the subjects 'Knowledge about working life' and 'Working technique' are not part of the regular curriculum of any study programme in Norwegian upper secondary school, but they are subjects that may be organised to prepare students with learning difficulties for working

**Table 2.** Presence of job training in student IEPs.

	Work training in company	Work training at school (practical or theoretical)	
IEP1	- 18 hours/week in kindergarten	- 4 hours/week kitchen skills	Comprehensive focus on work skills
IEP2	- 2 days/week in waste management company	- 3 hours/week working technique - 3 hours/week knowledge about work life - 2 hours/week healthcare	
IEP3	- 2 days/week at supermarket	- 1 day/week in school cafeteria - unspecified number of hours/week for fork lift training (practical and theoretical)	
IEP4	- 2-3 days/week in laundry service	- 3 hours/week knowledge about working life - 2 hours/week vocational training - 4 hours/week kitchen skills training - 3 hours/week working technique - 2 hours/week voluntary work - 2 hours/week healthcare	
IEP5	- 6 hours/week at library	- none	Moderate focus on work skills
IEP6	- 4.7 hours/week in IT company	- none	
IEP7	- none	- 3 hours/week working technique - 4 hours/week kitchen and ADL skills - 2 hours/week healthcare - 2 hours/week knowledge about working life	
IEP8	- none	- none	No focus on work skills
IEP9	- none	- none	



**Table 3.** Examples of generic work skills goals in student IEPs.

Educational goal in the IEP	Domain
Expressing personal opinions	<b>Communication and interpersonal skills</b>
Listening and being responsive during conversation	
Being punctual and on time (time management)	<b>Self-management and independence</b>
Initiating work tasks independently	<b>Work ethics</b>
Checking the quality of one's work	
Being honest and reliable	<b>Teamwork</b>
Collaborating and interacting with others	
Following instructions	<b>Work administration</b>
Knowing routines for sick leave	
Knowing what a CV looks like	<b>Workplace health, hygiene and safety knowledge</b>
First aid skills	
Knowing how and why to use safety equipment	

**Table 4.** Examples of technical work skills goals in student IEPs.

Educational goal in the IEP	Domain
Preparing food	<b>Hospitality industry</b>
Serving food	
Obtaining a license for operating a forklift	<b>Construction industry</b>
Repairing technical equipment	
Knowing about child development	<b>Childcare sector</b>
Being able to support children's free play	

life. In our study, IEPs that included such specially designed subjects had a more extensive array of goals related to generic work skills.

The generic work skills goals that were identified in the IEPs could be systematised into six domains, namely communication and interpersonal skills; self-management and independence; work ethics; teamwork; work administration; and workplace hygiene, health and safety knowledge. Each domain includes several skills that may be useful competences for employees, independent of the type of employment and workplace, such as asking for help when needed or showing perseverance at work (see [Table 3](#) for examples).

### *Presence of technical work skills as goals in the IEPs*

Technical work skills were present in seven IEPs in our study; two IEPs did not contain learning outcomes that had immediate relevance for any particular post-school vocational occupation. In the seven IEPs that did describe such goals, the technical work skills were arranged by work sector that they prepared the student for, namely the hospitality industry, construction industry, or childcare sector (see [Table 4](#) for examples). It was not possible to derive from the IEPs whether these goals were selected based on the students' interests and strengths, or whether other factors determined this choice.

### *Qualitative interview study*

This part of the study explored the factors that influenced the pedagogical action that teachers took to prepare students with ID for employment. Thematic analysis of the teacher interviews rendered five themes: *Choice of academic study programme; school's ability to provide individual adaptations; school-workplace collaboration; cooperation with external agencies; and collaboration with parents/guardians.*

**Table 5.** Factors that influence teachers' efforts to prepare students with ID for employment. Themes and subthemes.

	Choice of study programme	School's ability to provide individual adaptations	School-workplace collaboration	Cooperation with external agencies	Collaboration with parents/guardians
Subthemes	Traditional school subjects vs. practical subjects Opportunities for job training	Getting to know the student Flexible approach with individual follow-up	Personal network and goodwill Close collaboration with companies	Interdisciplinary collaboration Low threshold for contact and follow-up	Early involvement of parents/guardians Aligning expectations

Table 5 displays themes and subthemes from the thematic analysis of the interviews. Quotes are used to exemplify the themes.

### *Choice of academic study programme*

Two subthemes were identified within this first theme: Traditional school subjects vs. practical subjects on the timetable; and opportunity for job training at school or in a company.

Data analysis indicates that students' choice of study programme affects the extent to which teachers focus on preparing their students for employment. Teachers who taught students with ID in a vocational study programme had a more pragmatic approach and paid attention to preparing their students for future employment, thereby focusing on practical subjects with immediate relevance for future employment. A school counsellor at a vocational school described the timetable for one of his students as follows:

'He spent his first year in the "Sales and Service programme". In the second year, he applied for enrolment in the "Healthcare, childhood and youth development" programme. To make him succeed, I had to tailor a plan for him. [...] Because he wanted to mix and match competence goals from different areas, so that he could learn the skills he needed to get a job.'

Teachers who taught in a general studies programme seemed to direct their teaching mostly towards traditional school subjects, even when students were in a special classroom. These teachers prioritised teaching their students the very basics within these subjects, possibly because they felt constrained by the national curriculum for the study programme:

'Markus was admitted to the program called 'Adapted general studies programme'. This meant that he had to choose the same subjects as students in a general studies programme, with Norwegian, English, mathematics, social studies, history and geography. [...] We started from the curriculum for the programme area to which he was admitted. But while the topic was at upper secondary level, the content was maybe at fourth grade level.'

In our study sample, teachers in vocational programmes seemed to enjoy more freedom to tailor the contents of their teaching as they deemed suitable for the student's development, and they had a more hands-on approach towards the school's mandate to prepare students for adult life.

Schools with vocational programmes also appeared to have unique opportunities to offer students practical job training, either at school or in a company. Job training at

school included performing janitor duties as well as getting training in the school's library, cafeteria, laundry, etc.

Furthermore, teachers in vocational programmes assessed the importance of job training in a company as essential for later employment. One vocational teacher relates:

'This student got a safe and smooth transition from school to working life. She started early with job training in kindergarten during the school years, and she got to experience how that is. That is very important.'

In our study, teachers in general studies programmes did not consider it the school's responsibility to prepare students for a particular job. One participant states: 'It is not our mandate to be a teacher, and in addition think of future employment'. This stands in immediate contrast to a vocational teacher's opinion: 'Our task is to prepare them for what comes after upper secondary'.

### *School's ability to provide individual adaptations*

The school's ability to provide individual adaptations seemed to affect whether and how teachers prepared their students with ID for future employment. Within this theme, the following subthemes were identified: Getting to know the student, and a flexible approach with individual follow-up.

Getting to know the student was considered an important prerequisite for being able to provide individual adaptations in the study programme. In some schools, routines for gaining information about students were well-established, including close collaboration between lower and upper secondary school to allow for a smooth transition. As one teacher explained: 'We have regular transfer meetings. We have a number of standard documents that we follow'. Another teacher also underscored the importance of a well-functioning information flow between lower and upper secondary: 'Students shouldn't start with a "clean slate" when they come to us. We depend on smooth transitions, so that we can accommodate their needs and avoid trial and error to figure out what works'.

With routines for information exchange in place, teachers could take into consideration the student's abilities, interests and motivation when developing an individually tailored programme. This ensured that students experienced their education as relevant and future-oriented. A teacher explained that one of the students had only one wish, namely to work in childcare, and this was something that was known to the school from day one. Hence, educational goals related to the student's interest were integrated in her IEP and some degree of student participation and self-determination seemed present.

However, certain schools used a very long time to get to know the students, and in some cases, this could even take several years:

'Even with five years in upper secondary, we sometimes feel that we finally get to know the student really well in the fourth year. That's when we think that we should have another four years.'

A flexible approach with individual follow-up was by many teachers considered as pivotal for students' development and their preparation for employment. Therefore, many teachers did not follow a fixed template, but instead, they 'shaped' the content of the school subjects according to the students' needs and interests. Several teachers also described

systematic follow-up of the students' progress, and they worked incrementally to promote students' independence and self-determination.

### *School-workplace collaboration*

Within this theme, two subthemes were identified: Personal network and goodwill, and close collaboration with companies.

Several of our participants described how they relied on goodwill from companies to provide job training for their students with ID. This seemed often dependent on certain individuals, as one teacher explains: 'I think it depends on goodwill from the companies; it depends entirely on who the managers are'. Some teachers also related how they used their own network to arrange job training for their students, thus utilising personal relations to obtain internships for them. This dependence on certain individuals, either in school or in the company, made the possibilities for job training vulnerable to change. A new manager in a company could, for instance, mean the end for possible job training at that workplace. The use of teachers' personal network to provide job training for students with ID also led to a lack of systematic overview over which companies a school collaborated with. When asked, hardly any of our participants could provide a list of the companies that they collaborated with for job training. Yet, one school reported having regular network meetings with contact persons in local companies, where they discussed plans for apprenticeships and job training for different students, and another school had allocated time for a teacher to establish contacts with local companies.

Several teachers emphasised that close collaboration with companies was needed for job training to be successful. In particular, honesty regarding students' needs was highlighted, so that employers would not encounter unexpected challenges. Such collaboration required a clear division of responsibilities, and student follow-up was considered the school's responsibility. Some teachers also underscored the benefits for the company with providing job training for students with ID. This way, a company could get to know the student and experience what he or she could contribute with at the workplace, before offering a permanent job post-school. Hence, providing job training was described as a safe trajectory for a company to recruit employees with ID.

### *Cooperation with external agencies*

Within this theme, two subthemes emerged: Interdisciplinary collaboration, and low threshold for contact and follow-up.

Interdisciplinary collaboration was highlighted by most participants as pivotal for a successful school-work transition. Teachers in our study collaborated, amongst others, with pedagogical-psychological services, social welfare services, and vocational rehabilitation companies. Several participants emphasised the need for good routines to coordinate support services. One teacher explained:

'In general, we have collaboration meetings with community services, so that the student is supported also after secondary school. We have a good support system that has been built up over time, and we all know each other. We know whom to call.'

Yet, not all schools seemed to have routines for such collaboration, and this could cause despair for some teachers: 'Sometimes I just close my eyes and I cannot bear to think of

what will happen next [post-school]. I can hardly think of it, because I know that there's nothing there for the student. There's no-one in the receiving end'.

For those teachers who did have a network for interdisciplinary collaboration, a low threshold for getting in touch was described as important: 'We can just pick up the phone and ask, right?' A well-functioning collaboration that was not hampered by bureaucratic structure contributed to close follow-up of the students.

### *Collaboration with parents/guardians*

The last theme comprises the following subthemes: Early involvement of parents/guardians, and aligning expectations.

In our study, participants emphasised the importance of involving parents or guardians early to secure a successful school-work transition. Some teachers reported routines for information meetings for parents at the start of the first school year, where post-school outcomes were a central topic. During such information meetings, representatives for external agencies, such as habilitation services, social welfare services, and supported employment agencies, were also invited, so that parents could receive comprehensive information about the different possibilities for their child with ID. Several participants highlighted the importance of parents for the student's development and preparation for employment: 'Her parents were exceptional. They always pushed her just a bit more, so that she could manage as much as possible by herself. They've been worth their weight in gold'. In some cases, particularly resourceful parents could even take over the school's responsibilities to provide job training. Yet, some teachers also experienced that certain parents had ambitions for their child's future that teachers considered unrealistic. In such cases, teachers spent time listening to parents' concerns, reassuring them, and finding common goals to strive for.

## **Discussion**

This study investigated how participation in working life is expressed as goals in the IEPs of students with MID in Norway, and it explored factors that influence the pedagogical actions that teachers take to prepare students with MID for employment.

Despite the small sample in this study, a wide variation in approaches towards preparing students with MID for employment was identified. Some students were offered substantial job training and training of both generic and technical work skills, while others hardly received any preparation for employment at all. This variation was present both in student IEPs and in the interviews. One key factor appeared to be the choice of study programme. Vocational teachers in our sample acted pragmatically on behalf of their students, while teachers in general study programmes did not consider it their task to prepare students for employment. This raises questions about what is the 'right' choice of study programme regarding students' future work opportunities. Research suggests that job training and other employment-related activities, such as specific job skills training, vocational education, and vocational assessment during the school years are significant predictors of post-school employment (Joshi, Bouck, and Maeda 2012; Arvidsson et al. 2016). Given the low labour market participation for people with ID (Ellenkamp et al. 2016), it may be particularly important for students with ID to choose a study programme that prepares them for employment.

A positive finding of this study is the fact that all IEPs incorporated training of generic work skills, albeit to different extents. Generic work skills, such as communication skills and social skills, are considered important attributes in job applicants (Robles 2012). Due to impairments in adaptive functioning, people with ID may struggle with some of these skills, such as social communication and social responsibility (World Health Organisation 2022). Hence, this is an area that may require special attention during the school years.

According to the Norwegian Education Act (Ministry of Education 1998), students must be involved in the planning and implementation of their special education. Student self-determination and student participation in goal setting and decision making have been associated with improved post-school outcomes and increased employment levels (Shogren et al. 2013). From the IEP analysis, we found little evidence of such participation, but during the interviews, several teachers explained how they assessed students' interests to find relevant educational goals and job training. Hence, findings suggest that there is room for more systematically planned student participation and self-determination in teachers' efforts to prepare students for employment.

Finally, our study illustrates a need for a more systematic approach with clear guidelines for school-work transition. In some countries, such as USA, school-work transition programmes are implemented for students with ID (cf. Joshi, Bouck, and Maeda 2012), but this is not the case in Norway. This may explain the relatively large variation in approaches that this study identified. In line with recommendations by (2017), our data analysis shows that some teachers make efforts to facilitate job training in close collaboration with workplaces. Nevertheless, even when schools do well in providing students with work practice, the collaboration between schools and companies seems coincidental and dependent on certain individuals, making the system vulnerable to change. Moreover, not all schools had an established network with other organisations that could provide support and follow-up during the students' school-work transition. For students with ID, this could mean leaving secondary school without having any occupational activity to go to. Possibly, national school-work transition programmes could provide a more systematic approach to securing employment for students with ID.

This study is limited by its sample size, both regarding the number of IEPs and teachers involved. This cautions us to be careful about generalising our findings. Yet, the variation that we found in our data set may be illustrative of how students with MID are being prepared for working life in schools across Norway, cf. what Brinkmann and Kvale (2015) refer to as analytical generalisation. Moreover, the data triangulation strengthens the validity of our results. Previous research has identified a gap between expressed intentions in student IEPs and what really happens in the classroom (Andreasson, Asp-Onsjö, and Isaksson 2013). Supplementing IEP analysis with in-depth teacher interviews is one way of securing a more comprehensive picture. However, more studies that combine several research methodologies are needed to identify effective approaches that may improve the employment opportunities of students with MID. In particular, there is a need for longitudinal intervention studies that examine strategies to guide young people with MID towards sustainable employment. Finally, our findings stem from Norway, a welfare state with a comprehensive social support system. While we have tried to tie our results to international research, readers should consider carefully whether and how the findings from this study may be used in other geographical contexts.

## Conclusion

This study used qualitative data triangulation to explore how teachers prepare their students with ID for employment. While this study was based on students who had managed a successful school-work transition, findings indicate that schools not always played a major role in this success. Data analysis shows that the extent of job training and the presence of work-related goals varied greatly in the IEPs.

Interview data confirmed that teachers in vocational training had a more pragmatic approach to teaching work skills than teachers in general studies programmes. Furthermore, the school's ability to provide individual adaptations, school-workplace collaboration, cooperation with external agencies, and collaboration with parents/guardians, were factors that influenced teachers' efforts to prepare students with ID for employment. From this study, we conclude that there seems room for a more streamlined collaboration between schools and other instances, as well as an enhanced focus on student participation and self-determination.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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