



Work-AUT: Leveraging WBL to foster professional inclusion of people affected by Autism Spectrum Disorder

**IO2 – WBL pathways guidelines
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(Desk Research)**

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Summary

This focuses on training in the workplace, especially with regard to people with ASD. First and foremost, the report shows that this diagnosis triggers rights in both work and education, these rights are especially related to legislation and apply from early childhood. This group often falls into larger and more generally defined groups of children, young people, adults who fall outside what is "normal" within an educational race. When taking into consideration the target group there is a need to adapt individual learning plans to the individual adults, especially when it comes to work-based learning (WBL). The main educational needs and support are listed, which take into consideration the side of the employer and the future employer. Without a doubt, a mentor is essential in securing a productive work environment. The report highlights examples from practice and research that show simple, adapted measures affecting both employers and employees.

Aim and Scope of this report

This report takes into consideration the main challenges of professionals involved in the training process of ASD trainees as well as the incentives, whether they be monetary or an enhanced diversified working atmosphere. There is a brief overview of formal education in the partner countries specially adapted for ASD students. As well as an overview of which skills are needed to encourage a fruitful work environment.

Furthermore, there is an overview and training offer available for those who facilitate the transition to working life or who conduct training in the workplace. Formal and informal training adapted for people with ASD requires some insight into what one can be observant of in a learning process for many of those who have ASD; we have gathered some important experiences here, both through interviews, conversations and literature. The report does not aim to provide a full overview, but rather to draw a landscape that clarifies the situation around training in the workplace for people with ASD.

WBL in partner countries referring to people with ASD

State-of-the-art of WBL in partner countries

Italy

In Italy, once school pathways are finished, the youngster with autism and his family very often run the risk of being "forgotten" by society and find themselves isolated or forced to refer to services that are not always adequately and organized to take responsibility and manage their needs. A very high



risk of being assisted exclusively by the family or be placed in institutions which, for various reasons, do not specifically aim at integrating them concretely into community life.

The targeted placement for people with disabilities is regulated in Italy by Law 68/99, which provides one or more people with disability work in a private company or public institution with the same context. With regard to job opportunities in Italy, there are three types of "employment" for people with ASD: sheltered workshops, supported employment or preventive training for competitive employment.

Efforts to include adults with ASD socially and in the labour market are also rather weak in Italy.

In Italy school / work of students with disabilities in formal pathways is defined by the law. There is no special regulation for people with ASD. There is a different profiling to help the ASD student. This includes the Functioning Profile (FP), the Individual Project and the Individual education plan, which are all developed by others, e.g. multidisciplinary group composed by representatives from the competent local authority, medical specialists, school and family members in order to identify work potentialities and the ability to attend the school professional practice. They may also identify ways content should be delivered, the level of skills, abilities the student should reach, and ways to assess the student's results.

Considering this general framework, it is recommended that WBL pathways be built on:

- Learning approaches based on problem solving strategies, with the assignment of concrete tasks, under a structured environment and a tutor supervision.
- Working hours should be adequate to the student's ability to sustain the working pace and to adapt to the new environment and people.
- Evaluation criteria should assess the student ability to reach the defined learning outcomes (basic, professionals and transversal skills).

Usually the school/work starts with student's potential analysis in order to define the most suitable WBL path. This is followed by orientation to make the student aware about his/her own strengths. Then a workplace analysis in order to find the best working suite for the student. There is the professional project where the skills expected are clearly defined and the learner is acquainted with the working environment before beginning the working experience. Then there is an evaluation to assess educational objectives reached that is conducted by the company mentor and school together.

It is recommended to elaborate a monitoring plan in order to identify and analyse any critical situation that arose during the WBL path.

Germany

In Germany, the Vocational Training Act (BBiG) and the Crafts and Trades Regulation Code (HwO) provide the basic regulations for vocational education and training. The objective is the acquisition of employability skills. Within every kind of vocational training, the trainee must have the chance to gain the vocational knowledge, skills and experience that are necessary to get a job in a changing working environment (§1, paragraph 3 BBiG).

Three important documents for the vocational education and training of disabled people are **BBiG** (§§ 64-67), **HwO** (§§ 42k-n) and the **German Social Security Code III** (Participation in working life, § 112 SGB). Disabled persons should be trained in a recognized training occupation (§64 BBiG/§42k HwO). It is possible that disabled persons complete their training according to these standards; however, those so-called trainings for “professional practitioners” are also often used for young people who have learning difficulties and have less theory and are mostly offered by vocational training centers, whereas only a small proportion is carried out within a real company.

If the vocational training takes place in an institution e.g. vocational organization, at least 24 weeks should be carried out in a recognized training company or several recognized training companies and not within the institution itself. The content of the internship must be agreed between the trainee and the company in which the traineeship will be completed, based on the training curriculum and in agreement with the training institution. The vocational training is regulated in § 66 BBiG and in accordance with § 2 SGB IX. It has to be checked with every individual whether he or she have special learning needs by using an individual aptitude test carried out by departments of the Federal Employment Agency, or respectively by special measures referring to career choice or work-ability testing.

The training takes three years to be completed and takes place in accredited training companies according to BBiG, which states that disabled persons are only allowed to complete their trainings within recognized institutions. Besides the requirements stated in § 27 BBiG, the training institution must comply with the special requirements necessary for training disabled persons referring to rooms,

equipment and facilities. There has to be a sufficient number of trainers proportional to the number of trainees (1 trainer per 4 trainees).

In Germany, the vocational education for people with disabilities is also regulated. For disabled people, who cannot be trained in a state-recognized training occupation due to the nature and severity of their disability, the competent authorities should develop a special training regulation based on the contents of the training occupation. The BIBB and the Committee for Disabled Persons (AFbM) initiated the implementation process in November 2006 with the symposium "Qualified Vocational Training for All - Implementation of the Framework Guidelines for Training Regulations according to § 66 BBiG and § 42m HWO". Experiences and assessments of the practice could be included early in the implementation process in order to develop practical and needs-based solutions.

Bulgaria

In Bulgaria, people with ASD are directed either in a general education school, where they can work with the help of a resource teacher, or to a Center for Educational Support. However, even with higher functionality, children on the autism spectrum are often rejected by public, municipal, and private schools. Some of the reasons are the lack of sufficiently trained specialists. A special class for children with autism in Bulgaria has been functioning on the territory of Sofia for two years. The class offers an educational program for Bulgarian children with autism spectrum disorders according to the Competent Learner Model (CLM), which is the basis for their integration and is being rapidly adapted to Bulgarian conditions.

In Bulgaria, framework programs approved by the Minister of Education and Science regulate the acquisition of professional qualifications in the VET system. VET providers use framework programs as a basis for creating their own curricula. The most popular form of education for students in secondary vocational education is full-time. Individual and combined types of education offer more flexible learning for students with special educational needs. Individual curricula are developed based on framework programs and state educational standards for acquiring qualifications in professions and depending on the specific capabilities of the individual to achieve the units of learning outcomes, which can be divided into a larger number of lessons.

In 2015, the dual system of education began to develop in Bulgaria. It enables trainees to acquire professional qualifications as practical training in a real work environment alternates with theoretical

training in schools or other institutions in the VET system. Responsibility regarding the training is shared between the state and the business sector. With regard to vocational education and training and in particular work-based learning in general education schools, the same conditions and challenges exist for people with autism spectrum disorders. There are not enough specialists, there are no special guidelines for them in the framework programs for vocational training and education.

The Vocational Education and Training and work-based learning programs in particular in Bulgaria are spheres assigned for regulation, development and monitoring to the National Agency for Vocational Education and Training.¹ The Vocational Education and Training Act has been in force in Bulgaria since 1999, the last update of which is from 2020. It also regulates the vocational education and training of people with disabilities. The main regulations in it are focused on the possibilities for creating and implementing individual programs for people with disabilities, as well as some other general provisions. In recent years, several other laws regulating the needs for special education have been approved in Bulgaria, namely the Law on Inclusive Education of 2016, the Law on Protection, Rehabilitation and Social Inclusion of People with Disabilities of 2005, the Law on Preschool and school education from 2015, Family Support for Children Act updated in 2017.

The National Strategy for People with Disabilities for the period 2021-2030. The strategic goals of the document include establishing the necessary conditions so that people with disabilities could lead an independent life, ensuring their social inclusion; improve their quality of life; gain access to social protection, qualitative inclusive education, health care, employment and appropriate work conditions. A similar strategy has been in place for the period 2016 – 2020, with no significant improvements introduced in the lives of people with disabilities.

Another National program for employment and education of people with permanent disabilities. It is carried out by the Employment Agency and covers all municipalities in the country. The main goal of the program is to increase the employability and to ensure employment opportunities for unemployed people with permanent disabilities who have registered in the Labour office (24-month employment). The program also aims to encourage employers to hire people with disabilities.

¹ <http://www.navet.government.bg/en/>

France

In France, there is no WBL program specific to autistic people as people with ASD are free to participate to the classic French VET system. In France, the system offers several apprenticeship-type schemes and structured work-based learning programmes, based on alternance schemes and both work-based and school-based learning. However, there are two main apprenticeship schemes in France: the contrat d'apprentissage and the contrat de professionnalisation, both contracts are signed between an employer and an employee.

- The contrat d'apprentissage is an employment contract that has been available in France since 1919. It was modified and redefined in 1971. Its duration ranges from one to three years, depending on the target credential or diploma and the initial level of the employee. Its objective is to enable young people aged 16 to 25 to follow a general education curriculum, both theoretical and practical, in order to acquire a professional qualification based on a diploma or a professional credential.

This contract alternates periods of learning in training centres (centres de formation par apprentissage – CFA) and periods of work to develop 'know-how'. The main laws regarding apprenticeship are in the sixth part of the French Labour Code.

- Contrat de professionnalisation – contract has existed in France since 2004. Prior to that, however, there was a rather similar scheme called the contrat de qualification. The objective of the contrat de professionnalisation is to provide access to employment through the acquisition of a professional qualification (certificate, diploma, degree...) recognised by the state and/or a professional sector.

The contract alternates periods of general and technological education with training providers, and periods working in an activity related to the qualification. Since 2005, the French Government has sought to position apprenticeship as a remedy for mass youth unemployment and for the phenomenon of young people dropping out of school without qualifications. One of the most frequently used arguments is that young people who have undergone professional training are actually more successful on the labour market than young people with a general baccalaureate are.

Norway

Most county municipalities have alternative training offers in connection with the ordinary education programs and program areas. There may be specially adapted training or special offers for those who have dropped out of upper secondary education. Alternative training offers can be, i.e.: offers that combine school and placement in working life (such as internships); offers with special emphasis on work and rehabilitation training in various educational programs; and offers of preparatory years or introductory years that combine several educational programs.²

Nordvoll is Norway's only special school for students with autism. The school has 60 student places and covers the entire 13-year school course. Nordvoll School offers a special educational track for children and young people with diagnoses within the autism spectrum in Oslo.³

Most people with autism have the right to an individual plan (IP) and coordinator in the municipality. This is because people with autism need help from several agencies in the municipality. An IP should help you create a plan for how you want life to be. It can be about housing, work, transport or leisure activities. The coordinator can help find out how you can apply for new services, whom to contact to answer questions and make sure that those who need to cooperate in the municipality are in contact with each other.⁴

When a person needs long-term and coordinated services from both the municipality and the specialist health service, the municipality has the main responsibility for preparing an individual plan. The specialist health service has a duty to participate. Service coordinator is not necessarily the same as coordinator for individual plan. This is also stated in the regulations, as people in the target group to be offered a coordinator must receive this offer regardless of whether they want an individual plan.^{5 6}

² <https://www.vilbli.no/nb/nb/no/alternative-opplaeringstilbud-i-fylket/a/032964>

³ <https://nordvoll.osloskolen.no/>

⁴ <https://autismeforeningen.no/m%C3%A5lgrupper/diagnostiserte/>

⁵ [Jungelhåndboka, kap. 6.8 Koordinator \(tjenestekoordinator\)](#)

⁶ <https://autismeforeningen.no/tjenesteyting/ip>

Skills needed by career practitioners and companies for the implementation of WBL pathways, especially for people with ASD

When comparing research between Norway, Germany and Italy it is beneficial that there be a Job-Coach to support and accompany individuals during the practical portions of completing a job training. It has been proven that companies who offer a trustworthy contact person for those with ASD help in order to secure a permanent employment position for that person. This mentor should be introduced at the most critical period, which is as soon as the training begins. The mentor should be able to answer organizational questions, moderate and monitor the person with ASD interactions, identify emerging uncertainties and misunderstandings.

Job coach or mentors should also be able to clearly communicate the needs of the ASD person and be able to counsel the employer on how to address and meet the needs. The coach should be someone who is relationship-oriented, able to identify individual and needs-oriented support for integration into a place of employment. They should be able to design suitable, clearly structured and manageably organized framework conditions. (Dalferth & Seng, 2013) The mentor should be able to view situations holistically, i.e. to see the entire picture of learners' situation and how it relates to the job environment, as well as content for learning. Being able to combine the needs of the company with the learners' needs and wishes are also skills to remember, and make sure that the management understands and accepts the learning path facilitation.

Additionally, on the job mentors or supervisors should be aware of threats such as bullying on the job. This can not only affect the ASD employee, but also influence the entire atmosphere within a working team. It is the job of the supervisor to recognize and realize the bullying. All complaints or reports made by employees should be taken seriously and if necessary, the mentors should intervene at an early stage. If necessary, the mentors should take this up with higher management staff or human resources. Finally, they should remain open and communicate this to the staff so that they can come with any issues. (Bader, et al., 2018)

The skills needed for good implementation of WBL learning paths concerning especially learners related to Asperger Spectrum are similar to general skills concerning facilitating learning, but there are some specific recommendations for this diagnosis. First of all, knowledge about the diagnosis is crucial and then knowledge about the individual learner. The WBL mentor should have good listening skills and be able to easily understand the relations between personal challenges and solutions.

The following chart, taken from the Italian report, depicts an overview of the acquired specific knowledge and skills for the implementation of WBL pathways. The chart differentiates between the “career practitioners” who may be working in the local labour office and the “company tutor” or who may be referred to as coach or mentor.

	Career Practitioner	Company Tutor
Knowledge		
Characteristics of autism spectrum disorder and features of people with autism	X	X
Awareness about people with ASD' limits and resources	X	X
Main diagnostic tools for evaluating skills and competences of people with autism	X	
Augmentative and alternative communication for people with autism	X	X
National legislation on disable people assisted job placement and UN Convention on the rights of people with disabilities	X	X
Vocational education and training system	X	X
Business organization and types of work within companies	X	X
Main inclusion profiles for people with autism and most frequent duties / tasks assigned	X	X
National and international models of job placement for people with ASD	X	X
Fundamental principles and tools of supported employment	X	X
Coaching and mentoring models for people with ASD	X	X
Skills		
Evaluation of social, behavioural and professional skills of the person with ASD and individual profiling	X	X
Design of individualized paths to work inclusion and job placement	X	X
Work transition phases planning in collaboration with the services network and the family;	X	
Design and implementation of parent training courses, aimed to support the adulthood transition process and autonomy construction	X	
Design and implementation of work preparation and training courses for people with ASD	X	X
Workstation design and adaptation	X	X
Design and implementation of awareness-raising and training courses/actions addressed to companies employers and company tutors about the job placement of people with autism	X	
Implementation of awareness-raising actions among the other employees		X

Analysis of the tasks and on the job training of people with autism;		X
Company offers research / evaluation and assisted inclusion paths design;	X	
Research and establishment of an enterprise network based on Corporate Social Responsibility	X	
Collaboration with local services (Employment center, rehabilitation centers, health and social centers, training / education centers, employers' associations, etc.) for the definition of the individual project and the activation of other useful resources for job placement;	X	X
Transversal skills		
Knowing how to interact with the person with ASD and provide the correct recommendations for professional skills development	X	X
Work as a team and communicate with the local network	X	X
Negotiate with companies and employers, communicating using the "business" language	X	
Identify possible solutions (problem solving) for optimal job placement	X	
Promote the job placement of people with ASD with marketing strategies	X	

Most effective WBL methods and forms supporting efficient learning and employability, especially for people with ASD

Across the partner countries, there was a common theme on strategies to help people with ASD prosper in employability and learning. Quite often, they struggle with organizing and carrying out complex actions with some coherence. In order to support effective and efficient WBL it is not only important to have a coach or mentor for the ASD person available for the individual to build a trustworthy relationship, but there are a few individual structural characteristics, which should be considered. They include the following:

- *task analysis*, that is breaking down the activity into all its phases, thus determining more under objectives. Task analysis is fundamental to make people with ASD independent in carrying out daily work activities;
- *video modelling* of the single business process is a valid instrument that lets people internalize complex tasks;
- *daily agenda*, where exact indication of start and end hours of each activity, including breaks, is reported. The daily agenda is a tool that helps people with ASD to manage anxiety by introducing rituals and procedures.

To further support effective and efficient WBL, it is not only important to have a coach or mentor for the ASD person available for the individual to build a trustworthy relationship, but a few there are individual structural characteristics, which should be considered. They include the following:

- the use of clear and unambiguous language by the work supervisors
- precise instructions with exact description of individual tasks, eventually with visual or written aids.
- precise description of the required result and the timeframe available.
- low-stimulus and constant working environment
- timely notification of upcoming changes
- clear regulation of the break times and creation of retreat possibilities. (Dalferth & Seng, 2013)

Some learners like to know the goal and find their own path; others prefer specific courses with short modules. It all depends on what to learn and how. The following two examples were provided in the national research summary of the Norwegian partner and present two ways of meeting the needs of

The organization Kunnskapstrening IT, many of the learners are both producing and learning at the same time. The ASD learners are often learners with high autonomy, if they are motivated and see meaning in what they do. It can be a personal meaning or a community-workplace related meaning. They are often able to work from home; this gives them a familiar working and learning environment.

Langangerskolen in Denmark developed a model especially for this group it is called “Visualization and Structure”. It highlights the need for individualized adaptation by finding a structure and definition of skill level as crucial, small steps, goals are essential, and the learners’ skills and needs to be heard. The speed must be adapted and individualized. In a learning and work process the already enhanced skills must be in balance with new challenges. The learning is recommended as a dynamic process, where the learner's potential will be followed. Some basic points as planning a learning path for this group include defining formal and non-formal learning goals, being aware of the person's specific learning style, and focusing on the person's strength and use motivations and interests as a core. The methodology focuses on visualization of the learning/work process, which makes it easier to understand a plan or learning path.

Since individualized learning is strongly recommended in WBL and for this specific group, it is hard to talk about most effective WBL methods and forms. The organizer should be aware of the specific learners' needs and motivation. The level of autonomy of the learner is also important.

Learning environment needs are the same as work environment needs, making sure that the learner's sensor requirements are taken into consideration. Structure, predictability, sense of meaningfulness and related to goals are important.

Main advantages for SME driving from managing effective WBL pathways, especially for people with ASD

When it comes to advantages for SME taking on employees with ASD they can be split into monetary and working dynamics. Among the main business advantages deriving from managing effective WBL pathways of people with ASD the dynamics can be advantages such as the whole work team can benefit from major neurodiversity by learning from differences, exploring new viewpoints and evolving towards a more open and inclusive community. The greater attention to diversity has a positive impact on the perception of the market and consumers. The possibility to find new ways, also more efficient, to perform the different tasks.

In countries like Germany, there is an integration allowance for SMEs when they hire or select an applicant for training. This can be paid if the applicant does not yet have the knowledge required for the job since the training will take longer than usual. The amount and duration of the subsidy always depend on the individual case. SMEs can also be reimbursed the cost of a trial employment of up to three months. In this way, young people with disabilities, like ASD, have the chance to prove themselves through WBL in SMEs. You can also apply for a grant for training or continuing education. This is available if training or continuing education would not be possible without the subsidy.

Moreover, it is notable to mention, small and medium enterprises may have some advantages in managing effective WBL pathways for people with ASD. As a smaller workplace, the transparency in the organization can make it easier to see each individual in the work and learning context. In addition, as a person with ASD, a smaller environment can be less challenging than relating to a large organization.

Main barriers/incentives met by companies in introducing WBL pathways, especially for people with ASD

This section looks at both the main barriers and incentives for both the company and the people with ASD. They both have been summarised.

Among the main barriers met by companies in introducing WBL pathways of people with ASD, the research highlights the following:

- Lack of knowledge and awareness about autism spectrum disorders
- Need to sensitise and to prepare the other workers to the arrival of a people with ASD
- Onerous commitment of the tutor in terms of time needed to adequately follow a person with ASD
- Necessity to adapt the workstation to meet the special needs of the people with ASD
- Necessity to adapt the assigned tasks to the individual features
- Lack of funds and incentives to cover the additional resources necessary to introduce WBL paths for people with ASD
- Lack of experienced practitioners and services able to support the enterprise in the introduction of WBL paths for people with ASD

Another one big barrier ASD employees have in addition to the above mentioned is the hypersensitivity to stimuli. It is vital for employers to take environmental factors into mind in order to provide a barrier-free working atmosphere. This includes things such as lighting, smells, organization and function of office equipment, quiet working station (or individual office) or noise cancelling headphones, etc. In some situations, specific job tasks may be overwhelming in so that the ASD employee get wrapped up into details. Workload should be monitored and adapted to ensure a timeliness of work deliveries. (Bader, et al., 2018)

The potential employers sometimes receive incentives during the placement process in the form financial support when hiring a person with ASD from the employment agency. The integration office or also the State Office for Social Affairs and Supply to ensure an integration, e.g. entitlement to a subsidy on wages for the employer, subsidy for work aids, integration allowance following a completed education or further, subsidy for trial employment, necessary work assistance, subsidy for training

allowance, supported employment. (Dalferth & Seng, 2013) These monetary incentives are typical in several partner countries and regulated by law.

The recommendations from the *Menschen mit Autismus im Arbeitsleben* (Bader, et al., 2018) includes a checklist of recommended actions and noticeable differences, as well as further discuss what the action mean when it comes to barriers met by people with ASD when introducing WBL at a company. The overview was further subdivided into sections: contact and understanding, activities and need for structure, and lastly peculiarities. The list can provide supervisors and colleagues with appropriate methods to improve the working atmosphere. Some of the following barriers are summarized in the following chart:

Characteristic	Recommended course of action
Difficulty to assess expectations	Formulate and discuss expectations and discuss them. Clearly formulate work tasks
Difficulty with small talk as well as other intercompany occasions	Push, but don't force it Select topics especially interesting to the person
Difficulty with phone calls	Clarify preferred communication channels
Monologue	Clearly end conversations Clearly identify the time to talk
Statements are taken literally	Communicate clear and select words carefully
Take a long time to answer questions	Allow enough time for the employee to respond to questions
Rituals and routines are necessary	Set clear structures that provide security Add structure into the daily routine Structure the daily tasks Add structure to conversations Organise and maintain structure in the individual working stations

Planning of the WBL and time for this might take more resources related to the Asperger Spectrum learner. Good individualized planning and dialogue is crucial, this might be an investment for a company and challenging in terms of resources. The time aspect, giving time, and reducing stress is crucial.

Educational needs, support, supervision needed, especially for people with ASD

The educational needs and support needs to be a continuous and dynamic process, oriented to the individual needs. The mentor support is important to provide security and ease the relationship with the new environment. They are essential in any internship in order to provide certainties and unchanged environments for the ASD colleague. They will not only be a liaison between the ASD person and the company, but also establish new rituals and habits.

Apart from WBL, an important goal is the sharing of workplace social rules e.g. basic communication rules; shared behavioural rules; feelings, gestures and facial expressions; ability to show empathy; conflict resolution; and collaborative methods of working.

According to the handouts made available by the ABC project⁷, funded by the European Union, the following aspects should be assessed by mentors or job coaches while liaising between the employer and the ASD person in order to provide support they need:

- Telephone: uncertainty of phone calls can make ASD persons anxious, therefore during fixed working times; they should refrain from answering the phone and communicate rather via email.
- Breaks: random breaks can be uncomfortable especially when with other people. If the breaks are precise and follow consistent routine or pattern, this can help. Employers should try to phrase the breaks “from ... to ...”
- Stimuli: It is not easy to block out uncomfortable sounds, smells, colours, loudness, movement and so on, therefore a quiet workplace is most suitable.
- Multitasking: This is not always a strong point; therefore, it is important for the tasks to be listed in written form on paper in order to go through the various steps.
- Set priorities: Need structure instructions so that they know which tasks are given a priority and which tasks can be carried out at a later point.
- Mimics: ASD persons may display verbal or motor gestures, which are especially helpful in stressful situations. These actions have to establish inner balance and reduce stress and should be accepted or just ignored.
- Communication: Since social interactions and everyday communication can be challenging some communication aids can help:
 - Ask short closed questions.
 - Ask about interests.
 - When joking, make sure it is clear that it is a joke.
 - Use short concise questions.
 - Use clear indicators rather than signal words.

⁷ https://autismus-oberlinhaus.de/fileadmin/statics/bbw-oberlinhaus.de/pdfs/allgemein/2013_ABC_Broschuere_16_04_print.pdf

- Interrupt them when it is time to change or end a topic.
- Important tasks should be written down.
- Avoid using idiomatic or ironic marks.

With taking into consideration the additional needs the ASD person will profit with the comfortable working environment and the employer with the productivity and loyalty of the employee. (Dalferth & Seng, 2013)

In Germany and Norway there are networks for people with ASD, which are self-help associations for anyone interested in autism, i.e. people diagnosed, family members, friends, employers, specialists etc. The goal of the organizations are to offer as qualitative information to increase understanding and awareness. They have an assortment of seminars, works, further educational training courses and certification courses. The themes of the further education seminars can be divided into the following topics: parentings, foundations, challenging situations and crisis, communications, methodology, Asperger's, work life and sexuality. Experts lead the courses, which includes professors, psychologists and specialists.⁸

Overall, the support, supervision and educational needs depend on the individual learner. For this specific group the individual adapted learning process might be of higher importance than for others. Dialogue in support must be adapted to the learner, as mentioned earlier in the report, Kunnskapstrening IT experience that many learners prefer written dialogue, it gives less sensorial disturbances as one need to concentrate on the theme. Avoid learning in larger groups, even online, might take all energy away from the learning content. The autonomy of the learner varies from learner to learner, but also through the individual learning path. The mentor in a workplace should be aware of the learners' autonomy. Supervision must be adapted to these needs, too much might be a disturbance and too little will result in lack of focus. The time aspect is crucial for this group, to give time and reduce stress.

National pathways from school to labour market for people with ASD

School plays an important role in the transition phase of people with ASD. During the school students with ASD are evaluated, the attitudes of students with autism becomes fundamental to orient their abilities and competences to the right occupational and work activities. Teacher, social and health

⁸ [Bundesverband Autismus Deutschland e.V.: Startseite](#)

professionals may use different assessment tools, for example the so-called TTAP assessment scale (Teach Transition Assessment Profile) in Italy, or the NAV Arbejdsrådgivning - subjective mapping in relation to studies and work (IVAS, ASWI / ASIAS). This includes the IVAS - Information and communication tool adapted for people with Asperger's syndrome, ASWI - Asperger workplace interview, ASIAS - Asperger's in studies and work in Norway which is also used during the training phase. The main purpose of these tools is to obtain information about the person's own assessments of conditions that are important for mastering school or working day. In order to ensure success students' progressions need to be duly tracked in order to let them become aware about the individual strengths and provide concrete instruments to ease their integration into the labour market.

Across the partner countries, there is a similar theme on transition to the labour market. The following services help in placing the ASD students:

- **Consultancy and training for businesses and employers** relating to the hiring of people with autism;
- **Competencies assessment and training needs identification.** In this phase the person, his/her family, the reference figures in the school and extra-curricular environment should be interviewed, in order to detect behavioural aspects, professional skills, potentialities that may affect the working path;
- **Definition of a tailored professional qualification project:** consists of a series of job placement supporting measures, and tools to assess the results achieved;
- **Work preparation program and social and professional skills training**
- **Parent training:** a consultancy, training and support service for families
- **Orientation and targeted professional placement:** the service consists in the identification, activation and adaptation of suitable workstations calibrated to the individual needs of each person with ASD; a trial placement can happen both within the company by the workstation adaptation and within protected laboratories managed by a social enterprise;
- **Job placement:** depending on the individual features and the levels of competence achieved, three paths are possible:
 - *Direct placement into the company without adapting the workstation:* direct introduction into the labour market preceded by appropriate training and initial coaching; this is the case of high functioning autism, which generally show high skills

- in specific fields; actually, experience shows that, in any case, the person with autism requires a significant adaptation of the workplace also in order to prevent failure;
- *Placement with adaptation of the workstation* (Assisted work): supported employment where workstation is adequately adapted to the individual features; a strong job coaching is provided both by the company tutor (who must be trained) and by the job inclusion professional with guided acquisition of the necessary work skills and autonomy; in any case, the placement needs constant supervision;
 - *Placement in a protected laboratory within social enterprises*: this option is adopted for people with ASD with specific social and professional skills but not compatible with the ordinary labour market. People are involved in activities with a high degree of professional accompaniment, inside a social enterprise. The laboratory / sheltered work can also be configured as a learning and transition environment, especially for high or medium functioning forms of autism.
 - vocational training areas in workshops for people with special needs (WfbM) and facilities for young people (WfbM) and facilities of the youth welfare services or vocational training centres and similar facilities for people who need special support.
 - **Placement accompaniment community network**: definition and establishment of a local actors network (Employment Centre, Rehabilitation Centre, companies, employers' associations, etc.) and agencies.
 - Vocational training in special company establishments
 - The Entry Qualification (Einstiegsqualifizierung - EQ)⁹ - an internship that is subject to social insurance contributions. It is intended to prepare teenagers and young adults who have already decided on a specific occupation for training. In the company, they are introduced to the relevant training content and can demonstrate their skills. Good for companies to get to know young people on a day-to-day basis in the company and introduce them specifically to the content of the training.

In Italy and in Bulgaria these kinds of services are rarely adequately provided. There is a need for specialized job placement operators for people with autism, equipping them with specific tools. In

⁹ [Betriebliche Einstiegsqualifizierung - Bundesagentur für Arbeit \(arbeitsagentur.de\)](https://www.arbeitsagentur.de)

Germany, there is a higher tendency for young people with special learning needs to attend specialty schools. About half of all young people with special needs attend such schooling, which is much higher than other countries like the USA or Italy (Menze, Sandner, 2021). The year prior to leaving school students receive help from the Federal Labour Office's Rehabilitation. After leaving the school the students have different options. In principle, all young people have access to regular training programs (Ausbildung) under the Vocational Training Act (BBiG) training programs. These include:

- 3-year and 3.5-year training occupations, respectively, as well as
- less extensive training programs with a duration of only two years (e.g. salesperson)
- if they are unable to complete such an apprenticeship, they can also enrol in a specially developed training for people with disabilities in a so-called "specialist trainee occupation" (Zöller/Srbeny/Jörgens 2017)

Transitional measures for young people who cannot find a training place are the responsibility of the state governments. These include, for example:

- vocational preparation years (BVJ) and
- basic vocational training years (BGJ).

Some of the above do not lead to recognized vocational qualifications, but aim to improve training opportunities, by offering the opportunity to make up for missing school-leaving qualifications.

In Norway, different courses and follow-ups come from primary health care and specialist health care, vary greatly from municipality to municipality and county to county. A2G one of the largest work and inclusion companies and they offer a number of work-oriented services within all industries and work areas. They have developed a mastery and competence-building course for people with autism. It provides training in topics such as, working life knowledge, communication, social skills and stress management and helps people with autism to be able to master the demands of working life.

In the partner country, there are also laws on people with disabilities, which introduces the quota principle governing the obligation of employers to provide a certain percentage of people with permanent disabilities to be employed. However, the actual application of the clauses and provisions of such documents is often accompanied by many difficulties, as indicated in the Bulgarian report. For example with the quota principle the state is trying to encourage companies to do that by providing certain incentives for those that hire people with disabilities, but unfortunately the percentage

mentioned in the law is very low and despite existing very often these legal requirements remain unfulfilled and no further actions are taken.

Best practices

Best practice 1

Italy – “Agricoltura Sociale Lombardia”¹⁰ the biggest project in Italy in terms of involved partners, individuals, schools and institutions. It promotes a set of practices that combine the entrepreneurial aspect of agriculture with a development program oriented towards social values, the inclusion of people with disabilities or in difficult situations and the development of local communities. It aims to develop and promote a new model of action that aims at the socio-labour inclusion of people with disabilities and in difficult situations; promote the construction of a network between agricultural of Lombardy and social realities and support its members; promote their quality product; propose an innovative model of social agriculture that maintains its roots in tradition.

It offers people with disabilities or in difficult situations orientation or training internships carried out in agriculture, aimed at promoting work placement in agriculture; training courses in agriculture and agri-food; and accompanying paths to work placement in agriculture or other production sectors.

Best practice 2

Italy – The “Bottegamente” is a training for craftsmen is carried out in e-learning mode on the local and national level in Italy. The course is provided by the Bambin Gesù Pediatric Hospital through a highly specialized professional figure (psychologist expert in autism spectrum problems). From an administrative point of view, a scientific consultancy agreement is used with the hospital in which the person will be clearly assigned and the activities to be carried out within the established times will be described. A first phase is delivered with integrated CBT (computer base trainer), WBT (web base trainer) methodology and interactive seminar lessons. The course contents allow for a general knowledge of the main reference models on autism and will give participants the tools to work effectively and in a safe context with people with ASD. For this reason, a methodology based on the active participation of the participants is used. The training takes place for three months on a non-continuous basis, for a total of 20 hours.

¹⁰ <https://agricolturasocialelombardia.it/>

In the next step, people with ASDI confront their abilities, their talents and their characteristics. It is the phase in which the youngsters' talents take shape. In this phase, they begin to discover and rediscover themselves, giving "voice" to their manual and "artistic" attitudes.

To ensure the activity of the laboratories, very effective coordination work was obviously required between the work team, the associations and the reference shops that were involved in all regions. For each project site, craft workshops are activated with two distinct groups of no more than five children to facilitate the course and interaction. During the lessons, in addition to the craftsman, the presence of a health worker "mediator" is guaranteed in order to allow you to work effectively and in a safe context. The goal is to favour the local craftsman of the reference area, identifying participation and skills.

At the end of the workshops, each participant is asked to create an artifact that represents the experience of training and the "transmission of knowledge" to ensure what has been learned produces effective results, even in terms of work. The products produced will be collected and organized in a single location in order to create an "art-craft" gallery.

Best practice 3

Germany - The project "ABC – Jobs für Menschen mit ASS (Jobs for people with ASD)" financed by the European Union has the primary goal of the EU-funded pilot project "ABC - Jobs for People with ASD" was to ensure the sustainable integration of young BBW participants with ASD into an employer in the primary labour market. The 17 participants in the ABC project were in their final year of training to become office workers, media and information services specialists (with a focus on archives), bookbinding finishers, woodworkers or home economics assistants. The special feature of this project was the continuation of the coaching that all project participants had already received during their vocational training at BBW. Furthermore, after completing their vocational training, the participants received needs-based support for professional integration and assistance from project staff in setting up mentoring in the workplace. The project was divided into two project fields: The first project field concerned all actions for the integration of participants with ASD into the primary labour market. The second project area focused on knowledge transfer and training for all those involved in the integration process. During the project, information was exchanged mainly through thematic workshops on

"communication," "social interaction," and "repetitive behaviours". A special training for mentors ensured the transfer of information and an exchange of experience on the topic of ASD.

Best practice 4

Twofold (Switzerland) AG¹¹ is an IT company that prefers to higher and work with adults diagnosed with Asperger's. They have a special philosophy to higher and work with the target group in order to get them into the labour market, train them and help them develop into specialists. They look at each individual to see what their strengths are. The opportunity to use the online world is an easy way to fulfil individual needs. The company finds this as a win solution for the IT sector, Switzerland's economy and the individual. A woman who has been diagnosed with Asperger has founded the company.

Best practice 5

Norway - Unicus (p.108 NOU) A consulting company with 3 offices in Norway, as well as one office in Stockholm and one in Helsinki. All consultants have Asperger's syndrome. The company aims to utilize the positive qualities of people with autism, so that they can offer high-quality consulting services to their customers and at the same time contribute to an increased quality of life for the employees in the company. The company offers consultants with expertise in testing, programming, computer science, quality assurance, and sells services to, among others, several large companies. Unicus is part of Norwegian FERDS 'portfolio of investments in social entrepreneurship. FERD is a family-owned investment company with the ambition to create and develop companies, ownership environments, organizations and changes, which contribute to the development of individuals and society and thus make a positive impression.

Best practice 6

Norway - Interview with a supervisor who works with close follow-up in NAV, and who has extensive experience in mapping people with Asperger's, as well as assisting them with work. Through his long experience, the supervisor has met many people with Asperger's who have had different strengths, prerequisites and needs related to the transition from school to work. Based on her experience, she has shared with us what she thinks are the success criteria that can help ensure a good transition for the individual. First, it is the individual teaching plan and possibly individual plan (IP). Individual plan

¹¹ [twofold \(Schweiz\) AG – Der Andersartigkeit eine Chance geben \(enableme.ch\)](https://enableme.ch)

must be updated along the way and should be revised towards the end of completing upper secondary school.

Secondly she suggests thorough mapping of the individual's strengths and needs. Thirdly, transparency about the diagnosis to reassure the person that openness about their own diagnosis will make it easier for others to understand. General information to the employer, it will be important for the employer to get to know the person and what the diagnosis means before starting work.

Good time in starting a new employment relationship, and use funds such as salary supplements and mentors. Spend time getting to know each other, establishing security and predictability. Possibilities for adjustment during the start of an employment relationship. It is important that the person with ASD has a person who follows him / her well in advance of starting a new employment relationship in order to assist in making any adjustments in line with the person with Asperger's and the workplace.

A person who can follow the person with Asperger's in the process will be able to help ensure a good transition. Mentor and salary subsidy (some will need a permanent salary subsidy) will be necessary measures from NAV. In most cases, this group will not be able to meet expected productivity in accordance with the employer's requirements and expectations. It is important that those with Asperger's also have realistic expectations of their own production capacity.

Best practice 7

Norway - This interviewed small company was in need of competence within programming. A learning company who had this young adult (with ASD diagnoses) as a student contacted them. They were informed about the young person's skills in programming and as well the diagnoses. They were also told that the person preferred to communicate by written, online tools, and wanted to work from home. These preferences were no issue for the company. The transition from school to work was financed by NAV (Norwegian Labour and Welfare administration) who financed most of the wage and tutoring the first year. The manager stated that this was crucial for them so that they do not take economical risks as an SME when testing out the employee, he emphasised facilitating for the work and WBL was not a problem, the employee could work from home and they communicated written through a portal. What did take time was to organize and learn how to facilitate instructions along the way. The employee had a high degree of autonomy, but did need clear instructions. It took time to learn how to do the instructions in a clear way.

Gradually the employee came down to the office once a week for a coffee break. After a year, the company was happy for the new employee and he was regularly employed and included in the company.

Best practice 8

Project "Training in work environment - the process of transition from school to work", implemented in the period 2015-2017. The main goal of the project is to study the different approaches to work training in different European countries and to understand „what works ". The overall goal is to find successful ways and strategies tailored to overcome long-standing learning barriers in order to create sustainable learning success and ensure the successful integration of young learners with learning difficulties in the labour market. As a result of the research, a Guide to Good Practices was created, which illustrates the different approaches to learning in the work environment, documents the results of the study and presents the best existing practices.

Best practice 9

The project “Society and work inclusion technologies for children and youths with ASD” has been implemented in partnership with Autism Association, Adapta Foundation, Spain, Černorizec Hrabar Varna Free University and the Bulgarian Association of Software Companies (BASSCOM) from 2007-2015. The goal of the project was to support the inclusion of people with ASD in the open labour market. To achieve this, a methodology was developed to help young people with ASD to find a high quality employment; individual work plans were developed and used with the chosen candidates; training was provided to all stakeholders - people with ASD, future employers of people with ASD and the families of people with ASD. The success of this initiative has led to increasing the awareness of the employability of people with ASD in the open labour market, as being an asset and a resource to the company.

Best practice 10

The project, “Pathways for Guiding Employment Skills for ASD” was implemented from 2017-2019. The project focuses on people with ASD and focuses three points: intervention, education and inclusion in the labour market. The main objectives of the project cover training people with ASD (Autism Spectrum Disorder) to join the labour market and contribute to a methodology of inclusion of people with ASD in the labour market. It facilitates a positive working environment for the ASD people training and for

employers, managers. Guide the companies for the recruitment of people with ASD and facilitate the adaptation to the jobs.

The project was successful in producing comprehensive guidelines for employers to be able to meet the needs of people with ASD in providing the necessary environment and conditions of work. The project reached the conclusions that it is possible with small adjustments and understanding the needs of the individual, especially sensorial and behavioural needs of people with ASD to facilitate their integration and their working performance in terms of accomplished tasks and human interaction and cooperation with colleagues. For this to happen, the first and most important prerequisite for implementing these measures is the existence of a culture of inclusion throughout the organization from senior management (in order to ensure a tailored decision making process) to the working team (in order to ensure the correct implementation of given instructions).

Best Practice 11

The project “COACH&WORK” aimed to develop and implement an EQAVET system for the recognition and validation of knowledge, skills and competences acquired by providers of supported employment for people with disabilities. The project partners developed a professional training program for supported employment consultants and an evaluation system based on EQAVET principles. The unique training program was created by identifying learning outcomes according to the ECVET system. It includes the following sections: disability awareness; acquisition of key competencies; use of interactive technologies and methods in the coaching process; use of mass and assistive technologies by clients with disabilities; a toolkit for providing supported employment and a methodological plan for organizing the consultation process by supported employment counsellors.

In conclusion, we should note the main disadvantage of projects, namely their unsustainability and the fact that they are usually focused on a small number of direct beneficiaries. On the other hand, they help to open a space for dialogue and start overcoming barriers.

Best Practice 12

In 2016, Jean-François Dufresne set up an experimental scheme for social integration through work at the Auneau-Bleury-Saint-Symphorien factory in Eure-et-Loir via his association "Vivre et travailler autrement". The principle is to provide support in the work and living places located nearby. According

to him, "Autistic adults progress professionally and are happy while our company benefits from the involvement of efficient workers, reducing at the same time the support costs weighing on the community,". He also states "It is time for change and for us to make a collective and concrete commitment. Autism is not a disability but a difference; the refusal of difference is a disability".

Conclusion and future remarks

It is important to point out that this report gives a small picture of why there is a need for special adaptations in relation to training in the workplace for people with ASD. The fact that special arrangements are required by law and implemented from early school years, shows that the need is also there in adult learning. The report emphasizes that there is a need for special arrangements, but remember that all people are different even within the same diagnosis range. It is clear based on the results of the research, that some countries more than others have a good knowledge and facilitation for ASD learners, but there is still a long way to go in order to enhance WBL opportunities. There are good practical experiences on how to facilitate training in the workplace, but perhaps not so many arenas to be able to share these experiences in working life. A conclusion from the work on the report is that it will strengthen this group if experiences and knowledge about how to facilitate training for people with ASD are developed and disseminated in an easily accessible way.

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