INVESTT

Inclusive **V**ocational **E**ducation and **S**pecialised
Tailor-made **T**raining

Project number: 527924-LLP-1-2012-1-BE-LEONARDO LMP

Strategy at European level

1/12/2012 – 30/11/2015

European Association of Service Providers for Persons with Disabilities

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INTRODUCTION

Since the Salamanca Statement of 1994 and the UN Convention on the Rights of Persons with Disabilities (2006), there is a political aim within the European countries that all children and adults with disabilities have the same right to inclusive education as everyone else. Although there are many efforts to reach this goal, all European countries have still a long way ahead before reaching a society where equal opportunities are guaranteed for all. In many schools and training centres still much uncertainty and a lack of knowledge can be seen. For that reason, in 2009 the Comenius network 'Pathways to Inclusion' (P2i) was developed. While the focus in P2i was mainly on the compulsory education system in general, the INVESTT Project now wants to move our focus towards the vocational education system. In four schools in Austria, Belgium, Norway and Slovenia we develop and implement inclusive school programmes in the field of vocational educational training.

In order to evaluate our approach, we develop, design and plan the research using a four phases approach: 1) Research, design & planning phase, 2) Experience-based development phase, 3) Follow-up and optimisation phase and 4) Evaluation & reporting phase.

We present the results in two papers. Some are part of the "Research Paper":
- methodology,
- theoretical background and
- the national school systems
- results of the survey,

and some are part of this "Strategy Paper":

- the local school programmes
- recommendations and conclusion.

We have learned during the whole process that it is impossible to develop one generally valid European strategy. The national context with all the national, regional and local requirements needs to be addressed. Therefor we describe all our results in different ways. We describe them on the one hand always from a national perspective and on the other hand we try to summarize them in a more general way. At the end we come to general statements which we call "statements for a strategy". These recommendations and statements differ between a macro level (defined as political level with influence on the development of the curricula), a meso level (defined as a regional level with focus on the school as a system) and a micro level (defined as the classroom, the students and the teacher). We recommend to combine the national and the general statements to transfer them to the national context you come from.

1. The Project INVESTT - Inclusive Vocational Education and Specialised Tailor- made Training

The European Association of Service Providers for Persons with Disabilities (EASPD) and 13 European partners are developing or have developed INVESTT - a strategy at European level for implementing a universal design for learning and innovative actions in the regular vocational education and training system (VET).

Four vocational schools in Europe - Austria, Belgium, Norway and Slovenia - are piloting a new approach in VET programmes together with local service providers and researchers.

1.1. THE PROJECT

All children and adults with disabilities have the same right to inclusive and high quality education as everyone else. Since the Salamanca Statement of 1994 and the UN Convention on the Rights of Persons with Disabilities of 2006, there is a political will within the 27 European countries to carry out the necessary changes in the field of legislation and school organisation. Still, Europe has a long way ahead before reaching a society where equal opportunities are guaranteed for all. In many special as well as regular schools and training centres still much uncertainty and a lack of knowledge can be seen. For that reason, the Comenius network 'Pathways to Inclusion' (P2i) was developed in 2009.

In the meantime, the strategic framework for European cooperation in education and training ("ET 2020") as well as the EU Disability Strategy 2010-2020 has been launched, both highlighting the importance of equity, social cohesion and inclusion in education. So, qualitative education for all is still high on the agenda in Europe today.

The EU 2020 Strategy on Smart, Sustainable and Inclusive Growth, which has been launched in 2010 as well, includes an agenda on New Skills and Jobs. Without involving persons with disabilities in Europe's activation and employment policies, the goals of this strategy will never be reached.

Especially now the Council of Education Ministers decided to create the conditions required for the successful inclusion of students with special needs in regular settings (Council conclusions on the social dimension of education and training, 8797/10 EDUC 73 SOC 274), it is of utmost importance to further develop the work done during the projects' lifetime of P2i, which has ended in September 2012.

While the focus in P2i was mainly on the compulsory education system in general, the INVESTT project now wants to move our focus towards the vocational education system. Concretely, this means that:

- In Belgium: the focus will be on 17 - 21 years old students learning a labour oriented profession as part of their compulsory secondary education. E.g. carpentry, hairdresser.
- In Austria: the focus will be on 18 - 31 years old students learning a labour oriented profession in the field of social work.
- Norway: the focus will be on 16 - 19 years old students who receive special needs education in upper secondary vocational education and training.

- In Slovenia: the focus will be on 16 - 18 years old students learning a labour oriented profession as part of their compulsory secondary education.

Indeed, a qualitative and inclusive VET system is crucial to improve the chances of persons with disabilities on the open labour market and to ensure their full citizenship in society.

Particularly, in times of economic crisis, extra attention should be given to the inclusion of persons with disabilities in the labour market. They represent a significant addition to the labour force and thus contribute to economic production. Unfortunately, during the last years a dramatic decrease can be seen in the employment opportunities for people with disabilities across Europe: reports show that not only they have fewer opportunities to be employed than their non-disabled counterparts on the open labour market, but they are also among the first ones to be dismissed when economic climate is bad.

Therefore, action should be taken. This project wants to further develop the network including this new target group, and strengthen the knowledge centre by adding new information. Furthermore, we want to develop concrete and inclusive VET programmes helping regular schools to develop educational programmes emphasising inclusive strategies for all students. Previous research done at European level, as well as the principles 'Universal Design' and 'Reasonable Accommodation', as described in the UN Convention on the Rights of Persons with Disabilities (2006), will guide us in reaching the project outcomes.

These activities will translate the good intentions at policy level of integrating persons with special needs into regular education and training, to actions at grass root level.

1.2. INVESTT's OVERALL OBJECTIVES

A high quality VET for all
1) To support improvement in quality and innovation in vocational education and training systems, institutions and practices.
2) To facilitate the inclusion of students with special educational needs (SEN) into the regular VET system.

INVESTT's specific and operational objectives:

- A strategy at European level has been developed to help professionals in their own VET context. Strategy based on existing policy documents and research results of EU projects.
  - o 3-year project on VET initiated by the European Agency for Special Needs and Inclusive Education.
  - o Focus on 2 key principles of 'Reasonable accommodation' and 'Universal Design' (UN Convention on the Rights of Persons with Disabilities, 2006).

- Innovative Teaching Programmes: have been implemented in one school per partner country:
  - o Continuously evaluated according to a cyclic process of research and action

- o Public target: 16 - 31 years old students learning a labour oriented profession or social work.

- Better cooperation in Europe: To improve the quality and enhance the cooperation between institutions or organisations providing learning opportunities, enterprises, and social partners throughout Europe.

2. The development of the school programmes

In this chapter we describe the school programmes of all four countries. This includes the preparation phase and the implementation.

2.1. THE AUSTRIAN PROGRAMME

After the first phase of the project, which was to do research, plan and develop, the implementation of UD in Austria was executed in two steps. The first (school) year we had five students with SEN in an Introductory Course, which means that they were integrated in a full training for „Fachsozialbetreuung Behindertenbegleitung", but they participated only in certain subjects and did less practical training. The volume of the course is 400 hours.

The next step was the implementation of the Inclusive Training Social Assistance and Home Help, which is open to all people. In September 2014 we started with 17 students with SEN or other disabilities or no diagnosis at all. This training is based on a regular "Statut", a curriculum which was released in January 2014 and can be used in all SOB-schools in Austria. The volume of the training is 1600 hours.

First year: From UD00 to UD01

1. A general description "Introductory Course"

This course is our first step into a vocational training for disabled people in the area of social assistance and health care. The "Introductory Course" lasts one year and consists of a few theoretical subjects and a practical training. The curriculum is a part of the full curriculum for the inclusive training (IBB), starting in September 2014. The Introductory Course
- wants to give disabled people the chance to experience a "soft form" of vocational training,
- helps disabled people to discover their skills and strengths.

Based upon the experiences the students have in the course, they can make up their minds more easily, whether they want to complete a vocational training in the field of social assistance or not.

The Introductory Course covers one schoolday per week during the winter and summer semester. The students share two hours in the big group followed by deepening lessons. The practical training is in the summer semester.

2. Description of the students

In September 2013, four women and one man began the Introductory Course. At the start they were between 20 and 28 years old. Three of them were working in the field of gastronomy and two were still in education.

Because of their intellectual disability they needed a special design for learning.

3. A timeline
- Our Welcome-Event took place on June, 7th, 2013. We had the pleasure to inform about 15 people with and without disabilities about the "Introductory Course" and the following Inclusive Training (=IBB), starting in September 2014
- The Introductory Course started September, 9th, 2013 and lasted until July, 4th, 2014
- Teaching for our IC-students took place every Monday
- Practical training during the summer semester
- Preparation of the Inclusive Training Social Assistance and Home Help from December, 2013 until June, 2014
- Regular meetings (teachers, Investt-intern-meetings, coordination-meetings) have been held at least once a month and more often if needed.

4. Inclusive teaching methods
- Team-teaching
- "Klassenrat", a method to discuss the actual situation at school
- Special learning situations
- Excursions
- Communication-days at the beginning of the winter semester

5. Curriculum adjustments
- We designed a curriculum for our IC-students, which is a part of the full curriculum of the Inclusive training "Social Assistance and Home Help", starting in September 2014.
- The IC-students participate in the lessons of a regular course with a focus on "Behindertenbegleitung", for employed persons.

Subjects	SWS (hours per semester)
General Basics (German)	2
Basic knowledge on nursing	1
Immersion/Deepening teaching	2
Practical training	200 h

Table 1: Austria Curriculum Introductory Course

For each of these subjects we first defined learning targets (e.g., "I learn to write down things I have experienced" or "I learn to speak about problems").

Secondly we defined the skills the students should reach ("I can describe what a group is" or "I learn to work in a correct and hygienic way").

And third we described the competences the students will reach ("I am responsible for the proper washing of my hands" or "I recognise when people want something or need something").

6. Structural/organisational measures
- Additional value-units for team-teaching
- Organisation of an additional room for the immersions (deepening teaching)
- Acquisition of various teaching aids (books, software and so on)
- Creation of a timetable for IC-students in the regular timetable of the school

7. A revision of the evaluation methods
- "Pensenbuch" (After a self-assessment on learning in general, in this „Pensenbuch" the targets, skills and competences, the students can reach are described; instead of tests and certification the students achievements are described in four categories („yes", „no", „with this support", „we didn`t talk about at school")
- Ongoing oral evaluation
- Questionnaires from our project partner (University of Salzburg)

8. A list of reasonable accommodation measures
- Immersions (deepening teaching) on the theory once a week with a teacher from school
- Teaching aids such as a "BIGtrack" (a special computer mouse) and special computer keyboard
- Constant mentoring during the internship
- During the internship, the students get regular visits from the accompanying teacher.
- Supervision of the students by the accompanying teacher.

Second year: From UD01 to UD02

1. A general description "Inclusive Training Social Assistance and Home Help"

This training is our second step into a vocational training for disabled people in the area of social assistance and health care.
The training takes two years and contains 960 hours of theory and 640 hours of practical training. The course is based on a „Statut" – a curriculum which was released in January 2014.

Our main aim is to provide training for disabled people in the field of social care, which enables them to work in the first job-market.

The training is extra occupational but an employment is not required. The schooldays are Thursday and Friday.

We offer inclusive teaching methods as social learning, teamteaching, open learning, free work and different forms of assessment.

The practical training starts in the summer semester of the first year. During the internship constant individual mentoring is given to the students.

We will have our first graduates in July 2016.

2. Description of the students

At the beginning 17 students and 15 teachers were involved. The students, 9 women and 5 men, were between 20 and 31 years old.

3 of the students have a SEN, 1 has dyscalculia, 2 have epilepsy, 1 person is visually impaired, 1 has a cochlea implantat, 3 have no diagnosis and 5 are registered disabled people.

After the first year 11 students are remaining.

3. A timeline
- Preparation, roadshows, creation of the timetable, involvemenet of potential employers, determination of the objectives of the internships, curricular work and so on from January 2014 until August 2014
- The Inclusive Training Social Assistance and Home Help has started September, 18th, 2014 and lasts until July, 8th, 2016
- Conferences with the teachers in September, November, March and June
- Semester-certification for the students in February, 2015
- Start of the internships for all IBB-students in March, 2015
- Evaluation of the first year of the IBB-class in June, 2015
- Creation of the timetable for the second year in June, 2015
- Regular meetings (teachers, Investt-intern-meetings, coordination-meetings) have been held at least once a month and more often if needed.

4. Inclusive teaching methods
- Team-teaching
- Deepening lessons (2 hours per week)
- Papers and worksheets in easy language
- Special learning situations
- Different forms of open learning
- Supervision
- "Klassenrat", a method to discuss the actual situation at school
- Excursions

5. Curriculum adjustments
- The course is based on a „Statut" – a curriculum which was released in January 2014.
- As in the Introductory Course, we defined learning targets and skills as well as competences to be reached for each of the subjects.

Subjects	SWS (hours per semester) in 2 years
Religion	2
German	1
Communication	6
Activation and creative training	2
Profession and Ethics	2
Gerontology	1
Psychology	3
Politics and Law	1,5
Nursing	4
Biology, Pathology, First Aid and Hygienics	2
Household, Alimentation and Diets	4
"Behindertenbegleitung" (Work with disabled people)	12
Seminar for the internship	1
Deepening lessons	3
Supervision	2
Grief counseling (Basics)	1
Internship	640 h

Table 2: Austria Curriculum Inclusive Training

6. Structural/organisational measures
   - Additional value-units for team-teaching
   - Acquisition of various teaching aids (mainly books)
   - Provide options for regular meetings of the teams

7. A revision of the evaluation methods
   - Ongoing oral evaluation
   - "Pensenbuch" (After a self-assessment on learning in general, in this „Pensenbuch" the targets, skills and competences the students can reach are described; instead of tests and certification the students' achievements are described in four categories („yes", „no", „with this support", „we didn`t talk about at school") – at the moment only in the subject "German"
   - Questionnaires from our project partner (University of Salzburg)

8. A list of reasonable accommodation measures
   - Constant mentoring during the internship by a teacher from school and special guidance/mentoring in the training place

2.2. THE BELGIAN PROGRAMME

Preparation phase of the project:

After an extensive desktop research by the research group, the different concepts and theoretical frameworks were discussed with the school:

The local project meetings contained the following topics:

- Inclusion: vision, process and practices.
- Reasonable accommodations: legal background, procedural requirements, content conditions. The school provided us with a list of present accommodations. There were a number of accommodations for dyslexia, which were incorporated in the daily school life.
- Universal design for learning: universal design background, applications for learning and instruction.

Subsequently, more practicalities were discussed:

- The retrieval of the class groups with corresponding staff
- The involvement of other stakeholders
- The research methodology: action research (see later)
- How to establish a baseline through appreciative inquiry?
- How to collect relevant data (with questionnaires for students with special educational needs, parents, staff and employers).
- The first action

Group of selected students and staff:

Scheppersinstituut Wetteren selected each period two classes in BSO (vocational secondary education):

The first period: 6 TB and 7 CB.

The first period: 6 CB and 7 BL/TA.

CB stands for central heating and plumbing.

TB stands for horticular training.

BL/TA stands for florist and garden layout.

All pupils were between 17 and 21 years old. Students in 6th form are in their last year of secondary education but the majority stays for one extra year for specialisation: the 7th year. This extra year delivers them a diploma which is recognised as an equivalent to a 6-year technical training. Furthermore, there is a course in business management which is essential for anyone who wants to start a business of his or her own.

In TB this specialization is in florist or garden lay-out.

In CB, the students specialise in the field of heating. This means that they graduate with several certificates:

- certificate for controlling domestic fuel oil tanks
- certificate for installing and maintaining several domestic gas fuel installations
- certificate of business management

For all students there is a combination of lessons and internship:

- The 6th form has one day of internship per week throughout the school year.
- The 7th form two weeks of internship in March. They choose their own firm, but the school helps whenever necessary.

<u>What is their future prospect?</u>

- The majority of students from this kind of training have a high chance to be employed in a normal working environment.
- Especially people from the plumbing / central heating field are really wanted. Therefore, they are likely to work in the branch they have been trained for.
- Students from horticulture might have some more difficulty in finding a satisfying and challenging job in horticulture. The wages in horticulture are rather low and as a result a lot of untrained employees are from a foreign origin and not well paid. However, these pupils will have a specialised diploma at the end of the 7th form and therefore they can probably work in the field which they've chosen in school.

<u>What diagnoses do these students have?</u>

These two classes have been selected for INVESTT because there are quite a lot of pupils with a special diagnosis such as dyslexia, autism, dysorthography, ADHS, mental trauma, ataxia, hearing loss.

<u>From UD00 to UD01</u>

The methodology of action research for evaluation and optimizing of the program were used. The action research was conducted and shared in small learning communities of the staff. This way the UD-learning process was an ongoing process.

After the first introduction of the staff to the foundations of UD, they learned how to apply the UDL-principles of engagement, representation and action and expression, written out in guidelines, in the lessons with rubrics with feedback on their lesson plans. A lot of reflection with the whole group took place.

<u>From UD01 to UD02</u>

During the next phase of the project, the new teachers who came on board, had the same initial introduction and learning opportunities, enhanced by the experiences of the previous group. The whole staff learned by digging deeper in the guidelines with the three integrated

principles and by working with the integrated guidelines. Several items were worked out and shared in small learning communities, e.g.: visual roadmaps were developed and piloted, work schemes and instruction cards for practice were used for all students. Individual accommodations were investigated next to the lesson goals to see if they could be used for all students.

Teachers began to change their evaluation methods according to UDL-principles: peer-evaluation and self-evaluation to make students stronger in the ownership of their learning. Mastery-oriented feedback increased.

The whole process was coached by two coordinators: Jurgen and Rik, supervised by Marleen from the service-provider. The learning process of two crucial team members was an important step towards sustainable results.

A new way of working emerged: preparing lessons and reflecting about lessons together in small learning communities and intervision groups. A charter was written out to make the purpose for the teachers clear:

THE INVESTT CHARTER

Aims of INVESTT: Qualitative and innovative vocational education and inclusion.

Focus of INVESTT: Accommodations for SEN-students. UD and UDL: less need for these individual accommodations by a more accessible way of teaching (not only teaching for the average student).

The UDL guidelines: support for teachers to make lessons more accessible, to engage their students, to provide multiple strategies and to assess their students in multiple ways.

Methodologies of INVESTT: start from good practice (Appreciative Inquiry) and continuing action and inquiry (action research and the PDCA-circle of Plan-Do-Check-Act)

Research questions of INVESTT: can teachers teach more universal, can learning environments contain less barriers for SEN students? Can teachers shift the barriers to learning from the problems of the students to the learning environment? Can individual accommodations be a benefit for all? What is the effect on later employment?

Definition of a learning community in the INVESTT context: A way of collaboration to investigate and improve one's own practice by comparing results of students, sharing of lessons and reflection. Digging deeper in the UDL-guidelines by lesson preparation, action, reflection, and adaption.

A learning community has a mutual focus: working on INVESTT objectives, learning how to use the UDL-principles in lessons and learning environments to come to a mind shift. Improving results of students.

Characteristics of a learning community: a shared mission, vision, shared values and objectives. Collaboration with the focus on learning together (as opposed to working in isolation), collective inquiry, action – experiment – reflection), engagement to continuing improvement.

Actions: consciously use of scaffolds: roadmaps and visual instruction plans; learning how to formulate lesson goals (only the what) and assessment, directly linked to the lesson goal, self-evaluation of students, peer-learning.

To illustrate the process, a few narratives were written out by some teachers.

Narratives from teacher Roland Van De Walle about his lessons on horticulture practice.

Lesson: How to support trees

With the principles of UDL in mind, Roland started his lesson with the aspect of motivation (WHY). Through means of an anecdote and exemplary pictures he tried to make clear to the students that the material they work with is expensive on the one hand and that it is also necessary on the other hand.

His anecdote referred to a TV show called 'The Dream Factory'. In this program, people uttered a seemingly unreachable dream and the program made it happen. Roland recalled that a particular person wanted an orchard and needed small trees, but also supporting sticks for the trees. The program delivered a truckload full of these. The teacher asked the pupils for an estimation of the price of all that material together and of course next stunned them with the actual price. Thus, the interest of the students was clearly raised.

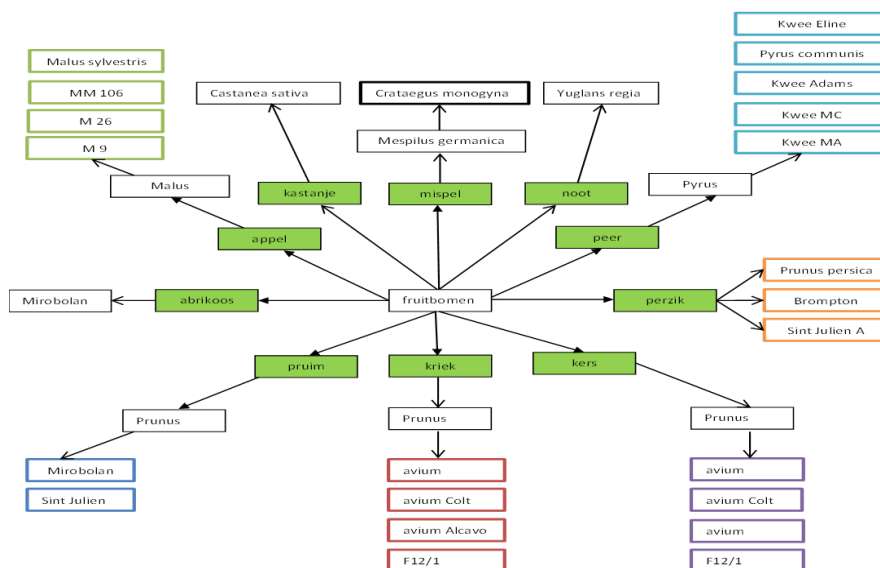Lesson: Rootstocks and pruning techniques

Figure 1: Mind map

Here the UDL-principle of providing subject matter is focused on (WHAT). In this case Roland used the following mind map. Even to people who are not familiar with the field of horticulture such a mind map offers a clear overview. The visual aspect makes connections clear in the blink of an eye.

For teaching pruning techniques, there was a demonstration with special attention to the haptic aspect.

Next students could try themselves individually. Of course the good practice pupils were quicker than the poor ones. This offered a possibility for differentiation. The slower students were then assisted by the quick ones, who served as trainers: peer-to-peer teaching.

Lesson: Recognizing, naming and nursing trees

In this lesson teacher Roland paid special attention to the UDL-principle that highlights the processing of information (HOW). Here he used a Powerpoint to show particular trees which the pupils had to recognize.

Next he organized a ball game. Pupils threw a tennis ball at each other and the one who received the ball had to say the correct name of a tree that was shown. As the game went further, the level of difficulty increased. This game activates all the pupils in a playful way and the teacher noticed that they reached a higher level than in previous years.

Lesson: Practice (apprenticeship / internship / work placement)

Mr Van De Walle strongly believes in the useful character of work placement under the condition that this placement is well chosen. To prove this, he refers to the good and bad experiences with one of our deaf pupils. This boy worked in several firms and the experiences were extremely different, both positive and negative.

In the firms where he received instruction cards with an overview of the chores that had to be done, it worked really well. There was another firm where he was only instructed orally and this did not work at all.

Lesson: Integrated Project

At the end of their training, students have to prove their skills and knowledge with an integrated project in which several subjects are integrated: general subjects (maths, language, history …) and technical subjects.

Roland noticed that pupils are really helped a lot by a description of what they have to do, a work division (with clear planning), and deadlines which are announced at the beginning of the school year. Handing out such guidelines on paper is insufficient. Such information is essentially shared on the digital platform so that it is traceable at all times.

Narrative from teacher Katrien about her Integrated General Subjects lessons.

Lesson: Carnival / Mardi Gras

One of the components of this subject is maths. In the beginning of the school year there is a repetition of the well-known rule of three. On the one hand this is supposed to be well-known, but on the other some students tend to forget how it works. Therefore, the teacher has conceived instruction cards which are available as learning aids at all time. These cards are a good help to those who need it. In the meanwhile, pupils who do know how it works, can continue and the teacher can assist wherever this is necessary.

Similar cards are used for the conjugation of verbs. Students differ greatly in the extent to which they master this.

Ideally such cards should be developed for different ages and gradually build up skills, and increase the level of difficulty. When these cards are used throughout the training, however, they should have a similar breakdown and be quite recognizable for students.

From RA01 to RA02

A number of individual accommodations (RA0-RA1) became available for all students. Examples are:

- A uniform layout for all students: tasks, tests, exams.
- A common font 'Verdana' and a universal lay-out for tasks, texts and exams: this font is proven to be very accessible for students with dyslexia. Now this font is used for all students.
- Subtitles, if acceptable for the lesson goal
- Solution keys on learning platforms
- A digital agenda
- Different roadmaps
- The provision of classroom texts (on the learning platform) before the actual lesson, e.g. reading texts or certain exams.
- Subject matter summarized in questions and answers
- The use of a time-timer
- Visualized integrated work (GIP)
- Questions during examination are read aloud by the teacher.
- The provision of more time for task and tests.

Narrative from coordinator Rik about examinations:

Rik made with the SEN-team the following agreement: At the start of the exam, (first 10 minutes), the questions are read aloud. Important words are highlighted. To make this measure universal, each class will receive a model of the exam with the highlighted words. Rik will do a tour in all the classes to introduce the importance of this method. Before, we only did this measure for some appointed students. Because more and more students needed this measure, this became unfeasible. Hence the decision to make it a 'benefit for all'. Important statement: by doing this we do not change the goal: we keep the goal high! Rik expresses a real mind shift towards a more universal way of teaching. He sees opportunities in all classes.

The following individual accommodations are still in place:

- Compensating assistive technology for a deaf student (cochlear implant).
- Special software for students with dyslexia
- Special measures for students with dyslexia and dyscalculia.
- Dispensation of the subject 'religion' for a deaf student to an alternative task.
- Some individual stimulating, compensating and differentiating measures.
- Remedial support, e.g. how to catch up with some learning problems by GON-support (integrated education)

The staff decided not to limit their learning process to the selected (INVESTT-) classes, in order to include other teachers. Stakeholders, such as other service providers and employment agencies, were informed.

All became more and more convinced that UDL makes a difference in outcomes of students and will lead to a less need for individual accommodations, without, if necessary, avoiding them. Even outside of the school, the INVESTT-work was included in IST programs for teachers, headmasters and supporting staff.

The following concluding quotes were given by the 2 coordinators Rik and Jurgen:

- "We learned that the implementation of UDL can consist of a lot of small steps, but many small steps change a lot for the students".
- "As a result we would recommend the organization of training sessions 'UDL' for teachers, school, support staff and headmasters!"

2.3. THE NORWEGIAN PROGRAMME

The school programme at Gand

This chapter gives an account of the Norwegian school programme. First, the chapter presents the school programme and its connection to the system of special needs education system. Secondly, the chapter describes the organisation of the project classes at Gand upper secondary school. Thirdly, the chapter presents the project aims at the school and the results from the two-year project. At the end, the chapter presents some conclusions.

The INVESTT project in Norway was located at Gand upper secondary school. The school is one of the largest upper secondary schools in Rogaland County. In the school year 2011/12, there were about 1200 students and 197 employees. The school offers seven of the 12 educational programmes in the National curriculum for upper secondary education, of these are six vocational programmes.

Special needs education in small groups; extended workplace practice

Within the upper secondary schools in the county, special needs education in vocational programmes can be provided either as extra individual support within regular classes, or as adapted education in small groups termed 'Special needs education in small groups; extended workplace practice' (EWP-classes).[1] In collaboration with the Norwegian INVESTT team, Gand upper secondary school decided to locate the INVESTT project to the EWP-classes. The students in these classes can be considered as students at the margin of upper secondary school and they are in risk of non-completion and weak qualification for regular work. At Gand upper secondary school, three of the VET programmes provided EWP-classes in the beginning of the project: Building and construction (BC), Health care, childhood and youth development (HC); and Technical and industrial production (TIP)[2]. After the first year the EWP-class at Technical and industrial production was closed. Therefore, this chapter will primarily focus on the two remaining EWP-classes Building and construction and Health care.

According to policy documents at the county level (Ohna, 2013, p. 7), the EWP-classes aim at qualifying students for participation in the regular labour market as skilled or unskilled labourers, or for work in sheltered workshops. The education may also qualify for entering regular programmes in upper secondary education and for future work. Further, it is stated that the courses are tailored to students who learn through practical work and who are in need of additional support beyond what is offered in regular classes. More specifically, the target group is formally designated in terms of difficulties related to learning and social functioning (vilbli.no/2012).

The EWP-classes is positioned within the special needs education continuum (cf. the chapter on the Norwegian school system). Students' assignment to these classes is regulated by expert assessments of the Educational Psychological Service (EPS). The Education Act further requires individual subject curricula (an individual education plan, IEP) of decisions concerning contents and aims, and pedagogical and didactical adaptations. To accommodate adapted education and training, the teaching and learning in EWP-classes are organised in groups with a reduced number of students, ten students at the maximum, while a regular VET class will have 15 students at a maximum. Each EWP-class will have 140 % teacher resource (one teacher per 35 school lessons a week) and 188 % assistant resource, while a regular VET class will only have 140 % teacher resource. Some teaching activities are located at the school campus; others take place outside the school. Compared to regular classes EWP classes use 2-3 times the resources spent on regular classes.

Learning arrangements

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[1] Special needs education in regular classes is rarely used at Gand upper secondary school. When students in regular classes needs extra support, it is usually organised without an individual decision on special needs education and an Individual education plan.

[2] In the county there are two other kinds of "special needs education in small groups", termed "everyday-practice" and "work-practice" designed for students who have an intellectual disability diagnosis. These programmes are not considered VET programmes and are therefore not included in this chapter.

The teaching in EWP-classes is usually organised as a three-year course. All of the students have an individual decision on special needs education. The students also have an Individual Education Plan (IEP) in all subjects and the learning aims is connected to a specific VET programme. The work practice, both school based practice and practice in private/public enterprises, is considered an important part of the education.

Practice in private and public enterprises can be organised within two different arrangements. A Training agreement [no: opplæringsavtale] is a local arrangement in Rogaland county. Students with a Training agreement are not considered regular apprentices, they are still considered students, and the school have the formal responsibility for the students' education and training. The enterprises are offered a minor payment per students/day. Contrary to Training agreement, a Training contract [no: opplæringskontrakt] is a part of the national VET curricula. Students aiming at competence at a lower level (official termed basic competence) and who are qualifying for a Vocational training certificate, can use the Training candidature system [no: lærekandidatordningen] and are entitled to sign a Training contract. When students have signed a Training contact, they have the same rights and obligations as regular apprentices. However, when the apprentice signs an Apprentice contract leading to the Trade certificate, the training candidate signs a Training contract leading to a basic competence, documented in a Vocational training certificate.

The EWP-classes at Gand upper secondary school have their own classrooms and workshops, and are thus separated from regular classes. Gand School has a learning arrangement called the Study workshop [no: studieverkstedet]. Here students from different classes and education programmes can study common subjects and receive supervision from teachers with competence in common subjects. The aim of the study workshop is to support the students' skills and abilities for learning style and to reflect on their own learning. One of the teachers is responsible for the activities at the study workshop.

There are two categories of employees working in the "extended workplace practice"-groups, teachers and assistants. The teachers teach in common subjects [no: fellesfag] and program subjects [no: programfag] and the assistant are participating in the programme subjects supporting the students when they are working in the workshops. In addition, one of the EWP-classes (Health care) decided to relocate resources from an assistant position to a Practice coordinator [no: praksiskoordinator]. The tasks of the practice coordinator are to facilitate contact between the school and private/public enterprises and to support students during workplace practices. At building and construction this tasks were a part of the regular teacher assignments.

The aim of the project at Gand School

The purpose of the Norwegian INVESTT project is to implement the principles from the overall INVESTT project (based on Universal design and Reasonable accommodation) into practice at Gand upper secondary school, and to investigate how these principles can contribute to increased goal attainment for students in 'Special Needs Education in small groups; extended workplace practice' (EWP-classes)

An overall challenge is to investigate how and to what extent, an educational provision, constructed for emphasising individual adapted education, local autonomy and contact with

local enterprises, can ensure qualification with regard to regular learning aims and qualification for regular work (cf. the INVESTT objectives).

In accordance with the overall aim of the INVESTT project, a key issue in the Norwegian project is students' qualification with regards to regular standards in the National Curriculum (at vg1 and vg2 level) and to qualify for Training contract in the practice part of the education (at vg3 level). Through these measures, the ambition is to improve the students' qualification at the labour market. More precisely: The aim of the INVESTT project at Gand upper secondary school is to enhance the possibilities for students in 'Special Needs Education in small groups – Extended workplace practice' to qualify for Training contract.

This implies that the student's Individual educational plan shall account for a learning path towards Training contract. Further:

- The team at Gand upper secondary school are responsible for formulating the aim for the local school development project, based on the principles of the INVESTT project (UD/RA).
- The INVESTT project at Gand upper secondary school uses the structure of 2 years' education and training in school and 2 years as apprentice or training candidate in (private/public) enterprises. (However, students with a decision on special needs education have a right to two extra teaching years in upper secondary education).
- The students' Individual Education Plan (IEP) shall document progression from year 1 to year 2.
- The students shall be given possibilities for education according to regular curriculum in subjects at vg1 and vg2 level, as a strategy for qualifying for training contract.
- Joint learning activities across EWP-classes and regular classes will be provided, and students in EWP-classes can participate in regular classes in single subjects when this is a part of the student's individual education plan.
- At the onset of the project, the teachers evaluate and revise the students' IEP according to the aim and principles of the INVESTT project. Every student shall have an ICT-log accounting for the aim of the teaching and for evaluation of the progress of the students' learning outcomes.
- The study workshop [no: studieverkstedet] will be used as a learning arena in the "space" between regular classes and EWP-classes.
- The Statped vest team is responsible for providing supervision and support to the school development project at Gand.

Project activities in spring 2013

The preparation for the project started during the late autumn 2012 and has continued until June 2013. At Gand upper secondary school, activities in this period have concentrated on:

- Defining target group for the project
- Develop a design for a research project based on principles from 'education action research'
- Establishing external reference group

- Prepare and involve teachers and staff at Gand upper secondary school for the project
- Accomplish a two-day seminar with teachers and staff from involved education programmes
- Send the notification form to the Data Protection Official for Research at the Norwegian Social Science Data Services (NSD 2013).

Programme results after the first project year

The findings after the first year indicate that it is the organisational frames; the teachers understanding of the curriculum aims; and the interplay between these dimensions that creates the possibilities for change. This mean that the organisation at the project school need to focus on strategies for mapping teachers' experiences and collaboration between the project groups and the school management.

Within the two programme areas, the teacher express different views with regard to the following areas:

- Use of common activities/obligatory courses together with regular students/classes. The teachers within Health care (HC) express higher importance on collaboration with regular classes than teachers within Building and construction (BC)
- The interpretations and use of learning goals in the student's IEP varies. Within Health care, childhood and youth development (HC), the students have few learning goals every year and focus on progression from first to second/third year. At Building and construction (BC), they use the same learning goals throughout the three years. However, they assess progression through different evaluation standards during the three years.
- Access to work-place practice varies. Within Building and construction (BC), they introduce students for work-place practice through group-based practice during the first year. Later the students can use Training agreement as a strategy for individual work-place practice and for qualifying for Training contract in private enterprises. Within Health care, childhood and youth development (HC), the work-place practice is more individualised as the students primarily are introduced to work places through individual Training agreements. Further, students from HC rarely sign Training contracts.

The first project year presented the Norwegian project team with several challenges, both project internal and project external. The lesson to learn is that it is of vital importance to look beyond the teachers' work and classroom processes in the struggle for Universal design and Reasonable accommodations. This exemplifies the need to use a systemic approach in the project. It is important to be aware of the fact that it is the organisational frames, the teachers' understanding of the aims and the interconnections between these issues, that creates the possibilities and constraints for a change.

Experiences from the first year of the project indicate that the project at the school needs a stronger anchoring in the school management and the communication within the school. Stated more explicit, before it is possible to develop UD and RA, the project need a stronger emphasis on teachers' experiences and the organisation and traditions within the school. These issues will be the major challenges for the Norwegian team in the next phase of the project.

Programme results after the second project year

Due to organisational priorities (external to the INVESTT project) and use of resources, the school made changes in the internal organisation of the project before the second year. These changes also effected the work in the INVESTT project: (1) The EWP-classes at Technical and industrial production was closed and the students were transferred to Building and construction. (2) The use of the Study workshop for EWP-students were restricted. Instead, programme area teachers shall take care of the teaching in common subjects. (3) The head of department at one of the educational programmes was appointed as the local project coordinator. (4) The programme Health care, childhood and youth development (HC) was supplied with a practice coordinator (financed by a vacant assistant position) ensuring the collaboration between school and external enterprises and the supervision of students in Training agreements.

Results from the evaluation after the second year, documents that the teachers value the initiatives proposed in the Dissemination paper as important with regard to a successful inclusive vocational education and training. However, the results do not give any answers on how or to what extent these initiatives are implemented in the organisation. In addition, the teachers from the two programmes give different judgements on the impact of the INVESTT project in their programme area. While teachers at Health care, childhood and youth development (HC) express that the initiatives in INVESTT has contributed to educational changes towards inclusive strategies, the teachers at Building and construction (BC) are more reluctant with regard the impact of the INVESTT project.

However, an interesting observation from the last year is how the teacher discourse have changed during the second year. This regards how the teachers reflect on the interaction between students from EWP-classes and regular students within the same educational programme, and a shift of focus in teachers' expressions from talking about individual students with problems, to educational issues and the use of regular tools in the educational system. Raising new questions with regard to the teaching and student learning, also have initiated a new collaboration and common learning among the teachers both within and between the two EWP-classes.

Conclusion

The overall results regarding the school programme shows that the education and training within Building and construction (BC) and Health care, childhood and youth development (HC) differs. The reason for these differences are complex; partly due to traditions at the school; partly due to the educational qualifications among the teachers, skilled labour with additional pedagogical qualifications (BC) versus college educated health care workers with additional pedagogical qualifications (HC); and partly due to the nature of the labour market the two programmes are collaborating with and qualifying students' for entering into.

The two EWP-classes (BC and HC) uses different strategies towards the student's possibilities for signing a Training contract. Within BC they emphasise "presenting" students for small private enterprises during informal Training agreements. Hoping the students will be able to sign a Training contract the following year. The driving force in this approach is the teacher's personal relations with smaller private enterprises in the local environment. Until now, such strategies have not been available for students at HC, because the labour market

is public institutions, and the local political government have policies that restrict signing Training contracts that qualifies students at a lower level than a regular trade certificate, i.e. the level of skilled worker. In addition, the institutions states that they cannot sign training contract when the students do not contribute to value creation, as a regular apprentice is supposed to do. There are reasons to assume that these differences in the labour market also have consequences for the school's strategies with regard to how they construct the education and training.

The last year, local management at Gand upper secondary school have made strong initiatives towards the central government in local municipality, and the city council are preparing new policies on the use of Training contract in public institutions. If implemented as suggested, this INVESTT related initiative, will give students in Health care, childhood and youth development classes new opportunities for relevant work-place practice is the future.

Although the INVESTT project has not made significant changes on educational programme as such, it has contributed to a new discourse on the education and training within the EWP-classes. The new discourse is connected to initiatives both internal and external to the INVESTT project: (1) the introduction of a digital IEP-log and a strengthening of the interconnection between students' individual education plan and the national curricula. (2) The use of practice coordinator (at Health care) in order to strengthen the connection between the school and the enterprises, and for supervision of students during work-place practice. (3) The use of regular tools in vocational education (e.g. the 2+2 system, Training contract). Altogether, these initiatives challenge the previous boarders between the EWP-classes and regular classes.

The main lesson learned from the INVESTT project at Gand upper secondary school is that approaches towards a universal design of the learning environment requires coordinated actions on the policy, county and school level, as well within the labour market. At the national policy level, the introduction of new policies emphasising flexible transitions between education and training in school and in workplaces gives the local government and schools new possibilities for meeting the needs of students in risk of non-completion.

Adaptions at county and school levels must take point of departure in the regular arrangements and should not be limited to changes within EWP-classes. Therefore, in order to realise the aim of the European INVESTT project, it is recommended that the county authorities, in collaboration with the schools and the teachers, reconsider the organisation of special needs education in upper secondary vocational education in order to maximising the pupils' possibilities for qualification for labour market.

2.4. THE SLOVENIAN PROGRAMME

UDL is not well established concept in Slovenia and it is not part of discourse practices about inclusive education. Because of that participants in the project faced the problems in the initial stage regarding how to properly approach the design of the programme. Upon getting to know and gaining insight into the conceptual scheme of UDL we decided to use the UDL guidance as the framework of the programme. This includes the following points: a) class atmosphere; b) interaction; c) physical environment and products; d) instructional standards;

e) delivery methods; f) information resources and technology; g) feedback; h) assessments (Burgstahler and Chang 2009).

Considering that in our case this is a rather new theme, we began the programme implementation into the school environment with small steps. We did not address UDL implementations on the whole secondary vocational school that cooperates in the project, but rather chose a few classes as "test classes" (in the first school year there were five classes, in the second we chose three, which also included SEN students). Also not all teachers and employees at the school are included into the project – we only cooperate with certain teachers who formed the "team of teachers". The chosen teachers interact closely, they have to think thoroughly and be creative about the UDL elements that could be introduced to their school in order to overcome the barriers for inclusion.

Further on and considering the key target groups – for whom this programme was designed – we describe each individual point of the UDL guidance in detail:

Class atmosphere

The first point of the UDL guidance referring to class atmosphere was vital for the preparation of our programme. Aimed at achieving understanding and acceptance of diversity we paid special attention to raising awareness among students, teachers, parents, and the wider local community. We especially wanted to strengthen the empathy among students in order to decrease the possibility of exclusion from the peer groups based on diversity. This way we also wanted to present the importance of implementing the necessary adjustments that persons with special needs require to function in the environment. Based on the teachers' observations the latter is rather important for achieving an inclusive environment as students – especially because they are unfamiliar with the problems that persons with special needs face – often accuse SEN of being entitled to various privileges, whereby the students feel deprived of the benefits. We wanted to educate the teachers on the subject pertaining to special needs whereby these required skills and knowledge would help prepare them for the teaching environment that would suit the measures of inclusive teaching. In Slovenia future teachers do not acquire enough in-depth knowledge on this subject during their studies.

To achieve the goals mentioned we organised different activities within the framework of the project, that is:

- For students:
  - Workshops that were held in close connection between the school and the CUDV Draga titled "In other shoes" on various locations (in school and in CUDV Draga). Within these workshops students were divided into groups that competed with one another in building a paper tower, whereby they had to complete the task with an improvised impairment (such as for instance blindness, the inability to move legs, arms, etc.). The students' responses to the presented workshop were extremely positive.

- - o A workshop, where we presented a deficit - blindness[3] to the students. The aim of the workshop was to introduce Braille and its characteristics to students, to acquire new experiences, strengthen understanding and acceptance of diversity.

    o A visit to the restaurant Druga violina that operates under the CUDV Draga. Persons with special needs are employed in the restaurant.

- For teachers (they were present at the above described activities. Beside that we also organised the following activities for this target group):
    o Training in classes, where they teach.

    o Lectures on the subject "Children with behavioural problems" held by psychologists employed at CUDV Draga. The teachers proposed the subject matter.

    o A preparation of a check-list, where different examples of the use for UDL and RA were listed. This way we tried to show teachers that although they do not know the UDL concept they are already using it in practice. The aim of the preparation of the check-list was also to present some good practices that the teachers might transfer into practice.

- For parents:
    o Discussion between class teachers and parents where the teachers present the aim of the project.

    o A lecture for parents held by the Doctor of Psychology - Director of CUDV Draga. At the theme parent-teacher meeting the lecturer referred to the following questions: "How can parents help children?", "Can we be tolerant toward different people and put ourselves into somebody else's shoes?"

- For the local community:
    o A national seminar organised as part of project dissemination. Different agents operating on the local level (schools, NVO, employers, etc.) participated in the seminar. The event also received considerable media attention.

    o Cooperation in a talk show on national television on the subject of employing people with special needs. The guests of the show included a SEN, a student from the vocational school that is included in the INVESTT project.

Interaction

The second point from the UDL guidance is closely connected with the first one. Among the activities implemented in the framework of encouraging interaction between different target groups especially the following should be mentioned:

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[3] We presented this deficit in detail because of a blind student who was included into the project. He had problems with independence, stayed merely in the company of his companion and was not included in peer network.

- Group meetings of the extended group of teachers. Regular meetings of the closest team of teachers formed for the INVESTT project, enabled teachers the transfer of good practices and joint search for solutions to ensure an inclusive teaching environment.
- Peer assistance through the peer tutoring, but it has not yet been well established (it is still developing).
- Transformation of the role of the SEN assistant. The aforementioned activity is a good example of how RA can become UDL. The purpose of the activity is to increase the independence of SEN students as during this project it became visible that these students rely too largely on the support and help of the assistants. The consequences of this lack of independence are already visible in the time of involvement in the secondary level of education (for example, there is a possibility of exclusion from social interaction with peers), but this obstacle can also be visible later at the higher levels of education (college students in Slovenia are not entitled to an assistant). Based on the aforementioned problem which could be a result of lack of independence, the role of the assistant was reformed so that today – when a SEN does not require the assistant's help - they are also available to the teachers and other students in the class.

Physical environment and products

The third point of the UDL guidance stresses the importance of building an accessible environment for everyone. SEN is – as a novelty at school which is the result of implementing the INVESTT project – allowed to use photocopied notes.

Instructional standards and delivery methods

This point refers to learning aims. The implemented activities are concisely presented in the table below.

Content	Description of UDL elements
Division of tasks	Classmates: Peer tutoring
	Teachers: Tutorship
Teaching methods	Regular use of different forms of learning (group work, pair work, individual tasks, frontal)
	More visually planned lessons
	Work in smaller groups when attention decreases
	Considering different learning styles
	Additional lessons available for all students
	Team teaching

Table 3: UD02 (from UD01 to UD02)

Additional lessons mean tutorship. Prior to the implementation of the aforementioned novelty only pupils with statements were entitled to this benefit which is again a good example of how RA can become UDL.

We assess that the implementation of team teaching is an especially positive contribution of the project towards improving the achievement of learning aims. It diversifies the classic approach of delivering the subject matter. It is a form of interdisciplinary learning that functions in a manner where teachers from different fields prepare a learning lesson on the same subject together, but from different points of view.

Information resources and technology

This point also focuses on emphasising the importance of enabling access to information and here is where team teaching decided to use less text per page and various ways of explanations.

Feedback

Students receive individual feedback on a regular basis in order to achieve goals set under the point pertaining to feedback.

Assessments

In the field of assessments, we implemented the following two activities, which are in accordance with the conceptual scheme of the UDL:

- Oral marking dates determined in advance. This is an idea from a teacher who participated in the project. Most teachers opposed the implementation of scheduled dates for oral markings and that is why she had to invest a great deal of effort and energy into the realisation of her idea. Students accepted this novelty extremely positively.
- Homework benefits. This is a way of marking homework with the help of implementing a reward system that enables the students to improve their grades. Certain teachers recognise negative aspects as well – in their opinion – it is hard to establish whether an individual student does the homework on their own whether they copy it from other students.

Reasonable accommodation (RA)

The UDL approach does not reject the idea of necessary adjustments as certain adjustments are inevitable. Within the framework of the projects teachers were able to use adjustments pertaining to assistive technology (such as wheelchair, software for the blind, copying notes from schoolmates), individual adjustments to the evaluation process (testing of the topics in several parts, extended time of testing, more frequent testing), individual curriculum

adjustments (lowering minimum standards of knowledge for SEN with learning disabilities and for the blind pupil, although lowering expectations goes against the principles of UDL).

We also prepared a list with descriptions of individual deficits for the teachers in the project as they – as mentioned before – do not receive a sufficient in-depth view into this field during their tertiary education studies. That is why they have a hard time understanding problems that the SEN face in the school environment.

One of the most important novelties worth mentioning here is also the establishment of a supported transition from school to work with establishment of cooperation between the school and Racio Office[4]. The establishment of the connection between the education system and the labour market is exceptionally important for SEN as this is how we let them know that they can still count on our help after they complete their high school education. It occurs often that after pupils with SEN complete secondary education they remain in the private sphere. In the framework of the project teachers visited some ex- SEN pupils at their homes; they find overprotection and isolation in domestic environment and they were not even interested in finding employment at all (this is connected with receiving social benefits as in Slovenia persons with special needs lose disability allowance for good if they get a job).

On the basis of considering the specifics of the Slovenian school system and experience acquired during this project we can conclude that in the implementation of UDL into the school environment it is necessary to start with implementation of smaller changes, good practices can then gradually be expanded onto the whole institution. This is a long-term process as achieving inclusive teaching practices demands a reflexive attitude towards the implemented changes and constant development of new ideas. Last but not least, hereby building a supportive environment (especially the relationship school leadership and teachers towards inclusion) is especially important; this represents a pre-condition for realising UDL in practice.

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[4] Racio Office carries out non-profit programmes for the unemployed persons, especially for those who are considered as vulnerable groups (for example persons with disabilities).

3. Recommendation and Conclusions

This chapter will give you an overview of all the findings in the INVESTT project on different levels: we differ between a macro level (defined as political level with influence on the development of the curricula), a meso level (defined as a regional level with focus on the school as a system) and a micro level (defined as the classroom, the students and the teacher). We tried to organize our recommendations on these levels, knowing that some of these recommendations have importance on different levels. The recommendations are not covering the whole possibilities but were used in one or more schools of the project.

The first part of this chapter explains the recommendations from the national perspective and tells you the connection to the school programme of each country.

3.1. MACRO LEVEL
(political level, curriculum)

MACRO LEVEL: Austria

Curriculum adjustments (Macro level)

- In the first step we designed a curriculum for our Introductory-Course-students (IC-students), which is a sector of the full curriculum for the inclusive course (IBB) that started in September 2014.
  - o The IC-students participated in regular courses for a few subjects with focus „Behindertenbegleitung" for employed persons.
  - o The subjects are General Basics (German), Basic knowledge in nursing, Immersion/Deepening teaching and a practical training for 200 hours.
- In the second step we have a curriculum (the training is based on a regular „Statut" which can be used in all SOB-Schools in Austria)

Both curricula were adjusted in order to contain all subjects according to the criteria of the NQF (knowledge, skills and competence). That means:

- We defined educational goals, e.g. „I learn to write down things I have experienced" or „I learn to speak about problems".
- We defined the skills the students should obtain. („I can describe, what a group is" or „I learn to work correctly and hygienically") and
- we described the competences the students will acquire. („I am responsible for the proper washing of my hands" or "I recognize when people want something or need something")

MACRO LEVEL: Belgium

Curriculum adjustments:

- Explore possibilities in the curriculum
- Consider each question for RA as a possibility for UD.
- Provide service-providers with the necessary perspectives (see above)
- Ensure good collaboration between school and work.
- Provide good internships through good collaboration, based on the principles of UD and RA.

We conclude the list of suggestions with two points. Firstly, according to our experiences within the project, the above listed examples will prove good practices only in case of the awareness of target groups. Awareness is therefore a precondition for inclusive education, since it affects the perception of the topic's relevance and motivation of school management and teachers for introducing change in this area. Secondly, it is necessary to strengthen the awareness of the authors of the teaching programme, founded in the concept of UDL, that introducing changes is a long-term process, demanding permanent improvement and a reflective approach to new elements set in the learning environment. We suggest that in the beginning, they introduce small changes and later on gradually build obtained knowledge in the entire institution.

The provision of reasonable accommodations is a right for all students. The new M-decree is an important step towards inclusion, but a lot of work still needs to be done. Each consideration of reasonable accommodations should be an incentive to explore universal design, in other words: every reasonable accommodation should be an opportunity to move reasonable accommodations in extension towards a universal design.

The concept of reasonable accommodations will become more and more known by the public as a consequence of new legislation. As a result, Belgium (Flandres) can expect more and more legal action to enforce this right.

Meanwhile the right to reasonable accommodations should be seen as a leverage to more inclusion.

A full change process to universal design can only be made possible by a review of our national standards. In Belgium (Flandres), curriculum goals differ according to different school organizations (state schools, Catholic schools, community schools). This makes the change process very difficult.

Conclusions: a vision that underlines the value of UDL in moving towards inclusion is of imperative importance. Good leadership should be empowered. A full change process to universal design can only made possible by a review of our national standards.

MACRO LEVEL: Norway

Curriculum adjustments

In Norway, vocational education and training is a two-part collaboration between the school and the labour market, often termed the 2+2 system, indicating that the VET comprises two years in school and two years as apprentice in an (public or private) enterprise.

The White paper launched in March 2013 by the Ministry of Education and Research (Meld. St. 20, 2012-13), identified the high percentage of school dropout in vocational education and training as a major problem. In order to enhance the general school completeness, the government is discussing the appropriateness of the 2+2 model in VET. It is suggested that this model does not fit the needs of all students and branches. Therefore, "(…) the ministry proposes that there is a potential for increasing student's motivation and competence attainment through closer connection in the workplace. The present qualification requirements are maintained, but the education and training shall be more adapted to students' choices, local needs and preconditions" (own translation, page 126).

The ministry uses the term 'Exchange model' [no: vekslingsmodell] and it is supposed that this model will integrate education in schools and workplaces in other ways than the 2+2 model. A key issue is that the government will maintain the qualification level. Therefore, it is emphasised that the subject content, competence objectives, the total number of years in school and workplaces, and the relation between common subjects and programme subjects, are the same as for the present 2+2 model.

It seems clear that the introduction of these new policies are new regulations that will influence the context where the Norwegian INVESTT-project is concerned. The Exchange model as proposed in the report to the Parliament, present a frame for new ways of organising adapted vocational education and training. The main idea is to give counties and schools possibilities for making education more adapted to pupils' choices, local needs and (student's) preconditions.

While "Extended workplace practice" (EWP) is developed within the frames of special needs education, the Exchange model is adapted education within the frames of regular education. There are many similarities between the exchange model and principles of universal design and reasonable accommodations. From an INVESTT perspective, the exchange model is an example on how the education can transfer elements from reasonable accommodation into a universal design. Initiatives made by the schools in the course of the INVESTT project are in line with the exchange model (strengthening the interaction between school based and work place education and training, flexible use of the 2+2 model, possibilities for earning grades in school subjects). In his way, the aim of the INVESTT project fits well to the national policies; and no further changes in policy are recommended.

MACRO LEVEL – Slovenia

Our project activities mainly focused on changes in micro, partly meso environment, but they did not touch macro environment. Therefore, we shall only note suggestions and observations stated at the national conference of the project:

- At different educational levels (from preschool to elementary and secondary school) the educational system should be complemented with other programmes for students with SEN; momentarily, schools with adapted programmes only offer two options of employment: a seamstress and an assistant in biotechnology and care.
- Financial support is insufficient, which is an especially burning issue e.g. with providing necessary equipment.
- Access to various forms of help and support should be provided for students with SEN even later, when they enter the labour market or continue education (students with SEN are entitled to a majority of support structures until the end of secondary school education, and no further. At the university, students have no a right to an attendant).
- A thorough study is necessary to identify obstacles which prevent students with SEN to enter the labour market.

3.2. MESO LEVEL
(local level, structural/organisational measures)

MESO LEVEL: Austria

Structural/organisational measures (Meso level)

- Several informative meetings for interested people (students with SEN, their parents or guardians, employers, mentors in the practical field)
- Additional value-units for team teaching
- Organisation of an additional room for the immersions (deepening lessons)
- Acquisition of various teaching aids (books, software and so on)
- Creation of a timetable for IC-students in the regular timetable of the course in the first year
- Creation of a timetable for the IBB-class in the second year
- Regular meetings of the teachers from the teams (Class-conferences)
- Weekly meetings of the project-team

- Creation of a selection-assessment
- Build networks with potential employers
- Find partners and mentors for the internships
- Providing trainings for the teachers in „Easy language"

Recommendations on UD and RA

- Build a network with potential employers (Meso level)
- Make sure, that all objectives of the internship are sufficiently well determined and explained (Meso level)
- Make a roadshow or information events at school (Meso level)
- Take your time! (Macro, Meso, Micro level)

MESO LEVEL: Belgium

Structural/organisational measures:

- Organize for collaborative work.
- Establish a mind shift concerning UD and RA on school and class level.
- Consider reasonable accommodations in the specific context of the whole school environment.
- Consider reasonable accommodations in the specific context of the whole work environment.
- Work on a clear vision and mission statement
- Make sure all levels of staff work with the shared vision and mission statement.
- Make sure all stakeholders, such as parents and employers work with the shared vision and mission statement.
- Establish good leadership.
- Establish good working relations with the labour market.

Recommendations on UD and RA:

- Invest in awareness raising with the whole school and stakeholders.
- Inform each teacher about UD and UDL and RA.
- Inform parents about UD and UDL
- Invest in learning activities about the foundations of UD and UDL. This is a necessary condition for change.
- Organize collaborative work on UD and UDL.

Traditionally, teaching in Belgium (Flandres) often happens in isolation (one teacher, one classroom). The concepts of universal design and reasonable accommodations should be seen on school and class level. All considerations of reasonable accommodations should be made in the context of the whole school (or work) environment. All staff should be included in these discussions.

Considerations of reasonable accommodations are very specific to a particular school or work context. This implies, that the whole organization has to work with the same clear

vision and mission statements.

Working towards a more universal way of teaching is not only a matter of the whole school but all stakeholders should be involved. Parents should be informed and made aware of the advantages of universal design. Teachers need to make a mind shift but this is only possible with good leadership, informed stakeholders and good working relations with the labour market.

Conclusions: The sustainability of inclusive classrooms and the implementation of UDL is dependent of the support at school level. Good leadership plays an important role in this process, as well as establishing a collaborative culture. The UDL-framework should go together with the design of curricula, assessments, technology and infrastructure. Leadership should provide and facilitate collaboration between teachers. Professional development should be provided, together with resources, such as material mapping. Stakeholders should be actively involved.

MESO LEVEL: Norway

Structural and organisational measures

This section concerns the interpretations made at regional and local school level as well as the local labour marked. Two topics are discussed: The structure of special needs education in upper secondary schools and the education and training in private and public enterprises.

The national policy delegates the governance of the educational provision in upper secondary education and training to the educational authorities at county level. With regard to the context for the INVESTT project, this comprise the organisation of special needs education in general and the extent and frames for the particular educational provision "Special needs education in small groups; extended workplace practice" (EWP).

Every year, the county authorities decide the number of EWP-classes within different educational programmes and their localisation at school level. Thereafter the Educational Psychological Service (EPS) at county level, in collaboration with pupil advisors in lower secondary school, supervise and guide actual students from lower secondary level into EWP classes.

At the county level, policy documents emphasise that the design of the EWP-classes shall take a point of departure in strategies that will increase student's motivation and competence attainment through closer connection to the workplace. In addition, the EWP-classes allow for student's choices, local needs and preconditions. In this ways, it reflects some of the principles connected to the exchange model. However, experiences from the INVESTT project indicate that the EWP classes are vulnerable with regard to curricula objectives and the connection with regular classes, both at the interactional level and the educational level. One way of explaining this lack of connection, is the overall framing of the EWP classes within the special education tradition. When students have an individual decision on special needs education, they also have an individual education plan, and the EWP-classes use separate educational locations.

This makes the connection between the use of exchange model and the extended workplace classes (EWP) an important issue for the policy level at the local county. A

possible strategy at county level could be to initiate a discussion on whether or to what degree the exchange model might be a more productive strategy for the schools' work on constructing adapted vocational education and training compared to a continued use of EWP-classes framed within the special needs education (cf. Slee 2011, Nevøy, et al. 2014).

The school decides how to organise the special needs education at school level. For the classes termed "extended workplace practice" (EWP), this concern the degree of autonomy with regard to administration (segregated or integrated models), collaboration and co-teaching between regular- and EWP classes, the use of human (teachers) and physical resources (classrooms and workshops).

The challenge for the school authorities at county level and the schools is to explore the possibilities and latitude within the exchange model as proposed in the report to the Parliament. However, as long as the number of EWP classes and their funding is decided at the county level, and the students are recruited through a SEN assessment at county level, it constrains the possibilities for developing alternative strategies in line with the principles of Universal design. Therefore, based on the experiences from the local INVESTT project, this report recommends that he county reconsider the county's policy of special needs education at upper secondary education. To what extent is the policy in line with national guidelines and how do the policy support (or constrain) the EWP classes work on developing universal strategies.

The organisation of workplace training in private and public enterprises is a collaboration between the schools, the enterprises, the apprenticeship-training agency [opplæringskontor] and the vocational training board [no: fagopplæringskontor]. The 2+2 system implies that learning objectives at Vg3 level is integrated in the apprenticeship at the work places.

Differences within the local labour market play a significant role with regard to the possibilities for signing a training contract for students at EWP-classes. When 'Building and construction' (BC) are qualifying workers for private enterprises, 'Healthcare, childhood and youth development' (HC) primarily qualifies students for work in public institutions (e.g. childcare and houses for elderly people). Experiences from the INVESTT project document that the threshold for signing a Training contract with a public institution is significant higher compared to a private enterprise. In fact, many municipalities, the owner of the institutions for childcare and elderly people, seems to have a policy on not signing a Training contract. The argument is twofold; Training contracts do not qualify for the required competence for employment in the public institutions, and the pupils do not contribute to the institution's value creation. Despite the fact that Training contract is a legal part of the National curricula and for some students a first step towards trade qualifications, local municipalities reject to sign Training contracts with pupil from Health care, a practice that deprives the possibilities for some students to use this option for achieving qualification for work through the regular school system.

The chapter on the school programme account for an important initiative from Gand upper secondary school in order to change the present policy within the municipalities. Through a dialogue between the school and the municipal authorities, the municipality will revisit present policies and make Training contract an option for students from the Healthcare, childhood and youth development programme. From the perspective of the INVESTT project, the initiative from the school is an important step towards realising the principles of Universal design. The report recommends other schools offering EWP-classes as well as the county authorities, to follow up these significant initiatives made by Gand upper

secondary school with regard to the use of Training contracts in public institutions.

MESO LEVEL: Slovenia

To achieve <u>UDL,</u> we suggest:

- **The strengthening of awareness of local community actors** about the importance of inclusive teaching, empathy and understanding of difficulties faced by students with SEN and other students who have problems with inclusion in school environment (we approached this, for example, with the organization of national conference where we presented the purpose and goals of the INVESTT project).

To introduce <u>RA</u>, we suggest:

- **Establishing the connection between school and the labour market** (in Slovenia, the connection between school and the labour market is established within practical training which students need to perform to successfully conclude their education; this is not sufficient for the improvement of their employability. Through interviews with ex-students, conducted in their home environment, a team of teachers who participate in the project realized that they often live isolated from outer environment, rather embedded in primary sphere. They do not enter the labour market because they fear losing (in case of getting a job) invalidity allowance, to which they are entitled if they have a status according to the Act Concerning Social Care of Mentally and Physically Handicapped Persons[5]. By extending the time spent at home, however, the possibility of their inclusion in the labour market is decreasing. Considering this, a close connection between school and the labour market is very important because it communicates to students with SEN that after they finish school they are not alone, having a formally established network of help they can turn to. Within the project we established connection between school and Racio employment service, which operates in the same local community as the school and deals with employment of people at a disadvantage in the labour market).

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[5] Act Concerning Social Care of Mentally and Physically Handicapped Persons (Uradni list SRS, št. 41/83, Uradni list RS, št. 114/06 – ZUTPG, 122/07 – odl. US, 61/10 – ZSVarPre in 40/11 – ZSVarPre-A).

3.3. MICRO LEVEL
(school and classroom level)

MICRO LEVEL: Austria

Inclusive teaching methods (Micro level)

- Team teaching in all subjects
- Immersion (deepening lessons) for all our IBB-students (Contents depend on the students' needs)
- "Klassenrat", a method to discuss the current situation at school
- Excursions
- Communication-days at the beginning of the winter-semester
- Formative assessment (Pensenbuch)
- Summative assessment (oral and written)
- Scripts in easy language
- Special learning situations

A revision of the evaluation methods (Micro level)

- "Pensenbuch" (After a self-assessment on learning in general, in this „Pensenbuch" the goals, skills and competences the students can acquire are described; instead of tests and certification the students' achievements are described in four categories („yes", „no", „with this support", „we didn`t talk about this at school")
- Ongoing oral evaluation
- Electronic evaluation once per semester on a platform called "QIBB" (www.qibb.at)
- Questionnaires from our project partner (University of Salzburg)

A list of reasonable accommodation measures (Micro level)
First year:

- Immersions (deepening teaching) on the theory once a week with a teacher from school.
- Teaching aids as a "BIGtrack" (a special computer mouse) and special computer keyboard.
- Easy-to-read worksheets.
- Constant mentoring during the internship.
- Supervision for the students by the teacher accompanying the internship.

Second year:

- Constant mentoring during the internship by a teacher from school and special guidance/mentoring in the training place.

Recommendations on UD and RA

- Implement team-teaching. (Micro level)
- Attend courses on "easy language" (Micro level)
- Provide papers that are easy to read (Micro level)
- Provide several means of assessment, e.g. not only written ones (Micro level)
- Implement deepening lessons for all students: 2 hours a week (possibility to repeat the content of the lessons, training and preparing for tests, often in smaller groups, explaining words they don't understand, …) (Micro level)
- Involve the mentors/coaches from the internships as soon as possible (Micro level)
- Make a good selection-assessment before you start the training (Micro level)

MICRO LEVEL: Belgium

Inclusive teaching methods:

- The use of roadmaps (visual instruction plans). Making this a "one size fits all" is an important pitfall to avoid.
- The 3 principles of UDL: engagement, representation, action & expression
- The UDL-guidelines as a tool for lesson designs.
    - Working with visual and specific learning goals and referring to them during the lesson
    - Subtitles for the whole class, keeping the lesson goal in mind.
    - More time for exams. If provided for all students, negative effects for others can be avoided.
    - Solution keys on a learning platform
    - A digital agenda

Evaluation methods:

- Different ways to evaluate the learning of the student. This can only be done under the condition of co-teaching or support.
- Self-evaluation on a meta level.

Reasonable accommodations:

- Dispensation of certain classes (if not necessary for specialized vocational training). This is a curriculum adjustment that can be part of reasonable accommodations.
- Individual roadmaps
- Individual subtitles
- Dyslexia and dyscalculia measures
- Compensating measures
- Remediating measures
- Dyslexia software

Recommendations on UD:

- Collaboration between students, peer learning: this has a very high effect size on

- learning
- Pedagogical use of technology
- Intermediate steps to reach the goals.
- Process and product evaluation (formative and summative)
- Collaboration with other teachers in a learning group; preparing lessons together; reflecting on lessons together; action research.
- Involvement of GON teachers (integration teachers)
- Collaboration with parents, employers and other stakeholders

Each teacher should be informed about universal design (for learning) and reasonable accommodations. Providing the necessary professional development in these concepts is a necessary condition for change. The INVESTT-staff gave evidence for this statement.

By means of different surveys at different evaluation points and after evaluating with the service provider, the following advises can be retained as valuable:

Inclusive teaching methods:

- The use of roadmaps (visual instruction plans). Making this a "one size fits all" is an important pitfall to avoid.
- The 3 principles of UDL: engagement, representation, action & expression
- The UDL-guidelines as a tool for lesson designs.
- Working with visual and specific learning goals and referring to them during the lesson
- Subtitles for the whole class, keeping the lesson goal in mind.
- More time for exams. If provided for all students, negative effects for others can be avoided.
- Solution keys on a learning platform
- A digital agenda

Evaluation methods:

- Different ways to evaluate the learning of the student. This can only be done under the condition of co-teaching or support.
- Self-evaluation on a meta level.

Reasonable accommodations:

- Dispensation of certain classes (if not necessary for specialized vocational training). This is a curriculum adjustment that can be part of reasonable accommodations.
- Individual roadmaps
- Individual subtitles
- Dyslexia and dyscalculia measures
- Compensating measures
- Remediating measures
- Dyslexia software

Time-investment is justified by long term learning profits.

The following items are considered as "good teaching", but are in the same time conditions for a universal design:

- Collaboration between students, peer learning: this has a very high effect size on learning
- Pedagogical use of technology
- Intermediate steps to reach the goals.
- Process and product evaluation (formative and summative)
- Collaboration with other teachers in a learning group; preparing lessons together; reflecting on lessons together; action research.
- Involvement of GON teachers (integration teachers)
- Collaboration with parents, employers and other stakeholders

Conclusions: Teachers who work in inclusive classroom cannot do the job alone. Responsibility for ALL learners is possible through a universal design of the learning environment and curriculum. Different from other top-down educational models, teachers who implement UDL should receive the necessary support in the following way: each teacher should be informed about universal design (for learning) and reasonable accommodations. Providing the necessary professional development in these concepts is a necessary condition for change. The INVESTT-staff gave evidence for this statement.

MICRO LEVEL: Norway

Inclusive teaching strategies

At Gand upper secondary school, the two EWP-classes in the INVESTT project, Building and construction (BC) and Health care and childhood and youth development (HC) represent two different strategies with regard to organisational models and strategies for inclusive education.[6] Building and construction organises the education and training in groups working with practical tasks, both within and out of school. In addition, the teachers have all of their workload in the EWP-classes. In this way, the EWP classes have few activities together with regular classes within the same educational programme. Collaborative activities together with students from regular classes are limited to smaller courses focusing "health, environment and safety" and how to use particular tools etc.

The EWP-classes at Healthcare, childhood and youth development (HC) present a somewhat different picture. A few years ago, these classes were organised relatively separated from the regular classes within the same programme area. Today, the EWP-classes at Health care are located in the same physical area as the regular classes, the amount of co-teaching and common activities is increasing and teachers are working across the regular and EWP classes.

These differences between the two EWP-classes can be explained with regard to local

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[6] In the first year of the INVESTT project, three educational programmes were involved. After the first year, the county (or school?) decided to close the EWP class at the Technical and industrial production programme.

cultures and traditions within the EWP-classes as well as the nature of the educational programme and the local labour marked they are qualifying students for.

The recommendations presented here is largely based on the information from the analysis of the questionnaires and the group interviews.

Participation in a community of learners

In the student's questionnaires at the onset of the project, almost all of the students stated that they were more satisfied with the education in EWP-classes compared to their earlier experiences in primary and lower secondary education. In the EWP-classes, the students participate with other students in a community of learners, they experience good relation to the teachers and the daily activities are predictable. For many of the students, this is a new experience. Instead of being marginalised and excluded to individual or small group-activities (in lower secondary school), they now experienced friendship and a feeling of mastering (cf. Bruin and Ohna 2013). With regard to the focus of this chapter, it is important to be aware of this situation. Any recommendations must take into considerations the students' previous school experiences. There are significant limitations on what is possible to do by the teachers themselves. The upper secondary education cannot in three to four years, repair what is also a consequence of ten years' school experiences. Therefore, the situation calls for a systemic approach to educational change, involving both the policy and the administrative level as well as the pedagogies in the everyday practices in upper secondary education (Ferguson 2008).

Increasing students' qualifications

In order to enhance the students' qualification, it is important to continue and further develop the strategies related to the implementation of the digital IEP-log and to strengthen the connection between the students' Individual education plan (IEP) and the National curricula. This includes the communication of predictable learning aims and progression. A stronger connection to the National curricula will also strengthen the students' possibilities with regard to signing of a Training- or Apprentice contract in the second part of the vocational education.

Scrutinize the border between special- and regular education

In the Norwegian school system, special needs education is an individual right to additional support. Within the EWP-classes, this support is organised as education in small groups at the outside of regular classes. The aims of the INVESTT project, as well as the experiences in the project, call for a continued investigation of the interaction between special needs education and the regular education. Both EWP-classes (BC ad HC) have some contact with the regular classes at the programme. Strengthening these initiatives have several advantages. It will make education of all of the students in the educational programme a joint responsibility for all of the teachers at the programme and it will improve the possibilities for meeting the individual needs of all of the students within the educational programme.

Workplace education and training

An interesting feature in EWP-classes is the possibilities for individual work practice during the first year of upper secondary education, formally organised within a Training

agreement [Opplæringsavtale]. This option is in line with the idea of soften the present 2+2 model in upper secondary education, described in the Exchange model proposed by the Norwegian government. Together with new practices regarding the use of Training contract (cf. initiatives made by the school towards the local authorities at the municipality), this gives the teachers more possibilities for facilitating varied learning experiences at ordinary workplaces for the students.

Micro level - Slovenia

Key issues in Slovenian education system regarding inclusion of SEN are inappropriate norms, the lack of appropriate teaching materials and the excessive volume of the matter which students are supposed to study within the established curriculum. In recent years, the structure of students in secondary vocational schools has changed. Increasingly more students with SEN enrol in secondary schools with adapted programmes, but teachers are not adequately prepared for this. During their education, teachers do not obtain a sufficiently profound insight in inclusive methods of teaching, and consequently they are not appropriately qualified for teaching students with SEN and for adapting learning environment and the style of teaching to these students' needs. Simultaneously, the level of student's knowledge is decreasing (which holds for students in general, not only for students with SEN), and due to this, teachers are forced to adapt the criteria for the assessment of knowledge). In addition to these, teachers identify as problems low motivation for learning and the frequency of behavioural issues (which, again, holds for students in general, not only for students with SEN, who are, in their teachers' opinion, in this regard less problematic than their peers).

To achieve UDL, we suggest:

- Introduction of activities by which in target groups (students, parents, teachers) we strengthen the awareness of the importance of inclusive teaching, empathy and understanding of difficulties faced by students with SEN and other students who have problems with inclusion in school environment (e.g. with lectures about this topic, "in the other's shoes" workshops, encouraging peer support, etc.).

- The use of innovative and various learning methods and materials and methods of assessment (e.g. different ways of explanation educational materials and giving instructions, the use of various materials (PowerPoint presentations, posters, audio recordings etc.), announced verification of knowledge etc.)

- The transfer of good practices among teachers (e.g. teachers' team meetings, class conferences etc.).

To introduce Reasonable Accommodations (RA), we suggest:

- The possibility of using technical support (in our case, a computer for the blind proved especially useful).

- Encouraging independence in students with SEN (within the project we remodelled the role of attendant, who is now, unless a student with SEN does not need them,

available for other students and teachers. In this context, this is actually a transition from RA to UDL).

4. Statements for a strategy

In this chapter we compress our recommendations in a more general way. This leads to general statements we would like to offer to develop more inclusive vocational educational systems in different European countries.

First you can read our statements from the perspective of the different countries. And again we differ between a macro level (defined as political level with influence on the development of the curricula), a meso level (defined as a regional level with focus on the school as a system) and a micro level (defined as the classroom, the students and the teacher).

	Macro **(policy and curriculum at national and regional level)**
A	Inclusive education has to be consistent from elementary school to university. In the field of inclusive vocational education, it is necessary to develop officially accepted curricula for different professions.
A	The certification of the vocational curricula must be possible on different levels of qualification. Therefore you need on the one hand detailed descriptions of these different levels (e.g. EQF – NQF) and on the other hand different assessment tools.
B	The national standards: a vision that underlines the value of UDL in moving towards inclusion is of imperative importance. A full change process to universal design can only be made possible by a review of our national standards. The curriculum should be accessible for all learners from different backgrounds, starting from diversity in the classrooms.
B	Educational practices: good leadership should be empowered, new educational practices, such as co-teaching should be made possible and encouraged. The inspectorate can play an important role in supporting these new practices.
N	Regional governments should support and facilitate school efforts on facilitating education and training in line with the ideas from the exchange model.
N	The county is responsible for upper secondary education. At the county level, the Extended Work Practice classes (EWP) as a rather segregated organization is part of the special needs education (SEN) structure. We recommend that the school authorities at the county level initiate a discussion on how the new national policies can be a more productive strategy for the school's work on facilitating adapted vocational education and training, and thereby make the relations between EWP classes and regular classes more flexible and even reduce the use of EWP classes.
S	Because the teachers are one of the main success factors for achieving inclusive teaching environments, the school system has to be designed in a way that "future teachers" gain proper knowledge about inclusive teaching practises during their training.
S	Financial aspects need to be taken into account as well. Financial encouragements facilitate achieving inclusive teaching (for example teacher's materials, appropriate norms, supportive devices etc.).

	Meso **(local level, structural and organisational measure)**
A	For vocational education the building-up of a network of stakeholder is crucial. This network should consist of provider of practical trainings (internship) and potential employers.
A	The network of stakeholder should cooperate with the local school administration. This improves the sensitivity of the school administration for the needs of an inclusive vocational education.

B	Strong leadership: the sustainability of inclusive classrooms and the implementation of UDL is dependent of the support at all levels. Good leadership can provide the necessary opportunities to all staff members to work on the design of flexible learning environments, accessible curricula, formative and summative assessments, technology and infrastructure. School leaders should also facilitate collaboration between teachers and support continuing professional development.
B	Involvement of all stakeholders: all stakeholders, such as parents, families, employers and the community should be actively involved. For students with SEN-statements, the support staff (in Belgium: GON) should be fully involved in applying UDL in the classrooms.
N	Norwegian VET consists of education and training in school (as student) and in enterprises (as apprentices). A Training Contract is an Apprenticeship Contract at a "lower level" containing fewer learning aims. We recommend that the school and the county authorities put a stronger focus on strategies that will increase the use of Training Contract as a valued part of VET.
N	The vocational education and training in upper secondary is based on a joint collaboration between school system and private and public enterprises. Experiences from the INVESTT project document that students from EWP classes for various reasons are constrained from signing Training Contract as part of their education and training. This call for a systemic approach where key actors at different levels in the school system and labour market collaborate on students' transition from education and training in school to education and training in workplaces.
S	From an organizational perspective the vision of the school leadership, its ideas and strategies for taking actions toward that vision is very important. The teachers won't practice inclusive teaching methods to the extent as they otherwise would, if the school leadership would be favourable to ideas of inclusion.
S	It is not enough to merely achieve an inclusive school environment. It is important to connect the school with the wider community, otherwise when not being in school or after finishing school SEN are left alone. Especially the establishment of connection between the school and the local companies is crucial here, as well as communication and collaboration with the wider community is (e.g., special educators, parents, NGO's).

	Micro level **(school and classroom level)**
A	Inclusion needs a good pedagogy. It is not necessary to have specialized teachers in the field of special education but highly motivated and team orientated teacher. Team teaching is essential.
A	All the teachers of a school should be involved in the development of the inclusive curriculum even if they are no direct members of the class team. This is the only way to develop an inclusive attitude in the school.
B	A collaborative culture: teachers who work in inclusive classroom cannot do the job alone. Full access to the curriculum and learning environments for all students can be achieved by applying a universal design by all teachers in the school. Good collaboration between these teachers is an important condition for success. One example of collaboration is a professional learning community, where teachers can design, plan, act, reflect and conduct action research together. Teachers should be aware of the added value of working together.
B	Professional development and support: different from other top-down educational models, teachers who implement UDL should receive the necessary support to make a mind shift from teaching to the average student towards teaching to all learners, starting from learner's variability. Teachers should be open towards continuing professional development and coaching.

N	Students in EWP classes report that they are more satisfied with the education in EWP-classes compared to earlier experiences in primary and lower secondary education. However, few students are given opportunities to sign a Training Contract as a part of the education and training in upper secondary education. In order to enhance students' qualifications for the regular labour market, we recommend that the individual education plan (IEP) for all students in danger of non-completion should include a perspective on qualification for Training Contract.
N	Vocational education and training are accused of putting too strong emphasis on theoretical and decontextualized knowledge. We recommend that the schools learn from the educational experiences in the EWP classes and strengthen their efforts on integrating education in school and workplaces as part of universal design in order to facilitate students' learning in and out of school (and thereby reduce the need for reasonable accommodations).
S	In the school environments where we can find integration rather than inclusion among the first things that have to be achieved in order to make inclusive schools is to widen up the notion of the concept of special needs. The concept of UDL is in this sense very useful, because it is mind shifting, since it shows that each person has some sorts of special needs in learning (different types of learning, language barriers, physical/psychological/social barriers etc.). Key actors here are teachers. Raising awareness among them is therefore one of the main tasks for successfully achieving inclusive environments.
S	To be included in the school environment means to belong and to be able to participate in activities, social networks. Therefore it is crucial to encourage independence of students with SEN and carefully design RA (for example a need for a special attendant), because only then students with SEN could truly be a part of the interaction between classmates and accepted by others.

Coming from the national perspectives now we try to make some general suggestions or recommendations, based on the national statements. And again we organize these statements on the three different levels (micro, meso, macro):

Macro Level
1. Inclusive education needs a consistency from elementary to tertiary education. In the field of vocational education, it is necessary to develop officially accepted curricula for different professions, which are accessible for all learners.
2. A differentiation of goal attainment in upper secondary education. Students in upper secondary VET should be given opportunities for certification at different levels within the trade, based on the criteria in EQF/NQF. The ambition of a "golden standard" for all, journeyman's certificate/trade certificate in VET or A-level/study competence in academic subjects, constrains the possibilities for low-achieving students to achieve valued qualifications.
3. An inclusive education system should have some guidelines for inspection of how inclusive values are practiced at regional and local levels. This could be linked to a system of an anti-discrimination legislation, a school inspectorate, a feedback system for parents and students on exclusionary practices.

Meso level
1. Systemic approaches, including a network of stakeholders representing key actors in relation to upper secondary VET. This can include schools (and school owners, service providers, …), organisations at the labour market, social welfare sector, local community and other stakeholders of national importance.

2. The development of strategies for educational transitions (progression) in school, between education and training in school and workplaces, and from VET to labour market.

<u>Micro level</u>
1. Every school should have policies and strategies on a common responsibility for all students within the school/education programme, and on rejecting strategies that put responsibility for some students (SEN students) on some particular teacher (SEN teacher). This requires active focus on teachers' professional development and collaboration between teachers.
2 Inclusive education has consequences for the mind-set among the professionals at the school. Therefor schools that emphasise inclusive education also should introduce understanding on learning that rejects deterministic views on student capabilities and supports transformative understanding on learning.
3 Transformative strategies on learning in VET are connected to strategies that enhance learning in authentic learning arrangements where students can participate in practical work/communities together with experienced and skilled workers.

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6. Table of tables and figures