DITOGA

**Digital tracking of VET graduates via auto-analytics
to enhance the quality and sustainability
of vocational and educational training programmes**

National Report - Austria

A.   Questionnaires - Results

The questionnaire and its empirical evaluation was the first step for the successful implementation of the first intellectual output. 15 persons were interviewed, divided into ten persons from the Vocational Education Training sector (VET) represented by employees from *Jugend am Werk Steiermark GmbH* and five persons from the economic sector who work with apprentices, train them and/or are apprenticeship officers in their respective companies.

Most of the interviews took place face-to-face with the employees from the training sector. The persons from the economy received a briefing by telephone and email and therefore transmitted their results by email.

1. Companies: demands of the world of work beyond the educational horizon.

The five respondents from the business sector come from different fields of work, with the companies being divided into small and medium-sized enterprises on the one hand and international companies on the other. In addition, emphasis was placed on empirically recording a wide range of the different sectors. The fields of work of the graduates in the companies include retail trade, the office sector, the automotive engineering sector, electrical installation technology, construction engineering, company logistics, the health sector and also lighting technology.

Below you will find the empirically evaluated results of the questionnaires, starting with the statements from the business enterprises.

A. EMPLOYMENT

A EMPLOYMENT	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
A1. Can the apprentices/trainees/new workers adapt to the job requirements/job profile?		4	1		
A2. Can the apprentices/trainees/new workers identify unique selling propositions (USP) about themselves?		1	3		1

Can they differentiate from others in order to convince?					
A3. Can the apprentices/trainees/new workers portray themselves and their competences professionally in front of employers?		1	3		1
A4. Do the apprentices/trainees/new workers have a clear understanding of the tasks/knowledge, skills, competences required by the occupation?		2	2		1

A1. The respondents from the economic sector have mainly rated the apprentices/trainees/new workers ability to adapt to the job requirements/job profile in a positive way- four as good, one as satisfactory- and were also quite positive about the target groups unique selling propositions (USP) in
A2., as performances are satisfactory for three and good for one company. However, one international company responds quite negative to this category and rates the target groups performance with insufficient. This trend can also be seen concerning the question
A3. as small and medium sized companies have a more positive image on how the target group portrays themselves and their competences, namely three as satisfactory and one as good.
A4. A similar outcome can be seen at this question, as the clear understanding of the tasks, knowledge, skills and competences required by the different occupations is rated with good to satisfactory by two companies each, but as not sufficient by another.

Additional information can be obtained by the remarks made by the business representatives:

'Self-assessment is difficult and often cannot be named.'

'The prior collection of information about the occupation is often missing. What is really being done, what will the requirements be?'

'Sometimes it's hard for young people to market themselves as they are not used to that much. It's better with graduates from higher educations or with people who have already gained enough experience.'

'Often, they do not even know what their competences are, unfortunately.'

B. SOCIAL INTERACTION

B SOCIAL INTERACTION	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
B1. Do the apprentices/trainees/new workers take initiative?		3		1	1
B2. Do the apprentices/trainees/new workers seem to be openminded and willing to improve?	1	2	1	1	
B3. Are the apprentices/trainees/new workers punctual and are willing to follow break times and working hours?	3	1	1		
B4. Are the apprentices/trainees/new workers able to co-operate and cope with feedback/criticism? (Please also comment below.)	1	2	1	1	

This section offers an image of mixed experiences companies have with the target groups social interaction which are generally positive. By contrast, there are still some categories that need improvement.

B1. According to small and medium-sized companies- a total of three-, taking initiative seems to be easier for the target group when there is not a high number of colleagues which apprentices/trainees/new workers have to work with, whereas it seems to be more challenging for them to work with changing colleagues. Thus, there is one sufficient and one not sufficient rating.

B2. Concerning the second question of this category, the target group tends to be openminded and willing to improve. One company considers this as very good, two as good and the others as satisfactory or sufficient.

B3. The majority of the target group receives positive feedback- three out of five companies- when it comes to punctuality and willingness to follow break times and working hours. There is one good rating and another satisfactory one.

B4. Also, the answers concerning the ability to cope with feedback and criticism are generally positive and are split into one very good one, two good ones and a satisfactory one. However, according to the experiences of one business representative, this ability could be further improved and is therefore rated with sufficient.

There are some interesting statements which provide a good picture of how the target group socially interacts:

'According to my opinion most of the apprentices/trainees/new employees are capable to cope with feedback and criticism.'

'Taking initiative is one of the most important things.'

'The willingness to follow working hours and break times has changed-in a positive way.'

'They want to improve if the see a meaning in what they do and if the team is ok for them.'

C. SELF PERCEPTION

C SELF PERCEPTION	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
C1. Do the apprentices/trainees/new workers ask questions when they are unsure? Are they afraid of admitting uncertainty?		4		1	
C2. Do the apprentices/trainees/new workers seem aware of their own strengths and weaknesses?		3	1		1
C3. Can the apprentices/trainees/new workers clearly express what they like and dislike about the tasks and profession?	1	2	1		1
C4. Are the apprentices/trainees/new workers able to estimate their own abilities realistically? (Please also comment below.)		1	3	1	

The self-perception of the apprentices/trainees/new workers is positive throughout as businesses state, and mostly comprises the ratings good to satisfactory. However, the self-perception of the target group can still be improved.

C1. It is obvious that admitting uncertainties and asking questions works well for four companies and sufficient for one.

C2. Three businesses consider the awareness of strengths and weaknesses as good, one as satisfactory. An interesting aspect here is that one international company has made bad experiences and therefore considers the target groups awareness as not sufficient.

C3. When it comes to expressing likes and dislikes about the tasks and profession four out of five companies have had good experiences with the target group.

C4. Three out of five companies value this category as satisfactory which means that the target group needs more self-reflection to be able to estimate their own abilities realistically. Moreover, one company answers this question with sufficient. By contrast, there is at least another company rating this question with good.

Some businesses have pointed out the following:

'They can estimate their own abilities somehow, some still cannot, whereas it's easier for the older ones to do so.'

'Some can estimate their own abilities, some cannot at all, so it is very ambiguous.'

'Asking questions generally works well; still, some are afraid to do so, because they are afraid of losing face.'

'Normally, they can express what they like or dislike, especially what they dislike. On the other hand, employees won't tell what they dislike.'

D. WORK ENVIRONMENT

D WORK ENVIRONMENT	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
D1. Are the apprentices/trainees/new workers capable of dealing with the demands of the physical environment (height, heat, cold, noise, isolation,)?	2	2		1	
D2. Do the apprentices/trainees/new workers have a realistic understanding of the demands of the workplace?	1	3	1		
D3. Do the apprentices/trainees/new workers recognise and adapt to the values of the company?	2	2	1		
D4. Do the apprentices/trainees/new workers interact with customers appropriately and in a good manner?	1	2	2		

D1. The respondents have a rather good image of how apprentices/trainees/new workers perform in the work environment. Four out of five companies say that the target group can deal with the demands of the physical environment in a good way, whereas one company values this category as sufficient.

D2. Three companies think that the recognition and adaption of company values is fulfilled good to satisfactory, one company even rates with very good. There is still improvement for one company as it rates with satisfactory.

D3. Responses are quite positive, two companies experience the target groups performance as very good, two others as good and the fifth one as satisfactory.

D4. The positive trend continues as ratings range from very good for one company and good to satisfactory for the other four ones. This means that the demands of interacting appropriately with customers are met quite well.

<u>There are some additional thoughts provided by the companies concerning the work environment:</u>

'Interacting well with customers depends on the person and also from the social background, which is hardly influenceable.'

'Once they are into training and practical work it's easier for them to understand the demands of the workplace. Routine is very important'

'Young people can adapt to company values quite easily, although they don't really care as long as they feel good about it.'

'I ticked 'sufficient' because about the half of my apprentices doesn't feel comfortable when they have to do work where they get dirty.'

E. EDUCATION AND TRAINING

E EDUCATION AND TRAINING	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
E1. Do the apprentices/trainees/new workers have sufficient language skills to carry out their work properly? This includes both oral and/or written skills depending on the job tasks.		4			1
E2. Do the apprentices/trainees/new workers possess and demonstrate sufficient digital skills?		3	1		1
E3. Are the apprentices/trainees/new workers willing to improve their occupational specific knowledge and skills?	2	2	1		
E4. Do the apprentices/trainees/new workers have any skill gaps that hinder their performances? (Please also comment below.)		2	2		1

E1. To carry out their work properly the target group has good language skills for four companies, especially when it comes to technical jobs and/or retail. The office sector requires sophisticated language skills, both oral and written, as can be seen in one negative rating for this question.

E2. *When sufficient digital skills are demanded the majority of the businesses is quite positive about the target groups performance and three companies consider these as good, whereas one as satisfactory and the other one as not sufficient. Demands are not met in specific sectors where good to very good digital skills are required.*

E3. *Commonly rated very good to good- two per two- is the target groups willingness to improve knowledge and skills required by work. For one company the target groups willingness is satisfactory.*

E4. *Skill gaps do exist, not only on a technical level, but also on the level of basic knowledge required during school. As for two companies each the skill gaps are low to medium, whereas for one company they are very present.*

The following statements focus on the average education and training levels of the target group:

'Working with MS Office programmes like word and excel should be focused on more at schools. Some pupils did not have a single lesson in the mentioned programmes within nine years of school!'

'Generally spoken, a lot of young people have grammar and spelling problems. People with migrational backgrounds mostly have severe language problems.'

'Dealing with EDP basically yes, operating systems like Excel and Outlook rather no.'

'They have skill gaps, and there is a need to catch up in our area in the STEM subjects.'

The top three attributes apprentices/trainees/new workers should have to be part of a successful team-a collection of answers provided by businesses representatives:

1.   *ambition*
     motivation
     willingness to learn
     fit into the existing team
     interest

2.   *willingness to learn*
     willingness to learn
     skilled hand
     willingness to really work
     motivation

3.   *basic knowledge of German and maths*
     determined
     enthusiastic
     punctuality
     customer-orientation

2. **VET Professionals/Teachers/Trainers: perspective on the key factors and relevant requirement necessary for aligning their training programmes to the current needs of the work field.**

The ten respondents from the Vocational Education Training (VET) sector work as social educational trainers, team leaders and managers of the *Supra-Company Apprenticeship* Training (*ÜBA2*) and the *Extended Apprenticeship Training* (*ÜBA TQ/VL*) at *Jugend am Werk Steiermark GmbH.* The apprentices they work with have different professional backgrounds on the one, and also different educational and social backgrounds on the other hand.

Below you will find the employees' results of the questionnaires.

A. EMPLOYMENT

A EMPLOYMENT	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
A1. Can the apprentices/trainees/new workers adapt to the job requirements/job profile?		2	3	5	
A2. Can the apprentices/trainees/new workers identify unique selling propositions (USP) about themselves? Can they differentiate from others in order to convince?			2	2	6
A3. Can the apprentices/trainees/new workers portray themselves and their competences professionally in front of employers?		1	6	2	1
A4. Do the apprentices/trainees/new workers have a clear understanding of the tasks/knowledge, skills, competences required by the occupation?		1	1	3	5

A1. According to the responses of the employees the target group has difficulties in adapting to job requirements/job profile as five out of ten people rate this question with only sufficient. By contrast, two employees rate with good and three with satisfactory.

A2. This question is valued as insufficient by 60 percent of the respondents and another 20 percent rate it as sufficient. Experience shows that this is a big challenge when working with the target group as they are not used to differentiate from others when it comes to work. It might be easier for some of them, as two employees have rated this question with satisfactory.

A3. Six out of ten people consider this as satisfactory, two as sufficient and one person as insufficient. One person rates the performance with good, however, but realistically spoken it is hard for the target group to present themselves and their competences professionally without any constant professional training.

A4. Again, also this question is rated quite negative according to the employees' experience, as three persons think that the target groups understanding of what is required by the occupation is sufficient and five people even value the question as insufficient. What is interesting is that there are better ratings for the target group from people who work on the countryside, as there is a good and a satisfactory rating in this category.

In addition, there are some interesting statement concerning questions A1. to A4.:

'The target group needs continuous guidance and control.'

'Self-initiative and working independently is hardly possible.'

'Their needs to articulate adequately are trained in-house, but are extremely difficult due to their many deficits and other limitations within the scope of communication skills.'

'The target group can portray themselves only if trained before.'

'They do not really have a clear understanding of what is required in most cases as they seem to have a transfigured image although they have informed themselves online about the required skills, knowledge and competences demanded by the job beforehand.'

'At the beginning some have a rather minimalistic approach towards the tasks.'

B. SOCIAL INTERACTION

B SOCIAL INTERACTION	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
B1. Do the apprentices/trainees/new workers take initiative?			3	6	1
B2. Do the apprentices/trainees/new workers seem to be openminded and willing to improve?	1	1	7	1	
B3. Are the apprentices/trainees/new workers punctual and are willing to follow break times and working hours?	2	7	1		
B4. Are the apprentices/trainees/new workers able to co-operate and cope with feedback/criticism? (Please also comment below.)		1	7	2	

The amount of ratings when it comes to how the target group socially interacts are completely mixed and can be divided into two clusters the first of which is spanned from very good to satisfactory, whereas the second one is spanned from satisfactory to insufficient, rather sufficient.

The outcome of **B1**. shows that taking initiative is sufficient in most cases, as six out of ten VET staff have ticked that rating. One person values this as insufficient, whereas three people consider it as satisfactory. Indeed, experience shows that

only a minority is willing to take initiative from the very beginning as they are not very much used to when it comes to professional life.

B2. is rated with satisfactory by seven VET staff. On the other hand, one person rates this question with very good, another one with good and a third person with sufficient. Honestly spoken, the willingness to improve gets better when the target group sees a sense it what they are doing and when they receive constant positive feedback on how they are doing it.

B3. Following work times and breaks is not a big problem for the apprentices. This is also confirmed by the employees of the VET sector, as two value the question as very good, seven as good and one as satisfactory.

B4. Coping with criticism is a big challenge for the target group, as it is hard for them to differ between criticism on a personal and on a professional level. Seven employees consider the co-operation of and the ability from the target group to cope as only satisfactory and two people even rate it with sufficient. However, there is at least one person who thinks that the target group performs in a good way.

The following remarks have been made by the employees from the VET sector:

'Punctuality and following break times is mostly valued good to satisfactory by the companies when they give feedback. Dealing with criticism often fails because of the participants' self-reflection and unrealistic self-assessment.'

'Criticism is often taken personally and is not related to the given situation.'

'Most trainees are open to constructive criticism and even demand feedback on their work. It always depends on who is criticising and how, whether they can accept it.'

'Feedback is a huge topic. Some are openminded and willing to adapt and improve, while others take every sort of criticism- even constructive one- directly on a personal level. Often they go into justification.'

'It seems that taking initiative not only depends on the character and the social background, but also on the range of tasks or if they need to interact with a lot of customers.'

C. SELF PERCEPTION

C SELF PERCEPTION	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
C1. Do the apprentices/trainees/new workers ask questions when they are unsure? Are they afraid of admitting uncertainty?			3	6	1

C2. Do the apprentices/trainees/new workers seem aware of their own strengths and weaknesses?		2	6		2
C3. Can the apprentices/trainees/new workers clearly express what they like and dislike about the tasks and profession?	1	7	1	1	
C4. Are the apprentices/trainees/new workers able to estimate their own abilities realistically? (Please also comment below.)		2	5	1	2

C1. Admitting uncertainty seems to be another challenge for the target group. Three out of ten employees think that this is only satisfactory and another six even consider this as sufficient. One person rates this with insufficient. In fact, according to the experience of the VET staff, the target group is afraid to lose face when admitting uncertainty or asking questions when they are unsure. This counts for the clear majority.

C2. This question is rated with satisfactory by six people, whereas two have a good image and another two consider the target groups awareness as not sufficient. To be true, the average was not trained very well in being aware of own strengths and weaknesses and this process mostly starts when they enter VET education and even then, requires constant training.

C3. Seven out of ten people from the VET sector rate this question with good, one person with very good, one with satisfactory and one other with sufficient. Although it seems sometimes hard to really name the likes and dislikes, it is usually manageable by the target group.

C4. Estimating their own abilities realistically works satisfactory for the target group according to the opinions of five employees. Two of them rate the question with good. Here, too, there is an urban-rural gradient, as one employee from the urban area has rated with sufficient and two with insufficient. A reason for that could be that there are more options in urban areas, so it could be hard for an urban target group to filter these appropriately and quickly.

Some VET employees have pointed out the following:

'It can be observed that the participants are probably aware of their weaknesses and their inability, but compensate these by different behaviours (disturbance, retreat, ...).'

'Consistently unrealistic self-assessment of one's own abilities.'

'Weaknesses are masked. Hubris.'

'Expressing likes and dislikes works somehow in a lot of cases; often they only have a vague idea/impression of what to do in their jobs. It can be hard

sometimes to express their own feelings/emotions/expectations adequately and often these are reduced to like-dislike, thumbs up, thumbs down like on facebook or instagramm.'

'The trainees often overestimate their abilities and it is not easy to make them realise that a final apprenticeship examination will not be an end in itself and will not lead to the desired result.'

'Estimating the own abilities works fine for a few, as most of them overestimate their own abilities. This is always related to self-perception and to show no sign of weakness to others they therefore often overrate themselves.'

D. WORK ENVIRONMENT

D WORK ENVIRONMENT	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
D1. Are the apprentices/trainees/new workers capable of dealing with the demands of the physical environment (height, heat, cold, noise, isolation,)?	1	7	2		
D2. Do the apprentices/trainees/new workers have a realistic understanding of the demands of the workplace?		1	2	7	
D3. Do the apprentices/trainees/new workers recognise and adapt to the values of the company?		7	3		
D4. Do the apprentices/trainees/new workers interact with customers appropriately and in a good manner?	1	9			

D1. The target groups capability of dealing with the physical environment seems to be good according to seven respondents from the VET sector. One person considers this very good, whereas two rate it with satisfactory.
D2. When it comes to a realistic understanding of the demands of the workplace, this is valued as only sufficient by seven employees. It is true, that in most cases the ideas do not correspond with reality. However, this also depends on the work carried out, therefore this question is rated with good by one respondent.
D3. This area is valued quite positive throughout, and according to the experience of seven VET staff the target group recognizes and adapts to companies' values in a good way. Three of the respondents answer that this is satisfactory.
D4. The target groups interaction with customers is rated with good by 90 percent of the employees and even very good by 10 percent. In fact, interacting

positively is fairly easy for the target group, as they are used to that, most likely because of social media and/or to further their own self esteem.

These are additional thoughts of the employees concerning the above questions:

'The companies report a high willingness to integrate on the part of the participants.'

'Courtesy, friendliness and good behaviour characterise most of our participants.'

'Once the initial shyness in the company has been overcome, the customer contact is very good.'

E. EDUCATION AND TRAINING

E EDUCATION AND TRAINING	1 very good	2 good	3 satisfactory	4 sufficient	5 not sufficient
E1. Do the apprentices/trainees/new workers have sufficient language skills to carry out their work properly? This includes both oral and/or written skills depending on the job tasks.	1	2	5	2	
E2. Do the apprentices/trainees/new workers possess and demonstrate sufficient digital skills?	1	2	1	6	
E3. Are the apprentices/trainees/new workers willing to improve their occupational specific knowledge and skills?		5	1	4	
E4. Do the apprentices/trainees/new workers have any skill gaps that hinder their performances? (Please also comment below.)		1	6	3	

E1. Half of the respondents have ticked satisfactory for this question. To which extent written skills are necessary depends the required tasks.
Two people consider the language skills as good, another two as sufficient and one person as very good.
E2. 60 percent of the VET staff reports that possessing and demonstrating sufficient digital skills is sufficient, whereas 10 percent report these as good and 10 percent as satisfactory. 20 percent consider these as good.
E3. The answers can be divided into two groups: on the one hand, five out of ten people value with good and one with satisfactory, whereas four people have different experiences and therefore value with sufficient.

E4. Six employees report that obvious skill gaps are mediocre, one employee thinks that there are not so many skill gaps. However, for three other people these are very present.

Some of the VET staff have made the following statements:

'The companies report a high willingness to integrate on the part of the participants.'

'Courtesy, friendliness and good behaviour characterise most of our participants.'

'Very few participants have a migration background, which significantly restricts speaking and understanding of the German language. The deficits lie in the areas of vocabulary, articulation and comprehension.
In general, however, the participants are very willing to learn.'

'The target group in Extended Apprenticeship Training has massive qualification gaps.'

'Cognitive deficits and learning difficulties.'

'Skill gaps: endurance, sometimes not able to cope with feedback/criticism.
Concerning school, there are deficits in mathematics and English (in terms of speaking everyday English).'

'Some of our trainees have gaps in their qualifications which are difficult or impossible to fill. Especially in mathematics. English is completely neglected in many schools.'

'People with migrational background try harder to improve and succeed in most cases. A lot of people with migational background who are second generation and people without any migrational background have lack in grammar, fluency and vocabulary. English is surprisingly poor but depends on personal interest. People with a higher educational background have better language skills.'

'Often they try to compensate both school and social gaps.'

'Sufficient digital skills are often very specific but mostly lack MS Office.'

The top three attributes apprentices/trainees/new workers should have to be part of a successful team-a collection of answers provided by VET employees:

1. *motivation*
   endurance
   soft skills
   ambitious
   readiness for personal and professional development
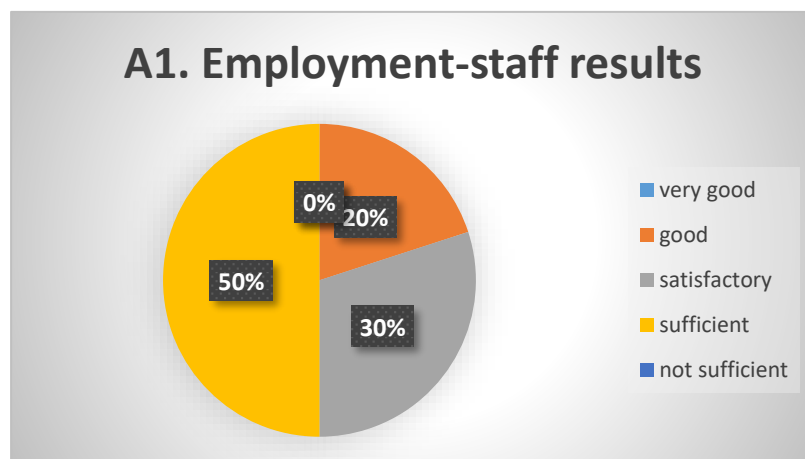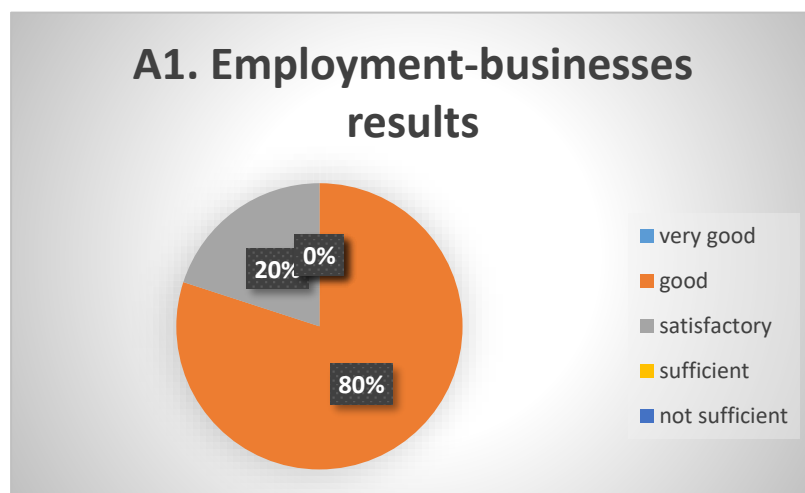   *diligence*

2. *willingness to learn and improve*
   motivation
   willingness to learn
   ability to work in a team
   willingness to learn
   loyalty

3. *cooperation*
   ability to work in a team
   willingness to work
   communication skills
   sense of duty
   ability to work in a team

Analysis and conclusion:

There are some interesting results from the people employed in the VET sector and the businesses alike, especially when focusing on similar ratings on the one, and differences concerning the same answers on the other hand.

An example of different answers can be seen in the following charts:

A1. Employment-businesses results

- very good
- good
- satisfactory
- sufficient
- not sufficient

A1. Employment-staff results

- very good
- good
- satisfactory
- sufficient
- not sufficient

Question A1. 'Can the apprentices/trainees/new workers adapt to the job requirements/job profile?' provides a different image of the experiences VET staff has made compared to the companies' ones.

Whereas 80 percent of the businesses respondents rate this question with good, it is only 20 percent of the VET staff 50 percent of which even rate with sufficient. How can this be explained?

It is likely that-according to the experiences and statements of the VET staff-the majority of the target group has only a vague idea of what the real requirements

of work are, not only depending on the kind of job, but also how their abilities and skills could possibly match these requirements. It has turned out that it is important for the target group to permanently deal with the requirements of the job profiles from the very beginning and to work practically. Consequently, a lot of companies do not know about unrealistic job expectations the target group has as these have already been dealt with beforehand in VET training centres to provide a clearer and more realistic picture.

Generally spoken, it is challenging for companies to not only find appropriate apprentices or trainees, but also new employees, irrespective of their educational backgrounds. For the apprentices in VET training centres, this means to work even harder on their strengths and abilities to be a future part of the working world and to perform well. Social educational trainers and management alike has pointed out that preparing young people for the job market is one of the biggest challenges of their daily work. In fact, application management exists at least in some school types in Austria and there are practical work days. However, these methodologies do no seem to be enough for a certain amount of young people. The reasons for this may range from a lack of interest among the target group and/or unrealistic or no expectations concerning future career paths. Additionally, a decent amount has learning disabilities, and therefore need constant learning support to be able to succeed in the labour market.

When it comes to social interaction, it is obvious that both VET employees and businesses representatives value punctuality and the willingness to follow working hours as rather good. An interesting aspect is the target groups ability to cope with feedback and criticism. For a generation who defines itself so much by social media and the valuations of others, it is hard to professionally deal with- even constructive and positive- criticism. Feedback on the professional level is mostly transferred to the personal level quickly and a lot of young people start questioning themselves as persons and not as employees who have to gain knowledge to better perform. For some, there is nothing in between like and dislike and some quit practical training due to these circumstances. It seems like they have never learnt how to cope with criticism adequately and appropriately without entirely questioning themselves as persons. Many companies have already made the same observation. Fortunately, this development is being counteracted by mentoring and tutoring in VET centres and has proved to be successful in most cases.

Self-perception is another aspect for the target groups general performance, not only in VET centres but also in practical training at companies. Admitting uncertainty and asking questions is difficult for some young people because they are either not used to it or have no realistic idea of what is required by them or they are afraid of being considered stupid. Additionally, for some this seems to be a trained tactic to avoid attracting attention.
There are correlations in the answers and statements concerning the awareness of own strengths and weaknesses and the realistic estimation of own abilities;

experience shows that it can be hard for young people to properly express and 'market' themselves. For example, they often consider punctuality a strength not a prerequisite. By contrast, it is indeed interesting that expressing likes and dislikes is usually not a problem. Can it be speculated that this can be linked to the already mentioned shaping by social media?

The overall performance of the target group in the work environment is valued rather positive by companies and VET staff alike. A major divergence can be seen in the realistic understanding of the demands of the workplace, again. However, according to the experience of the employees in the VET sector, young people tend to perform quite positively and well once the underwent enough training, both theoretically and practically. As expected, performance is better if they are convinced of their profession and when they find a sense in what they are doing and consider this meaningful. It has turned out that the process can be enhanced by smaller staff sizes in companies, so it has a more familiar setting, whereas in large companies some young people first must find their place in the personnel structure which might cause insecurity and irritation for them.

The most relevant divergences between the VET employees' and businesses representatives' answers are when it comes to education and training. One must not forget that especially big and/or international companies already recruit potential apprentices in secondary schools when pupils are in the last grade or offer internships and options to do research for and write diplomas for future university graduates. As for the first group mentioned, namely young people who start or are already part of VET training, it might be easier for companies to recruit pupils directly from school. As for the respondents of the VET sector, it is obvious that there are not only skill gaps young people have concerning basic knowledge like mathematics and written German, but also the time between school and starting a VET programme is relevant. Some young people have long gaps in their CVs and the longer they are away from learning, the more difficult it becomes to get back into the learning process. This is a possible reason why VET staff has valued this section rather negative as the prerequisites and the educational backgrounds of the target group are generally different and more challenging compared to those young people who do not have any gap between school and apprenticeship or have underwent some sort of higher education or are still in an educational process, including university.

Naturally, there are not only apprentices in companies including the interviewed businesses representatives' ones, but of course workforce with higher educational backgrounds, post-graduates and different prerequisites.

Due to the experiences of the VET staff and also the responses and feedbacks from the companies, not only of those who participated in the survey, it can be said that an ongoing training and learning support for the target group is absolutely vital to be able to perform well in VET school and also to meet the demands of the working world. Of course, it is easier for young people to adapt to learning requirements when they are used to learning and if they do not come from an educationally disadvantaged home.

B. Desk Research

A. Describe initiatives in your country that focus on the tracking of VET graduates and their future career paths in the working world.

Honestly spoken, there are no real initiatives in Austria that focus on the tracking of VET graduates. If they do not remain in employment after their apprenticeship in the company concerned, i.e. in an employment relationship, their further career path will not be recorded. It is only recorded when they get unemployed and therefore register at the Austrian Labour Market Service (AMS). However, VET centres for example, do not have access to this data. Moreover, there is an insurance extract from the health insurance company, which is only available for the persons concerned themselves or for future employers due to the registration as an employee. Based on this extract, it is visible how long the respective person worked in different companies, so also the apprenticeship is visible.

Additionally, there is statistic data provided by the Austrian Chamber of Commerce (WKO). However, this data only presents how many apprentices are in which economic/industrial sector, how many of them are male or female and a comparison to the year before. Also, there is data about the total amount of final apprenticeship examinations in all sectors and how many graduates succeeded or failed. Still, there is no data that records future career paths of VET graduates.

B. Do the above-mentioned initiatives also include EU- initiatives and concepts?

No, they do not.

C. What initiatives are there in your country to define skills and competences in VET?

Concerning VET education there is a guideline provided by the Austrian Chamber of Commerce (WKO) to ensure the quality of VET and to provide a legal framework by law.

The following provides a detailed description of how VET works in Austria:

'Austrian apprenticeship training is a model for many European countries. Around 40 per cent of young people in an age cohort choose one of around 200 apprenticeships each year and, after passing their final apprenticeship examination, make a significant contribution to strengthening the competitiveness of the Austrian economy as qualified skilled workers.

Through training within the framework of company work processes, apprenticeship training makes it possible like no other educational path to acquire a vocational qualification at the pulse of time. The success of apprenticeship training is essentially ensured by the dynamics inherent in the system. In addition, there is a need for a framework that extends beyond the company level and offers trainees and companies the best prerequisites for the success of an apprenticeship. This includes all measures for quality assurance and improvement in apprenticeship training.

The success and further development of apprenticeship training are achieved through partnership and cooperation of many institutions and facilities at different levels.

Federal level

Federal Ministry of Science, Research and the Economy (BMWFW)

The operational part of apprenticeship training falls within the competence of the Ministry of Economic Affairs.
The legal basis for apprenticeship training is laid down in the *Vocational Training Act* (Berufsausbildungsgesetz - BAG).
The training regulations for the individual apprenticeship occupations are issued by the *Ministry of Economics* after an expert opinion of the *Federal Advisory Board for Vocational Training.*

Federal Vocational Training Advisory Board (BBAB)

The members of the *Federal Advisory Board for Vocational Education and Training* are appointed by the *Ministry of Economic Affairs* to the following positions proposal of the social partners (Austrian Federal Economic Chamber, Federal Chamber of Labour).
It also includes vocational school teachers in an advisory capacity.

The *Federal Advisory Board on Vocational Education and Training* submits opinions and concepts to the *Ministry of Economic Affairs* which must be taken into account when issuing or amending regulations.

Federal Ministry of Education and Research (BMBF)

The provisions relating to the organisation of vocational schools and the basic principles of the Curriculum regulations are laid down in the *Federal School Organisation Act*. The *Ministry of Education* prescribes the framework curricula for vocational schools for each apprenticeship occupation. 50% of the salaries for teaching staff in vocational schools are paid from federal funds.

State level

Apprenticeship

The apprenticeship offices located in the chambers of commerce of the individual federal states act as the vocational training authority of first instance. They examine (together with representatives of the *Chambers for Workers and Salaried Employees),* the suitability of the training companies with regard to the subject matter and personnel and are responsible for examining and recording the training contracts. In principle, they have taken care of all questions in the interest of the apprentice and to provide comprehensive advice in this regard. They are supported by the *Apprenticeship and Youth Protection Offices* of the *Chambers of Labour for Workers and Employees.* The chairmen of the examination boards are appointed by the head of the apprenticeship centre or by the *Apprenticeship Office Manager* on the basis of a report by the *Federal Apprenticeship Advisory Board* to order the proposal to be obtained. The final apprenticeship examinations as well as the grants for training companies are handled by the apprenticeship offices.

Ensuring and strengthening training quality

5 federal states

The federal states are responsible for setting up and equipping vocational schools. They also finance 50% of the salaries of teachers at vocational schools.

Provincial governors

In the federal states, the heads of state and their supporting
Office of the Provincial Government as a vocational training authority of second instance.
The provincial governors appoint the members of the respective provincial vocational training advisory boards.

Province Vocational Training Advisory Boards

The advisory boards for vocational training are set up as advisory bodies at state level, which are also staffed by social partners. They are responsible for drafting expert opinions, proposals and suggestions that directly affect the apprenticeship system in the respective federal state.
They make a recommendation for the appointment of the chairpersons of apprenticeship-leave examination commissions.

State school inspectors

The state school inspectors are responsible for school inspection and for safeguarding the agendas falling within their remit, as well as for implementing the federal framework curricula in the form of the Land curricula.

Local level

Training companies

The authorised apprentice is the responsible body for apprentice training. In his company, the apprentice is trained to become a qualified specialist. He is supported in this by the trainers.

Vocational schools

The vocational school is integrated into the economic activities at its location. The direct contact with the training companies in the region is one of the most important preconditions in order to optimally fulfil the educational mission.'

Source:
https://www.wko.at/service/bildung-lehre/Qualitaet_Lehre.pdf
https://www.wko.at/service/bildung-lehre/Qualitaet_in_der_Lehre.html

D. Do the above-mentioned initiatives also include EU- initiatives and concepts?

Yes, they do, as most curricula are based on certain initiatives.

One initiative is ECVET:

The European Credit System for Vocational Education and Training (ECVET)

According to the Recommendation (European Parliament and Council of the EU, 2009), the ECVET was to be applied gradually to VET qualifications at all

EQF levels, and used for transfer, recognition, and accumulation of Learing Outcomes as from 2012.

The aim of the European Credit system for Vocational Education and Training (ECVET) is to:

- make it easier for people to receive validation and recognition for work-related skills and knowledge acquired in different systems and countries – these can then count towards vocational qualifications
- make it more attractive to move between different countries and learning environments
- increase the compatibility between the different Vocational Education and Training (VET) systems in place across Europe, and the qualifications they offer
- increase the employability of VET graduates, and give confidence to employers that each VET qualification requires specific skills and knowledge

Read more:
http://www.cedefop.europa.eu/node/11836
http://www.ecvet-toolkit.eu/

Source:
https://ec.europa.eu/education/policy/vocational-policy/ecvet_en

The implementation of ECVET in **Austria** can be divided into the following aspects, based on information obtained in 2014.

Firstly, developing the orientation of learning outcomes (e.g. competence focused curricula, education standards in VET, competency models for professions in the health sector, etc), to allow a change from input, to output control. Secondly, make it more attractive to move between different countries for the purposes of learning. Another aspect is allowing more transparency within the national education system to mutually recognise learning competences which have already been achieved. Other vital aspects include a better recognition of formally, non-formally and informally achieved learning competences, along with an increase in employability in the Austrian and European labour market through better documentation of achieved competences.

Another one is EQF:

The European Qualifications Framework (EQF)

The Qualifications Framework of the European Higher Education Area (QF-EHEA), consisting of a three-tier system of degrees (Bachelor, Master and

PhD), is compatible with the European or National Qualifications Framework. This enables the automatic assignment of acquired degrees to the EQF or NQF.

In December 2004, education ministers from 32 European countries reached an agreement (Maastricht Communiqué) to develop a common European Qualifications Framework. The EQF sees itself as a meta-qualification framework that links the qualification systems of different countries and thus helps to achieve greater transparency in the education landscape.

Main objectives:
-promoting cross-border mobility
-support for lifelong learning

Any qualification in any country of the European Union can be related to the EQF. The framework consists of eight reference levels defined by a series of descriptors. Each descriptor describes learning outcomes that are necessary to achieve the qualification corresponding to a specific level. Learning outcomes are not assigned directly to the EQF, but first to the level of a National Qualifications Framework, which then corresponds to the EQF level.

Source:
https://lehr-studienservices.uni-graz.at/de/lehrservices/europaeischer-hochschulraum/qualifikationsrahmen-eqr-nqr/der-europaeische-qualifikationsrahmen-eqr/

E. Does your organization have and use standardized curricula/concepts, maybe self-developed ones, to define skills and competences?

Jugend am Werk Steiermark GmbH, respectively the VET sector of our organization, namely the *'Supra-Company Apprenticeship Training' (Überbetriebliche Lehrausbildung2, ÜBA2)* and *the 'Supra-Company Extended Apprenticeship Training' (Überbetriebliche Lehrausbildung Teilqualifizierung/Verlängerbare Lehre, ÜBA TQ/VL)* follow the legal guidelines provided by the Austrian Chamber of Commerce (WKO) to ensure and guarantee the quality and success of VET by law.
Additionally, there is a so-called 'Ausbildungsdokumentation', a training documentation. This is divided into the specific tasks related to the specific training years and is absolutely important to assess the skills and competences of apprentices together with the training companies.

There is an example of a training documentation below, due to its size only two pages instead of 17. The full version can be seen here:

https://www.wko.at/service/bildung-lehre/Einzelhandel_Lebensmittelhandel_111228_v1_3.pdf

WKO WIRTSCHAFTSKAMMERN ÖSTERREICHS

WKO DER HANDEL

AUSBILDUNGSDOKUMENTATION

EINZELHANDEL

SCHWERPUNKT:
Lebensmittelhandel

für Herrn/Frau

© Wirtschaftskammer Österreich
Bildungspolitischer Ausschuss
der Bundessparte Handel

AUSBILDUNGSDOKUMENTATION

Ausbildungsnachweis für den Lehrberuf Einzelhandel Schwerpunkt

Lebensmittelhandel

Lehrbetrieb:		Lehrzeit:	3 Jahre
Ausbilder:		Beginn:	
Lehrling:		Ende:	

Pos	Fertigkeiten und Kenntnisse laut Ausbildungsordnung	½	1.	1 ½	2.	2 ½	3.
1.	**DER LEHRBETRIEB**						
1.1	*Kenntnis über den Lehrbetrieb*						
	• Erster Lehrtag im Lehrbetrieb • Führung durch den Lehrbetrieb • Kennenlernen der betrieblichen Räumlichkeiten und Einrichtungen • Kennen möglicher Unfallgefahren im Betrieb • Vorschriftsmäßiges Verhalten bei Unfällen und im Brandfall • Bekanntmachen mit anderen Mitarbeitern und Erklärung ihrer Tätigkeits-, Verantwortungsbereiche und Aufgaben						
1.1.1	Kenntnis der Betriebs- und Rechtsform des Lehrbetriebes						

	• Kennen der Betriebsform des Lehrbetriebes:
	  - nach der Sortimentsgestaltung:
	    Fachgeschäft, Spezialgeschäft oder
	    Vollsortimenter, Verbrauchermarkt
	  - nach der Verkaufsmethode:
	    Selbstbedienung, Vorwahl, Bedienung, Versandhandel
	• Kennen der Rechtsform des Lehrbetriebes:
	  Einzelunternehmen, Personen-, Kapitalgesellschaft.						

1.1.2	Kenntnis der Ziele und der Marktposition des Lehrbetriebes sowie der Standorteinflüsse						

	• Information über die Branche (Fachbereich) des Lehrbetriebes.
	• Stellung des Lehrbetriebes auf dem Markt bzw. in der Branche:
	  - auf Grund des Warensortiments
	  - der Verkaufsform
	  - der Angebots- und Preisgestaltung
	  - der Serviceleistungen
	  - der Anzahl der Qualifikation der MitarbeiterInnen
	• Standort des Lehrbetriebes:
	  - Infrastruktur und Kundenkreis im Einzugsgebiet
	  - Einfluss auf die Marktstellung und den Kundenkreis
	• Ziele des Lehrbetriebes						

1.2	*Einrichtungen, Arbeitssicherheit und Unfallverhütung*						
1.2.1	Funktionsgerechte Verwendung der betrieblichen Einrichtungen und Geräte des Verkaufes						
	• Kennen der betrieblichen Einrichtungen und deren funktionsgerechte Verwendung (z. B. Türen, Fenster, Aufzüge, Regale ...) • Kennen der technischen Geräte des Verkaufs und deren funktionsgerechte Handhabung (Maschinen, Waagen, Kassen, Printer...) • Kontrolle der Funktionsfähigkeit • Erkennen von Störungen (z.B. Kühlung) • fachgerechtes Verwenden (Beleuchtung, Beheizung, Belüftung, Maschinen, Waagen, Kassen, Printer) • sowie der Hilfsmittel (Reinigungsmaschinen und Reinigungsmittel)						

F. How do you identify skill mismatches and skill gaps in your organization?

In *Prospects Workshop (Perspektivenwerkstatt)* which focuses on professional orientation for young people there is a suitability diagnostic that focuses on the strengths and weaknesses of the tested person on the one, and on cognitive abilities, like spatial imagination and logical-analytical thinking, on the other.

In the *'Supra-Company Apprenticeship Training' (Überbetriebliche Lehrausbildung2, ÜBA2)* and *the 'Supra-Company Extended Apprenticeship Training' (Überbetriebliche Lehrausbildung Teilqualifizierung/Verlängerbare Lehre, ÜBA TQ/VL*) we have to rely on the feedbacks provided by the companies. Former school reports also play a role to identify if an apprentice who e.g. does an apprenticeship in a technical sector has little knowledge in mathematics. Moreover, we offer regular learning support in German, mathematics and applied economics. There is more learning support in *'Supra-Company Extended Apprenticeship Training' (Überbetriebliche Lehrausbildung Teilqualifizierung/Verlängerbare Lehre, ÜBA TQ/VL)* as of course the demand is higher. Furthermore, we get feedback from vocational schools.

A lot of our participants also have youth coaching reports as these are done in schools at the age of 15 and these provide a good assessment of cognitive abilities. When participants are not able to do a regular apprenticeship due to cognitive abilities they can do an Extended Apprenticeship Training instead. In Austria, Training as an alternative to school is compulsory in any case up to the age of 18.