

Summary Report

Graduate Tracking Peer Learning Activity Graduate tracking to improve the quality of VET

11 - 12 November 2021, online

The Peer Learning Activity was the first of a series of Peer Learning Activities aimed to help countries to support them to establish or further develop graduate tracking systems in their countries. It provided information on the use of graduate tracking data can be used to improve the quality of VET at both a system and provider level. The virtual Peer Learning Activity was hosted by Finland and attended by 54 participants, who represented decision makers and experts in national authorities and statistics agencies¹.

The Peer Learning Activity aimed to provide an opportunity for countries to learn from the approaches adopted by different countries to implement graduate tracking. This included look at the strengths and weaknesses of different approaches and the conditions in which approaches work best, alongside providing participants with a clearer understanding of the value of graduate tracking and how it can effectively support national VET systems. In particular, it explored the graduate tracking system in Finland, which is one of two countries that fully comply with the Graduate Tracking Recommendation². The Peer Learning Activity also included inputs from Ireland, the Netherlands, Poland, Portugal and Sweden where they presented their different approaches to graduate tracking.

Background and context

Good quality data on graduate outcomes in the labour market and feedback on their learning experiences can play a critical role in shaping the design and delivery of VET programmes. They provide intelligence on the strengths and areas of improvement for particular programmes, their fit with labour market needs and the effectiveness of learning delivery. The data can be used by policy makers and VET providers to strengthen career guidance, support curriculum design, improve skills matching, and plan for and forecast employment, educational and social needs.

Tracking graduates has long been considered a core component of effective quality assurance systems. It is recommended in both the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) revision in 2015 and the European Quality Assurance Framework for Vocational Education and Training (EQAVET) adopted in 2009.

The 2017 Council Recommendation on tracking graduates further reinforced the importance of adopting effective processes for graduate tracking. The Recommendation invited Member States, with the support of the European Commission, to make progress by 2020 with regard to establishing graduate tracking systems that college longitudinal data on socio-biographical and socioeconomic information; information on education and

¹ Representatives of the European Commission were joined by representatives from AL, BE, BG, BU, CY, CZ, DE, EE, EL, ES, FI, HU, HR, IE, IT, LT, LU, ME, MT, NL, NO, PL, PT, RO, SI, SK, SW. They were also joined by representatives from CEDEFOP and the European Training Foundation.

² Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017H1209(01)

training; information on employment or further education and training; relevance of education and training to employment or life-long learning; and career progression.

Situation in Finland

In Finland, the statistics agency (Statistics Finland) has a long tradition of collecting administrative data on graduates and their employment. This has primarily connected graduate (learner registry) data to employment data. This data is published by Statistics Finland and the Ministry. It is also available on the Vipunen portal, which presents graduate tracking data on All levels of education (link), vocational education (link), UAS education (link) and University education (link)

Graduate tracking has been linked to the VET funding and quality system since 2001. It has an impact of 10% of a provider's VET funding. This is based on graduates' placement after graduation, for example status in the labour market or placement in further education as well as student feedback (from students and graduates) collected by the ARVO-service.

While the Finnish graduate tracking system is well established, Finland are working on collecting more qualitative data concerning employment and placement in further studies and reducing the time gap as it takes one to two years to prepare the data. In the future, they are looking to develop surveys based on information available in national registers and mapping the possibilities to use income register data to give insights into the quality of employment.

In terms of career monitoring in higher education, networks of higher education institutions (HEIs) conduct surveys with all graduates to look at career pathways. The questionnaires are sent by HEIs as they have the contact information and basic information about graduates (e.g. gender, name, education). The information is collected on the following basis:

- Five years after graduation for university master's degree graduates
- Three years after graduation for university doctoral degree graduates
- Five years after graduation for bachelor's degree and master degree graduates from universities of applied sciences

The career monitoring survey data is publicly available, and it is used as a tool to develop education of the HEIs. It is used by the Ministry of Education and Culture to determine funding models for HEIs and monitoring activities.

VET provider perspective in Finland: SEDU

SEDU vocational education and training institute is based in South Ostrobothnia, western Finland. They offer classroom-based learning, work-based learning or apprenticeships. Apprenticeships in Finland have an employment contract in place, the learner receives a salary and the company receives subsidies and learners spend the majority of time in the work place with two to three days in a school setting. Work-based learning takes place with a training agreement in place but the employer does not receive any subsidies and the learner does not receive a salary.

SEDU collect graduate feedback through contributing to the national VET surveys at the start and end of a learners' studies and the Amis national work life feedback surveys. In addition, the Finnish Education Evaluation Centre Karvi collects data on each education provider which covers each field of study and qualification, and they are aimed at teachers, students, working life and education providers.

Data on graduates' preparation for entering the workplace is also collected directly from employers. SEDU is able to do this because they have well-established relationships with

local employers through work placement cooperation and from providing staff training and development services.

The graduate tracking data is used for developing implementation plans for the qualifications. It is initially discussed with the pedagogical management team as well as sectoral education team staff in different campuses. This is then used to develop the education provision and implementation plans. The data collected from employers is also used in regular meetings with key partners (employers and key stakeholders in the region) to inform the development of common development targets which are included in their national plan.

Situation in the Netherlands

Graduate tracking takes place by using data from registers and surveys. In terms of registers, the educational/household database containing all students and schools' leavers is linked with the social security database and tax records. The data from registers includes a depth of data which allows graduates to be tracked for 15 years. It includes information about the labour market position of all graduates including participation rate, allowances/social benefits, income, number of hours, type of contract and the sector. This allows data to be published at a national level, as well as regional and school level.

The data collected from registers is complemented with a school leavers survey. The school leavers survey is conducted via an online, or smart phone, questionnaire one year after they have graduated. All VET graduates receive the survey and the response rate is approximately 30%. The survey collects information on occupation, vertical and horizontal mismatch, satisfaction rates, skills mismatch and other areas.

The Graduate tracking data is available to a range of stakeholders. It is used by:

- Students, parents and career counsellors to enable students to make informed choices for studies and career choices.
- Schools to inform their policies (strategic plans) and legal requirements (the requirement for macro efficiency of educational supply)
- Municipalities/regions to provide information on skills mismatches
- National authorities to inform their policy development and monitoring. Indicators are also used for Government budget accountability
- International stakeholders for scientific research

A national cohort (tracking survey) is also used as part of the monitoring and evaluation of the new Covid-19 National Recovery Programme. Here it is used to measure both school career progression and transition into the labour market. This will be used to demonstrate the progress of the "Covid Cohort" and the extent to which the policies/interventions are working.

Situation in Sweden

In Sweden, graduates from initial VET (IVET) and continuing VET (CVET) are tracked. For IVET, the graduate tracking measures include both surveys and linked administrative datasets. The survey is conducted every three years and follows a cohort of graduates three years after graduation (link). It collects both factual and qualitative data. This is complemented by using administrative datasets to gather data from all students one, three and five years after they have left school. This captures data on graduates' status in the labour market, whether studying and whether they are not working or studying. The administrative dataset combines information from the employment register, income and tax register, unemployed register, education register and student loan register.

For CVET, graduates from higher vocational education and training are asked to complete a survey one year after they have graduated. There is also a survey conducted by providers that looks at graduates' positions six months after graduation. Linked administrative data is then used for comparative follow up. For other forms of CVET, a survey is expected to be conducted every 10 years and register-based follow up is conducted every 4 years.

Graduate tracking data is provided online by the Statistics Sweden and the Swedish National Agency for Education. The latter provides national data as well as data that can be disaggregated by city, school and programme level. Data security is built into the tool, with some figures being hidden if the numbers are too small and can therefore be disclosive.

Graduate tracking data is used at various levels:

- At national level it is used to assess the effectiveness of individual programmes (such as the extent to which higher education preparatory programmes lead to progression to higher education) and overall whether VET programmes lead to the occupations aimed for
- At a regional and provider level it is used to understand the relationship between the supply and demand for VET programmes and their value in the labour market. This informs provider planning of their VET offer
- For students and parents, it is used to inform their choice on the programme to study and provider to study at

The factors that have supported the development of the Sweden graduate tracking system has been strong user engagement in the design of the system, the availability of rich administrative data, and political commitment. Challenges include the delay in the statistics being available, difficulty in presenting data on smaller provider programmes due to limited numbers, and lack of clarity on how widely the data is being used. To improve the latter Sweden is planning to overhaul how it presents graduate tracking data to make it more visually appealing. They are also undertaking an exercise to map VET programmes to occupations to create a view of vertical matching.

Situation in Portugal

In Portugal, they established the observatory of the paths of secondary education students (OTES) in 2006 so that they could follow students' paths in and out of upper secondary education and transitions to the labour market or higher education. The main purpose is to diagnose, monitor and evaluate the education system in order to support the decision-making process at local and central level. They do this by producing and disseminating information on education and occupational trajectories, highlighting areas of strategic importance linked to employment rates, employment/student rates and study follow up rates and providing information to support decision making process.

The OTES oversees three surveys to secondary school students, which include:

- Students starting secondary level of secondary education this survey is undertaken at school level
- Students at the end of their secondary level of secondary education this survey is undertaken at school level
- Young people in post-secondary education the Directorate-General for Education and Science Statistics undertakes this survey

The data is available at the central level through publications, thematic reports and statistical results, and at the school level. The results obtained in the surveys are available and returned to the schools, for each school, so that they can be used as part of internal management and planning information.

Situation in Ireland

SOLAS, the Further Education and Training Authority, are responsible for providing strategic leadership to the further education and training sector in terms of supporting the development and implementation of further education and training strategies, funding and ensuring maximum impact of investment and overseeing the development and implementation of the Performance Agreements between SOLAS and Education and Training Boards (ETBs). They also analyse the labour market and identify and anticipate skills needs.

To monitor graduate tracking, Ireland established the Programme and Learner Support System (PLSS), which was developed between 2014 and 2017 and launched in 2017. The data and statistics available in the PLSS support decision making at all levels of further education and training. This includes supporting Learners in their education and training choices; policy makers regarding labour market activation and education and training provision; and other interested parties.

The PLSS is now well-established throughout the sector and accepted as a comprehensive database for VET learners. A second phase of development linked the PLSS data with national administrative data is available via the Central Statistics Office, and thus linking data available from other government sources. It now allows for system-wide tracking of learners to establish their outcomes.

Outcomes derived from graduate tracking data are embedded in SOLAS's Strategic Funding Agreements (SPAs) with ETBs. This is used in data dashboards to discuss ETB performance against plans. The main graduate tracking outcomes included in SPAs are on graduate progression to employment and further learning.

Graduate tracking data is also used to produce bespoke analysis to inform VET policy in the country. An example of this is the research conducted by SOLAS to examine early school leaver progression and how this varies by level of study and subject area. It has also been used to examine progression from VET to HE and skills match across different subject area.

The next step for SOLAS in the field of graduate tracking is to further develop the analytics so that they can perform additional graduate tracking to evaluate learner outcomes. They will also be linking PLSS to administrative datasets to carry out counterfactual impact assessment of specific provision.

Situation in Poland

Poland launched a new graduate tracking system in 2021. Since 2015 the Educational Research Institute has been developing the methodology of tracking graduates of secondary schools using administrative data to monitor the careers of secondary school graduates. The national work built on several decentralised initiatives of IVET graduate tracking, which has been based on surveys. It also built on the graduate tracking system for higher education, which is a centralised national system based on linking education and social insurance data that provides reports on most institutions and programmes in Poland³.

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³ https://ela.nauka.gov.pl/pl

The new system will provide annual standardised information on graduates' activities in the labour market (e.g. type of employment, salary, inactive/unemployment spells) and graduates' further education activities (including types of schools and fields of study/education). The system will use data from administrative data sets, such as regional examination boards and social insurance databases. Monitoring will be the responsibility of Educational Research Institute and the Education Information Centre, who are responsible for producing the annual labour market forecasts. The Educational Research Institute will be responsible for analysing the data and preparing monitoring reports.

The system will produce automatically generated reports summarising the situation of graduates by school, industry of study and region. The first results will be available in late November 2021, reporting on graduates from June 2020.

It is expected that the results will help to forecast the demand for employees in sectors on the national and provincial labour market as well as look at the validity of certain education training courses. The results will be used on a local level to monitor and adapt educational offers (at local level and school level) as well as being used by career counsellors to inform students of their options.

Workshop question 1: What benefits do you believe graduate tracking data can bring to the management, funding and quality assurance of VET in your country?

What are the benefits graduate tracking data can bring to management, funding and quality assurance of VET?

Graduate tracking was felt to offer multiple benefits to the management, funding and quality assurance of VET. Overall, it can be used to improve the quality of VET as it can provide data on employability rates of graduates at programme and provider level. Ministries of education and those related to VET can use this data together with information on the salary of graduates and other labour market information (e.g. anticipated skills needs) to identify which programmes have good employment prospects and those that are producing an over-supply of For example, in the Netherlands they have used graduate tracking data to identify that there is a mismatch between the numbers of graduates from media and creative arts programmes and the number of jobs in the related professions. This information has informed strategic decisions around VET provision in the Netherlands. graduates.

This information could also be used to inform students via career guidance so that VET students can make informed choice and ministries, providers and other stakeholders can make adjustments to VET provision as needed. This includes providing information on the quality of different programmes and providers to inform choice, as well as providing tangible information on starting salaries and career pathways that can inform student decisions on what sector they wish to work in.

In some countries, such as Finland, graduate tracking data is used to monitor the performance of providers and funding is linked to the performance, including the employability rates from certain programmes. The information gained via graduate tracking can be used by ministries to examine if the investment in certain courses / providers is ultimately worthwhile and the data can be a useful trigger to take further steps with the provider. By having graduate tracking data publicly available to providers (as well as other stakeholders), the process can be as transparent as possible.

What decision-making processes can graduate tracking data feed into?

Graduate tracking data has the potential to feed into decision making processes at national/regional, provider and individual level.

On a national level, graduate tracking data has the potential to be an evidence-base for relevant ministries decisions on VET provision. It can be used to highlight programmes that are under-subscribed and where there may be potential skills gaps in the short, medium and long-term. Such information can help ministries to take actions to attract students to certain programmes, for example by providing incentives to train. In contrast, it can also highlight programmes that are providing an over-supply of graduates where there are few jobs available. Decisions can be made to adjust the provision of VET accordingly so that it is in line with labour market needs.

At provider level, it was felt graduate tracking data can help VET providers to understand the satisfaction levels of graduates. Such data can allow providers to review their pedagogical approaches and make adjustments to their methods, content (where VET providers have the remit to do so) and to increase or reduce the places available for programmes in line with labour market demands.

It is also interesting to note that graduate tracking data enables detailed analysis of early leavers from VET and their destinations. The information can be used by providers and ministries regarding skills matching, employability and feed into discussions with employers and wider stakeholders to see if it is better for VET graduates to have completed a programme with transversal skills or if it is better for a VET graduate to have completed a programme that is closely rated to their area of employment.

Which departments/organisations can benefit from the graduate tracking data?

In most countries the primary target groups for graduate tracking data tend to be ministries of education and those related to VET. National statistics bodies often have an important role in collecting the data and they need to work closely with the relevant ministries to determine what information is useful to collect. It is important to note that in decentralised countries, such as Spain, the national ministry may wish to set a framework for which the regional level can work with to collect and analyse graduate tracking data and the regional bodies will play a greater role in collecting, analysing and using the data.

In addition, on a national/regional level those dealing with career guidance such as public employment services can also be an important target group. Organisations such as public employment services, or others who deal with career guidance, can use the data to provide realistic information, particularly around salary potential for graduates from different programmes.

In Sweden, the data is used at different levels by different stakeholders. At national level, the data helps assess whether programmes are meeting their objectives and, if not, then small adjustments are made (for example, introduction of a VET specialisation for higher education preparatory programmes) or the system is adjusted. The Swedish National Agency for Education is developing a package of information that will support schools to better develop programmes that focus more on forecasted labour market demand and give better results (graduate tracking). On a regional level, graduate tracking data is used to looking at how programmes fulfil the needs of the labour market.

How can graduate tracking data be used by parents and students?

On a student and parent level, graduate tracking data was felt to be useful for them to make informed decisions about programmes, school and type of programme (if relevant). An important starting point is to have transparent and user-friendly information available for parents and students to access so that they can see the data, and/or main conclusions, for themselves if they wish. In Finland, within the Higher Education sector the Ministry of Education and Culture has established an online portal where students can see where their

degree will lead to⁴. Similarly, the Swedish National Agency for Education is planning a future database that aims to inform VET students and parents about occupations and possible career paths, graduate tracking results and labour market forecasts.

Workshop question 2: What challenges, if any, need to be overcome for graduate tracking data to be used to its full potential?

What are the challenges for graduate tracking data to be used to its full potential?

It was felt to be important that there is consistency across data sets collected over time as well as collected at different levels so that comparisons can be made. Where providers have the responsibility to collect data or where regional bodies are collecting data it is important that frameworks are provided and that those involved in the data collection and analysis processes have the same understanding of key terms and, ultimately, what is being measured.

Data collection processes also need to balance the potential burden for certain groups, such as employers, with the need for the data. For example, collecting occupation data and the views of employers as to the skills that graduates have and what are needed in the workplace can be a burden to employers. As such, it may achieve response rates and therefore the overall dataset may not be robust. Therefore, it is important to make decisions as to what data is really needed and what can practically be collected.

It is important that the necessary permissions to use the data are in place where graduate tracking data when linking administrative data or other survey information. More widely, all surveys and data collection processes must be GDPR compliant, and data must ideally be anonymous at all stages, which can be challenging. This may add some time to the processes between the point of data collection to publication. For example, in Ireland the data in the PLSS undergoes a number of processes so that the data is anonymised, and no graduates can be identified.

Anonymising data may be more difficult for programmes that have small graduate numbers, particularly when the data is viewed at provider level as the learner may be easily identified.

It was widely understood that graduate tracking data does not always tell the full story and that there may be background variables at play. For example, when looking at VET provider level data it may be useful to consider if the VET training centre is located in an economically deprived area, learners may have different motivations or barriers (in some cases) to fully participating in the programme and that they have different backgrounds.

It is also worth noting that graduate tracking data requires digital literacy and well-developed analytical skills so that the data can be interpretated appropriately. This requires staff within ministries of education and other ministries to have the in-house capacity and skills to do so. In some countries, they may bring in specialist subcontractors to analyse the data and draw out conclusions however Peer Learning Activity participants noted that this may lead to a reliance on external parties so in-house capacity is preferred.

Are there any factors that restrict national stakeholders from using graduate tracking data?

Undertaking surveys to collect information from graduates and providers can be costly and they can take considerable time for the data collection process to be completed. Ministries

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⁴ https://toissa.fi/home-en-us/

of education and providers must balance the costs with the short, medium and long-term benefits of graduate tracking.

In cases where VET providers are involved in collecting, reporting and sharing data it can be challenging to motivate VET providers to take part as this is an additional activity to their day-to-day responsibilities. However, in many countries (such as Finland, Sweden and the Netherlands) VET providers are informed that graduate tracking data is an important part of the overall quality and provision of VET and the results play an important role in the planning and delivery processes. In Finland in particular, VET providers are responsible for collecting data from their students. This often leads to a higher response rate as students are more likely to respond to the VET provider rather than a national body that they have no relationship with. It can reduce some of the challenges around GDPR as the VET provider can incorporate the graduate tracking within wider GDPR processes and information notices. In addition, by involving the VET providers in this process they can have 'ownership' of the process and the data itself and therefore they have an important role in graduate tracking process.

What enablers can support these changes to be made?

It was felt data collection systems (or portals) need to be user-friendly and accessible to different audiences so that all target groups feel comfortable using the system and they can easily get the information that they need. In Finland, the Vipunen portal provides national level data and it can be viewed in different ways and for different target groups. For example, the data can be viewed at all levels of education5, vocational education6, university of applied sciences7 and university level8. Data from Vipunen can easily be disaggregated for use at regional and provider level, which may be useful for different stakeholders.

Many countries, such as Finland and Sweden, have included the satisfaction of VET training at provider level within surveys with graduates. This creates a buy-in from VET providers as they are interested to see how graduates have viewed their learning and what, if any, adjustments and improvements can be made in the future.

In Sweden, the enablers for graduate tracking have included having rich administrative data sets to hand and well-established user dialogue. There has also been political commitment to make changes and address skills' supply and demand problems.

Training, support and guidance is important to enable ministry internal staff, VET providers and wider stakeholders to be able to appropriately use the data. Practically, this can include factsheets, frequently asked questions and 'how to' documents.

Workshop question 3: What data needs to be collected from graduates so it can be effectively used in the managing and funding of VET?

What particular data metrics (e.g. employment rates) are useful for managing the quality of VET?

The following data metrics are useful to collect to manage the quality of VET:

- Employment rates
- Salary of graduates
- Occupation data

⁵ https://vipunen.fi/en-qb/combined/Pages/Tutkinnon-suorittaneiden-sijoittuminen.aspx

⁶ <u>https://vipunen.fi/en-gb/vocational/Pages/Tutkinnon-suorittaneiden-sijoittuminen.aspx</u>

⁷ https://vipunen.fi/en-gb/polytechnic/Pages/Tutkinnon-suorittaneiden-sijoittuminen.aspx

⁸ <u>https://vipunen.fi/en-gb/university/Pages/Tutkinnon-suorittaneiden-sijoittuminen.aspx</u>

- Inactive or unemployment rate
- Skills used in the workplace

Additional information can be collected and added to this at national, regional and provider level.

It is useful for the data to be able to be broken down into the following levels:

- Provider
- Programme
- Regional level
- Industry / sector
- Occupation

It was also felt to be important to be able to show graduates' destinations and salary so that this information can be used to map career trajectories as well as the implementation, adjustment and flexibility of programmes. It is worth noting that the extent to which programmes can be adjusted at provider level depends on the VET system in place in a specific country and how much flexibility VET providers have. However, ultimately the data can be used to determine if programmes are 'useful' for learners' future careers and if they are in line with the labour market needs at national, regional and local level.

It is also worth noting that small cohorts within programmes at provider level pose problems. It may not be suitable to track data if less than 10 people otherwise graduates could be easily identified.

Workshop question 4: What role can graduate tracking data play in supporting VET providers in your country with their planning and quality assurance?

What role can graduate tracking play in supporting VET providers, and how would you want VET providers to use graduate tracking data?

It is important to note that the level of autonomy and decision-making processes available to VET providers is different to HEIs and VET providers often have less autonomy when compared to HEIs in the same country. The processes and abilities of VET providers to use graduate tracking data therefore should be in line with their remits and national or regional contexts.

It was felt VET providers can use graduate tracking data to inform their provision and delivery. Information such as satisfaction rates from graduates can be used to inform and prompt adjustments and, if necessary, re-designing programme delivery. Information about employment rates can also be used to stimulate discussions with employers about their needs and identify where new programmes are required, for example where skills gaps have been identified in existing and new emerging sectors.

In addition, graduate tracking data such as salary information can be used by VET providers to attract students to programmes so that students are aware of their long-term employment prospects.

In Finland, SEDU uses the national feedback when developing implementation plans for qualifications. Here the availability of skilled labour and graduate employment is an important aspect of cooperation between partners and in informing their plans. The VET feedback survey plays an important role in providing VET providers, such as SEDU, with insights into graduates' futures.

How could results be compared?

Where graduate tracking information is available on a VET provider level, the information can be used for comparing VET providers. This is often preferred over ranking systems as VET providers often view ranking systems negatively. Comparisons can also make note of other variables, such as location (urban/rural or economically deprived area/wealthy area or programme delivery mode – work-based learning or school-based). However, it is important to be aware of the differences in VET provider size when comparing data between VET providers as there will likely be an impact of sample sizes and there may be an impact on feedback between larger and smaller VET providers.

Workshop question 5: How can this data be made available and accessible to providers?

What existing mechanisms exist to share graduate tracking data with providers?

Many countries felt online databases/portals are an important tool to share graduate tracking data with providers. Such databases should provide providers with the ability to see their data and to compare it with other providers, and/or the national level. It is important that the information is user-friendly and has an easy-to-use interface, transparent and easily accessible to encourage providers to use the data within their decision-making processes.

In addition, thematic reports with specific analytical focuses can be produced by relevant authorities to inform VET providers as to wider trends and what the implications are for VET provision. In Portugal, the relevant ministry produces publications, thematic reports and school-based reports that accessible to VET providers and in Ireland, SOLAS are planning to use the outcomes of the PLSS to publish key reports on the VET sector.

In terms of barriers to share information with and between providers, it was felt there must be a common framework or understanding in the cases where VET providers determine, define and collect data so that data can be shared and compiled on a national basis.

Workshop question 6: What levers and mechanisms can national/regional authorities use to encourage providers to make effective use of graduate tracking data, including national level cooperation?

It was felt that national/regional authorities can use management and funding arrangements to encourage providers to make effective use of graduate tracking data. This could be via determining the funding or programme provision and informing the development of strategic agreements with VET providers.

Graduate tracking data can also be used to inform performance management with VET providers in terms of setting objectives. It is measure progress against key performance indicators in Ireland and Finland, which ultimately informs funding. In the Netherlands, graduate tracking data the relevant ministry has put in place a rule that if employment rates of graduates drop below a minimum of 70% at school or sector level then the issue will reviewed. This was used recently to freeze the number of students in creative and media VET programmes, as there have been a high number of graduates and lower than 70% employment rates.

Within SEDU, graduate tracking data provides career guidance to graduates who do not find employment and they have regular meetings with the local PES office as well to ensure that their staff are up to date with the labour market situation. In addition, they have regular meetings with employers to get their feedback and information on the situation of the labour market.

What support and guidance do providers need?

It was felt that providing support and guidance to providers is important to ensure that they have the necessary skills, knowledge and competences to use graduate tracking data in their planning and management of VET. Peer learning activities at regional, national and European level can showcase inspiring best practice and show how graduate tracking data can be practically used and 'what works.'

At national/regional level it is also useful to provide guidance to VET providers on how they can use graduate tracking data to advertise and attract students to VET pathways. By using data such as salary and employment rates, VET can be seen as a viable route to sustainable employment and successful career paths.

In addition, artificial intelligence can provide support to VET providers as it can undertake deeper analysis of the data and this can feed into better-informed decision-making processes.

What role do quality assurance providers play?

If was felt that quality assurance agencies could play a role in assisting VET providers with understanding graduate tracking data and practical issues regarding data collection, reporting and using the data. Quality assurance agencies can deliver group and one-to-one training, and ad hoc support to VET providers. In Sweden, quality assurance agencies visit VET providers and provide them with feedback on how they are using graduate tracking data, what aspects they could further explore and give encouragement (where needed) to use the data to its' full potential.

Summary

In summary, the effective use of graduate tracking data offers multiple benefits at the national, regional, VET provider and individual learner. By using the results as an evidence-basis for decision making processes, students can make more informed choices and national authorities and providers can adjust VET provision so that it better meets the needs of the labour market. Graduate tracking data can use existing administrative data sets to track the progress of graduates but there is also an important role for qualitative data that can be collected via surveys. The experience of Finland shows that graduate tracking data can offer multiple benefits for ministry level as well as VET provider level.

It is important to have central online databases, such as Vipunen, that show the information in a clear, easy-to-understand interfaces where data can be analysed by different stakeholders, and they can easily access the information that is relevant to them. However, there is a need for users to understand that the data has certain limitations, and they must have the appropriate analytical skills to interpret the data. Training and support to VET providers and certain stakeholders, such as ministries and other bodies, is important to ensure proper use.

Creating buy-in from VET providers into the process is important and there are a range of tools that can be used to do this, ranging from linking graduate tracking data to funding arrangements (as in Finland), strategic agreements and decision-making processes to the delivery of certain programmes.

VET providers should be supported in their use of graduate tracking. Support can take place via peer-to-peer support, training and written guidance. Events at European, national and regional level can bring VET providers together to look at what works and share practical tips and advice. Quality assurance agencies have an important role in supporting VET providers to maximise their understanding of graduate tracking data, their use of the data and to offer encouragement where needed.

Further information and resources

Finland

Vocational education information:

Information available on Vipunen:

https://vipunen.fi/en-gb/vocational/Pages/Opiskelijapalaute.aspx

Basic information on financing in VET:

 $\frac{https://okm.fi/documents/1410845/4045717/AKR-rahoitusjarjestelma-en.pdf/27f2618f-ddae-5a13-1906-e3d32ee435a7/AKR-rahoitusjarjestelma-en.pdf?t=1622114049583$

Detailed information on financing in VET:

https://okm.fi/documents/1410845/4150027/Financing+of+vocational+education+and+training/cf88b996-d53a-1ac1-8d11-

570b4ce12f50/Financing+of+vocational+education+and+training.pdf

Information on qualifications and studies in VET:

https://okm.fi/en/qualifications-and-studies vet

Information on work-based learning in VET:

 $\frac{\text{https://okm.fi/documents/1410845/4150027/Work+based+learning.pdf/b24fe2a9-dfe3-}{\text{7ee3-02d4-5728b4e9762b/Work+based+learning.pdf?t=1569997783000}}$

Higher education information:

University network data:

https://www.aarresaari.net/latest-results/?lang=en

Discover where your degree could lead to:

https://toissa.fi/en US/home-en-us

University of Applied Sciences survey data on Vipunen:

https://vipunen.fi/en-gb/polytechnic/Pages/Uraseuranta.aspx

University survey data on Vipunen:

https://vipunen.fi/en-gb/university/Pages/Uraseuranta.aspx

Information on financing in HE:

https://okm.fi/en/steering-financing-and-agreements

Netherlands

Information on secondary VET: www.kiesMBO.nl

Information on higher vocational education: www.studiekeuze123.nl

Factsheets http://roastatistics.maastrichtuniversity.nl/SISOnline/Home.aspx

Data portal:

https://public.tableau.com/app/profile/centraal.bureau.voor.de.statistiek/viz/Dashboard MBOuitstroom/Welkom

Portugal

OTES: https://www.dgeec.mec.pt/np4/47/