UPGRADE

Enhancing Graduates' Employability Tracking in Moldova

BENCHMARK REPORT ON BEST PRACTICES IN MONITORING HE GRADUATES' EMPLOYABILITY

Milestone 5

GRADUATES' EMPLOYABILITY TRACKING



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1. EXECUTIVE SUMMARY

In recent years, tracking the employability of higher education graduates has become a significant priority in the European Union and elsewhere. This analysis identifies many major trends in graduate tracking systems across a number of countries, including EU members Denmark, Finland, Hungary, Ireland, Italy, Lithuania, Slovenia, and Sweden, as well as Canada and the UK. This comprehensive analysis includes a variety of techniques to tracking graduate outcomes, highlighting the global necessity of linking higher education with labour market demands.

This analysis identifies several major patterns in graduate tracking systems. There is a definite trend towards more extensive and longitudinal monitoring of graduates' job outcomes, which frequently combines survey data with administrative records. Many countries are using advanced technology to better data collecting and analysis, with online surveys and integrated data platforms becoming more popular. Furthermore, collaboration among higher education institutions, government agencies, and companies has been critical in building effective graduate tracking systems.

The data produced by these systems is utilised not just for informational purposes, but also to shape policy decisions, direct curriculum development, and, in some situations, affect institutional funding. Despite tremendous advances, obstacles still exist in areas such as survey response rates, data privacy concerns, and cross-border data comparability.

Based on our findings, we propose standardising data collection procedures across EU countries to simplify comparisons and benchmarking. There is also a need for further investment in technology infrastructure to support advanced data analysis and visualisation. Improved collaboration among stakeholders, particularly in exchanging data and insights, will be critical. Furthermore, implementing regulations to ensure the proper use of graduate tracking data, while balancing transparency with privacy concerns, is critical. Finally, we propose more systematic integration of graduate employability data into quality assurance and higher education funding processes.

As the higher education landscape evolves in response to shifting labour market demands and technology improvements, graduate tracking systems will become increasingly important in guaranteeing educational programs' relevance and efficacy.





2. INTRODUCTION

2.1 Research objectives

This research seeks to give a complete examination of graduate employability tracking systems in selected countries, with an emphasis on EU member states but also including viewpoints from outside the EU. By studying various techniques and methodologies, we want to uncover best practices, new solutions, and places for development. Our ultimate goal is to provide concrete recommendations for improving graduate tracking systems, thereby facilitating the alignment of higher education outcomes with labour market needs in a variety of country contexts.

2.2 Context: Local, national, and EU landscape

Graduate employability has emerged as a critical emphasis area in European higher education policy during the last two decades. This emphasis is reflected in significant EUwide efforts such as the Bologna Process and the establishment of the European Higher Education Area (EHEA). These initiatives have highlighted the necessity of integrating education with labour market needs and improving graduates' employability across Europe.

Many countries have created their own monitoring systems, usually in reaction to local economic realities and policy agendas. These systems differ in methodology, breadth, and level of development, reflecting the varied higher education landscapes of Europe.

2.3 Research methodology

Our study compares graduate tracking systems in six EU countries (Denmark, Finland, Hungary, Ireland, Italy, Lithuania, Slovenia, and Sweden), as well as Canada and the United Kingdom. We gathered information from several sources, including national policy documents, official reports from relevant government organisations and higher education institutions, and academic literature on the subject. This multifaceted approach enables us to provide a comprehensive picture of existing practices and developing trends in graduate employability monitoring across a wide range of nations, both within and outside the EU. By incorporating non-EU nations such as Canada and the United Kingdom, we hope to provide a more global perspective on graduate tracking systems.





2.4 Key initiatives and policy framework

Several significant projects serve as the context for our research. At the EU level, the Eurograduate Pilot Survey is an attempt to create a European-wide method to graduate tracking. At the national level, policies such as the UK's Graduate Outcomes Survey and Finland's register-based tracking system demonstrate several approaches to solving this issue.

Graduate tracking policy frameworks are frequently integrated into larger higher education policies, reflecting an increasing emphasis on higher education outcomes and impact. In many countries, graduate employability has become a crucial performance metric for higher education institutions, influencing both funding and image.

2.5 Scope and limitations

While our research seeks to give a complete review of graduate tracking procedures in the EU, it is necessary to acknowledge some limitations. While our focus on specific countries allows for in-depth research, it may not capture the intricacies of each national system or reflect the complete diversity of approaches within the EU. Furthermore, due to the continuously growing nature of this sector, our research may not fully reflect some recent discoveries.

2.6 The growing importance of graduate employability tracking

A number of interconnected factors contribute to the rising emphasis on graduation outcomes. First, quickly changing job markets require graduates to have adaptive skill sets, putting pressure on higher education institutions to constantly update their curricula. Second, there is an increasing need to demonstrate the return on investment in higher education, both for individual students and society as a whole. This is especially important considering the escalating cost of higher education in many nations.

Third, there is a push for increased accountability in the education sector, with stakeholders requesting evidence of higher education programs' impact and effectiveness. Fourth, EU-wide initiatives such as the Bologna Process have highlighted the need of comparability and quality assurance in European higher education institutions, with employability serving as a crucial criterion.

Finally, as students and graduates move throughout Europe, there is a growing demand for comparable data on employment outcomes. This information is critical for students





deciding where to study, institutions looking to attract students, and politicians trying to understand and improve the competitiveness of their higher education systems in a European context.

As we go more into the specifics of graduate tracking systems in later sections, these motivators will give valuable context for understanding the creation and implementation of various approaches across EU countries.







3. OVERVIEW OF GRADUATE TRACKING SYSTEMS IN EU

3.1 Current state of graduate tracking

Graduate tracking systems in the EU vary significantly in terms of methodology, breadth, and level of development. However, there is a growing tendency towards more thorough methodologies that combine survey data with administrative record analysis.

Graduate tracking systems are well developed in countries such as Finland and the United Kingdom, and they are fully incorporated into national policies. The UK's Graduate Outcomes survey, for example, provides a thorough overview of graduates' activities 15 months after graduation, but Finland's register-based system enables continuous tracking of graduates' job and further study trajectories.

Other countries are in varying phases of creating or improving their tracking systems. Italy's AlmaLaurea consortium represents an innovative collaborative strategy, whereas Slovenia's system promotes tight collaboration between higher education institutions and the state employment agency.

Despite these differences, there is an increasing consensus on the need of graduate tracking, as well as a tendency towards more complex and comprehensive systems within the EU.

3.2 Legal and policy frameworks

The creation of graduate tracking systems is frequently supported by specialised legal and policy frameworks. In Italy, for example, Law No. 240/2010 and Legislative Decree No. 19/2012 establish a framework for monitoring graduate employment outcomes as part of larger quality assurance measures in higher education. In the United Kingdom, for example, the Higher Education and Research Act 2017 provided a legal framework for collecting and publishing information about graduate outcomes.

In Slovenia, the Higher Education Act requires the collecting of data on graduates' employability, whereas in Ireland, the Higher Education Authority Act establishes the legal framework for graduate surveys.

These legislative frameworks not only permit the gathering of graduate data, but they also frequently establish criteria for data protection, usage, and distribution, ensuring that tracking operations are carried out in a responsible and ethical manner.





3.3 Responsible institutions and stakeholders

Graduate tracking often involves a number of institutions and partners, reflecting the multifaceted nature of higher education and employment. Key players frequently include:

- National statistics offices, such as Statistics Finland or the UK's Higher Education Statistics Agency (HESA), frequently play a key role in collecting and interpreting graduation information.
- Ministries of Education are normally responsible for developing policy orientations and using monitoring data to inform higher education strategy.
- Higher education institutions provide and use graduate tracking data to improve their curriculum and support services.
- Employers and industry associations frequently assist in tracking efforts by giving information on skill requirements and graduate performance in the workplace.
- Student unions and graduate groups can help to encourage involvement in tracking activities and provide feedback on the value of the data obtained.

The involvement of these many stakeholders contributes to graduate tracking systems that are comprehensive, relevant, and sensitive to the needs of different user groups.

To better demonstrate the intricate connections between many stakeholders in graduate tracking systems across different EU nations, we have provided a set of flow diagrams in Annex 2, titled 'Graduate Tracking System Flow Diagram'. These graphs depict how data moves between graduates, institutions, government entities, and other stakeholders in each country's monitoring system.

The flow diagrams provide a comparative view of the structures and processes in place in various EU member states, emphasising both commonalities and distinctive characteristics of each system. Readers are urged to consult this annexe for a short, visual overview of the various approaches to graduate tracking in the EU.

3.4 Data collection methods and tools

Graduate tracking is carried out using a number of approaches and instruments within the EU. Here are some common approaches:

Graduate surveys





Extensively used to gather information about graduates' work situation, future education, and perceptions of their higher education experience. Examples include the Graduate Outcomes Surveys in the United Kingdom and Ireland.

Administrative data analysis

Many nations, particularly those with comprehensive national registers, such as Finland, rely heavily on administrative data to track graduates' employment and earnings over time.

Longitudinal studies

Some countries perform long-term studies that track graduates' professional progression over time. This technique is best shown by the UK's Longitudinal Education Outcomes (LEO) dataset.

Online platforms

Digital tools are being used to collect and communicate graduate tracking information. Italy's AlmaLaurea portal, for example, functions as both a data collection tool and a resource for graduates, businesses, and institutions.

Methods and technologies are frequently chosen based on national interests, data availability, and privacy issues. Many countries are using mixed-method techniques that combine the depth of survey data with the breadth and consistency of administrative records.

To present a comprehensive picture of the current condition of graduate tracking systems in the EU, we undertook a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, which is included in Annex 3. This report provides a fair view of the landscape of graduate tracking in EU member states.

The SWOT analysis identifies numerous major strengths of contemporary systems, including the variety of approaches customised to national circumstances and the growing integration of diverse data sources. It also notes important prospects, such as the possibility of improved EU-level cooperation and the incorporation of future technologies such as AI and machine learning.

However, the investigation reveals significant challenges. Weaknesses include a lack of standards between countries and variable levels of development among member states. Data privacy concerns, as well as the danger of data misinterpretation or misuse in policy decisions, pose threats to the success of these systems. This SWOT analysis provides





useful background for understanding the best practices and implementation methodologies addressed in the parts that follow, as well as recommendations for future graduate tracking system development in the EU.

As we go on to the following phase, we will look in depth at some of the most exceptional graduate tracking systems in the EU, highlighting innovative ideas and best practices that could help other nations create their own tracking systems.







4. BEST PRACTICES AT EU& INTERNATIONAL LEVEL

4.1 Case studies of exemplary systems

Denmark: Use of tracking data in performance-based funding

Denmark has taken a unique approach by including graduate employment outcomes into its university finance strategy. A percentage of each institution's financing is connected to its graduates' employment rates, providing a direct financial incentive for universities to prioritise graduate employability.

This system's data is gathered via a combination of graduate questionnaires and administrative record analysis. This strategy ensures that the funding model is founded on reliable and thorough data.

<u>Key takeaways:</u>

- The direct link between graduate performance and institutional finance encourages an emphasis on employability.
- The system takes a balanced approach to funding decisions, taking into account graduate employment as well as other considerations.
- This approach shows how tracking data can drive systemic change in higher education.

Finland: Integration of survey data with national registers

Finland's graduate tracking system draws on the country's extensive national registers to provide a precise and ongoing picture of graduate outcomes. The system integrates data from demographic, education, and employment registrations, as well as periodic graduate surveys.

This method enables efficient, large-scale tracking of graduates' employment status, earnings, and future education without imposing a considerable load on graduates to answer to surveys. The data is accessible via the Vipunen portal, which includes user-friendly data visualisation tools.

<u>Key takeaways:</u>

- Making effective use of existing administrative data lessens the burden on graduates and institutions.





- The register-based approach provides high-quality and comprehensive data coverage.
- Transparent reporting through the Vipunen portal improves data accessibility and usability.

Ireland: HEA Graduate Outcomes Survey and CSO longitudinal data

To track graduate outcomes, Ireland uses a nationwide graduate survey as well as longitudinal data analysis. The Higher Education Authority (HEA) conducts an annual Graduate Outcomes Survey to provide a standardised national picture of early career outcomes across all higher education institutions.

This survey data is supplemented by longitudinal analysis undertaken by the Central Statistics Office (CSO), which connects educational records to job and earnings data across time.

<u>Key takeaways:</u>

- A comprehensive national approach promotes consistency and comparability across institutions.
- Combining survey and longitudinal data yields both quick feedback and long-term insights.
- The HEA provides central coordination to guarantee efficient data collection and analysis at the national level.

Italy: AlmaLaurea Consortium model

Italy's AlmaLaurea Consortium represents an innovative collaborative approach to graduation tracking. The collaboration, which covers the majority of Italian universities, collects and analyses information about graduates' characteristics, academic achievement, and employment results.

AlmaLaurea not only conducts graduation surveys, but it also keeps a database of graduate CVs, which is an important resource for both employers and scholars. The consortium's operations go beyond data collection to include career assistance and support for universities' quality improvement efforts.

Key takeaways:

- The collaborative approach ensures that numerous stakeholders buy in and that data collecting and analysis can be done on a larger scale.





- Comprehensive services beyond data gathering increase the value offered for participating universities and graduates.
- The system promotes direct contacts between graduates and employers, increasing its practical worth.

Slovenia: Collaboration between HEIs and Employment Service

Slovenia's approach to graduate tracking focusses on tight collaboration between higher education institutions and the government Employment Service. This collaboration enables the merging of school data and labour market information, resulting in a full picture of graduates' transitions into employment.

The system incorporates both graduate surveys and employment record analysis, with the goal of leveraging the data to improve career coaching and support services for students and recent graduates.

<u>Key takeaways:</u>

- The strong link between education and job sectors increases the relevance and usefulness of the data obtained.
- A focus on the practical application of monitoring data for career assistance benefits students and recent graduates.
- A collaborative approach promotes a more comprehensive knowledge of the education-to-employment transition.

Sweden: Long-term tracking using administrative data

Sweden's graduate tracking system emphasises long-term outcomes. The country extensively uses administrative data to follow graduates' employment status, earnings, and career advancement for several years after graduation.

This technique provides insights on long-term career paths and the changing value of various educational levels in the employment market. It also reduces the need for multiple graduate surveys, lowering expenses and response burden.

<u>Key takeaways:</u>

- Long-term tracking gives useful information about job paths and the long-term impact of higher education.
- The efficient utilisation of existing administrative data reduces the need for additional data collection initiatives.





- The system enables the investigation of how the value of various qualifications changes over time in the employment market.

Canada: Comprehensive Long-term Tracking through the National Graduates Survey

Canada has a well-established and comprehensive strategy to graduate tracking through the National Graduates Survey (NGS), which has been conducted since 1978.

Key takeaways:

- Long-term tracking: The NGS surveys graduates two and five years after graduation, providing information about both short- and medium-term results.
- Comprehensive data collection: The survey covers a wide range of subjects, such as employment status, job relevance to field of study, earnings, and future educational goals.
- Regular updates: The survey is conducted every five years, allowing for long-term trend monitoring.
- Use of administrative data: Canada integrates survey and tax data to provide more accurate and comprehensive information about graduates' wages and job status.
- Adaptability: The poll has evolved over time to incorporate additional issues such as the impact of the COVID-19 epidemic, online learning, and microcredentials.

The NGS provides useful information for policymakers, educational institutions, and academics to evaluate the efficacy of higher education programs and their alignment with labour market demands. Its extensive history and frequent updates make it an effective instrument for analysing graduate outcomes and shaping education policy."

<u>United Kingdom: Comprehensive approach with Graduate Outcomes survey and</u> <u>LEO data</u>

The UK has a dual strategy to graduate tracking, combining extensive survey data with long-term administrative data analysis. The Graduate results Survey, administered 15 months after graduation, gives thorough information about graduates' activities, perceptions, and early career results. This survey replaces the earlier Destinations of Leavers from Higher Education (DLHE) survey, expanding the time frame to provide a more accurate picture of graduate outcomes.

The Longitudinal Education Outcomes (LEO) dataset complements this survey data. LEO connects educational records to tax data, enabling long-term tracking of graduates' wages





and work status. This mix of survey and administrative data provides a comprehensive and diverse view of graduation outcomes.

Key takeaways:

- The combination of survey and administrative data yields both breadth and depth of understanding.
- Long-term tracking with LEO allows for examination of career advancement over time.
- Data is utilised to educate prospective students, direct institutional strategies, and influence national policy.

4.2 Innovative approaches and tools

Throughout these case studies, various new techniques and tools stand out:

AI for data analysis and prediction

Some countries are starting to look into using artificial intelligence and machine learning techniques to analyse graduate tracking data and forecast future graduate employment trends.

Blockchain for secure credential verification

Pilot projects in various EU nations are looking into using blockchain technology to establish secure, verifiable digital credentials that can be integrated with graduate tracking systems.

Interactive data visualisation tools

Platforms such as Finland's Vipunen and the United Kingdom's Discover Uni offer userfriendly interfaces for exploring graduate outcomes data, increasing accessibility and usefulness for a diverse variety of stakeholders.

4.3 Data utilisation and impact

The data produced by these tracking systems is used in a variety of ways to improve higher education and support graduates.

Insights from graduate tracking are being used by universities to revise curricula and build new programs that are more in line with labour market needs.





Data on graduate outcomes helps career services departments provide more tailored advice and support to current students.

Policymakers use graduate tracking data to guide decisions regarding higher education funding, quality assurance, and skill development plans, thereby promoting evidence-based policymaking.

Improving transparency: Prospective students now have more access to information regarding prospective results from various courses and institutions, allowing them to make more informed decisions.

4.4 Challenges and solutions

Despite progress in graduate tracking, numerous difficulties remain:

Low response rates

Many countries experience low response rates to graduate surveys. Mixed-mode surveys (which combine online, phone, and mail methods), incentives for participation, and complementing survey data with administrative records are among the solutions being investigated.

Data privacy concerns

With the increased gathering and use of personal data, ensuring compliance with data protection legislation (especially GDPR in the EU) is critical. Countries are tackling this by strictly adhering to data protection principles, utilising data anonymization tools, and communicating clearly with graduates about data use.

Cross-border comparability

As student mobility grows, so does the demand for data that can be compared across nations. Efforts are underway to standardise important measurements and procedures, but considerable hurdles remain.

To give a comprehensive view of graduate tracking methods in the EU, Canada, and the United Kingdom, we have provided a complete comparative analysis in Annex 4, headed 'Comparative Analysis of Graduate Tracking Systems'. This thorough table compares the essential elements of graduate tracking systems in several EU nations, Canada, and the United Kingdom.





The analysis addresses topics such as main tracking methods, tracking timeframes, use in funding decisions, key responsible institutions, data integration levels, employer involvement, quality assurance applications, data accessibility, cross-border comparability, and the use of emerging technologies. This comparative perspective allows for a more in-depth understanding of each country's system's strengths and distinctive approaches, making it easier to identify best practices and potential areas for reform or collaboration.

In the following part, we will look at how these best practices and innovations can be adopted across various stakeholder groups, as well as ways for addressing typical problems in graduate tracking.







5. IMPLEMENTATION APPROACHES

5.1 For higher education institutions

The University of Helsinki's career services branch not only conducts graduation surveys, but also uses the results to create career counselling and job search assistance for current students.

Integrate employability skills into curricula

Using insights from graduate tracking data, universities can identify important talents that employers value and implement them into their programs. For example, the University of Bologna in Italy used AlmaLaurea data to guide the creation of soft skills modules across many degree programs.

Conduct regular internal graduate surveys

While many countries perform national-level surveys, institutions can benefit from undertaking more frequent and tailored surveys. This enables quicker feedback loops and institution-specific insights. The University of Manchester in the United Kingdom, for example, conducts a separate survey of graduates six months after graduation to supplement the national Graduate Outcomes survey.

Foster industry partnerships

Graduate tracking data can assist in identifying significant employers and industries where graduates succeed. Institutions can utilise this data to build targeted collaborations for internships, placements, and collaborative research projects. Sweden's KTH Royal Institute of Technology has used graduate tracking insights to form strategic collaborations with companies in high-demand industries for its graduates.

5.2 For students and graduates

Engaging students and graduates is critical to the success of tracking programs:

Encourage survey participation

Institutions should explicitly emphasise the relevance of graduate surveys to both current students and alumni. The University of Ljubljana in Slovenia, for example, mentions the graduate tracking survey in its pre-graduation workshops and alumni mailings.





Provide clear information on data use

Being transparent about how monitoring data is used helps enhance desire to participate. The website for Finland's national graduation survey gives thorough information on data protection and use, which helps to create confidence with respondents.

Offer personalised career guidance

Use tracking insights to provide tailored career advice. Ireland's Gradireland platform, for example, uses graduate outcomes data to provide current and recent graduates with course_specific job path information.

5.3 For policymakers and employers

Policymakers and employers utilise and facilitate graduate tracking systems:

Use tracking data to inform skills forecasting

Policymakers can identify future skill shortages by combining graduate employment data and labour market estimates. The Danish Agency for Labour Market and Recruitment, for example, uses graduate tracking data in its skill predicting models.

Encourage employer involvement in curriculum development

Tracking data might reveal areas where graduate skills do not meet employer needs. Policymakers can utilise this information to encourage more collaboration between higher education and industry. In the United Kingdom, the Office for Students promotes the use of graduate outcomes data in the development of industry-university relationships.

Develop regulations that encourage work-integrated learning

Graduate tracking frequently demonstrates the importance of work experience while studying. Policymakers can utilise this evidence to advocate for the extension of internship and apprenticeship programs. Italy's recent "Decreto Rilancio" includes initiatives to expand work-based learning opportunities, which are partially based on AlmaLaurea data demonstrating a favourable impact on graduate employability.

5.4 For academic staff

Academic staff play an important role in turning graduate tracking information into better educational results.





Provide training on reading and using graduate tracking data

Many universities hold workshops for faculty on understanding and implementing graduate outcomes data. The University of Helsinki, for example, holds annual seminars for academic staff about the significance of their graduate tracking statistics.

Encourage the integration of employability skills in teaching

Using tracking data, academic staff can be encouraged to incorporate key employability skills into their courses. Based on their graduate results data, the University College Dublin created a toolbox for academics on how to infuse employability into the curriculum.

Encourage industry engagement

Academic staff might use graduate employment data to find potential industry partners for guest lectures, project partnerships, or curriculum advising roles. Lund University in Sweden aggressively encourages academics to use graduate tracking findings to identify and engage alumni in key industrial roles.

5.5 Overcoming common challenges

Implementing comprehensive graduate tracking systems often faces several challenges:

Improving response rates

Low survey response rates can be addressed by implementing multi-channel communication techniques, using shorter, more focused surveys, and providing incentives for participation. Denmark's graduation survey generates strong response rates using a combination of online, phone, and mail methods, as well as clear communication about the survey's value.

Addressing data privacy concerns

Requires clear permission processes, strong data protection mechanisms, and transparency regarding data use. Finland's register-based system, which relies on existing administrative data, reduces the need for extra data collection while delivering comprehensive insights.





Enhancing data integration

Standardised identities and data sharing agreements between institutions and government agencies can aid in the better integration of various data sources. The UK's Graduate Outcomes survey employs a unique student identification that can be linked to other administrative data sets, allowing for more in-depth analysis.







6. KEY INITIATIVES AND DIGITAL PLATFORMS

The graduate tracking landscape in the European Union is defined by a combination of national systems and EU-wide initiatives, frequently utilising digital platforms to improve the gathering, analysis, and distribution of data.

6.1 EU-level initiatives

Several European initiatives strive to promote and standardise graduate tracking.

The Eurograduate Pilot Survey was launched in 2018 with the goal of developing a longterm European graduate survey. It aims to provide comparable statistics on graduate outcomes across participating nations, thereby solving the issue of cross-border comparability in graduate tracking.

The European Graduate Tracking Initiative is an ongoing effort financed by the European Commission that aims to improve the availability, quality, and comparability of data on graduates. It includes initiatives to create uniform indicators and procedures for tracking graduates across EU member states.

6.2 National portals and tools

Many countries have created sophisticated digital platforms to support their graduation tracking efforts:

Finland's Vipunen portal

This comprehensive education statistics platform offers easy access to a wide range of data on graduate outcomes. Users can look into employment rates, wages, and further education trends for graduates from various universities and study programs.

Italy's AlmaLaurea web platform

This website not only collects graduation data, but it also connects graduates with businesses. It comprises a database of graduate CVs and provides a variety of services to help graduates move into the job market.

Slovenia's eGuidance and SQAA Initiatives





The eGuidance portal offers career advice and assistance based on graduate tracking data, and the Slovenian Quality Assurance Agency for Higher Education (SQAA) incorporates graduate outcomes into its quality assurance processes.

Ireland has GradIreland and IrishJobs.ie

These platforms integrate job search features with career information collected from graduate tracking data, assisting students and recent graduates in making career selections.

6.3 Learning outcomes and skills frameworks

Graduate tracking systems frequently integrate with larger frameworks for learning outcomes and skills:

European Qualifications Framework (EQF): This translation tool compares national qualification systems and improves the transparency, comparability, and portability of qualifications throughout Europe. Graduate tracking data can help to refine the EQF over time.

National qualifications frameworks: Many countries have created their own qualifications frameworks that are compatible with the EQF. These frameworks frequently use information from graduate tracking to ensure that educational degrees are aligned with labour market needs.

6.4 Visual Examples of Graduate Tracking Platforms

To provide a more concrete knowledge of how graduate tracking data is presented and made available, Annex 5: 'Existing system snapshots' contains visual samples of existing systems. This annexe contains screenshots from many national graduate tracking platforms, including Finland's Vipunen portal, Italy's AlmaLaurea system, and Hungary's Graduate Career Tracking System (DPR).

These pictures show the various methods to data visualisation and user interface design used in different countries. They show how complex graduate job data is translated into understandable, user-friendly formats.





6.5 Emerging technologies in graduate tracking

Several cutting-edge technologies are being investigated or applied in graduate tracking systems:

AI and machine learning: These technologies are utilised in predictive analytics to project future graduate employment trends based on historical data and current labour market statistics. For example, the UK's Office for Students is investigating the use of AI to evaluate patterns in graduate outcomes data.

Blockchain: Some organisations are testing blockchain technology for safe, verifiable credential management. This might potentially speed up the process of validating graduates' credentials for employers and decrease fraud.

Big data analytics: As the number of data acquired by tracking systems increases, big data techniques become more significant for processing and analysing large-scale administrative datasets and survey replies.

These technology improvements offer the possibility of more efficient, accurate, and informative graduate tracking systems. However, their implementation poses fundamental concerns about data privacy, algorithmic bias, and the ethical application of predictive technology in educational settings.

In the following part, we will look at the benefits and implications of graduate tracking systems for key players in the higher education ecosystem.







7. BENEFITS AND IMPACT OF GRADUATE TRACKING

Graduate tracking systems have far-reaching consequences for many stakeholders in the higher education system. This section investigates the benefits and implications of these systems for higher education quality and relevance, student career development, labour market alignment, and evidence-based policymaking.

7.1 For higher education quality and relevance

Graduate tracking systems serve an important role in improving the quality and relevance of higher education programs.

Curriculum development and refinement: Graduate tracking data provides essential insights into the skills and knowledge most in demand in the employment market. For example, the University of Helsinki in Finland used graduate employment data to identify skill gaps, resulting in the addition of new courses in data analytics and digital communication across many degree programs. This flexible approach guarantees that curricula remain relevant to the changing needs of employers.

Quality assurance processes: Many countries are already incorporating graduate outcomes data into their higher education quality assurance frameworks. In the United Kingdom, the Office for Students utilises graduate employment rates and earnings data as major measures in its Teaching Excellence Framework (TEF), which evaluates the quality of undergraduate teaching in universities and colleges. This strategy encourages schools to focus on their graduates' long-term outcomes, rather than merely the present educational experience.

Program viability assessment: Graduate tracking data enables institutions to measure the performance of various programs in terms of graduate outcomes. For example, Italy's AlmaLaurea collaboration publishes extensive reports on job results by field of study, allowing universities to make informed program decisions. This data-driven strategy has the potential to reinforce high-performing programs while redesigning or discontinuing those that provide poor employment outcomes.





7.2 For student career development

Graduate tracking systems are useful resources for students when planning their educational and career pathways.

Informed decision-making: Graduate outcomes data can help prospective students make more educated decisions regarding their academic subjects and institutions. In Ireland, the gradireland portal incorporates graduate employment data into course descriptions, allowing students to evaluate projected career results across programs and universities.

Realistic expectations: Graduate tracking data can help create reasonable expectations for post-graduation prospects. For example, Sweden's national graduation survey gives thorough information on typical career paths and wage advancement for graduates in various professions, allowing students to better plan their careers.

Career guidance enhancement: Career services can leverage graduate tracking data to deliver more targeted and effective career advice. The University of Ljubljana in Slovenia, for example, tailors career workshops and individual counselling sessions to the most relevant skills and job search techniques for each subject of study, leveraging graduate tracking information.

7.3 For labour market alignment

Graduate tracking systems serve an important role in linking higher education with labour market needs.

Skills gaps are identified by tracking graduates' employment outcomes and career growth. In Denmark, the Ministry of Higher Education and Science uses graduate tracking data to influence continuous discussions with universities and industry regarding skill requirements and curriculum development.

Collaboration between industry and academia: Graduate tracking data can reveal areas where higher education institutions and industry could work more closely together. For example, Finland's Vipunen portal gives thorough data on graduate employment by sector, allowing universities to locate possible industrial partners for internships, guest lectures, and collaborative research initiatives.

Graduate tracking can help shape regional economic development policies. In Italy, regional governments use AlmaLaurea data to study graduate mobility patterns and design measures to retain highly skilled graduates in areas experiencing brain drain.





7.4 For evidence-based policymaking

Graduate tracking systems give a variety of data that informs higher education policy.

financing decisions: In some nations, graduate employment outcomes are considered when allocating higher education financing. In Denmark, a portion of university funding is tied to graduate employment rates, encouraging institutions to prioritise employability.

Education system evaluation: Graduate tracking data enables policymakers to analyse the overall success of higher education in preparing students for employment. In the United Kingdom, the Department for Education uses Longitudinal Education Outcomes (LEO) data to assess the economic value of higher education and guide policy decisions.

International competitiveness: By providing comparative statistics on graduate outcomes, tracking systems assist policymakers in determining the international competitiveness of higher education institutions. The Eurograduate pilot survey, for example, seeks to provide cross-country comparisons of graduate outcomes to guide national and EU-level higher education strategy.

Widening participation initiatives: Graduate tracking data can provide insight into the results of students from various socioeconomic origins, informing policies targeted at boosting social mobility through higher education. In Ireland, the Higher Education Authority analyses graduate outcomes data to assess the effectiveness of access programs for under-represented groups.

The impact of graduate tracking systems goes beyond the immediate benefits. These methods help to create a culture of data-driven decision-making in higher education, making it more responsive, efficient, and effective overall. They establish a feedback loop that enables ongoing improvement and adaptability to changing economic and social needs.

However, it is vital to emphasise that the benefits of graduate tracking systems will only be realised if the data is broadly shared, well understood, and actively exploited by all stakeholders. This emphasises the value of user-friendly data platforms, clear communication of findings, and ongoing initiatives to increase data literacy among politicians, educators, students, and employers.

In the final section, we will synthesise the report's important results and make recommendations for the future development of graduate tracking systems in the EU.





8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Key findings

This comprehensive review of graduate tracking systems in numerous EU nations finds a landscape marked by innovation, rising sophistication, and a growing appreciation for the value of graduate outcomes data. Our investigation yielded some major findings:

1. Approach diversity: While the goal of understanding and improving graduate outcomes is shared by all countries, several approaches to graduate tracking have emerged. These range from Finland's comprehensive register-based system to Italy's AlmaLaurea consortium model, all of which reflect national interests and institutional circumstances.

2. Data integration: The most effective systems, like those in the United Kingdom and Finland, combine survey data with administrative information. This integration paints a more complete and nuanced picture of graduate outcomes, weighing short-term feedback against long-term career paths.

3. Technology as an enabler: Digital platforms and powerful analytics are becoming important in graduate tracking activities. From Finland's Vipunen site to the United Kingdom's use of longitudinal data analysis, technology is improving data gathering, analysis, and distribution.

4. Stakeholder collaboration: Effective graduate tracking systems require strong coordination among higher education institutions, government agencies, employers, and graduates. This multi-stakeholder strategy ensures that the information gathered is relevant, complete, and actionable.

5. The impact on policy and practice: Graduate tracking data is increasingly being utilised to drive policy decisions, shape curriculum development, and direct career assistance. In certain nations, such as Denmark, it even influences financial allocations for higher education.

6. Challenges persist: Despite tremendous advances, challenges remain in areas such as survey response rates, data privacy concerns, and cross-border data comparability. These difficulties require continual attention and creative solutions.





8.2 Recommendations for improvement

Based on our findings, we propose the following recommendations for improving graduate tracking systems throughout the EU:

1. Standardise key measures: While national systems should maintain flexibility, creating a set of core, standardised criteria for graduate outcomes will significantly improve cross-border comparability. The European Graduate Tracking Initiative provides a basis for this, but further work is required to secure widespread acceptance.

2. Invest in data infrastructure: Countries should prioritise investments in strong data collection and analysis infrastructures. This includes creating integrated databases that can connect educational records and employment data, as shown in Finland's register-based system.

3. Improve data sharing and collaboration: Encourage more data sharing across organisations and countries, while adhering to data protection standards. The AlmaLaurea group in Italy offers a model for collaborative data collecting and analysis that could be applied on a larger European scale.

4. Use emerging technologies: Investigate the potential of AI, machine learning, and blockchain for graduate tracking. These technologies could improve predictive analytics, protect data, and simplify credential verification processes.

5. Improve stakeholder engagement: Plan methods to boost graduate survey participation and employer involvement in data interpretation and usage. Clear communication about the value and effects of graduate tracking can increase engagement.

6. Integrate tracking data into quality assurance: Encourage the systematic use of graduate outcomes data in institutional and program-level quality assurance processes, drawing on precedents such as the UK's Teaching Excellence Framework.

7. Encourage data literacy: Invest in training programs for academic staff, career services professionals, and policymakers to help them read and implement graduate tracking data more effectively.

8. Address ethical concerns: Create explicit criteria for the ethical use of graduate tracking data, especially as predictive analytics becomes increasingly common. This should contain measures to prevent data misuse or misinterpretation.





8.3 Future outlook

The area of graduate tracking is expected to evolve fast in the next years, owing to technology improvements, shifting labour market conditions, and a greater emphasis on responsibility in higher education. Several trends will likely impact the future of graduate tracking:

1. Greater granularity: Future systems may offer more extensive insights into specific abilities and competencies, rather than just broad employment outcomes. This could entail the creation of sophisticated skill taxonomies connected to graduate tracking data.

2. Real-time tracking: Advances in data collection and analysis may enable more frequent, if not real-time, updates on graduate outcomes, allowing for more responsive policymaking and curriculum changes.

3. Integration with lifelong learning: As the concept of continuous learning takes traction, graduate tracking systems may be expanded to track ongoing education and profession changes throughout graduates' careers.

4. Improved predictive capabilities: With the use of AI and machine learning, graduate tracking systems could become more forward-thinking, predicting future skill needs and career trends.

5. Greater European integration: While national settings are important, there is likely to be a drive for greater harmonisation of graduate tracking systems across Europe, which will facilitate student mobility and cross-border comparisons.

To summarise, graduate tracking systems have become a vital instrument for improving the quality and relevance of higher education in the EU. By providing critical data on higher education outcomes, these platforms enable evidence-based decision-making at all levels, from individual student decisions to national policy formation.

As we look to the future, the continuing development and refinement of these systems will be critical in ensuring that higher education remains responsive to the changing demands of students, industry, and society at large.

The hurdles are enormous, but the potential rewards, such as improved educational outcomes, better labour market alignment, and increased competitiveness of European higher education, make this an investment well worth making.





9. ANNEXES

Annex 1: Glossary of Key Terms

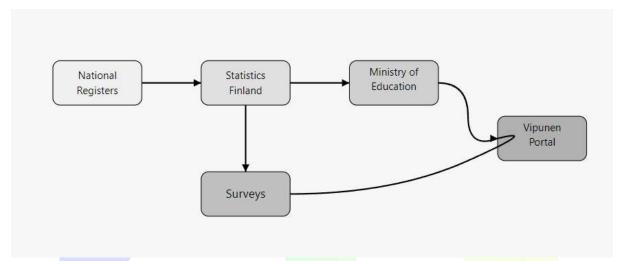
- Graduate Tracking: The systematic collection and analysis of data about the career paths of higher education graduates.
- Employability: The set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations.
- Higher Education Institution (HEI): An organisation that provides higher education, typically including universities and colleges.
- Graduate Outcomes: The employment status, further education pursuits, or other activities of graduates after completing their higher education.
- Longitudinal Study: A research method that involves repeated observations of the same variables (e.g., graduate employment status) over long periods of time.
- Administrative Data: Information collected by government departments and other organisations for the purposes of registration, transaction and record keeping, usually during the delivery of a service.
- Survey Response Rate: The number of people who completed a survey divided by the number of people who were eligible to participate in the survey.
- Skills Mismatch: A discrepancy between the skills that employees possess and the skills that employers need.
- Quality Assurance: The maintenance of a desired level of quality in a service or product, especially by means of attention to every stage of the process of delivery or production.
- Labor Market Information (LMI): Data about the supply and demand of labour, which can include employment rates, salary information, and skills requirements.
- NEET: An acronym standing for "Not in Education, Employment, or Training", typically used to refer to young people who are not engaged in these activities.
- Eurograduate: A pilot project initiated by the European Commission to develop a Europewide graduate survey.
- AlmaLaurea: An inter university consortium in Italy that represents the majority of Italian university graduates and is responsible for graduate tracking activities.
- HESA: Higher Education Statistics Agency, the official agency for the collection, analysis and dissemination of quantitative information about higher education in the UK.
- LEO: Longitudinal Education Outcomes, a dataset in the UK that links higher education and tax data to provide information on graduate employment and earnings.





Annex 2: Graduate Tracking System Flow Diagram

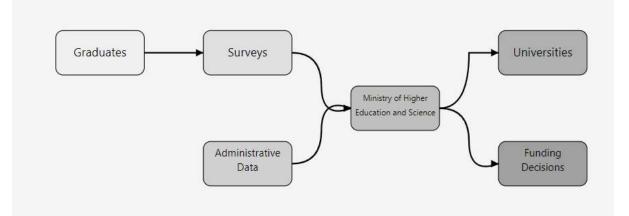
Finland



Explanation:

- 1. National Registers provide data to Statistics Finland.
- 2. Statistics Finland processes this data and shares it with the Ministry of Education.
- 3. Additional data is collected through surveys.
- 4. Both the register-based data and survey data are integrated into the Vipunen Portal.
- 5. The Ministry of Education oversees the entire process and uses the Vipunen Portal for data dissemination.

Denmark



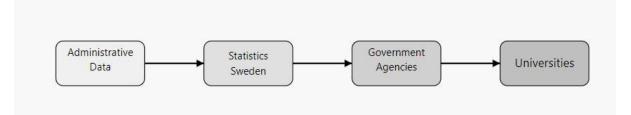




Explanation:

- 1. Graduates provide data through surveys.
- 2. Administrative data is also collected separately.
- 3. Both survey and administrative data are processed by the Ministry of Higher Education and Science.
- 4. The Ministry provides processed data to universities.
- 5. The Ministry also uses this data to inform funding decisions.

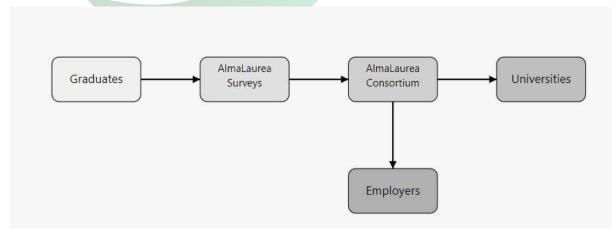
Sweden



Explanation:

- 1. Administrative Data: Sweden relies heavily on administrative data for tracking graduates. This includes data from various government registers.
- 2. Statistics Sweden: This is the central statistical agency that collects and processes the administrative data.
- 3. Government Agencies: Various government agencies, including the Swedish Higher Education Authority, use the processed data for policy-making and planning.
- 4. Universities: Higher education institutions receive the analysed data to inform their practices and improve educational outcomes.





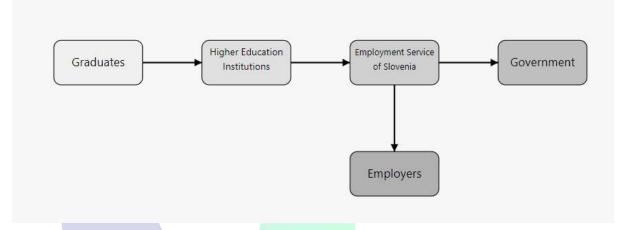




Explanation:

- 1. Graduates: Italian graduates provide data through surveys conducted by AlmaLaurea.
- 2. AlmaLaurea Surveys: These surveys collect comprehensive data on graduates' educational experiences and early career outcomes.
- 3. AlmaLaurea Consortium: This inter-university consortium manages the survey process, analyses the data, and disseminates results.
- 4. Universities: Member universities receive detailed reports on their graduates' outcomes, which they use for quality assurance and program improvement.
- 5. Employers: AlmaLaurea also serves as a platform connecting graduates with potential employers, facilitating the transition from education to work.

Slovenia



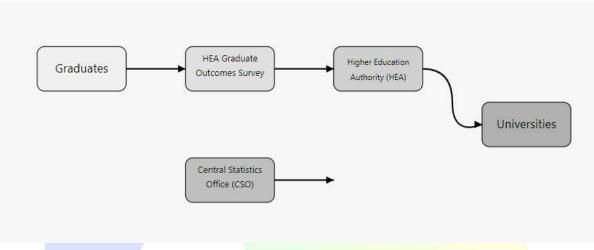
Explanation:

- 1. Graduates: Slovenian graduates provide data through surveys and are tracked through administrative records.
- 2. Higher Education Institutions: Universities and colleges collect data on their graduates and collaborate with the Employment Service.
- 3. Employment Service of Slovenia: This agency plays a central role in tracking graduates' employment outcomes and facilitating their transition to the job market.
- 4. Government: The government uses the data for policy-making and to evaluate the effectiveness of higher education programs.
- 5. Employers: The system facilitates connections between graduates and potential employers, supporting the transition from education to work.

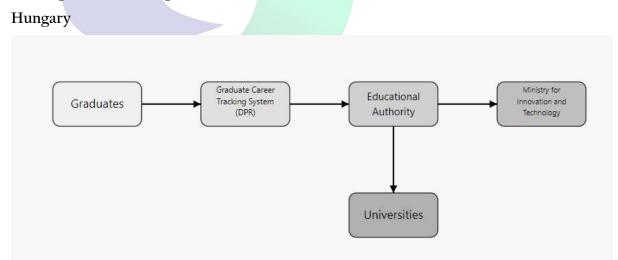




Ireland



- 1. Graduates: Irish graduates participate in the HEA Graduate Outcomes Survey.
- 2. HEA Graduate Outcomes Survey: This survey collects data on graduates' employment status, further education, and other outcomes 9 months after graduation.
- 3. Higher Education Authority (HEA): The HEA manages the Graduate Outcomes Survey and analyses the results.
- 4. Central Statistics Office (CSO): The CSO provides additional long-term data on graduates' outcomes through analysis of administrative records.
- 5. Universities: Higher education institutions receive the analysed data to inform their practices and improve educational outcomes.



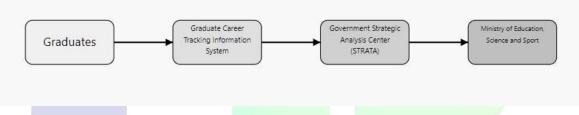




Explanation:

- 1. Graduates: Hungarian graduates participate in surveys conducted through the Graduate Career Tracking System (DPR).
- 2. Graduate Career Tracking System (DPR): This system collects data on graduates' employment outcomes, career paths, and satisfaction with their education.
- 3. Educational Authority: This body manages the DPR, coordinating data collection and analysis.
- 4. Ministry for Innovation and Technology: The Ministry oversees the system and uses the data for policy-making and strategic planning in higher education.
- 5. Universities: Higher education institutions receive analysed data to inform their practices and improve educational outcomes. They also play a role in conducting the surveys.

Lithuania

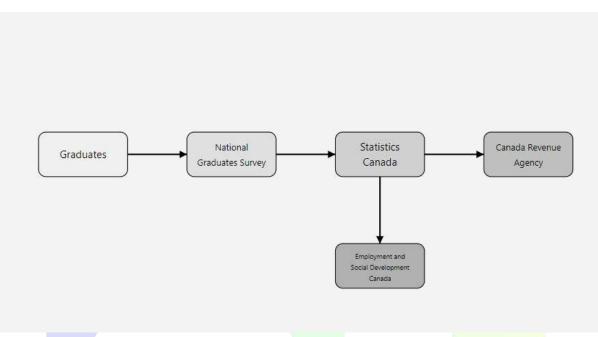


- 1. Graduates: Lithuanian graduates are tracked through the Graduate Career Tracking Information System.
- 2. Graduate Career Tracking Information System: This system collects and processes data on graduates' employment outcomes and career trajectories.
- 3. Government Strategic Analysis Center (STRATA): STRATA manages the tracking system, analyses the data, and provides insights to policymakers and educational institutions.
- 4. Ministry of Education, Science and Sport: The Ministry uses the analysed data for policymaking and strategic planning in higher education.
- 5. Universities: Higher education institutions receive data and insights to inform their practices and improve educational outcomes.





Canada

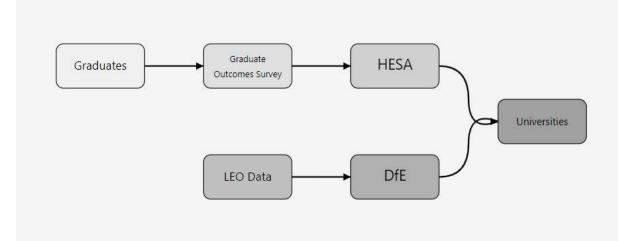


- 1. Graduates: Canadian graduates participate in the National Graduates Survey.
- 2. National Graduates Survey: This survey collects data on graduates' employment status, earnings, and career trajectories 2 and 5 years after graduation.
- 3. Statistics Canada: This agency manages the National Graduates Survey, analyses the data, and produces reports on graduate outcomes.
- 4. Canada Revenue Agency: Provides tax data to complement survey information, enhancing the accuracy of employment and earnings data.
- 5. Employment and Social Development Canada: Uses the analysed data for policy-making and strategic planning in higher education and workforce development.





United Kingdom



- 1. Graduates provide data to the Graduate Outcomes Survey.
- 2. The survey data is processed by the Higher Education Statistics Agency (HESA).
- 3. Separately, Longitudinal Education Outcomes (LEO) data is collected.
- 4. The Department for Education (DfE) processes the LEO data.
- 5. Both HESA and DfE provide processed data to universities.





Annex 3: SWOT Analysis of Graduate Tracking Systems in EU

Strengths

- Different techniques customised to national settings (e.g., Finland's register-based system and Italy's AlmaLaurea consortium)

- Multiple data sources (surveys and administrative data) are integrated in advanced systems like the UK's.

- The increasing use of technology for data collection and analysis (e.g., Finland's Vipunen portal)
- Enhancing coordination among stakeholders (HEIs, government agencies, and employers).
- Using data to inform policy and curriculum development.
- Some systems offer long-term tracking of graduate outcomes (e.g., UK LEO data).

Weaknesses

- Lack of standards among countries, which limits cross-border comparability.
- Different levels of development among EU countries.
- Survey response rates are low in some systems.
- Most systems have limited integration of upcoming technologies such as AI and blockchain.
- Challenges with data privacy and GDPR compliance.
- Incomplete coverage of graduates moving between countries
- Some systems focus exclusively on short-term results.

Opportunities

- Potential for more EU-level coordination and standardisation (e.g., Eurograduate Pilot Survey)
- Rising demand for evidence-based policymaking in higher education.
- The growing emphasis on skill-based employment creates demand for detailed skills data.
- The potential for AI and machine learning to improve predictive capacities.
- Possibilities for real-time or near-real-time tracking as technology advances
- Integrate with lifetime learning initiatives and track continuing professional progress.

<u>Threats</u>

- Concerns about data privacy and the risk of personal data misuse.
- Risk of oversimplifying difficult career paths in data analysis.
- Possible misinterpretation or misuse of data in financing decisions.





- Rapid changes in job marketplaces may exceed the tracking systems' ability to adjust.

- The risk of generating perverse incentives in higher education (for example, focussing on short-term career outcomes at the expense of other educational aims)

- Difficulties in sustaining engagement among graduates and employers over time
- Potential budget constraints that limit investment in system enhancements.

This SWOT analysis gives a balanced assessment of the current state of graduate tracking systems in the EU, highlighting areas of strength and opportunity while also recognising obstacles and potential risks.

This SWOT analysis gives a thorough examination of the current situation of graduate tracking systems in the EU. Here are several important takeaways:

- 1. Strengths: The variety of methodologies and the increasing integration of numerous data sources are significant positives. Positive factors include increased technological use and stakeholder collaboration.
- 2. Weaknesses: Significant drawbacks include a lack of uniformity across countries and disparities in development levels. Challenges include low survey response rates and limited adoption of developing technology.
- 3. Opportunities: There is enormous potential for increased EU-level cooperation and the incorporation of future technologies such as AI. The increasing demand for evidence-based policymaking also presents a significant opportunity..
- 4. Threats: Concerns about data privacy, as well as the possibility of data misunderstanding or misuse, are significant issues. The risk of generating skewed incentives in higher education is also a major issue.

This SWOT analysis could be used to guide strategic planning for the future development of graduate tracking systems in the EU. It identifies areas where efforts could be directed towards improving existing systems and mitigating potential hazards.





Annex 4: Comparative Analysis of Graduate Tracking Systems

This comparative table provides a quick summary of the essential characteristics of graduate tracking systems in the countries studied. It enables rapid comparisons across a variety of crucial variables, including monitoring methods, timelines, funding decisions, data integration, and more.

Some key observations from this comparison:

- 1. Tracking methods vary, with some countries relying more heavily on surveys (UK, Italy) while others emphasise administrative data (Finland, Sweden).
- 2. The timeframe of tracking differs, from short-term snapshots to long-term continuous tracking.
- 3. Only Denmark explicitly uses graduate tracking data in funding decisions.
- 4. The UK and Italy seem to have the most developed systems for using tracking data in quality assurance.
- 5. Data accessibility is generally good, with several countries offering public platforms for data exploration.
- 6. Cross-border comparability remains a challenge for all countries.
- 7. The use of emerging technologies like AI and blockchain is still limited across all systems.

Feature	Denmark	Finland	Hungary	Ireland	Italy	Lithuania	Slovenia	Sweden	Canada	UK
Main tracking method	Surveys + administra tive data	based	e Career Tracking	HEA Graduat e Outcome s Survey + CSO data	tium	Graduate Career Tracking Informati on System	HEI and Employ ment Service collabora tion	Administ rative data	National Graduat es Survey (NGS) + tax data	Outco mes
Timeframe of tracking	Short- term and long-term	Continu ous	l, 3, 5 years after graduati on	after	and 5 years	6, 12, 36 months after graduatio n	Short- term	Long- term	2 and 5 years after graduati on	15 month s (surve y) long- term (LEO)





Use in funding decisions	Yes performan ce-based funding	No	Indirect	No	No	No	No	No	Indirect	Indirec t
Key responsible institution	Ministry of Higher Education and Science	Statistics Finland, Ministry of Educatio n	y, Ministry for	HEA, CSO	AlmaL aurea Conso rtium	Governm ent Strategic Analysis Center (STRATA)	Employ ment Service of Slovenia		Statistics Canada	HESA, DfE
Integration with admin data	Medium	High	Medium	Medium	Low	High	Medium	High	High	High
Employer involvement	High	Low	Medium	Medium	High	Medium	High	Medium	Medium	Mediu m
Use in quality assurance	Medium	Medium	High	Medium	High	Medium	High	Medium	Medium	High (TEF)
Data accessibility	Medium	High (Vipune n portal)	`	Medium	High (Alma Laurea platfor m)	Medium	Medium	Medium	High (public reports and microdat a)	High (publi c platfor ms)
Cross-border comparability	Low	Low	Low	Low	Low	Low	Low	Low	Medium	Mediu m
Use of emerging tech (AI blockchain)		Low	Low	Low	Low	Low	Low	Low	Low	Mediu m





Annex 5: Existing system snapshots

Vipuden, Finland

https://vipunen.fi/

Career Monitoring - Master's degrees

	Number of respondents (Master's degrees)	Distribution of answers (Master's decrees)	Average (Master's degrees)
V TYPE OF EMPLOYMENT	6,927		4.7
⊟ 18. Was the master's/bachelor's degree you completed in 2018 an eligibility requirement for your current job?	6,912		
1 No	2,193	32 %	
2 Yes	4,209	61 %	
3 I do not know	510	7 %	
□ a) The skills and knowledge I learned at the university can be applied well in my current job.	6,909		4.6
1 = fully disagree	123	2 %	
2 = disagree	315	5 %	
3 = slightly disagree	534	8 %	
4 = slightly agree	1,755	25 %	
5 = agree	2,586	37 %	
6 = fully agree	1,596	23 %	
⇒ b) The requirements of my current job correspond well with my academic qualifications.	6,900		4.7
1 = fully disagree	228	3 %	
2 = disagree	327	5 %	
3 = slightly disagree	492	7 %	
4 = slightly agree	1,185	17 %	
5 = agree	2,535	37 %	
6 = fully agree	2,130	31 %	
20. If the requirements of your current job do not correspond well with your qualifications, what was your main reason for accepting the job offer?	2,454		

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gb/ layouts/1	5/xlviewer.a	aspx?id=/en-g	b/Report	ts/Uraseurant	a maisteri	EN.xlsb





Career Monitoring - Master's degrees

 □ IV EMPLOYMENT STATUS □ 11. Which of the following options best describes your situation at the moment? Permanent full-time job Fixed-term full-time job Part-time job Independent entrepreneur/self-employed/freelancer (with your own business ID) Several employment relationships in parallel (working with a tax card) Subsidised employment/practical training Unemployed job seeker Labour force training or similar Full-time studies (leading to a degree or grade) Family leave (from an employment relationship) Family leave (no employment relationship) Working with a grant Outside the labour force (military service, etc.) 4 Other 12. What is the type of your principal employer? 	6,984 6,981 4,914 870 222 201	70 % 12 % 3 %	
 Permanent full-time job Fixed-term full-time job Part-time job Independent entrepreneur/self-employed/freelancer (with your own business ID) Several employment relationships in parallel (working with a tax card) Subsidised employment/practical training Unemployed job seeker Labour force training or similar Full-time studies (leading to a degree or grade) Family leave (from an employment relationship) Family leave (no employment relationship) Working with a grant Outside the labour force (military service, etc.) Other 	4,914 870 222	12 %	
 2 Fixed-term full-time job 3 Part-time job 4 Independent entrepreneur/self-employed/freelancer (with your own business ID) 5 Several employment relationships in parallel (working with a tax card) 6 Subsidised employment/practical training 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	870 222	12 %	
 3 Part-time job 4 Independent entrepreneur/self-employed/freelancer (with your own business ID) 5 Several employment relationships in parallel (working with a tax card) 6 Subsidised employment/practical training 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	222		
 4 Independent entrepreneur/self-employed/freelancer (with your own business ID) 5 Several employment relationships in parallel (working with a tax card) 6 Subsidised employment/practical training 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 		3 %	
 ID) 5 Several employment relationships in parallel (working with a tax card) 6 Subsidised employment/practical training 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	201		
 6 Subsidised employment/practical training 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 		3 %	
 7 Unemployed job seeker 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	78	1 %	
 8 Labour force training or similar 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	6	0 %	
 9 Full-time studies (leading to a degree or grade) 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	105	2 %	
 10 Family leave (from an employment relationship) 11 Family leave (no employment relationship) 12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other 	6	0 %	
11 Family leave (no employment relationship)12 Working with a grant13 Outside the labour force (military service, etc.)14 Other	120	2 %	
12 Working with a grant 13 Outside the labour force (military service, etc.) 14 Other	246	4 %	
13 Outside the labour force (military service, etc.) 14 Other	36	1 %	
14 Other	81	1 %	
	1-4	0 % - 0 %	
	96	1 %	
	6,879		
	6,888		
H. Which of the options in the previous question best describes your primary duties? duties?			
	6,852		

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Almalaurea, Italy

https://www.almalaurea.it/

Employment status of graduates





Survey selection			
year of investigation		level (type of aggregate course) [2]:	
2023 ~		everyone	~
course type [3]:		years since graduation [3]:	
everyone	¥	1	~
Selection of the collective [279,008 graduate	s selected]		
Athenaeum [75]:		Faculty/Department/School:	
everyone	×	all	×
		Selectable only after choosing a university	
disciplinary area [4]:		disciplinary group [15]:	
everyone	×	everyone	~
degree class;		degree course:	
all	*	everyone	2
Selectable only after choosing a course type		Selectable only after choosing a type of course, a university and at least of Faculty, disciplinary group or degree class	one variable between
Employment Status at Graduation [2]:		Enrollment in a second level degree:	
everyone	~	everyone	~
This selection limits the analysis to the interviewees only since the i questionnaire.	information is taken from the	Selectable only after choosing "first level" in "course type". This selection interviewees only since the information is taken from the questionnaire	limits the analysis to the

Source:https://www2.almalaurea.it/cgi-

php/universita/statistiche/tendine.php?anno=2023&LANG=it&config=occupazione

Selected group (broken down by course type)Selected group (broken down by course type)Selected collectiveBachelor's Degreesingle-cycle master's degreetwo-year master's degreePrimar Education Sciences (pre reform course DM n 249/2010) (1Number of graduates279.008153.00931.62593.474Number of interviewees204.210113.81122.80667.593Response rate on total graduates73.273.972.172.3Response rate of contactable graduates78.178.477.378.0Type (%)40.440.732.142.8Women59.659.367.957.2Age at graduation (average, in years)25.624.427.027.1Graduation grade (average, out of 110)104.0101.0106.0108.1Duration of studies (average, in years)3.94.06.82.7						
collective outputBachelor's Degreesingle-cycle master's degreetwo-year master's degreePrimar Education Sciences (pre reform course DM nNumber of graduates279.008153.90931.62593.474Number of interviewees204.210113.81122,80667,593Response rate on total graduates73.273.972.172.3Response rate of contactable graduates78.178.477.378.0Type (%)	1. Population analyzed		Selected group (broken down by (course type)	
Number of interviewees 204.210 113.811 22,806 67,593 Response rate on total graduates 73.2 73.9 72.1 72.3 Response rate of contactable graduates 78.1 78.4 77.3 78.0 Type (%)				master's	master's	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾
Mem 73.2 73.9 72.1 72.3 Response rate of contactable graduates 78.1 78.4 77.3 78.0 Type (%)	Number of graduates	279.008	153.909	31.625	93.474	
Response rate of contactable graduates 78.1 78.4 77.3 78.0 Type (%)	Number of interviewees	204.210	113.811	22,806	67,593	
Type (%) Men 40.4 40.7 32.1 42.8 Women 59.6 59.3 67.9 57.2 Age at graduation (average, in years) 25.6 24.4 27.0 27.1 Graduation grade (average, out of 110) 104.0 101.0 106.0 108.1 Duration of studies (average, in years) 3.9 4.0 6.8 2.7	Response rate on total graduates 🗎	73.2	73.9	72.1	72.3	
Men 40.4 40.7 32.1 42.8 Women 59.6 59.3 67.9 57.2 Age at graduation (average, in years) 25.6 24.4 27.0 27.1 Graduation grade (average, out of 110) 104.0 101.0 106.0 108.1 Duration of studies (average, in years) 3.9 4.0 6.8 2.7	Response rate of contactable graduates 🗅	78.1	78.4	77.3	78.0	
Women 59.6 59.3 67.9 57.2 Age at graduation (average, in years) 25.6 24.4 27.0 27.1 Graduation grade (average, out of 110) 104.0 101.0 106.0 108.1 Duration of studies (average, in years) 3.9 4.0 6.8 2.7	Туре (%)					
Age at graduation (average, in years) 25.6 24.4 27.0 27.1 Graduation grade (average, out of 110) 104.0 101.0 106.0 108.1 Duration of studies (average, in years) 3.9 4.0 6.8 2.7	Men	40.4	40.7	32.1	42.8	
Graduation (average, out of 110)104.0101.0106.0108.1Duration of studies (average, in years)3.94.06.82.7	Women	59.6	59.3	67.9	57.2	
Duration of studies (average, in years) 3.9 4.0 6.8 2.7	Age at graduation (average, in years) 🗅	25.6	24.4	27.0	27.1	
	Graduation grade (average, out of 110)	104.0	101.0	106.0	108.1	
Delay index 🗋 0.35 0.35 0.28 0.37	Duration of studies (average, in years)	3.9	4.0	6.8	2.7	
	Delay index 🗎	0.35	0.35	0.28	0.37	

Translated from Italian to English. Source: <u>https://www2.almalaurea.it/cgi/php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tutti&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1&condocc=tutti&siscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione</u>





2b. Post-graduate training	Selected	Selected group (broken down by o	course type)	
	collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾
They have participated in at least one post-graduate training activity (%)	33.8	20.0	62.7	47.1	
Post-graduate training activities: completed/in progress (% per activity)					
Voluntary collaboration	4.2	2.7	7.0	5.9	
Internship/Practicum	6.3	1.8	23.4	8.0	
Graduate School	3.8	1.0	22.3	2.3	
First level master's degree	4.3	4.7	2.8	4.1	
Other type of master	3.4	2.7	3.7	4.4	
Internship in company	12.6	9.2	9.5	19.2	
Professional training course	1.9	1.7	2.6	2.0	
Activity supported by scholarship	2.2	1.1	2.7	3.8	

TranslatedfromItaliantoEnglish.Source:https://www2.almalaurea.it/cgi-php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tuttii&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1&condocc=tutti&sicrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione

. Employment status		Selected group (broken down by course type)			
	Selected - collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾	
Employment rate 🗎						
Men	56.1	36.9	75.9	81.7		
Women	54.7	39.6	73.4	73.7		
Total	55.3	38.5	74.2	77.1		
Share not working, not looking for but engaged in a university course/internship (%) \square	28.9	48.5	8.9	2.5		
Post-Graduation Work Experience (%)						
They don't work but they worked after graduation	11.5	13.0	7.7	10.3		
They never worked after graduation	33.2	48.5	18.1	12.6		
Job search (%) 🗎						
They don't work and they don't look	35.1	52.9	18.2	10.9		
They don't work but they search	9.6	8.6	7.6	12.0		
Unemployment rate	11.3	12.5	7.5	11.5		

Translated from Italian to English. Source: <u>https://www2.almalaurea.it/cgi/php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tuttii&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1 &condocc=tutti&iscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione</u>







4. Entering the job market

Selected group (broken down by course type)

	Selected – collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾
Number of employed	112.875	43.817	16.929	52.129	
Employed: employment status at graduation (%)					
They continue the work they started before graduation	21.7	27.2	10.1	20.8	
They do not continue the work they started before graduation	16.1	16.9	11.4	17.0	
They started working after graduation	62.2	55.8	78.5	62.2	
Employed: time to enter the labor market (average, in months)					
Time from graduation to starting the first job search	0.9	1.0	0.8	0.8	
Time from start of search to finding first job	2.2	2.1	2.3	2.3	
Time from graduation to finding first job	3.1	3.1	3.1	3.1	

Translated from Italian English. Source: https://www2.almalaurea.it/cgito php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tutt i&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1 &condocc=tutti&iscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione

5. Characteristics of the current work	Selected	Selected group (I			
	collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾
Profession carried out (%) 🗎					
Entrepreneurs and senior management	1.0	1.4	0.5	0.7	
Intellectual, scientific and highly specialized professions	34.1	17.6	48.3	43.3	
Technical professions	30.9	45.6	5.2	26.9	
Executive Professions in Office Work	8.3	10.5	3.2	8.2	
Other professions	8.7	17.3	1.5	3.9	
Other 🗎	17.0	7.6	41.4	16.9	
Type of work activity (%)					
Self-employed activity 🗎	8.6	8.8	13.8	6.7	
Indefinite period 🗅	26.8	28.7	11.4	30.3	
Fixed term	26.6	29.2	24.6	25.1	
Scholarship or research grant 🖻	6.5	1,2	4.4	11.7	
Training contracts 🗈	21.2	15.2	41.4	19.7	
Other contractual forms	7.9	12.3	3.5	5.5	
Without a contract	2.2	4.3	0.8	0.9	
Smart working diffusion (%) 🗈	20.8	15.6	7.3	29.7	
Part-time prevalence (%)	22.2	35.9	13.0	13.7	
Prevalence of involuntary part-time work (%)	10.0	13.0	6.6	8.7	
Number of working hours per week (average) 🗈	35.1	32.2	36.9	37.0	

Translated https://www2.almalaurea.it/cgifrom Italian English. Source: to php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tutt i&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1 &condocc=tutti&iscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione





6. Characteristics of the company	Selected	Selected group (broken down by course type)				
	collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾	
Business sector (%)						
Public	25.3	16.1	51.8	24.3		
Private	69.8	77.1	47.2	70.9		
Non-profit	4.8	6.6	0.9	4.7		
Branch of economic activity (%)						
Agriculture	1,2	1.5	0.2			
Metalworking and precision mechanics	4.3					
Building 🗅	3.0		3.6			
Chemistry/Energy 🗎	4.0		3.6			
Other manufacturing industry 🗅	4.2		0.6			
Total industry	15.4		8.3			
Trade 🗅	10.6	16.0	10.5			
Credit, insurance	3.4		2.2			
Transport, advertising, communications 🗅	4.2		0.7			
Various consultancy 🗈	11.9	8.1	15.2			
Informatics	4.9	5.0	0.3			
Other business services	2.5	2.7	0.7			
Public administration, armed forces	2.8	3.2				
Education and Research 🗈	17.0	8.0	24.9			
Health	14.4					
Other services 🗈	11.3	17.8	1.6			
Total services	82.9	87.1	91.2	76.7		
Geographical area of work (%)						
Northwest	28.3	28.7				
North-East	23.0					
Center	22.2					
South	15.9	15.7	18.9			
Islands	6.4					
Abroad	3.9	3.0	1.6	5.5		

TranslatedfromItaliantoEnglish.Source:<a href="https://www2.almalaurea.it/cgi-php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tuttiphp/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tuttii&facolta=tuttii&facolta=tuttii&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&stella=0&annolau=1i&condocc=tutti&stella=0&annolau=1&condocc=tutti&siscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione

7. Remuneration		Selected group (broken down by course type)			
	Selected collective	Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾
Net monthly salary (average, in euros) 🗎					
Men	1.451	1.283	1.583	1.539	
Women	1.269	1.145	1.432	1.319	
Total	1.343	1.198	1.481	1.419	

Translated from Italian to English. Source: <u>https://www2.almalaurea.it/cgi/php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tutti i&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1 &condocc=tutti&iscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione</u>





8. Use and request of degree in current job	Selected collective	Selected group (broken down by course type)				
		Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾	
Graduates continuing work started before graduation: have noticed an improvement in their work due to graduation (%)	45.3	39.2	62.4	49.4		
Graduates who continue the work they started before graduation and who have noticed an improvement in their work: type of improvement (%)						
From an economic point of view	13.9	13.7	12.4	14.4		
In the working position	27.3	24.9	35.9	27.6		
In the tasks performed	10.3	10.3	10.2	10.4		
In professional skills	48.0	50.8	40.5	47.1		
From other points of view	0.5	0.3	1.0	0.5		
Use of skills acquired with the degree (%)						
To a high extent	56.3		78.9	55.7		
To a lesser extent	32.5		18.0	36.3		
Not at all	11.0	17.8	2.9	7.9		
Adequacy of professional training acquired at university (%)						
Very adequate	60.8		73.1	63.6		
Not very adequate	29.6		23.2	30.1		
Not at all adequate	9.5	15.7	3.5	6.2		
Degree required for work activity (%)						
Required by law	42.5		82.5	35.4		
Not required but necessary	20.9		8.4	27.0		
Not requested but useful	27.0		7.1	30.9		
Not requested nor useful	9.4	15.7	1.9	6.6		

9. Effectiveness of the degree and satisfaction with the current job	Selected collective	Selected group (broken down by course type)				
		Bachelor's Degree	single-cycle master's degree	two-year master's degree	Primary Education Sciences (pre- reform course DM n. 249/2010) ⁽¹⁾	
Effectiveness of the degree in the work performed (%) \square						
Very effective/Effective	64.5	55.5	90.6	63.5		
Quite effective	23.2	24.6	6.7	27.5		
Not very/not at all effective	12.2	19.9	2.6	9.0		
Satisfaction with work done (average, scale 1-10)	7.8	7.7	8.0	7.7		
Employed people looking for work (%)	20.8	21.0	14.0	22.8		

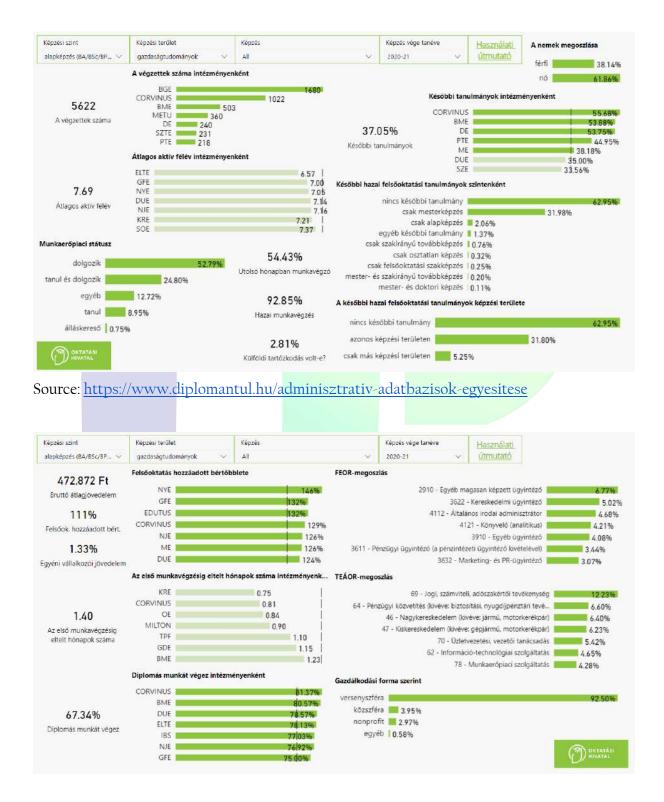
Translated from Italian to English. Source: <u>https://www2.almalaurea.it/cgi-php/universita/statistiche/visualizza.php?anno=2023&corstipo=tutti&ateneo=tutti&facolta=tutti i&gruppo=tutti&livello=tutti&area4=tutti&classe=tutti&postcorso=tutti&isstella=0&annolau=1 &condocc=tutti&iscrls=tutti&disaggregazione=corstipo&LANG=it&CONFIG=occupazione</u>





Graduate Track Tracking System (DPR), Hungary

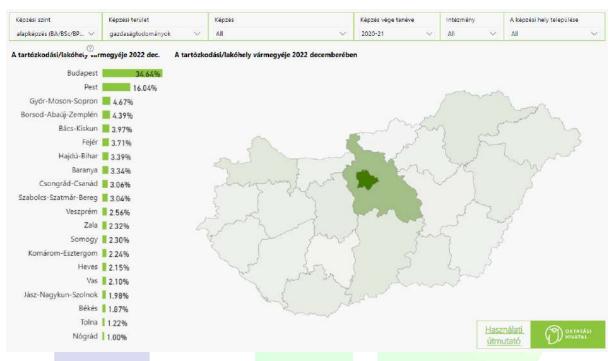
https://www.diplomantul.hu/







Source: https://www.diplomantul.hu/adminisztrativ-adatbazisok-egyesitese



Source: https://www.diplomantul.hu/adminisztrativ-adatbazisok-egyesitese





Annex 6: Sources by country

EU level

Qualification Frameworks, European Higher Education Area and Bologna Process

https://ehea.info/page-qualification-frameworks

Eurograduate Pilot Survey

https://www.eurograduate.eu/

Recommendations of the expert group, European Graduate Tracking Initiative of the European Commission

https://op.europa.eu/o/opportal-service/download-handler?identifier=c5669b4b-6adb-11eb-aeb5-01aa75ed71al&format=pdf&language=en&productionSystem=cellar&part=

Mapping the state of graduate tracking policies and practices in the EU Member States and EEA countries

https://data.europa.eu/doi/10.2766/62505

Denmark

Ministry of Higher Education and Science

https://ufm.dk/en

The Danish Higher Education System

https://ufm.dk/en/education/higher-education/the-danish-higher-education-system

Danish Agency for Labour Market and Recruitment

https://www.star.dk/en/

UddannelsesGuiden/ The Education Guide

https://www.ug.dk/programmes/aboutugdk

Inventory of lifelong guidance systems and practices

https://www.cedefop.europa.eu/en/country-reports/inventory-lifelong-guidance-systems-and-practices-denmark-0

Resourcing higher education in Denmark

https://www.oecd.org/en/publications/resourcing-higher-education-in-denmark_c8217325en.html





Finland

Career Monitoring Survey https://www.aarresaari.net/masters-degree-career-monitoring/?lang=en Education Statistics Finland https://vipunen.fi/en-gb Finnish Education Evaluation Centre (FINEEC) https://www.karvi.fi/en Finnish National Agency for Education's (EDUFI)

https://www.oph.fi/en

Education policy report

https://okm.fi/en/education-policy-report

Hungary

Ministry of Culture and Innovation (KIM)

https://www.felvi.hu/

Office of Education

https://www.oktatas.hu/

Graduate Track Tracking System (DPR), Department of Higher Education Analysis of the Office of Education (2024)

https://www.diplomantul.hu/

Hungarian Graduate Career Tracking System (2010)

https://www.felvi.hu/pub_bin/dload/DPR/DPR_GraduateCarreerTrackingInHungary.pdf

Education Authority

https://www.oktatas.hu/

National Office of Vocational Education and Training and Adult Learning

https://www.nive.hu/

Higher Education Law

https://www.mab.hu/wp-content/uploads/Nftv angol 2Sept2016 EMMI-forditas.pdf

The Youth Guarantee Program

https://fejlesztesihirek.hu/en/the-youth-guarantee-program-has-helped-thousands-of-young-people-under-the-age-of-25-in-the-central-hungarian-region/

Hungarian National Employment Service (Állami Foglalkoztatási Szolgálat)





https://nfsz.munka.hu/

Ireland	

Higher Education Authority (HEA)

https://hea.ie/

Universities Act, 1997

https://www.irishstatutebook.ie/eli/1997/act/24/enacted/en/html

Qualifications	(Education	and	Training)	Act,	1999
https://www.i	rishstatutebook.ie/eli	/1999/act/26/enacted/	<u>en/html</u>		
Institutes	of	Technology		Act,	2006
https://www.i	rishstatutebook.ie/eli/	2006/act/25/enacted	/en/html		

DublinInstituteofTechnologyAct,2006https://www.irishstatutebook.ie/eli/2006/act/25/enacted/en/print#sec2

Student Support Act, 2011 https://revisedacts.lawreform.ie/eli/2011/act/4/front/revised/en/html

Qualifications and Quality Assurance (Education and Training) Act, 2012 https://www.irishstatutebook.ie/eli/2012/act/28/enacted/en/html

National Strategy for Higher Education to 2030 <u>https://hea.ie/assets/uploads/2017/06/National-</u> <u>Strategy-for-Higher-Education-2030.pdf</u>

National Skills Bulletin 2023

https://www.solas.ie/f/70398/x/940b9df162/national-skills-bulletin-2023.pdf

Student Survey, Association of Irish Universities

https://studentsurvey.ie/

Italy

Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) <u>https://www.anvur.it/en/agency/mission</u>

The National Institute for the Analysis of Public Policies (INAPP)

https://www.inapp.gov.it/en/institute

National Statistical Program

https://www.sistan.it/

National Institute of Statistics (Istat)

https://www.istat.it/it/archivio/63418

Excelsior Information System





https://excelsior.unioncamere.net/

Italian National Agency for the Evaluation of the Universities and Research Institutes, ANVUR https://www.anvur.it/

Eurac Research in Bolzano

https://www.eurac.edu/

Center for Field Sciences

https://www.fieldsciences.org/

2020 Report on Graduates Employment Status in Italy

https://motive-euproject.net/wp/wp-content/uploads/2021/11/Graduates-employment-statusduring-Covid-19-in-Italy-1.pdf

Italian graduates' employability in times of economic crisis : overview, problems and possible solutions

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AlmaLaurea Consortium

https://www.almalaurea.it/en/about-us/the-consortium

Lithuania

The Ministry of Education, Science and Sport

https://smsm.lrv.lt/en/

National education strategy 2013-2022

https://eurydice.eacea.ec.europa.eu/national-education-systems/lithuania/lifelong-learningstrategy

Law on Higher Education and Research, 2009

https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/548a2a30ead611e59b76f36d7fa634f8

Government Strategic Analysis Center, STRATA

https://strata.gov.lt/en/

Research And Higher Education Monitoring And Analysis Centre (MOSTA)

https://mosta.lt/

Open Information, Consultation and Guidance System (AIKOS)

https://www.aikos.smm.lt/Puslapiai/Pradinis.aspx

State Data Agency

https://vda.lrv.lt/lt

Official Statistics Portal





https://osp.stat.gov.lt/

Skills anticipation in Lithuania, 2023 Update https://www.cedefop.europa.eu/en/data-insights/skills-anticipation-lithuania-2023-update

Slovenia

Slovenian Qualifications Framework Act

https://www.etf.europa.eu/sites/default/files/2021-11/sqf act en.pdf

Strategic Development Of The Slovenian Quality Assurance Agency For Higher Education For The 2021-2025 Period

https://www.nakvis.si/wp-content/uploads/2021/06/Strategy-SQAA-2021-2025.pdf

Slovenian Development Strategy 2030

https://www.gov.si/assets/ministrstva/MKRR/Strategija-razvoja-Slovenije-2030/Slovenian-Development-Strategy-2030.pdf

Ministry of Education, Science and Sport

https://www.culture.si/en/Ministry of Education, Science and Sport

Statistical Office of the Republic of Slovenia - Education

https://www.stat.si/StatWeb/en/Field/Index/9

Slovenian Quality Assurance Agency for Higher Education

https://nakvis.si/?lang=en

Higher Education Act

https://pisrs.si/pregledPredpisa?id=ZAKO172

Alumni Department, University of Ljubljana

https://www.uni-lj.si/en/study/alumni

Student satisfaction survey, University of Ljubljana

https://www.uni-lj.si/en/university/quality-assurance/monitoring-satisfaction-student-surveys

Regulations On The Student Survey At The University Of Ljubljana, University of Ljubljana (in Slovene)

https://www.uni-lj.si/assets/Sluzba-za-spremljanje-kakovosti-analize-in-porocanje/ANG/Ruleson-UL-student-surveys.pdf

Alumni Department, Faculty of Economics

https://www.alumnief.si/

Alumni Department, University of Maribor

https://moja.um.si/en/after-study/Strani/alumniUM.aspx





Employment Service of Slovenia https://www.ess.gov.si/en/jobseekers

Sweden

Swedish National Agency for Education

https://www.skolverket.se/andra-sprak-other-languages/english-engelska

Education and Training Monitor 2020

https://op.europa.eu/webpub/eac/education-and-training-monitor-2020/countries/sweden.html

The Swedish Higher Education Act

https://www.uhr.se/en/start/laws-and-regulations/Laws-and-regulations/The-Swedish-Higher-Education-Act/

Statistics Sweden - Employment and income after completed education

https://www.scb.se/en/finding-statistics/statistics-by-subject-area/education-andresearch/education-of-the-population/employment-and-income-after-completededucation/# Tablesandgraphs

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