



**Enhancing Labour Market Relevance and Outcomes (LMRO) of Higher Education** 

# **LMRO Partnership Initiative: Peer Learning Activities**

1st International Policy and Practice Seminar on Labour Market Information for Learners and Higher Education Institutions

Monday 30 November 2020, 10:00-16:30 CET via Zoom

# **Table of Contents**

LMRO Partnership Initiative and its peer learning model	3
LMRO Partnership Initiative (LMRO-PI)	3
LMRO-PI peer learning model	3
1st International Policy and Practice Seminar	4
Aim and topic	4
Participants	4
Seminar materials	4
Programme	5
10:00-10:50: Opening session	5
11:00-12:30: Session on "labour market information for HEIs"	5
14:30-16:30: Session on "labour market information for learners"	6
Background information on the expert presentations	7
10:00-10:50: Opening session	7
LMI for All, the United Kingdom	7
11:00-12:30: Session on "labour market information for HEIs"	10
Establishing a system for monitoring employability of higher education graduates in Slovenia and upgrading of eVŠ, Slovenia	
HRSM Project Graduate Tracking, Austria	12
University of Porto Employment Observatory, Portugal	14
14:30-16:30: Session on "labour market information for learners"	15
Labour Market Information for Post-Secondary Education Students and Graduates, Canada	15
CareersPortal, Ireland	16
Background information on the expert panel discussion	19
What additional information would be helpful to support students in their study and career choices, could it be obtained?	
From a learner's perspective	19
From a policy maker's perspective	20
How should LMI reach learners to effectively support them in decision-making?	22
From an online information portal manager's perspective	22
From a researcher's perspective	23

# LMRO Partnership Initiative and its peer learning model

# LMRO Partnership Initiative (LMRO-PI)

The European Commission and the OECD launched the LMRO Partnership Initiative in September 2019. The LMRO Partnership Initiative builds on the OECD country reviews of the Labour Market Relevance and Outcomes of Higher Education Project. While the LMRO country reviews take a single-country perspective, the LMRO Partnership Initiative involves several countries concurrently in analysis, policy development and peer learning. The methodology of the LMRO Partnership Initiative combines: (i) country-specific examinations of labour market outcomes and policies, (ii) peer learning activities, and (iii) support for higher education institutions (HEIs) to identify and address institutional-level barriers and introduce and expand the adoption of effective practices. Austria, Hungary, Portugal and Slovenia participate in the LMRO Partnership Initiative as four core countries, while other countries are invited to participate in some of its activities, including the peer learning activities.

# LMRO-PI peer learning model

The peer learning activities offer insights into policies and practices that seek to enhance the labour market relevance and outcomes of higher education. The activities are organised at two levels, international and national.

- In **international seminars**, we share key findings from research, innovative national policies and HEI practices from a range of countries with an international audience of HE policy stakeholders, including policy makers, HEI representatives and researchers, as well as representatives of quality assurance bodies, industry, and student unions. We aim to identify key questions relevant for policies and practices that require further attention.
- In national workshops, organised upon request, national stakeholders discuss country-specific challenges and priorities, informed by research and innovative policies and practices from other countries. National workshops aim to support the adoption of actionable policy options and effective scalable institutional practices.

As part of the LMRO Partnership Initiative, we will organise between November 2020 and February 2022 three international seminars, followed by national workshops upon request by countries. Countries interested in organising a national workshop are invited to contact <a href="mailto:HigherEducation@oecd.org">HigherEducation@oecd.org</a>.



# **1st International Policy and Practice Seminar**

# Aim and topic

In the seminar, we seek to stimulate and contribute to an international policy debate by leveraging on the perspectives of policy makers, HEI representatives, and the wider group of higher education policy stakeholders. The topic of the seminar is labour market information (LMI), which has become increasingly important in helping learners make study and career choices, and in helping HEIs to make their educational offering more responsive to employer skill demands. The following key questions guide the discussion:

- LMI for learners: What LMI is available to learners? When and how should it reach learners to be effectively used in decision-making? What additional LMI would be helpful, and how should it reach learners?
- LMI for HEIs: What LMI is available to HEIs? How is LMI used in the development of educational programmes, for quality assurance and career guidance purposes? What additional LMI would be helpful, how could it be obtained and used?

# **Participants**

Higher education policy makers, HEI representatives and researchers, as well as the wider group of higher education stakeholders (e.g. representatives of quality assurance bodies, industry, and student unions).

#### Seminar materials

- You can download all the presentations on the OECD Higher Education Policy Team webpage.
- There is no recording available.
- For any other inquiries about the seminar, please contact <a href="mailto:Shizuka.KATO@oecd.org">Shizuka.KATO@oecd.org</a>.

# **Programme**

# 10:00-10:50: Opening session

#### Welcome

- Shizuka Kato, Analyst, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD
- Thomas Weko, Team Leader, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD
- Jörg Niehoff, Policy Coordinator, Innovation and EIT, Directorate General for Education, Youth, Sport and Culture, EC
- **Key findings from the OECD Working Paper** on "<u>the role of labour market information in guiding educational and occupational choices</u>"
  - Andrea-Rosalinde Hofer, Lead Analyst, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD
- **Expert presentation** on "the development of the LMI for All web portal since its launch in 2012" (more information below)
  - Sally-Anne Barnes, Reader and Director of Graduate Studies, Institute for Employment Research, University of Warwick, the United Kingdom

# 11:00-12:30: Session on "labour market information for HEIs"

#### Introduction

- Maria Palladino, Policy Officer, Innovation and EIT, Directorate General for Education, Youth, Sport and Culture, EC
- Expert presentation on "the establishing a system for monitoring employability of higher education graduates in Slovenia and upgrading of <u>eVŠ</u> project" (more information <u>below</u>) Why is the availability of LMI important for HEIs?
  - Duša Marjetič, Head of Higher Education Division, Ministry of Education, Science and Sport, Slovenia
  - o Sonja Mavsar, Chief Expert, Ministry of Education, Science and Sport, Slovenia
- **Expert presentation** on "<u>graduate tracking</u> in Austria" (more information <u>below</u>) What LMI is available to HEIs? How is LMI used in the development of educational programmes, for quality assurance and career guidance purposes?
  - o Michael Hofer, Head of Unit for Quality Assurance, University of Vienna, Austria
- Expert intervention on "the Eurograduate initiative"
  - Kinga Szuly, Head of Sector, Higher Education, Directorate General for Education, Youth,
     Sport and Culture, EC
- Expert presentation on "the use of graduate survey data at the University of Porto"
   What LMI is available to HEIs? How is LMI used in the development of educational
   programmes, for quality assurance and career guidance purposes?
  - Maria de Lurdes Fernandes, Vice-Rector for Education, Academic Affairs and International Cooperation, University of Porto, Portugal
  - João Correia da Silva, Pro-Rector for Institutional Development and Business Relations, University of Porto, Portugal

# Group discussion (using the breakout room function)

Questions for discussion: "Most crucial LMI for HEIs"

- What information about labour market outcomes of graduates and employer skills demand is – in your view – most crucial for HEIs to have, and why?
- Is this information already available for and used by your HEI or in your HE system? If yes, in which ways? If not, how could it be obtained?

#### Session summary

 Thomas Weko, Team Leader, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD

# 14:30-16:30: Session on "labour market information for learners"

#### Introduction

- Nora Brüning, Analyst, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD
- Expert presentation on "the work of the <u>Labour Market Information Council</u>" (more information below)

What LMI do learners want and what LMI is available to learners? What additional LMI would be helpful, and how should it reach learners?

- o Bolanle Alake-Apata, Economist, Labour Market Information Council, Canada
- Expert presentation on "<u>CareersPortal</u>" (more information <u>below</u>)
   When and how should LMI reach learners to be effectively used in decision-making?
  - o Eimear Sinnott, Managing Director, CareersPortal, Ireland
- Group discussion (using the breakout room function)
  - Question for discussion: What additional information would be helpful for learners, and in which ways should it reach learners to be effectively used in decision-making?
- Panel discussion (more information below)

What additional information would be helpful for learners, and in which ways should it reach learners to be effectively used in decision-making?

- Viktória Lilla Pató, Vice President for Foreign Affairs, Association of Hungarian PhD and DLA Candidates, Hungary
- o Sofia Escária, President, Academic Federation of Lisbon, Portugal
- o Ellen Thompson, Head of Orientation Mission, Ministry for Higher Education, Research and Innovation, France
- Marina Crnčić Sokol, Head of Unit for Strategy and Development of Higher Education, Ministry of Science and Education, Croatia
- o Sveinn Aðalsteinsson, Managing Director, Education and Training Service Centre, Iceland
- o Fjóla María Lárusdóttir, Specialist, Education and Training Service Centre, Iceland
- o Arnar Porsteinsson, Editor, Education and Training Service Centre, Iceland
- Jenny Bimrose, Emeritus Professor, Warwick Institute for Employment Research, University of Warwick, the United Kingdom

# Session summary and closing

- Andrea-Rosalinde Hofer, Lead Analyst, Higher Education Policy, Policy Advice and Implementation, Directorate for Education and Skills, OECD
- Jörg Niehoff, Policy Coordinator, Innovation and EIT, Directorate General for Education, Youth, Sport and Culture, EC

# Background information on the expert presentations

10:00-10:50: Opening session

LMI for All, the United Kingdom

Key facts about the initiative		
Country	The United Kingdom	
Name of the initiative	LMI for All	
Website	https://www.lmiforall.org.uk	
Name of organisation implementing the initiative	Institute for Employment Research, University of Warwick	
Year it started and ended/is expected to end	2012 – to date (current funding to 2021)	
Contact	Sally-Anne.Barnes@warwick.ac.uk / LMIforAll.dfe@education.gov.uk	

## Short summary of the initiative

Funded by the UK Department for Education, LMI for All (<a href="https://www.lmiforall.org.uk/">https://www.lmiforall.org.uk/</a>) uses technological solutions to bring together different sources of labour market data to support the work of careers practitioners in delivering high quality careers advice. The aim of LMI for All has been to provide a single portal for multiple, high quality sources of national and regional data, which is openly accessible to a wide range of potential users.

This development has enabled access to a number of publicly funded and open large-scale datasets, including the Annual Survey of Hours and Earnings (ASHE), the Labour Force Survey (LFS) and the Employer Skills Survey (ESS). It also provides a gateway to specialist datasets that have been developed by the Institute of Employment Research at the University of Warwick, including the *Working Futures* employment projections and pay data at a detailed occupational level. The data are made freely available via an Application Programming Interface (API) for use by developers. By using the LMI for All API developers can embed and visualise the labour market data in the applications, widgets or websites they create. Data are often presented alongside qualitative information, such as descriptive and explanatory text or videos, to further inform and engage their users.

By optimising access to these high quality datasets, and others, through LMI for All, data are available in a way that allows them to be used in a number of career related interfaces. These are supporting individuals in making more informed decisions about education, training and work. Data in the LMI for All database can help answer such questions as:

- Where are the jobs of the future?
- How much can I earn in this job?
- What qualifications and skills do I need to this job?
- I have good technical skills, what jobs can I do?

At its heart, this is an open data project, which supports the wider government agenda to encourage use and re-use of government data sets. It allows creative, talented developers to access data and gives them the opportunity to produce useful, visually striking apps, bringing the data to life for varying audiences, including individuals, careers practitioners, employers and policy makers. LMI for All has changed the way information on the labour market is made available and used by a range of beneficiaries (e.g. government, careers organisations, schools and colleges) across the UK to support the delivery of careers.

## Why was the initiative launched?

The LMI for All service was first piloted, then developed from 2012, with funding from the UK Commission for Employment and Skills (UKCES) to respond to a number of issues and concerns. First, despite the increasing emphasis on the importance of LMI for supporting individual labour market

transitions and career choices, general access to a number of publicly funded and open large-scale databases was limited. In the absence of high quality and reliable data, a range of partial information and data with unknown provenance was increasingly becoming available online. For individuals searching for information on the labour market to help with their career choices, this resulted in conflicting and/or dated information being used. The publication of the 2012 Government open data white paper 'Unleashing the Potential' created new possibilities for the delivery of careers LMI and intelligence (HM Government, 2012). The white paper set out how the Government was opening up access to publicly funded datasets to unlock the potential of open data.

Second, UK public services were increasingly using the internet and technology to deliver services online and provide greater access to information. Alongside these changes, careers delivery services (in both the public and private sectors) were also using advances in technology to enhance the services offered to individuals. It was apparent that there was a need to strengthen and improve the quality of LMI for careers and employment practice, essential to inform the choices of individuals wishing to enter or re-enter the labour market, or to move between jobs. To respond to these changes and support the enhancement of careers service delivery, the feasibility of a careers database was piloted drawing upon access to open data and technological advances in data linking and processing. The careers database was piloted to evaluate whether such a service could provide easy access to improved data through a single portal and have the potential to enhance careers delivery services. The pilot confirmed the feasibility and viability of the foundation concepts and ideas to create a database with a test infrastructure created. The careers database became known as the 'LMI for All' service.

After successful completion of the pilot, from 2012-2015, the careers database was expanded with new and updated datasets, as well as undergoing further testing. The technical infrastructure was improved and the application programming interface (API), which enables access to the database through querying, was positively evaluated through two sets of hack and modding days. During this development period, a range of additional datasets were explored their potential to add value to the service. The service was also promoted through a number of stakeholder events to raise awareness of the resource and its potential to support those wishing to integrate LMI and intelligence effectively and creatively into a career's education and guidance context. A number of applications were developed, and third parties started to embed data from the LMI for All database into their own websites, integrating it as part of their careers offer. From 2015, the LMI for All service was given full project status by the Government and has continued to be maintained, updated and enhanced up to the present time. The overall aim of LMI for All continues to be:

• To increase and widen use of high-quality labour market information in order to support decisions about careers and learning.

It has been proven that the LMI for All service is able to meet the needs of a wider range of end users and their customers. A key element of continuing the successes of 'LMI for All' is to embed this significant and substantial resource not only through continued efforts in dissemination, but also in active engagement with stakeholders. This ensures that understanding continues to be developed of how the resource can be harnessed and integrated to enhance support to individuals and to careers organisations in a manner that increases the efficacy of individual labour market transitions.

# What are the key achievements?

The LMI for All service continues to be known and used by a range of users within their websites and learning platforms. Many of those using LMI for All continue to develop their offering by drawing upon more data from LMI for All. Some of our users include Eluceo, BBC Bitesize Careers, Career Pathways by Float, SkillsMatch by London Councils, U-Explore's Start, and the National Careers Service. Some case studies of those who have developed websites using LMI for All provide useful insights into how the LMI for All service can be used (see <a href="https://www.lmiforall.org.uk/designers/">https://www.lmiforall.org.uk/designers/</a>). The LMI for All service

has continued to see significant increases in its use. Current data on usage suggests that there are on average 700,000 queries per day (in 2018-2019, this was on average 400,000-500,000 queries per day), which equates to around 7-8 queries a second. The LMI for All API monitoring system reports regular spikes of around 800,000 queries a day.

A further key achievement has been the development of two free widgets: **Careerometer** and **Skillsometer**. These were developed and made freely available, supporting those unable to develop their own interface to LMI for All as they may lack the technical capacity and/or resources. Schools and colleges have been able to embed these widgets into their own websites to provide access to LMI.

Finally, the LMI for All team have been able to maintain, develop and enhance the service. This has included: expanding the technical infrastructure to manage increased usage; supporting those wishing to develop their own website or application using LMI for All; offering LMI training for those working in careers; and expanding the database with new datasets. Work is currently underway to add a local dimension to the database.

#### What do you think were the key success factors?

For the LMI for All team, a key success factor has been our ability to engage with a range of stakeholders – from those delivering careers services to those creating careers websites and applications using LMI for All. Key to the development of LMI for All, which has contributed to its success and continued take-up, has been its focus on the three strands of work that make up the service, namely data, technical and stakeholder. Each strand has key objectives that contribute to the overall success of the service. LMI for All is not just a database, but provides a service that: supports developers in understanding the data and the role it plays in supporting career pathways; and supports the professional development of those working in careers in understanding LMI, interpreting the data and using it in practice.

#### What do you think were the barriers?

There are two main barriers to the initiative. During the beginning phases of the LMI for All development, a significant challenge was developing understanding of what LMI for All was, how it could be accessed and used. The primary audience for the service were unable to create a brief for a developer and did not have access to resources to appoint a developer. Whilst this continues to be a barrier for some to use the service, there are a number of freely accessible websites that use LMI for All. A continued barrier to the enhancement of the service is a lack of local data from official sources that are disaggregated at the level required and that are statistically reliable and can be published.

#### If you were to start again, what would you do differently?

If we were to start again, we would implement an improved monitoring system to be able to better evaluate the impact of LMI for All. An improved monitoring system would enable us to enhance our understanding of when LMI for All is used and by who, as well as what data are being used.

## Any additional information

The following reports document the piloting, developing and continued enhancements to the LMI for All service since its development in 2012:

- 2012 Summary report on feasibility study
- 2012-15 Report of development process
- 2015-16 Report on data, technical and stakeholder activities
- 2018 Report on <u>Labour market information for all: stakeholder engagement and usage, data</u> and technical developments, documenting work and activities undertaken in 2016-2017
- Labour market information (LMI) for All 2017 to 2018

- Developing and enhancing a labour market information database: LMI for All (Stakeholder Engagement and Usage, Data and Technical Developments) (2018-2019)
- Enhancing a labour market information database: LMI for All (Stakeholder Engagement and Usage, Data and Technical Developments) (2019-2020) – to be published shortly by the UK Department for Education

# 11:00-12:30: Session on "labour market information for HEIs"

Establishing a system for monitoring employability of higher education graduates in Slovenia and upgrading of eVŠ, Slovenia

Key facts about the initiative	
Country	Slovenia
Name of the initiative	(project) Establishing a system for monitoring employability of higher
(in English)	education graduates in Slovenia and upgrading of eVŠ*/**
Name of the initiative	"Vzpostavitev sistema za spremljanje zaposljivosti visokošolskih diplomantov
(in the local language)	v Sloveniji in posodobitev eVŠ"
Website	http://eportal.mss.edus.si/portal/statistika-in-analize
Name of organisation implementing the initiative	Republic of Slovenia Ministry of Education, Science and Sport; Higher Education Division
Year it started and ended/is expected to end	2018 –2020 (prolonged until 2022)
Contact	Duša Marjetič, (dusa.marjetic@gov.si)

#### Short summary of the initiative

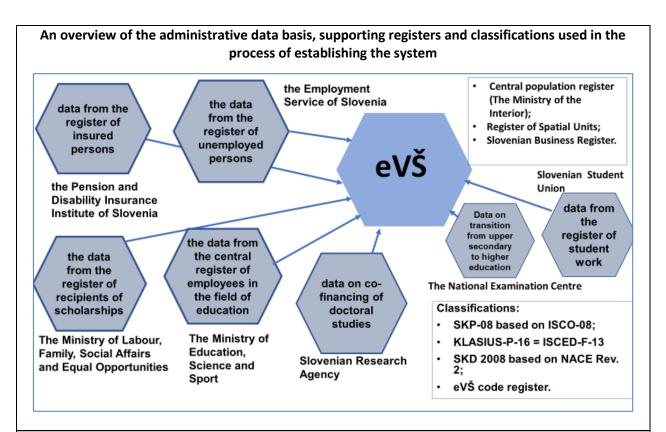
The main task within the project is the process of collecting and linking (on the basis of the unique personal identification number) the administrative data from several different administrative basis: eVŠ (The records and analytical information system of higher education in the Republic of Slovenia), data from the Register of insured persons kept by the Pension and Disability Insurance Institute of Slovenia, the data from the register of unemployed persons kept by the Employment Service of Slovenia, the data from the register of recipients of student scholarships kept by the Ministry of Labour, Family, Social Affairs and Equal Opportunities and the data from the central register of employees in the field of education kept by the Ministry of Education, Science and Sport.

In addition, the existing eVŠ system is currently being upgraded with s.c employability module for collecting and analysing data accompanied by the development of the methodology, and setting-up the group of experts and ongoing consultations with relevant stakeholders.

Slovenian system for monitoring employability of higher education graduates includes the data on the following periods:

- Transition from upper secondary to higher education;
- Higher education period (from the enrolment until graduation, ISCED levels 6, 7 and 8)
- The period after graduation (transition to Slovenian labour market and career progress).

Target population: all graduates from all Slovenian higher education institution's study programmes accredited by the Slovenian Quality Assurance Agency for Higher Education from the year 2005 onward.



#### Why was the initiative launched?

To improve the quality of Slovenian higher education institutions (and system) with quality data on the labour market status/career status of their graduates in order to support the designing and updating of study programme curricula according to the labour market needs, to improve acquisition of relevant skills and strengthen career guidance for future students, current students and graduates and to support self-evaluation/self-assessment of higher education institutions.

In addition, the initiative (project) aims to contribute to policy development and decision making at national (ministerial) level (as the basis for cross-sectoral dialogue).

#### What are the key achievements?

- Developing technical solution to enabled the linking of several heterogeneous administrative databases.
- From content point of view, developing methodology for the graduate tracking system on national level based on transforming administrative data into quality data for graduate tracking/ monitoring purposes.
- From applicative point of view, upgrading of the eVŠ with analytical s. c. employability module (tailor-made) to be used by the relevant stakeholders.

# What do you think were the key success factors?

Qualitative preliminary preparation in pre-project phase which included comprehensive and detailed discussions with all relevant stakeholders supported by three feasibility studies.

Well established national higher education educational data system with quality data on graduates (Student and graduate records, including records on student's international mobility and Records of study programmes).

#### What do you think were the barriers?

The system was developed within the project with well-defined framework and strict set of activities and timeline with less expressed time set for the issues on quality of the captured administrative data for the graduate tracking purposes.

# If you were to start again, what would you do differently?

When planning the project timeline more time could be devoted to data quality checks, more discussions, and reflexions with higher education institutions regarding the designing of reports/analysis i.e. which data and how to include it in an individual report (fit-for-purpose). Mostly due to the above-described issues, the project is being extended for two years.

#### Any additional information

- \* The project is co-financed by the Republic of Slovenia and EU European Social Fund (Operational Programme for the Implementation of the EU Cohesion.
- \*\*eVŠ (eHE Elecronic Higher Education) The records and analytical information system of higher education in the Republic of Slovenia.

#### HRSM Project Graduate Tracking, Austria

Key facts about the initiative		
Country	Austria	
Name of the initiative	HRSM Project Graduate Tracking	
(in English)	TROIN Project Graduate Tracking	
Name of the initiative	LIDCAA Danielt Alexal continue and Translain a	
(in the local language)	HRSM Projekt Absolvent*innen-Tracking	
Website	https://qs.univie.ac.at/en/analyses/graduate-tracking/hrsm-project/	
	Project lead: University of Vienna	
Name of organisation	Project partners: 20 Austrian Public Universities	
Name of organisation implementing the initiative	Implementation by Statistics Austria	
implementing the initiative	HRSM Project funded by the Austrian Federal Ministry of Education,	
	Science and Research with EUR 250,000	
Year it started and ended/is	2017 - 2021	
expected to end	2017 - 2021	
Contact	michael.hofer@univie.ac.at	

#### Short summary of the initiative

With the initiative a register-based analysis of career starts and career paths of university graduates in the Austrian labour market is established for Austrian public universities. The universities participating in the initiative have access to important comparative information about their graduates' entry to the profession and their first career years after they completed their studies (especially about the duration until they found their first occupation, their employment status, labour market integration and income and the economic sector in which they work). The results of the graduate tracking initiative are used by HEIs for a number of purposes, including:

- as a basis for steering decisions by university bodies,
- as an aid for prospective students when deciding on a degree programme,
- as a basis for career counselling for graduates,
- as a data basis for the evaluation and further development of study programmes,
- as general information for the public.

#### Why was the initiative launched?

Up until 2016 only a handful of Austrian universities performed register-based graduate tracking and two different cooperation partners and study designs existed. The current initiative was launched with the following aims and measures:

1. Synthesis and further development of existing approaches for a register-based tracking of graduates' career paths

- 2. Positioning the respective university in a nationwide comparison by means of an appropriate, register-based data infrastructure
- 3. Comparative analysis of career paths of graduates and dropouts of the participating universities
- 4. Strengthening inter-university cooperation
- 5. Standardised processing and visualisation of the results, in a way that is appropriate for strategic decisions, for purposes of curriculum development, planning of degree programmes and as information for prospective students and career services
- 6. Guaranteeing the study design's sustainability regarding feasibility and affordability after the project's completion, possibility of including more universities in the project, as well as the potential for a larger data basis.

# What are the key achievements?

HEIs participating in the project

- have access to an individual online data base (**STATcube**) with a multitude of comparative information about their graduates' entry to the profession and their first five career years after they completed their studies.
- receive fact sheets divided into the university degree programmes and academic degrees (bachelor's, master's, diploma, doctoral) as well as broader fields of study (ISCED F 2013 fields of education). The fact sheets comprise diagrams for selected results in the following areas:
  - Labour market status
  - o Time period until the first employment
  - o Top-5-sectors
  - Gross monthly income for full-time employees

# What do you think were the key success factors?

Funding, profound expertise of project leaders and Statistics Austria, leadership, established collegiate network of quality assurance specialists of Austrian public universities, push of universities by the science ministry via performance agreements to perform graduate tracking, enough project time to discuss, design, revise and agree on study design, processing and visualization of results and data access, willingness to work for the greater good.

# What do you think were the barriers?

Synthesizing different existing approaches into one common study design.

Agreeing on the core information that should be included in the fact sheets.

Study programmes with low numbers of graduates do not easily reach a sample size larger than 30 (necessary that the results can be published for data privacy protection reasons).

# If you were to start again, what would you do differently?

Looking back no major adaptions of the initiative seem necessary. The project was well thought-out and the implementation worked well.

#### Any additional information

By using a register-based approach, Austrian universities can avoid costly graduate surveys with usually low response rates to gather information that is already collected and available through Statistics

LMI can be used for additional analyses of regional income and mobility, gender pay gap, etc. Cross-border graduate tracking is needed for those graduates that leave the country after graduation (cf. initiative by European Commission).

## University of Porto Employment Observatory, Portugal

Key facts about the initiative	
Country	Portugal
Name of the initiative	U.Porto Employment Observatory
(in English)	on one employment observatory
Name of the initiative	Observatório do Emprego e Trajetória Profissional dos
(in the local language)	Diplomados da U.Porto
Website	
Name of organisation implementing the University of Porto	
initiative	Offiversity of Porto
Year it started and ended/is expected to end Started in 2008	
Contact	Joao Correia da Silva ( <u>icsilva@reit.up.pt</u> )

#### Short summary of the initiative

The main initiative carried out by the Employment Observatory is a Graduate Survey. Every year, the cohort which graduated 2 years before is surveyed on: employment status, quality of education at U.Porto, and match between skills acquired at U.Porto and skills needed at current job.

#### Why was the initiative launched?

The initiative was launched to collect demand-side information that is important for the design of study programmes, for quality assurance and for career guidance:

- Employment status and wages of recent graduates (many unemployed looking for their first job are not registered at employment centres and thus not detected in national statistics).
- Perceived quality of education and training received at U.Porto and its importance for their skills and to the job market.
- Perception of recent graduates regarding skills that are important for their career development and that they did not acquire at U.Porto.

## What are the key achievements?

Decent response rate (between 40% and 50%) allows successful attainment of proposed goals:

- Characterisation of unemployment rates and wage distribution for each study programme
- Feedback regarding quality of education and training along different dimensions (good in terms of theoretical knowledge acquisition; bad in terms of match with job market needs)
- Feedback regarding skills that are important for career development and that were not acquired at U.Porto (mainly soft skills such as time management and teamwork but also hard skills such as use of ICT and knowledge of foreign languages).

#### What do you think were the key success factors?

Intense personal involvement of Vice-Rector and Pro-Rector, quality of researcher chosen to design survey, data on personal contacts of graduates, goodwill of recent graduates in filling a relatively long survey.

# What do you think were the barriers?

Data protection regulation makes implementation more challenging, and places barriers on the dissemination of results.

# 14:30-16:30: Session on "labour market information for learners"

# Labour Market Information for Post-Secondary Education Students and Graduates, Canada

Key facts about the initiative		
Country	Canada	
Name of the initiative	Labour Market Information for Post-Secondary Education Students and Graduates	
Website	https://lmic-cimt.ca/	
Name of organisation implementing the initiative	Labour Market Information Council (LMIC)	
Year it started and ended/is	The LMIC website was created in April 2018	
expected to end	The first Interactive Dashboard was launched in June 2019	
Contact	Bolanle Alake-Apata (bolanle.alake-apata@lmic-cimt.ca)	

#### Short summary of the initiative

LMIC's mission is to ensure high quality, reliable and useful labour market information can be accessed and understood by a wide variety of audiences, including youth and post-secondary education (PSE) students and graduates.

In 2018 we conducted a number of surveys of underrepresented groups to learn more about the particular challenges and LMI needs faced by Canadians. Recent graduates places particularly high importance on the skill requirements of jobs and tended to feel available LMI lacks insights about the future. The main findings of these surveys are available on our <a href="Public Opinion Research dashboard">Public Opinion Research dashboard</a>. Building on this work, we conducted immersive, online focus groups with first-year college and university students to gain an in-depth understanding of the type of <a href="wage information">wage information</a>, <a href="skills">skills</a> information and <a href="mailto:employment forecast information">employment forecast information</a> they seek.

In an effort to start to close the information gaps identified, we analysed a new administrative dataset linking earnings from tax files to university enrolment information. This allowed us to link earnings to fields of study – a key dimension of wages identified – and produce an interactive dashboard on <u>Post-Secondary Graduate Earnings</u>.

Although, available tax data are several years out of date, we have begun to deliver timely skills information via our <u>Canadian Online Job Posting Dashboard</u>. Through this tool users can explore monthly data (with a 1- to 2-week lag) on the skills and other work requirements in specific occupations and regions across Canada. We are continuing to work to improve this recently released tool by integrating labour market information from a variety of sources to meet the needs of PSE students and graduates, among others.

#### Why was the initiative launched?

We understand the value of having meaningful jobs and the importance of enabling companies to grow and prosper. To support those goals, LMIC aims to provide Canadians with data and insights so the decisions they make regarding their careers, training, education, investments, and workplace practices are as informed as possible. In order to do this, we sought to identify the key LMI needs of Canadians and that is why we conducted a pan-Canadian public opinion survey.

# What are the key achievements?

- Public Opinion Research dashboards showing survey results by <u>population groups</u>, by <u>employers</u>, and by region.
  - Acted as the foundation for LMIC to establish and produce an array of products focusing on the LMI needs of Canadians.
- Post-secondary Graduate Earnings dashboard.

- The dashboard averages 2,100 visitors per month since launching in January 2020.
- Created a national conversation with on gender earnings gaps in Canada through news media coverage
- o Will be updated annual as new earnings and graduate data become available
- Canadian Online Job Posting dashboard.
  - o The dashboard averages 3,400 visitors per month since launching in August 2020.
  - Established new relationships with organizations leveraging this dashboard and data for research and as an additional information resource for job seekers

## What do you think were the key success factors?

- User levels
- Open accessible data and methodology
- Easy to use and navigate portals
- Downloadable (Coming soon!)
- Contextualizing information explaining data limitations via FAQ's and other background information available on the dashboards

#### What do you think were the barriers?

When building interactive dashboards, there's always technical issues when developing something custom:

- Establishing a dashboard that is both intuitive and user friendly while ensuring the back end works as intended.
- Establishing measurement metrics on use and interaction.
- Streamlining data updates with developers and contractors.

# If you were to start again, what would you do differently?

Building time for user acceptance testing is critical. This is one step we would build in more time for to reduce revisions and corrections through the development process

## CareersPortal, Ireland

Key facts about the initiative	
Ireland	
CareersPortal	
Irish version of the website <u>www.saoloibre.ie</u>	
https://careersportal.ie/	
CareersPortal	
The website was developed in 2007	
info@careersportal.ie	

#### Short summary of the initiative

CareersPortal mission was to create a one stop national career information portal. The site and the associated career guidance programmes are designed to provide the most up-to-date and relevant careers information and resources for those needing or providing careers guidance in Ireland. As a careers information resource CareersPortal provides information about the World of Work and the World of Education along with substantial advice and useful information for a number of different **target groups**:

- 2nd level students
- College Students and Graduates
- Jobseekers, and Career Changers

- Adult Learners
- Parents and Guardians
- Guidance Professionals and Careers Educators

The CareersPortal website may be best understood as providing both **Information/Tools** and providing a **Service** to its registered members. It is freely available to all Irish citizens.

The key areas addressed are...

- Career Sectors (33)
- CourseFinder Database (CAO/PLC/Fetchcourses)
- Occupational Database (Career Explorer)
- Self-Assessment Tools
- Scholarship and Supports (Financial/Disability)
- Organisation Profiles
- Career Interviews and Videos
- Work Experience Advice and Vacancies
- Apprenticeships Database
- Upskilling Opportunities and Supports
- College Profiles
- Integrated Labour Market Information Jobs in Demand
- Careers Advice
- Daily Career News and Events
- Employability/Career Skills
- Subject Choice

In addition to the above information, a number of tools are provided to assist people find and research the information they want:

- Career Interests Profiler
- CourseFinder
- CareerExplorer
- Job Search
- CAO and QQI Points Calculators

All of the above information is integrated into a unique architecture that allows information to flow freely between sections. This allows the site to be used effectively to assist individuals plan and direct their careers in the context of the current labour market and available education and employment opportunities.

### Why was the initiative launched?

The CareersPortal website was developed as a direct response to the recommendations from the Expert Group on Future Skills Needs (EGFSN) Report in July 2006 entitled Careers Information and Labour Market Information in Ireland. This report commissioned by the EGFSN aimed to ensure that career guidance professionals and users of careers information in Ireland have a clearly defined and upto-date reference within which to make career decisions or provide careers advice. In particular, the Group was concerned that relevant labour market information should form an intrinsic part of careers information. One of the key recommendations of the report was the creation of a Central Careers Portal site.

"The development of a single careers portal is recommended. Its design should facilitate a high degree of information access by user groups with differing needs. It should contain careers, course and labour market information, organisational/company profiles and a range of

assessment tools. The objective should be to provide timely, relevant, up-to date information and allow users to make their own choices. Guidance professionals also need support in accessing and understanding this information".

(Appendix 1 - http://www.skillsireland.ie/media/egfsn060711 careers labour market.pdf)

# What are the key achievements?

The site has become the "One Stop Shop" for those needing or providing career guidance in Ireland. It has developed from being a primarily 2nd level only resource to now being used across all the adult guidance services. It is a very busy site with over 2 million visitors a year which in terms of the Irish population (4.9M) is huge engagement and traction. One of the greatest achievements has been taking all the information provided on the site, which is vast, and using it to develop 2 Bespoke Guidance Programmes which are structured, monitored and can clearly demonstrate evidence supported guidance practice in action. During the recent phases of lockdown, due to COVID, the career guidance programmes have been an invaluable support to both the guidance community and their clients. The guidance relationship and practice has been able to continue seamlessly in a remote setting with both parties having access to all relevant information and research.

# What do you think were the key success factors?

One of the key success factors was our ability to engage and collaborate with a wide selection of key stakeholders both public and private, who were prepared to partner with us to assist in the creation of content, which in turn informed different areas of the site. Setting up a central advisory board made up of Guidance Counsellors from across the community to feed into the development of the resources. Being able to connect with and train the Career Guidance Professional in the best use of the resources and understanding their key role as gatekeepers to the information.

#### What do you think were the barriers?

With any new resources it takes time for people to know it is there and understand how best to use it. There was no national awareness campaign publicising the resources, so it took longer to grow the awareness around the website and train people in who best to use it. One of the greatest barriers to using any new resource is training both the end user and more importantly the gatekeepers in the best use of the technology. Ironically the COVID pandemic and the fact that people are now more used and happier receiving training remotely has helped this extend this training to people who might not otherwise have engaged.

There is also a lot of information to keep up to date, so money and resources are always an issue.

#### If you were to start again, what would you do differently?

We have learnt an awful lot on the journey. Technology has improved so much since we launched the website in 2008. Technology will continue to evolve, and you have to be prepared to update software platforms, respond to new user interfaces and technologies on an ongoing basis. However, there is a fine line between developing the software platform and improving and changing the navigation on the site. The latter can undermine all the hard work you have already done on user training as users get used to navigating the site and any changes can take a while to bed down.

# Background information on the expert panel discussion

What additional information would be helpful to support students in their study and career choices, how could it be obtained?

# From a learner's perspective

Panellist	Sofia Escária, President, Academic Federation of Lisbon, Portugal
Contact	sofia.escaria@falisboa.pt

# How do we (students) make study and career choices? How do we select fields of study?

Main motives include:

- Skills
- Interests
- Future goals
- Status and wealth
- Employment prospects
- Safety and stability
- Desired lifestyle
- Costs

# The importance of interdisciplinary offer

- Extend and upgrade skills
  - Widen Critical Thinking
  - Analysis of different perspectives and approaches
  - o Improve Motivation and Effort
  - Boost Creativity
  - Foster Learning Skills
  - o Address Students' differences and characteristics
  - o Encourage innovation development
- Meet Employer's Demand
  - o Gap between Supply and Demand
  - o Misalignment between theoretical and practical application of knowledge
  - Need for distinction/authenticity
  - Lack of opportunities
  - Look across Boundaries
  - Consolidate Expertise
  - o Connection with the real world
- Lifelong learning
  - Update Competences
  - Labour Market Competitiveness
  - Unemployment
  - Job Requirements
  - Peer Pressure
  - Self Esteem
  - o Personal Fulfilment

## From a policy maker's perspective

Panellist	Ellen Thompson, Head of Orientation Mission, Ministry for Higher Education, Research and Innovation, France
Contact	ellen.thompson@enseignementsup.gouv.fr

Parcoursup (<a href="https://www.parcoursup.fr/">https://www.parcoursup.fr/</a>)

#### The main kets to Parcoursup

- Support for each student during each step of the process
- Key information to understand the courses that are offered, their expectations, the general criteria for examining files, professional opportunities and making the right choices for success
- Taking into account the profile of each high school student and the last word given to the candidate to choose his course
- Personalised success paths (Oui Si) at the university, to support success in higher education
- A national calendar

#### The elements of the file transmitted to each course

- Motivation for the course
- Additional documents requested by certain training courses
- The "Activities and areas of interest" section, if it has been completed
- La fiche Avenir : the form filled in by the school
- School reports and baccalaureat marks:
  - Second year of lycée « première » : school reports, notes of joint assessments and anticipated French exams
  - Final year of lycée terminale school reports for the 1st and 2nd trimesters, marks from the final exams of the two specialty courses followed in the final year
  - = The « baccalauréat » is taken into account

#### Parcoursup at the service of equal opportunities

- Places are prioritised for high school scholarship holders in each course, including the most selective ones
- Financial assistance for high school scholarship holders who enroll in training outside their academy
- A number of places in "BTS" are prioritised for professional baccalaureat holders
- A number of places in "BUT" are prioritised for technological baccalaureat holders

# 5 TIPS TO BE WELL PREPARED: these tips given in all documentation and training courses for teachers

- Do not wait until the last minute to get informed and prepare your career plan
- Discuss in your school and take advantage of meeting opportunities: trade fairs, open days, etc.
- Prepare the elements to register and fill in the contact details of the legal representatives for better monitoring
- Approach the admission phase calmly
- Subscribe to Parcoursup social accounts (Facebook @parcoursupinfo and Twitter @parcoursup\_info)

Panellist	Marina Crnčić Sokol, Head of Unit for Strategy and Development of Higher Education, Ministry of Science and Education, Croatia
Contact	Marina.CrncicSokol@mzo.hr

#### **Graduate tracking in Croatia**

- There is no comprehensive national system for graduate tracking in Croatia.
- Attempts to explore readiness for graduate tracking:
  - In 2013 The Ministry started pilot project to investigate the possibility of using administrative data on graduate students owned by higher education institutions, employment data owned by the Croatian Pension Insurance Institute and data on unemployed persons owned by the Croatian Employment Service.
  - The Agency for Science and Higher Education (AZVO) in 2017 started a graduate tracking survey with the vision to conduct survey on annual bases.
- In 2017-2018 Croatia participated in the initiative of the European Commission, DG Education and Culture and the OECD HEinnovate. The country review was produced with recommendations to improve entrepreneurial and innovative potential of Croatian higher education. (https://heinnovate.eu/en)
- In 2018 the Ministry joined the EUROGRADUATE pilot project in order to explore a possibility for development of the national graduate tracking system in line with the Europe wide GT.
- Experience from previous administrative data research was useful for understanding the quality and availability of data on graduates.
- The Agency supported the EUROGRADUATE pilot survey in Croatia with it's resources and experience from 2017 survey. (The Agency ensured that graduates sign consent to be contacted in GT survey one year after the graduation).

# The EUROGRADUATE pilot survey in Croatia

- Croatia is one of the 8 countries participating in the EUROGRADUATE pilot survey 2018-2019
- The Croatian Researchers: Ivan Rimac, Teo Matković, Jelena Ogresta from the Faculty of Law, University of Zagreb & Igor Drvodelić from the Agency for Science and Higher Education
- The EUROGRADUATE survey was conducted in Croatia: October 2018 February 2019
- 2 cohorts: graduation year 2016/17 and 2012/13
- Online survey from a central location for all countries involved in the project
- More information: <a href="https://www.eurograduate.eu/">https://www.eurograduate.eu/</a>

# **Experience from the EUROGRADUATE survey**

- Support and coordination from the EURPGRADUATE consortium and other countries
- Flexibility in methodological issues (sampling) and possibility to adjust to the national circumstances
- EU's General Data Protection Regulation (GDPR) application and interpretation
- Opportunity to see different approaches and solutions for graduate tracking at national level
- Opportunity to compare national results and trends
- Prospect to track graduates who are working abroad (other EU countries)

#### What have we learned

#### Graduates prospective:

- Bachelor level graduates do not feel competent enough to enter the labour market so they continue their study at master level
- Master level graduates consider moving to other EU member state as option to get job closer to their education field and level of education
- Self-employment is present in about 10 %. of graduates

- More than 55% of all graduates think that they work on horizontally and vertically matched jobs
- Those graduates that accept vertically mismatched jobs have little chance to correct their position afterwards

# Several actions should be undertaken in Croatia:

- Improve legal basis for the collection of personal data from graduates
- Establish a national database on graduates that enables analysis and monitoring, as well as interconnectivity with data on employment and unemployment
- Enhance alumni activities within HEIs
- Improve capacity for graduate tracking at all levels
- Effectively use graduate tracking data in education (for example: career guidance, quality assurance, developing new study programmes, connecting with employers and entrepreneurs, strategic planning and informed decision making)

Graduate tracking is expensive and complex undertaking at the national and international level but the benefits are numerous and the information it provides can be used at all levels (from learners to policy makers).

# How should LMI reach learners to effectively support them in decision-making?

# From an online information portal manager's perspective

Panellist	Sveinn Aðalsteinsson, Managing Director, Fjóla María Lárusdóttir, Specialist, Arnar Porsteinsson, Editor, Education and Training Service Centre, Iceland
Contact	Sveinn Aðalsteinsson (sveinn@frae.is); Fjóla María Lárusdóttir (fjola@frae.is); Arnar Þorsteinsson (arnar@frae.is)

NaestaSkref (https://naestaskref.is/) was created in 2014 and rebuilt in 2018.

#### Why was the website created?

Mainly, because information on education and work in Iceland has long been fragmented and inaccessible. It was about time to make accessible material that supported vocational and educational choices, access to information, guidance and adult learning pathway. The aim is to provide information and guidance to users regardless of time and place, as well as making the web so that it can be used by everyone in the search for information on studies and work, although the main target group so far has been adults with little formal education.

Does the website display labour market information associated with educational programmes? On the website, there are about 270 short general job descriptions with links to practical information such as professional associations and connection to possible study programs.

# From a researcher's perspective

Panellist	Jenny Bimrose, Emeritus Professor, Warwick Institute for Employment Research, University of Warwick, the United Kingdom <a href="https://warwick.ac.uk/fac/soc/ier/people/jbimrose/">https://warwick.ac.uk/fac/soc/ier/people/jbimrose/</a>
Contact	Jenny.Bimrose@warwick.ac.uk

#### Mediating and interpreting Labour Market Information for career decision-making

As this seminar has vividly demonstrated, vast quantities of factual information have been collected about labour markets around the world and are increasingly being made creatively available in different formats, using different methodologie, to support learners in their career journeys into and through higher education. Many different types of organisations have collected these data for varied purposes and while LMI is generally regarded as centrally important to enhancing effective career support and career decision-making, its use in this process highlights issues relating to impartiality and the role of information in the career decision-making processes for learners in higher education.

Whilst LMI largely comprises factual information about the labour market, we know that facts don't speak for themselves. For example, the same LMI data can be used to support different versions of events. For example, the same LMI on the numbers of girls and women attracted into Science, Technology, Engineering and Mathematics (STEM) over a particular time period could both be used to:

- a) illustrate how governmental and/or sector-led marketing campaigns have been successful in breaking down gender stereotyping, because girls and women are increasingly being attracted into STEM; or
- b) argue that career decision making support provided to learners by career counsellors or tutors/teachers remains biased, because insufficient numbers of girls and women are being attracted into the STEM sector.

Indeed, the role of LMI in the career decision-making process is a highly contested area, both with regard to how information should be used and what type of information that should be used. This relates to the complex issue of the impartiality of LMI data. Impartiality represents a key value for career counselling practice. Many career professionals will argue that impartiality is crucial to the delivery of 'objective' support and defend their right to operate in this way. This aspect of professional practice is, however, not without problems. For any selection of data, or data sets, for wither online or any form of face-to-face support for learners in higher education, professional judgements are implicated. Judgements about the selection of which data sources and/or what data sets are seen as 'relevant' are immediately evident. One example of this has been referred to as 'protective channelling', where a career professional will seek to shelter clients from occupational experiences they anticipate will be discriminatory and negative. Whilst this, in its way, is commendable, it is not being impartial. Indeed it could be argued that we are all partial and that impartiality cannot exist.

This brings into sharp focus the mediation and interpretation of LMI data. Here, it seems evident that whilst many governments are beginning to address the need for customized approaches to LMI for learners who are navigating volatile labour markets, one invisible dimension appears to be the career/employment professionals, in higher education, tutors and career tutors, as well as the parents and careers of learners who are often asked by learners to help them to interpret and mediate LMI. Research effort over recent years is beginning to support those who are advising learners. From our research, it is clear that this is an important and continuing omission in policy and practice internationally. The explosion of the availability of LMI online adds a further and complicated dimension. Many learners will access LMI independently of HEI and/or any other available support. This emphasizes the importance of

interpretation and mediation of LMI in a post-truth era. Even the most robust, high quality and up-to-date LMI can be interpreted differently, with important consequences for the learner.

#### References:

Bimrose, J. (2020). Labour Market Information for Career Development: Pivotal or Peripheral? In P. Robertson, T. Hooley & P. McCash (Eds.) The Oxford Handbook of Career Development.: Oxford University Press. Retrieved 25 Jul. 2020,

 $from \ \underline{https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190069704.001.0001/oxfordhb-9780190069704-e-21.$ 

Bimrose, J., Brown. A., Mulvey, R., Kieslinger, B. and Dewanti, R.T. (2019) <u>Transforming identities and coconstructing careers of career counselors</u>, Journal of Vocational Behaviour, Volume 111, April, pp 7-23.