DISRUPTED FUTURES 2023: International lessons on how schools can best equip students for their working lives

OECD conference
31st of May, 1st and 2nd of June 2023

A free online conference highlighting innovative research and practice

This conference is organised by the OECD Career Readiness team. For more information about the team’s work, visit: https://www.oecd.org/education/career-readiness/
ABOUT THE CONFERENCE

As countries turn their attention from handling a healthcare emergency to dealing with its economic consequences, concern rises over youth unemployment. Even before the pandemic, young people in many countries were facing difficulties in their transitions into work.

During the pandemic, young people commonly found themselves disproportionately affected by lay-offs and recruitment freezes. Now, with the world coming out of the crisis, young people find themselves particularly vulnerable in the search for work. This OECD conference focuses on what schools can do to prepare young people for their transitions through education into ultimate employment.

PRACTICAL INFORMATION

The conference will take place virtually over three days and is divided into five distinct sessions. Day 1 will begin with an opening session and keynote speeches. Day 2 and Day 3 are focused on research and practice papers on career readiness that will be presented in parallel sessions.

To attend the conference, please use the registration links on our main page

CONFERENCE PROGRAMME

DAY 1: 31 MAY 2023

How career guidance can best respond to social inequalities: new OECD analysis and guidance

- David Blustein (Boston College, Chair)
- Hanka Boldemann (JPMorgan Chase Foundation)
- Matt Diemer (University of Michigan, United States)
- Esther Doyle, Carol Guildea (Department of Education, Ireland)
- Tristram Hooley (Inland Norway University of Applied Sciences)
- Triin Roosalu (Tallinn University, Estonia)
- Shinyoung Jeon and Anthony Mann (OECD)

The conference will open with presentation and discussion of new OECD analysis within a forthcoming working paper on how career guidance systems can best respond to social inequalities. New analysis of PIAAC data shows that the early labour market experiences of young people are heavily shaped by their socio-economic status, gender and migrant/ethnic background. Even when comparing similarly educated people, these characteristics are often related to worse outcomes than other groups. Moreover, analysis of PISA data shows that the engagement of teenagers in career development activities is often shaped by such characteristics. In this session, the new analysis will be presented alongside a discussion of how to make sense of such findings and their practical implications for guidance systems. Three guest contributors will share practical insights from their work linked to how public fundings can respond to additional student needs and how students can be prepared to cope with labour markets that are shaped by gender and ethnic inequalities. The session will conclude with the opportunity for questions and discussion.
Morning Parallel- Session A:

Evidence-driven practice in career guidance

Yr 10 Multi-Engagement Career Readiness Program - Australia
Nick Humphreys, Jake Snepvangers and Kath McCann - Beacon Foundation

Beacon Foundation (Beacon) has designed and delivered career readiness programs in Australian secondary schools for nearly 35 years. In 2022 Beacon commenced development of a new multi-engagement career readiness program building upon the operational knowledge and understanding that the organisation has developed over this time. This new program has been informed by global research and input from career experts, industry, parents and students. A co-design process was undertaken with students to determine the most impactful content and delivery model for the target cohort.

The program that has been developed is a 12-session career readiness program that is broken into three distinct phases – awareness (of self), exploration (of career alignment) and experience (of the world of work). The program is facilitated by an expert Beacon facilitator who works with students, industry volunteers and educators throughout the duration of the program (two Australian school terms).

The program is designed to be delivered in-school for students in grade 10 (aged 15-16) at schools with an Index of Community Socio-Educational Advantage ranking of less than 1,000. The program is designed for up to 20 participants and involves meaningful interactions with approximately 18 industry volunteers who help to bring the content to life, both in the classroom and the workplace.

Guided self-awareness, self-lead careers exploration and the coordination of a work placement experience are key elements supporting the development of each students’ positive vision of their future self.

The program will be monitored and evaluated at the beginning, end and throughout the program. Students, educators, industry volunteers and the program facilitator will all provide evaluation to determine full impact.

A trial of the program was conducted in late 2022. Following this very successful trial two full pilot programs commenced in March 2023, with another four scheduled to commence in July 2023.

What we are learning from multi-stakeholder approaches to foster students’ career readiness: Teach For All’s Future of Work Initiative - Tunisia
Tarek Chehidi and Mariana Franco (Teach For All), and Banalata Sen (Deutsche Post DHL Group)

Teach For All’s Future of Work Initiative (https://teachforall.org/future-work-initiative ) is a multi-stakeholder initiative that brings together public and private sector actors to support teachers and communities to adopt a holistic and inclusive approach to developing students as leaders who will thrive and shape meaningful careers in an evolving economy. We are seeing that when multiple stakeholders (school, educator, business leader, and other educational stakeholders) work together toward a shared student vision, we learn faster about what it takes to provide students with more meaningful opportunities so they are prepared for the future world of work. We will share an example of how our network is working with DP-DHL in under-resourced public schools and how this partnership contributed to developing the Student Career Readiness Framework, which is informed by OECD research, and educators and employers have found very useful to guide their collaboration for the benefit of students.
Morning Parallel- Session B:  
**Challenging stereotypes in construction careers**

High school learners’ perceptions of careers in the built environment sector - South Africa  
Itumeleng Dube, University of South Africa

The purpose of this study was to examine the perceptions of leaners on careers in the built environment. The construction industry is confronted with a critical shortage of skilled trade workers, which significantly hampers its growth and labour productivity. This workforce scarcity mainly stems from a lack of effective strategies for recruiting and retaining leaners in construction programmes. The objective of this study was to examine the perceptions of leaners on careers in the built environment. This qualitative study examined the perceptions of 43 previously disadvantaged black high school learners, regarding careers in the built environment sector. Using the planned behaviour theory, qualitative questionnaires investigating leaners’ perceptions of careers in the built environment was used to collect data. The data was thematically analysed using the Braun and Clarke’s six phases of analysis. From the five themes, the findings indicate that a learner’s attitude towards a career influences his/her decision in selecting it or not. The career perceptions of the community and significant others affect the career choice of a learner. When learners realise that they have the required traits for a particular career, they will mostly likely select the said career. The built environment sector needs to understand the perceptions of its future workforce. As factors such as attitudes towards a career, subjective norm and perceived behavioural control can influence the career choices of leaners. Ultimately, the findings of this study will assist the built environment sector in creating an attractive value proposition for learners to join the sector. It will also assist the sector to know which kind of information they need to decimate to attract leaners in choosing careers in the built environment. Future research could explore the perception of learners of other careers within the Science, Technology, Engineering and Mathematics.

**Constructing women: Investigating the influences on career development educators when advising young women on construction trades - New Zealand**  
Kylie Taffard, ConCove Tuhura

As is the experience in many countries, the construction trades in New Zealand have a skills shortage. As the construction trades experience gendered occupational segregation, recruiting women to trade roles are seen as an opportunity to address the skills shortage. This research project aimed to investigate the influences on the advice provided to female secondary school students interested in the construction trades by Career Development Educators (CDEs). The research was conducted in two phases and these findings provided an insight into the influences on the conversation between CDEs and young women interested in entering the construction trades.

Using secondary data and interviews with tradeswomen and recruitment specialists within the construction industries, the first phase of research developed an understanding of potential influences on the advice provided by CDEs to female students interested in the construction trades. The second phase of research used Q-methodology to gain an objective understanding of the influences on the advice given when having a career conversation with their female students.

The findings can be separated into the two participants of the career conversation – the student and the CDE. Both the student and the CDE bring their own beliefs and values to the conversation. The student in this situation is an adolescent female, whose career decision making is influenced by the values and beliefs of her whanau (family), peers and teachers, in turn guided by gender, occupational stereotypes and perceptions of the construction industry. The second person in the conversation is the CDE themselves. The CDE’s key focus within the conversation is the student’s interest, however, the CDE is influenced by their own beliefs and knowledge about careers and career pathways.
Morning Parallel- Session A:
Understanding impact through quantitative analysis

Career Design Under the Effect of School and Student Socioeconomic Status: A Global Interaction Analysis at the Global Level - Turkey
Ilker Kalender - Bilkent University

Countries or economies have students with varying socioeconomic status (SES). Low SES limits access for such students to qualified teachers, quality schools, counselling, etc. Quality career planning and development is one of the services disadvantaged students receive less than their peers with higher SES. Many countries and economies assume a positive relationship between SES and good quality education components. Career planning and development is no exception. However, this positive relationship may be more complex than considered by many. A student’s and a school’s SES where the student is enrolled may interact. A student with high SES in a low SES school may be affected negatively in several ways. Or the opposite scenario may create substantial opportunities. Thus, being at a “good” school may be a prerequisite but not sufficient alone. A mismatch between two SES components may hinder opportunities regarding career design. Thus, this interaction and its effect on career planning and development need further study.

This research hypothesises that the interaction between school and student SES impacts career-related services severely and to understand how such interaction creates different opportunities or disadvantages for countries and economies in the career design of students using PISA data. Using responses given by students to the educational career questionnaire, schools and students were divided into four quartiles of SES within each country and economy that participated in PISA 2018. Using a 4x4 cross-tabulation, the interaction between school and student SES was examined separately. When an interaction was found, its effect on career design was analysed statistically.

Results indicate that significant interactions were found between two SES components in some countries and economies, revealing exciting and unexpected patterns for career design. Further analysis also revealed that countries and economies are clustered regarding career design patterns under the effect of two SES.

Impact of Career Interventions on Career Competency and Social Well-Being: A Study of Non-Engaged Youth in Hong Kong - China
Steven Sek-yum Ngai, Chau-kiu Cheung, City University of Hong Kong

This study seeks to examine the impact of career interventions on career competency and social well-being of non-engaged youth (NEY) who are at risk of becoming not in employment, education, or training. Based on data collected in the CLAP@JC project in Hong Kong, which aims to empower NEY to become active path navigators of their career and life development, the present study systematically investigated the effects of six career interventions, namely developing interest, awareness, and motivation (DIAM), semi-structured learning (SL), career counseling (CC), learning through service, volunteering, and caring (LSVC), workplace learning (WL), and facilitating pathway choice and implementation (FPCI), on NEY’s social well-being directly or indirectly through career competency. Data collection comprised two parts: 1) career competency and social well-being data from 665 NEY participants aged 13–29 who participated in both the baseline and four-month follow-up surveys; and 2) aggregated data on career interventions from baseline to follow-up and NEY’s demographic information provided by social workers responsible for supporting the NEY participants. This study found that the effects of SL and WL on social well-being were significantly mediated by career competency, while the effect of LSVC directly contributed to social well-being rather than indirectly through career competency. Moreover, the effects of DIAM, CC, and FPCI were non-significant in promoting NEY’s career competency and social well-being. Overall, our findings suggest that career interventions involving learning through experience and deep interactions with relevant stakeholders in the workplace have more significant effects for improving NEY’s social well-being through career competency. The empirical findings of the present study yield practical implications for future career interventions with NEY.
Access to career supports and the amelioration of disadvantage - Australia
Elizabeth Knight, Shuyan Huo, Melissa Tham - Mitchell Institute, Victoria University

Young people have been disproportionately impacted by the major disruptions in the past few years and career support plays a central role in helping young people navigate uncertainty, especially disadvantaged youth who were already more likely to report unemployment. This research analyses data from the Longitudinal Study of Australian Young people (LSAY) to explore how young people’s engagement with career development resources (speaking to parents and friends), school supports (speaking to careers counsellors and attending school organised work experience) and student-directed activities (obtaining information from the internet) can influence their career outcomes as adults. The methodological approach is largely descriptive, but regression analysis, including OLS linear regression and logistic regression methods are also applied in identifying the independent effect of career development resources, supports and activities in secondary school upon career outcomes. Importantly, the analyses examines whether these vary by socioeconomic background. Speaking to family, friends, someone on the job and career advisers or teachers at school was significantly related to career satisfaction, while other school supports and student-directed activities were not significant. For example, talking to parents or family members about their futures had the largest effect on participant’s confidence talking to a career practitioner or direct employers also had positive effects, 7.9 and 6.2 per cent, respectively. Overall, there was a positive relationship between SES and likelihood of feeling prepared for the future. The most disadvantaged youth were the least confident about their futures compared to advantaged youth when they participated in the same career development activities, or had the same supports or resources. The findings highlight that familial resources, in combination with career development supports delivered through schools such as career practitioners, are key interventions that may help to ameliorate disadvantage in Australian youth.

Morning Parallel- Session B: Delivering effective career guidance

Keeping students and parents at the heart of career education in secondary school - Australia
Marian Wright - Brisbane Catholic Education

This paper will outline the practice of Brisbane Catholic Education’s Career Readiness Project, which engaged students from age 12 to 15 (and their parents) in a career confidence study to give schools and the BCE system insight into career self-efficacy. Students and parents completed surveys and participated in Data Dialogues with school leaders to share perspectives on career education and how the wider practices the school were enabling them to progress towards the educational goals of the Alice Springs Declaration on Education. As a result of this study, the BCE system worked with schools to create a quality framework for career education and used this to guide targeted improvement to school-based career education programs. Action plans included increased connection to curriculum, increase in parent engagement, the establishment of career education development committees that include students, parents and industry and co-construction of programs with students. This year, the students in the first study will be surveyed again to determine where career confidence has increased as a result of a change in school practices.
The benefits of participating in career talks for high school students - South Africa
Sizile Makola - University of South Africa

Tertiary institutions in South Africa are experiencing alarming undergraduate dropout rates. This has partly been attributed to students' inadequate preparation, and failure to gather information on, and planning for, their careers. The need for sound career guidance at the high school level is key, making the role of Life Orientation (LO) increasingly prominent. The aim of this study was to determine what benefits high school learners derive from attending career talks. To this end, a qualitative study was conducted with Grade 10 learners studying STEM (science, technology, engineering, and mathematics) at a township high school in Mamelodi, Tshwane. Data were collected using a qualitative questionnaire and analysed thematically. The findings demonstrated the importance of role models sharing information about their careers and work experiences. Another finding pertained to the importance of information on diverse careers, for the development of learners' career self-efficacy as students of STEM in a township high school context. The findings highlight the importance of LO teachers organising career workshops. The study will benefit the Department of Basic Education, businesses, and employers as key stakeholders, by helping to enhance the career development of future employees and entrepreneurs.

The YOUTHshare project: real-time monitoring and expanded training for young people from the European South - Greece
Georgios Chatzichristos, Fotini Vlachaki, Stelios Gialis - University of Aegean

In response to the 2008/2009 economic crisis, the European Union developed the Youth Guarantee (YG) Action Plan, aiming to combat youth disengagement from the labour market. Relevant studies show that although the YG seems to be successful in some cases in terms of employment, it is closely intertwined with labour precariousness in the European South, as reflected in the increasing rates of temporary employment and inactive youth. Against this backdrop, the crucial question is whether young people in the European South are entering the labour market at the expense of job insecurity. Therefore, if policymakers want to address the problem of youth unemployment, the analytical focus should shift from whether young people enter the labour market to how they do so. In this vein, this study suggests that (a) enhanced real-time monitoring and (b) the involvement of various resilient sectors and social and sharing enterprises in the training processes of youth can improve their employability, without promoting precarious employment. At a more detailed level, monitoring tools can provide regular updates on youth employment trends in the EU South. In this way, policymakers and businesses can develop tailored training programmes and interventions to help job seekers acquire the skills they need, while recognising differences in skills and understanding the needs of local employers. This approach can lead to lower unemployment rates, higher workforce engagement, and greater economic mobility for individuals and families. At the same time, by involving resilient sectors and social and sharing enterprises in the youth training processes, the target groups can be offered comprehensive counselling, networking, and job matching with potential employers, as well as through various tools and new training. Last but not least, young people's soft skills, which often prove to be more important than hard skills when looking for a job, can be significantly improved.
Afternoon Parallel- Session A: 
Challenging inequalities

Matching High School Endorsement and Major Program of Study Choices for Texas College Students - USA
Maria Adamuti-Trache, Yi Leaf Zhang - University of Texas at Arlington

The State of Texas implemented in 2014-15 a new Foundation High School Program (FHSP) that requires grade 9 students to choose one of five endorsements (areas of study) for graduation: STEM, Business & Industry, Public Services, Arts & Humanities, and Multidisciplinary Studies. This initiative aims at improving youth college and career readiness by encouraging students to explore their career aspirations and increase awareness of post-high-school pathways, as a key strategy to developing an educated workforce that meet local and national economic demands. This study will focus on the 2014-15 Grade 9 cohort who enrolled in Texas postsecondary institutions in the Fall of 2018 immediately after high school graduation. First, the study will compare endorsement completion and post-high-school pathways by socio-demographic factors (i.e., gender, race/ethnicity, social class) to reveal the presence of social inequalities in shaping career aspirations during secondary education. Second, we will examine the matching between high school endorsements and major programs of study for college students at the intersection of socio-demographic characteristics. This is a quantitative study based on restricted-use, statewide longitudinal administrative data housed in the Texas Education Research Center (ERC). The study is guided by the College and Career Readiness (CCR) framework (Conley, 2010, 2012) that highlights critical areas for post-high-school transitions that include both academic and nonacademic factors affecting students' preparation for college and careers. In this study, we focus on the academic-related factors indicated by completion of endorsements and the Texas STAAR End-of-Course (EOC) tests that measure students' mastery of content knowledge in core subjects, and their analytical and critical thinking skills. The study employs descriptive statistics and multivariate analyses to examine the likelihood of matching career aspirations at the transition from high school to college, and whether this transition is marked by an equitable access to educational opportunity for all Texas students.

Take your field trip to the school - Canada
Susan Ibach, Hilah Barbot, Garrett Dorfman - Amazon Future Engineer

These tours were created based on the need to increase exposure of youth, in particular underserved youth to work experiences. A variety of existing research influenced the program development and design. Research shows that jobs students choose are often based on stereotypes so we deliberately feature interviews with minority role models in our videos. We developed primary school versions of the tours given the research showing the need to start talking careers with students in early grades. We also found research that shows how centering learning around a phenomena is an effective way to create equitable learning experiences and on how gamification can be effective in education which led us to the Kahoot! platform to provide a more gamified experience.
Afternoon Parallel- Session B:

Enabling transitions

Toward diversified ways to promote decent work trajectories: career guidance for emergent adults in the informal sector- Brazil

Marcelo Afonso Ribeiro - University of São Paulo

The constantly changing working world has led to work precariousness and vulnerability situations and to a struggle for decent work, generally taking employment as a model. Latin America has been formed by contexts predominantly marked by informality, unemployment, precarious and temporary employment, and restricted state support. Based on research and practices developed in Brazil, this presentation will discuss the possibilities and limits of a career guidance program toward diversified ways to promote decent work trajectories. The target audience consists of young people (aged 18-20) working in unregulated jobs in the informal sector, who were attending secondary school. They engaged in a career guidance program developed for this group, which aimed to foster narrative changes and social repositioning through expanding dialogue, negotiating meanings, and integrating differences. This program articulated epistemologies from the North with theories contextualized in the South. It is grounded on intercultural dialogue, narratability, discursive validation, critical consciousness, and communitarian strategies. The career guidance was conducted through small groups using existing projects and spaces in neighborhood associations, community groups, and NGOs in twelve one-hour meetings, with a proposed follow-up meeting four months later. As a result of the intervention, the program aimed at enhancing critical consciousness, actively engaging in developing resources to cope with life construction, identifying social supports and possibilities for community engagement, accessing programmatic resources (public and private), seeking help and support in organized social movements, accessing the experiences of their community of origin, and undertaking actions and changes to make their work decent. In order to evidence the positive change following the intervention, the LAQuA (Life Adaptability Qualitative Assessment) was used, which qualitatively assesses narrative changes throughout the process through a coding system based on categories of changes. Limitations and potentialities will be discussed.

Utilizing technology to mobilize +125 000 mentees to guide youth in career development - USA

Jared Chung - careervillage.org

Through online micro-mentoring, guidance systems can be 100x easier as there is infinite mentor capacity and mentees who self-serve. CareerVillage.org has practiced frameworks for identifying a truly scalable mentorship model, maximizing the use of technology in the most effective way possible. This strategy not only allows career guidance organizations the ability to dramatically expand the reach of their services by reducing mentor workloads, but also enables more mentee-centered programming at lower cost that closes social capital gaps.

With simple asynchronous question answering, CareerVillage.org has effectively engaged 125,000+ mentors to help youth navigate career readiness. Any individual any age can sign up as a student on CareerVillage and ask any question related to a career. Whether its high school students preparing for college, college students selecting a major, or graduates preparing for their first job, CareerVillage.org gets their questions answered and puts them on the path to more meaningful careers.
**Afternoon Parallel- Session A:**

**Career pathway programmes**

**Wisconsin’s Youth Voice in Career Readiness Research Project- USA**
Karin Smith, Alexis Burgos - Wisconsin Department of Public Instruction

Wisconsin has been creating and implementing robust career readiness programs for many years. In an effort to make sure these programs are providing students with what they really need for career success, we went straight to the source by surveying over 4,000 current high school students and recent graduates followed by several focus group sessions to collect more in-depth information.

An analysis of the data has yielded valuable findings on the following research questions:

- How do students find out about career readiness activities?
- Who do students go to when they need help with their academic and career goals?
- What do students believe their school does really well regarding career readiness?
- What do students believe their school needs to do to encourage more career readiness?

- What factors discourage student participation in career readiness activities? The results of this project will drive career pathway program development and policy at the state level. In addition, results will be shared with local school districts along with recommendations on immediate actions that school leaders can take to create high quality career pathway programs and student career advising processes. Wisconsin is preparing to make a commitment to collect future youth (or learner) voice by institutionalizing the surveying and focus group of current high school students and recent graduates as a part of a comprehensive local needs assessment process required every two years by school districts receiving federal Carl D. Perkins funding.

**Career Preparation in a Rapidly Changing World: A Comparative International Review of Career Pathways- USA**
Paul Herdman (OECD), Robert Schwartz, (Harvard University)

This project builds on the first of its kind longitudinal analyses overseen by the OECD that shows that career pathways can routinely be associated with better employment outcomes for youth. That 2021 OECD longitudinal data analysis of ten countries confirmed that career pathway programmes are one of 11 indicators that result in better career readiness. Students undertaking such programmes at age 15 could commonly be expected to experience better employment outcomes (such as lower NEET rates, higher wages and greater job satisfaction) at age 25 than comparable peers. The new research to be shared in the spring of 2024, will involve a qualitative, look at the components and impact of the career pathways programmes in several of the countries involved in the 2021 analysis. This will be the first time that a comparative international study of career pathways will have been attempted. This project will surface lessons learned through targeted visits and interviews in the US, Australia, New Zealand, Scotland and Canada. The intent is to accelerate how countries and municipalities can help young people better transition from education to work by surfacing new insights and sharing these innovations.

**Methodology:**

- Comparative analysis on the design and delivery of career pathways with a focus on how countries vary in responding to strategically important skills shortages (e.g., green jobs),
- Review of existing longitudinal quantitative data on the long-term impacts of career pathways,
- Review of relevant literature on the effective design and delivery of such programmes,
- Semi-structured interviews with policy officials, practitioners, students, and employers during field visits to at least three OECD countries (provisionally, Australia, Scotland, and New Zealand), bolstered by targeted interviews with leaders in the European Union, Canada, and the United States.
GO TEC Virginia: Talent Pathways for Technology and Engineering Careers - USA
Julie Brown - Institute for Advanced Learning and Research

Great Opportunities in Technology and Engineering Careers - GO TEC® is a collaborative hub-and-spoke talent development program, administered by the Institute for Advanced Learning and Research (IALR) in partnership with K12 school systems, higher education and private sector employers, that builds strategic talent pipelines in targeted industry sectors. Starting in middle school, GO TEC engages students in Career Connection labs using hands-on learning in high-demand career pathways such as precision machining, welding, IT and cybersecurity, robotics and automation, mechatronics, and advanced materials. These students continue skill development during high school through career and technical education (CTE) programs and dual enrollment courses where they receive credit from a Virginia community college. Students have the opportunity to graduate with industry certifications, making them job-ready as soon as they receive their high school diploma. They also have the option of continuing their education to earn postsecondary degrees in the targeted pathways. Today, GO TEC labs are in 25 middle schools across Virginia where 3,500 students are using welding simulators, programming Raspberry Pis, and fabricating parts through additive and subtractive manufacturing. Working together, education partners and businesses have aligned efforts, creating scale and clear career pathways.

GO TEC is an intentional talent development model that recognizes the need to expose middle school students to career opportunities through hands-on experiences that are fun, engaging, and allow them the opportunity to practice their communication, creativity and critical thinking skills. As students advance from Year 1 to Year 3 GO TEC Career Connection courses, they are refining their interests and starting to develop skills and abilities in the targeted pathways. As students enter their high school (secondary) experience, GO TEC efforts transition from career exposure to academic and skill preparatory programs. These emerging workers are career ready and prepared for their chosen future professions.

Afternoon Parallel- Session B:
Challenging inequalities through career guidance: quantitative analyses

What Can We Learn About Career Readiness Interventions from Large-Scale, Longitudinal Datasets - USA
Thomas Torre Gibney (WestEd) Cameron Sublett (University of Tennessee Knoxville)

This session will provide a general survey of new and recent research from the United States on a variety of career readiness policies and programs. Specifically, the session will focus on how researchers are leveraging the increasing availability of large-scale, longitudinal datasets to examine national and localized career readiness outcomes that span secondary, tertiary, and workforce settings. The presenters will share examples of their work using these datasets, such as the High School Longitudinal Study of 2009—a nationally representative survey that follows a cohort of first-time ninth grade students through postsecondary education and into the workforce—as well as other examples from the growing literature base on youth preparedness for and transitions into careers, such as career pathways research. Examples will focus on research that explicitly examines inequalities in student outcomes and interventions that seek to close gaps in outcomes between historically disadvantaged groups and their more privileged peers. Additionally, the presenters will unpack some of the unique features of these datasets that make them useful sources for informing consequential decisions in policy and practice. As part of the discussion, the presenters will share examples of the kinds of research questions that can be answered using large-scale, longitudinal datasets, and elicit sample questions from session participants. Time will be allotted to reflect upon the research and consider future directions in career readiness research, policy, and practice.
Preparing young people for an uncertain future: school-based career preparation activities can reduce the risk of experiencing NEET - UK

Ingrid Schoon, Golo Henseke - University College London

The Covid-19 pandemic and its aftermath highlighted the over-proportional employment risks young people face in today’s uncertain labour markets. Against this background we ask if career preparation activities offered in schools and college can help young people, in particular those from less privileged family background, to navigate the transition from education to employment. Guided by career construction theory, this study examines if participation in school-based career preparation activities can support young people in developing a range of psychosocial resources and enable a smooth transition into the labour market during a period of economic upheaval, avoiding the experience of not being in education, employment or training (NEET). The research draws on a nationally representative longitudinal sample of 18 to 25 year-olds who participated in the Youth Economic Activity and Health (YEAH) online survey conducted in the UK between February 2021 and November 2022 (n=5278). The findings suggest that participation in school-based career preparation (for example, taking up an internship or work experience; being mentored; or receiving careers advice) is more likely among females, among those with better educated parents who did not receive free school meals (a widely used indicator of socio-economic status). Moreover, participation in school-based career preparation activities is associated with higher levels of career adaptability, self-efficacy and optimism for the future. All these factors, in turn, are associated with a reduced risk of being NEET, in particular for males and those who had received free school meals. The findings highlight the importance of school-based career preparation activities in supporting adaptive career-related behaviour among young people in times of economic uncertainty and upheaval, in particular for males and those from less privileged background.
Morning Parallel- Session A:

Enhancing guidance through digital technologies

Insights from an online, teacher-led Career Education program - Australia
Lucy Sattler - Work Study Grow

Since the start of 2022, hundreds of secondary schools across Australia have taken part in a low-cost and easy to implement career education program that’s designed to start positive career conversations between young people and their teachers, peers, and parents.

Drawn from the Australian Blueprint for Career Development, the Ponder Program has been co-created with schools and students, and is delivered primarily by subject area teachers, under the supervision of a Career Practitioner, in previously underutilised time periods such as homeroom or pastoral care settings. Teachers use the resources, including videos, slideshows, and digital workbooks, to explore common career development concepts and then facilitate conversations which give students the space to apply the concepts within their own context.

The Ponder Program has been delivered in a huge range of schools, from elite schools in the inner city through to small, rural schools and schools with diverse learners. Schools that participate in the program report a range of benefits, which include improved engagement in career education, higher rates of teacher interest in career development, and the creation of a school-wide career mindset. Our Career Practitioners tell us that teachers are coming to them with questions about how they can integrate career-related learning into their classroom content, and advocating for more time to facilitate career conversations with leadership. Another outcome has been that students feel more confident to hold career conversations with parents.

There are a few key factors which we believe have underpinned the success of this program, and this presentation will expand on how these factors make the program impactful and easy to implement within just about any educational setting. We will also share our insights into the use of digital technology to deliver the program, and suggest considerations for other interventions.
From looking down a wishing well to exploring wide and deep oceans of opportunity. A tech innovation that supports all young people to explore broadly and think deeply about their future - New Zealand and Australia
Dr Jim Bright, Liv PENNIE - BECOME Education

Our starting point is the analysis of a new dataset of over 5,000 young people between years 5-11 in Australia and New Zealand during 2022 and 2023. Our analysis shows the aspiration patterns of young people mirror the OECD’s investigation of PISA data. We found that, as a group, around 50% aspire to just 10 occupations.

When we zoom in to a school level, the aspiration concentration effect is almost double that. At a school level, 50% are aspiring to around just 5 occupations.

That top 5 list of occupations differs significantly across schools - changing by demographics.

Many young people are limited by social inequalities, but the data suggest that most young people regardless of context are also hampered by looking through a narrow viewfinder at a limited set of careers. This limited view may be constrained by holding to externally generated definitions of success without the opportunity or skills to challenge that or by a lack of training in expansive, divergent thinking about careers.

This narrow and shallow approach (looking down the wishing well) can be transformed using innovative digital technology in a teacher-led program. We argue that the two most neglected areas of the OECD Career Readiness Indicators are the opportunities for young people to explore and to think about their future. The BECOME program helps them see beyond the boundaries of their community and their self-concept through playful, active, low stakes explorations, starting earlier in the school years.

The impact of this program shows that instead of conforming to a ‘narrow-tive’, students gain the skills and opportunities to shape their own narrative. Significant positive effects on academic engagement and wellbeing also build the case for a whole school approach to student futures, early, often and integrated to assist students appreciate the oceans of opportunity.

Morning Parallel - Session B: Career management skills

Career management skills: why? Which? How?
Florian Kadletz – European Training Foundation (ETF)

The session curated by the European Training Foundation has two objectives. First, to facilitate a forward-looking discussion about Career Management Skills (CMS) around the value of extending the traditional DOTS model (Decision making, awareness of Opportunities, Transition skills, and Self-awareness (Law, 2001; Law & Watts. 2003) to social and emotional learning. The rationale behind this is that people will face lifelong transitions in their careers in the context of changing labour markets and therefore also career guidance needs to adapt from a learning process focused on information provision on transition points to support decision for a career for life towards empowering individuals to deal with manifold transitions and lifelong learning. CMS must therefore be a holistic concept integrating transversal key competencies or life skills and career learning from early schooling onwards; going beyond the traditional approach of learning practical skills like CV writing and interviewing and beyond personality traits and interest testing followed by information provision on matching education pathways and occupations. Secondly, it is the objective to present practices from the EU neighbourhood countries in the area of career education and guidance in formal education and discuss challenges and opportunities for holistic CMS learning in school.
(continued on next page)
Presentations include:

Social and Emotional competences of career guidance practitioners – why and which?
Peter C. Weber – University of Applied Labour Studies, Germany

The presentation aims at discussing why social-emotional competence is relevant for the practice of lifelong guidance today and in the future and what skills therefore form part of career management skills next to practical skills such as CV writing skills. Finally, the consequence of this for guidance practitioner competences and which competences are required are discussed. A reference to the EU Erasmus+ project STRENGTH is provided: http://projectstrength.net/

Career education and guidance in formal education - Armenia
Haykuhi Gevorgyan – Career Guidance and Capacity Development Centre (CGCD) / CareerLab, Armenia

The new state standard for general education (2021) and learning outcomes for graduates of elementary, basic and secondary education programmes in Armenia in relation to career education and guidance will be presented as well as the related learning approaches (subject in curriculum, extracurricular activities, methodologies and tools). For more details consult:


Career education and guidance in formal education - Serbia
Jelena Manić Radoičić – Employability & HR Senior Expert, Author of ETF Serbia guidance review

The presentation will focus on the practice of career guidance and counselling teams in elementary and secondary schools in Serbia, looking at the team composition, cooperations with external stakeholders, and the learning approach, methodology and tools. References to the Law on Primary Education and Secondary Education are made as well as to the Serbian Career Management Skills Framework to set the scene. For more details consult: https://www.etf.europa.eu/en/document-attachments/career-development-support-system-review-serbia
Morning Parallel - Session A:

Enhancing guidance through digital technologies

Navigating career paths in the age of AI - UK

Deirdre Hughes (University of Warwick), Dr Chris Percy (University of Derby) and Lauren Croll (CareerChat)

We will present emerging findings from an applied digital and careers research programme underway in a school for children and young people aged 3 to 19 and a multi-academy trust (MAT) in England. The research examines lessons learned from how two contrasting post-primary schools have used an innovative careers chatbot to support the career readiness of young people aged 14+, and targeting teachers and parents. The key research question (i) How can a chatbot, powered by AI and machine learning, be used most effectively to improve career learning outcomes in a secondary school setting? The chatbot integrates labour market intelligence (LMI) datasets drawn from UK government and other sources within career conversation flows. A dashboard facility provides insight into aggregated user characteristics, occupational searches and preferences. The study has been underway over a nine-month period.

Methodology:
- A literature review to identify the current state of research on chatbots and AI in an education and careers guidance context, including its benefits and challenges. We briefly consider the latest ChatGPT developments and implications for careers practice.
- The formation of triad SuperUser Groups in each of the contrasting school settings, supported by a team of researchers, careers leaders and senior managers, provides new insights into how schools can inform and support individuals’ career readiness by harnessing social technology.
- An exploration of the link between a chatbot, powered by AI and machine learning, and human advisers as a symbiotic relationship where each complements the other’s strengths and compensates for their weaknesses.

Our findings shed light on how differing careers information, advice and guidance (CIAG) arrangements exist within schools to support young people career readiness, including teacher and parental support. We highlight models of good and interesting policies and practices and discuss the implications for chatbot usage in a career education and careers guidance context.

AI for career guidance: possibilities and ethical considerations - Finland

Egle Gedrimiene, Ismail Celik, Hanni Muukkonen - University of Oulu

Rationale: AI is increasingly growing in its capabilities and is seen as important and transformative in the field of career guidance. Nevertheless, concrete examples are missing (Brown et al., 2020) leaving the role of AI in guidance unclear. Moreover, users’ experiences and ethics must be kept central in this conversation to assure effective and responsible development and use of AI guidance services (European Commission, Directorate-General for Communications Networks, Content and Technology, 2021). Accordingly, research is needed to identify promising areas for need-driven and ethical user support (Westman, 2021; Gati & Kulcsár, 2021). In response to these gaps, we investigated supportive and ethical aspects of AI-enhanced LA applications in career guidance from users’ perspectives.

Methodology: The AI enhanced career guidance tool was developed utilizing national-level Finnish education registry data. The tool recommended educational programs and study places from vocational education and training and applied science universities in Finland. The recommendations were formed based on a natural language processing technique, subfield of AI and similarity of analysed contents (Competence Leap, 2019). Participant (N = 106) comprised of 42% males and 57% females; age mean 21.7 years; majority having completed basic education (72.6%) and in needed for career guidance. Qualitative and quantitative data analysis was employed.

Finding: Five main user support expectations from AI enhanced guidance tool were identified. Specifically: provision of career information; research and analysis of provided information; transition support; diversification of ideas on possible career options; and self-reflection support. The two latter ones were especially emphasized by the users. Further, the origin of the provided recommendations was not transparent to the users. Despite that, users evaluated them as more trustworthy. Accuracy and not the clarity of the recommendations played the key role in users’ intentions to follow the tools guidance. Caution for user overtrust in AI enhanced guidance is raised.
Maria José Barata is a psychologist with over twenty years of experience running a Professional and Vocational Guidance Office in a Portuguese town with over 200,000 inhabitants called Cascais. While offering a one-to-one counseling experience for young people – with a particular focus on the ages between 14 and 15 years old, right before the entrance to secondary education – the office seeks to build reflexivity skills, broadening their perspectives around career pathways, while gradually supporting a continuous construction of a career project. Maria testifies a shift from the presential to the virtual sessions that happened with the Sars-CoV-2 pandemic, and outlines some of the advantages that the virtual aspect brought to the service, some of these being: Increased number of sessions; Greater session time flexibility; Greater adherence and engagement of young people around the virtual, and flexible times; Easier parental involvement – which enhanced the impact of the session on participants; Interactive information sharing, and skill and ability development in searching for information. Cost reductions in the service; Increased equity in session deliverance — Potential to reach and target any potential participant from any region. While describing some of these advantages, Maria also points out that this shift led to new perspectives around the online format – more openness for creative and interactive screen share ideas that could enhance the student-counselor relationship. “While the virtual shouldn’t be seen as a substitute for the presential, there is the possibility to complement and extend the presential” – Maria adds –, to promote access, engagement, continuity, and cohesion around previous career guidance experiences.

Morning Parallel- Session B:

Work experience placements

Work Experience Placements in Lower Secondary Education in Nordic Countries - Finland
Jaana Kettunen - Finnish Institute for Educational Research

There has been a renewed international interest in how schools support students in learning and preparation for work and working life. One of the ways in which lower secondary education in the Nordic countries provides for students to learn about world of work is through work experience placements (WEP). This presentation focuses on how and to what extent work experience placements in career education is formalised across the Nordic countries. It identifies similarities and differences among the countries and will provide a comparison of the key characteristics relating to work experience placement in lower secondary education in Nordic countries. The analysis is based on policy documents, curriculum and research concerning work experience placements in lower secondary schools in the respective countries. The comparison reveals that while there are some similarities there are also significant differences among the countries regarding the national guidelines, curriculum and general aim of the work experience placement in lower secondary education.
Rapid evidence review of international work experience practices - UK
Will Millard, Isabel Hampton, Izabela Zawartka - SQW

In 2022, the education charity Speakers for Schools commissioned SQW, an independent research company, to undertake a rapid review of English-language evidence on international work experience practices for young people aged 11 to 16. SQW completed the review with support from CUREE. In total, 527 potentially relevant documents were identified during the literature searches. Of these, 496 were excluded through systematic reviews of titles and abstracts. 31 documents were then reviewed in full and a structured coding framework was used to extract information pertaining to three research questions:

What forms of work experience exist for young people aged 11 to 16?
What outcomes does work experience deliver for young people participating?
How does work experience deliver these outcomes?

From an exploration of work experience practices in eight different jurisdictions the review finds that international programmes share various commonalities, e.g., placements generally last for one to two weeks and are completed by students aged 13-16. A point of divergence is around whether work experience is optional or mandatory, and who (the student, the school or district) finds placements. Work experience is associated with a wide range of benefits for students. These include short term gains in students’ self-confidence, motivation toward school and career awareness; longer-term benefits such as improved access to higher education; and benefits for specific groups such as a reduced likelihood of becoming NEET. The international literature identifies several factors that help facilitate successful work experience. These include adequate preparation, support and reflection; aligning placements to students’ interests; providing interactive experiences and opportunities to sample different parts of a profession; and having dedicated resources within schools to lead on building work experience networks. This review also draws attention to factors that can make the delivery of effective work experiences more challenging.

Work experience for all; exploring the relationship between work placement and employment outcomes - UK
Elnaz Kashefpakdel – Speakers for Schools

Young people in England are leaving education with limited opportunities to have experienced the real world of work; with the death of Saturday jobs and part-time work, work placement becomes ever vital for individuals while they are still in full time education.

In 2010, a review of the vocational education system in England meant that the responsibility of organising work experience was no longer enforced on schools; however, it remained a legal duty for post-16 education institutions. Much has changed over the past decade in terms of the education system and the labour market. Young people have to make so many critical decisions about their education pathways earlier on in life and feel prepared for the ever-changing workplace before they leave education.

This paper explores the impact of work experience placements for young people in terms of employment outcomes based on data from 2,098 UK-wide respondents between 18 and 30 recalling their experiences when they were in full time education. The research borrows a methodology used in the past to quantify the relationship between employer engagement on wage premium.

The analysis shows that for each additional work experience reported throughout secondary school, whether virtual or face-to-face, respondents reported a 3.4% higher average wage, indicating that attending work experience is associated with higher salaries when young people are in full-time employment. It also shows that attending work experience reduces the probability of young people becoming not in education, employment or training (NEET) from 11% to 7%.

The research findings have policy implications for reinstating universal work experience for school-age young people as it promotes social mobility and economic growth in the long term.
**Afternoon Parallel - Session A:**

**Enabling effective transitions for all youth**

In Motion and Momentum+: A transformative approach to career development programming for under-represented groups most distant from the labour market - Canada

Sareena Hopkins - Canadian Career Development Foundation

In Motion & Momentum+ (IM&M+) is an action-oriented career development program that supports those furthest from the labour market using a strengths-based, values-driven approach. The program, designed by the Canadian Career Development Foundation, was initially implemented in New Brunswick, Canada to address high rates of dependence on social assistance. The program resulted in unprecedented savings as social assistance dependence was reduced across the region by 10%. The program is evidence-informed, having annual evaluations in New Brunswick, a pilot study in Eastern Ontario, Canada and two pan-Canadian studies: an impact analysis (completed in June 2022) and a randomized controlled trial (to be completed in 2024). The evidence to date is highly promising, showing statistically significant changes in social and emotional learning, pre-employability skill development, employment hope increases, and training and employment outcomes across the intersectionality of participants in the program.

While originally developed for adults living in poverty and facing multiple, complex barriers to employment, there is considerable interest in its potential as a preventative program for delivery to youth. The research to date has focused on youth out-of-school and 18 years of age and over, but participants have been as young as 16 and the program was recently approved by two Boards of Education as a credit course for high school equivalency. This session would describe the approach, highlight the results, and explore the potential application to senior secondary students – particularly those who may be at-risk of dropout.

**Reduced youth disengagement post-16 via improved school-level careers provision in England - UK**

Chris Percy (University of Derby), Laura Hawksworth (Careers & Enterprise Company)

The English government asks secondary schools to achieve the Gatsby Benchmarks of good careers guidance, which specify activities across eight domains, including linking curriculum learning to careers; encounters with employers and education providers; workplaces experiences; and personal guidance. Progress began from a low base in 2014 with an estimated 1.4 out of 8 Benchmarks achieved on average across reporting institutions, improving to 4.9 benchmarks in 2021/22. Nonetheless, some schools achieve all or nearly Benchmarks, as captured in the Compass self-assessment tool used by over three quarters of eligible institutions in recent years. This research exploits variation in schools’ achievement of the Benchmarks to test the link between careers provision and post-16 youth destinations, using school-level administrative government data on where students go after completing lower secondary national exams. The regression analysis controls for key differences between schools such as level of disadvantage, academic grades, school type, and location. A generalised linear model (logit link) is used to model the outcome as a percentage, testing both bootstrapped and heteroskedasticity-robust standard errors, hierarchical inclusion of control variables, and outlier influence. Three years of data are used to generate a sample size of 5453 schools, being all the cohorts available at the time of research due to lags in destinations data publication. Our findings reveal that each additional Benchmark achieved is associated with a 1.1% decline in youth disengagement rates (p-value < 0.01). This is the equivalent of 6.7%pts not sustaining confirmed Education, Employment or Training routes post-16 for full Benchmark achievement compared to 7.3%pts for zero Benchmark achievement. The relationship is approximately twice as strong in the quarter of schools with the most economically disadvantaged student intake. Careers provision appears particularly influential on negatively stereotyped routes, such that full Benchmark achievement is associated with a 17% increase in apprenticeship uptake (p-value 0.00).
Case study of an after-school programme for connecting education with workplace - Greece
Panagiota Argyri, Zacharoula Smyrnaou - National Kapodistrian University of Athens.

In the framework of doctoral study titled “Connecting Education with Workplaces in Secondary Schools in terms of developments students’ skills’ have been researched worked based learning strategies and methodologies that could enhance the career readiness of young people in the terms of development skills, knowledge and attitudes in order to support them in transition from education to the labour market. This case study of the after-school program in Evangeliki Model School of Smyrna in Greece is part of the participatory designed based research methodology of the doctoral study. Students aged 16-17 years old participated in field overview of the workplaces and became part of the professional function, as they have the opportunity to acquire comprehensive knowledge of what an employee does, in corresponding operating department, what are its tasks for the provision of services or the production of products. To capitalize on the experiences, knowledge, attitudes and skills developed through interaction with the professional issues of workplaces, students simulated the role of a professional in implementation interdisciplinary/research tasks. A key parameter of the designing these tasks is the investigation for the integration of services from the environments of the respective workplaces, related to the issues being negotiated. The qualitative analysis of all phases of this practice that lasted one school year, provides that these strategies have a positive impact of strengthening and improving students’ skills, as they will need to behave as “professionals”, observing standards of behavior, cooperation and communication. Also, these interventions with workplaces provide students with authentic knowledge of the scope of the modern working world, allow them to explore and/or confirm their interests, develop social contacts and self-efficacy, so that they could play an active role as future citizens in actions and decisions that will have a positive impact on their personal, social and professional lives.

Afternoon Parallel- Session B:

Career guidance for students with disabilities & enabling well-being

Career Guidance and Employment for Students and Adults with Disabilities: Challenges and Opportunities - Employment for People with Intellectual and Developmental Disabilities. (1)- USA
David Blustein (Boston College), Carly Blustein Gilson (Ohio State University), James Sinclair (University of Oregon)

In this presentation, the career guidance challenges of students and adults with disabilities are reviewed in relation to psychology of working theory (Blustein, 2006), which reflects a highly relevant conceptual model in understanding and intervening in the lives of marginalized students and adults. The presentation will begin with a brief overview of psychology of working theory and its relevance for students and adults with disabilities. First off, it will summarize a qualitative study on the work lives of adults with intellectual and developmental disabilities (IDD) in the United States.
Career Guidance and Employment for Students and Adults with Disabilities: Challenges and Opportunities - Work experiences of adolescents with severe learning disabilities and ADHD (2) - Israel
Galia Ran, Gali Cinamon (both Tel Aviv University)

While many Western countries have seen an increase in youth employment rates along with their studies, adolescents with disabilities often face greater difficulties finding student jobs and obtaining fair conditions compared to typically developing youth. However, research on career development has mostly focused on privileged groups and people with typical development, limiting our knowledge and ability to offer evidence-based practices to enhance the career development of vulnerable groups. To address this gap, this study draws on the Psychology of Working Theory to explore the unique perspectives of working adolescents with learning disabilities and ADHD.

Nine adolescents participated in an in-depth, semi-structured interview, and content analysis revealed two major domains:

1) Interest and work meaning (rather than just payment) as adequate compensation and 2) Safety and protection, reflecting the need for safe and supportive interpersonal conditions at the workplace, as an extension of the protection provided in special education frameworks.

The findings shed light on the distinct way in which youth with disabilities perceive the concept of “decent work. Implications for research and practice are discussed, including suggestions for career education programs that specifically cater to the needs of youth with LD.

Career Guidance and Wellbeing: Empowering young people to re-engage - UK
Deirdre Hughes – University of Warwick

Careers and employability support services are vital parts of a well-functioning society. These services are increasingly recognised by employers, governments, and citizens as value-added means to help support individuals’ transitions into meaningful learning and work.

Transitions in and out of work, changes in physical and mental health, identity crisis, moving to another area and feeling stressed about life can sometimes be real challenges. It is well known that education, skills, health, relationships, finance, and location impact differently on people’s lives depending on circumstance. Career development and wellbeing has been researched in many career construction studies. However, little is known in a career development and employment services context about how best to approach potentially sensitive wellbeing conversations to support individuals who may be facing tough times.

This paper presents a new toolkit designed to support the well-being and career development of young people. The toolkit was designed through an international collaborative research project, working with 31 careers specialist practitioners and career development senior leaders from Wales, Scotland and Canada. This is designed for use by practitioners and senior leadership teams working with young people and adults.

The free practical toolkit has resulted in training rolled out to 300+ guidance practitioners across Wales, including many working in schools and is now being developed to support career and wellbeing conversations with young people who have reduced attendance or non-attendance at school.
From research to practice: how New Brunswick is integrating insights from longitudinal analysis into K-12 career development

Tricia Berry (Department for Education and Early Childhood Development, New Brunswick) and Anthony Mann (OECD)

The final session of the conference focuses on the integration of research into policy and practice. It explores the ways in which the Canadian province of New Brunswick has drawn on longitudinal analysis undertaken within the OECD Career Readiness project to enhance guidance for children and young people. It integrates aspects of guidance which can be most confidently associated with better employment outcomes for young people into a new approach to provision. This session provides an overview of the New Brunswick’s new K-12 Career Education Framework, its rationale and how it is influencing the ongoing development of guidance in the province.

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