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



# OECD conference 27, 28 and 29 October 2021



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 sign up separately to each session that interests you:

Day 1 (PM) - 16:00-18:00 Sign up here
Day 2 (AM) - 09:00-12:00 Sign up here
Day 2 (PM) - 15:00-18:00 Sign up here
Day 3 (AM) - 09:00-12:00 Sign up here
Day 3 (PM) - 15:00-18:00 Sign up here

# CONFERENCE PROGRAMME DAY 1: 27 OCTOBER 2021

16:00-18:00 Plenary session

During the opening plenary session, OECD Director of Education and Skills Andreas Schleicher with his colleagues Catalina Covacevich and Anthony Mann will present findings from an unprecedented review of national longitudinal datasets from ten countries (Australia, Canada, People's Republic of China, Denmark, Germany, Korea, Switzerland, United Kingdom, United States and Uruguay). Analysis explores how teenage attitudes and experiences relate to employment outcomes ten years later. The work identifies indicators of better employment outcomes linked to how students explore, experience and think about potential futures in work, providing new insights for countries and schools looking to optimise career guidance. Following the presentation of the results, an expert panel will discuss the implications for policy and practice and the session will include a presentation on engaging schools with employers from Nick Chambers, CEO of Education and Employers.

#### **Our Panel:**

David L. Blustein - Professor of Counselling Psychology, Boston College (USA)

**Hanka Boldemann** – Executive Director Jobs & Skills International, Global Philanthropy at J.P. Morgan

**Gert van Brussel** – President of the International Association for Educational and Vocational Guidance (IAEVG)

**Sareena Hopkins** – Executive Director of the Canadian Career Development Foundation and a Board member of the International Centre for Career Development and Public Policy (ICCDPP)

**Deirdre Hughes –** Co-editor of the British Journal of Guidance and Counselling: International Symposium Series

# Morning Parallel session 1A – Early career awareness and education

#### 09:00-09:30 Practice

Preparing high school students for their Future in Work - whatever the shocks may be.

- Mr Pete JONES, Manurewa High School; Ambure Giborees, Leanne Gibson, Emma O'Riordan, Manurewa High Business Academy

The entrepreneurial spirit of Manurewa High and its Business Academy has been a positive lever in transformational outcomes for our community. With an established network of partners in government agencies and business, we were well prepared to manage the Covid-19 disruptions that affected our community harder than most.

#### 09:30-10:00 Practice

# Best practice career education for middle-school students from low socioeconomic backgrounds: Two case studies

- Dr Olivia GROVES, National Centre for Student Equity in Higher Education, Curtin University; Kylie Austin, University of Wollongong; Nicola Cull, Australian Catholic University; Laurie Poretti and A/Prof Philip Roberts, University of Canberra

#### /BREAK/

This presentation discusses an Australian research project which developed best practice principles for the provision of career education for students from low socioeconomic (LSES) backgrounds. Two pilot programs designed, implemented and evaluated as part of the broader research project, are showcased in order to demonstrate how career-education programs for middle-school students from LSES backgrounds can support the expansion of aspiration and career thinking. This will be evidenced by drawing on program evaluation data which included surveys and interviews with a range of stakeholders including the student participants, mentors, teachers and program implementation staff. The findings presented show how such programs can support the aspiration development and refinement of career thinking of students from diverse backgrounds.

#### 10:15-10:45 Practice

# Arriving where we started and knowing for the first time: evaluating an inquiry-based approach to career exploration in 10-13 year olds.

- Ms Liv PENNIE, BECOME Education; Professor Jim Bright, Australian Catholic University

The aspirations and plans of high school students demonstrate significant gaps in both understanding and skills when it comes to exploring, designing and navigating their future. This paper outlines the practice and impacts of an Australian careers education program which makes it easier for schools to deliver careers education early, often and integrated by taking a whole school approach. The pre and post program results from a single cohort of 176 10-13 year olds demonstrate the positive impacts to be gained not just in supporting students to be active and critical thinkers about their future but also in increasing their focus and connection to their learning when it's required rather than after the event. In addition to more effective careers education, the practice also enables schools to deliver proactive and personalised career guidance. As students repeatedly engage with their ideas for their future, the interactive tool underpinning the program shows a real time picture of their explorations and emerging aspirations. Career Advisors in schools can use this dashboard to proactively target their help to those who need it when they need it rather than relying on a one size fits all process towards the end of high school.

## Parallel session 1A – Early career awareness and education

10:45-11:15 Practice Supporting, strengthening and enhancing Victorian students' career planning and career and work readiness

 Ms Leela DARVALL, Department of Education and Training, Australia; Ms Rowena Archer, Braybrook Secondary College

Following an external Review of Career Education and a Parliamentary Inquiry into Career Advice Activities in Victorian Schools, the Victorian Department of Education and Training is implementing a number of career education reform initiatives to transform career education to ensure government secondary school students have access to high-quality career education to make more informed career and pathway decisions; connect today's learning with tomorrow's jobs; have the skills and capabilities to navigate multiple careers; manage complex and challenging transitions; and meet the demands of the rapidly changing globalised job market. A recent Review into Vocational and Applied Learning Pathways in Senior Secondary Schooling further highlighted the importance of good quality career education in providing students with valuable linkages to the world of work and understanding their career pathway options from an earlier age. The review included a set of transformative reforms to senior secondary schooling to improve the skills and work readiness of young people and to set them up for success in further education and training, a rewarding and fulfilling career and thrive in life. The presentation will outline the major reforms being implemented to transform career education in Victorian Government Schools, the reforms to senior secondary schooling and will feature a case study from a school on how it is using the career education reform initiatives to enhance its students' career and work readiness, particularly given the unpredictability of the post COVID world of work.

11:15-11:45 Practice

#### FURNCRAFT - Supporting Youth Transitions into Furnishing Careers

- Ms Janine BLAKE, Food Fibre and Timber Industries Training Council

In Western Australia, responses to Covid-19 have included the closure of state borders and a focus on job creation with significant investment in infrastructure. The consequence has been competition for labour and a smaller talent pool. As at May 2021, the unemployment rate was 4.7% in Western Australia and the youth unemployment rate at 10.7% nationally. The Furnishings industry have recorded significant skills and labour shortages prior to and continuing during Covid. As a response to these labour and skills shortages, the Food, Fibre and Timber Industries Training Council, an advisory body to the WA government, has partnered with the Department of Education; Registered Training Providers; Headspace; Cabinet Makers Association and Furniture Makers Association to deliver FURNCRAFT, a career learning and work experience initiative seeking to both respond to the immediate labour and skills shortages and to improve career awareness of the furnishings sector amongst schools. FURNCRAFT is a multi-day initiative with career activities aligning to qualifications including Cabinet Making, Upholstery, Wood Machining and Furniture Finishing and providing structured outcomes such as work experience, pre-apprenticeships, apprenticeships, employment and institutional training. FURNCRAFT draws on the research "It's who you meet: why employer contacts at school make a difference to the employment prospects of young adults" by Dr Anthony Mann, Director of Research and Policy, Education and Employers Taskforce. The research indicates that young people who recall 'four or more employer contacts' are less likely to be NEET (not in education, employment or training) and, more recently, Australian research "Ameliorating disadvantage: Creating accessible, effective and

#### Parallel session 1A – Early career awareness and education

11:15-11:45 Practice

equitable careers and study information for low SES students" by lead investigators Professor Dawn Bennett and Dr Jane Coffey from the Perth: National Centre for Student Equity in Higher Education where the research indicates that there was diminished access to quality career quidance for students with low SES. In addition, FURNCRAFT has been developed based on significant practice experience (2017 – 2021) in the development and implementation of a multi-employer Work Inspiration model for students experiencing disadvantage in Australia including in pilot form to young people not engaged in education, employment or training. The findings have noted a considerable opportunity to improve the model by way of: - Focusing on an industry area and labour market need; - Using an employer partnership model; - Including career activities with a more intense hands-on experience delivered by qualified trainers; and -Including deliberate opportunities to learn and demonstrate the core skills for work linking to structured outcomes for the young people. Research has focused on multiple contacts with employers by schools students and the positive impact this has on their future. However, there is a gap for more research on career activities including multiple employer engagements for young people who have left school and are not in education, employment or training and the impact of this intervention on their future.

#### Parallel session 1B - Disadvantaged students

09:00-09:30 Research The impact of socioeconomic status on students' access to information on career thinking and exploration

 Prof Dawn BENNETT, Bond University; Dr Jane Coffey, Curtin University; Paul Koshy, National Centre for Student Equity in Higher Education; Ian Li, University of Western Australia; Alfred M Dockery, Curtin University, Australia

The OECD Career Readiness project emphasises the importance to young people of thinking about, and exploring, potential work futures. This presentation reports a study of how students' access to information on career thinking and exploration differs by socioeconomic status (SES). The researchers analysed data from the Longitudinal Surveys of Australian Youth (LSAY) to understand changes in career-related advice over more than two decades. They then analysed data from a freely available self-assessment tool via which university students reported their perceived employability. LSAY data revealed that career and study information for senior high school students has increasingly focussed on traditional university pathways despite fewer than half of Australia's university entrants engaging with these pathways.

Data also showed that the socioeconomic divide in the type and quality of career information available to students is becoming more pronounced. Students' self-assessments of their career and study confidence revealed that students from government (state) schools, regardless of SES, were disadvantaged in relation to employability thinking and preparation. The impact of the inequitable provision of careers and study information in secondary school is long-lasting.

Coupled with other disruptions, such as the pandemic, the impact of disadvantage in higher education is likely to be exacerbated. Implications include the need for: (i) better use of longitudinal data in the support of career exploration and readiness; (ii) the creation of accessible career information that emphasises multiple study and career pathways; and (iii) the inclusion of career guidance information in initial teacher training

## Parallel session 1B - Disadvantaged students

09:30-10:00 Research Identifying school-level factors that drive long-term outcomes for students from regional, rural and remote areas in Australia – evidence from two large-scale national cohort studies

 A/Prof Wojtek TOMASZEWSKI, Institute for Social Science Research/The University of Queensland (UQ); A/Prof Francisco Perales, Dr Ning Xiang, Dr Melissa Johnstone, The University of Queensland (UQ)

There is growing evidence that the COVID-19 pandemic has amplified pre-existing inequalities in educational and labour-market outcomes among young people. In many countries around the world, people from disadvantaged backgrounds have found themselves at increased risk of poor school and post-school outcomes. In this context, it is critically important to understand the factors that shape the outcomes of young people from disadvantaged backgrounds.

In Australia, the country of focus for this research, one group deemed as disadvantaged are people from regional, rural and remote (RRR) communities. Given the vast geographic distances between rural and urban centres within Australia, people from RRR communities experience very different life circumstances than people from urban areas—often lacking access to important material and immaterial resources and access to high-quality social and community services. This situation applies—perhaps particularly strongly—to children and young people, who are at a critical developmental period and a core stage of their longer-run educational trajectories.

This project focuses on how factors that operate at the school level—especially those that schools and governments can influence—shape the longer-term educational and labour-market outcomes of young people from RRR backgrounds. School-level factors are both pivotal in improving students' school experiences and potentially malleable to intervention. Yet there is little empirical evidence in Australia on their longer-term impacts for students from rural backgrounds. This study identifies school-level factors associated with RRR students' outcomes and compares them with those of students form urban areas. It is based on analyses of data from two major panel studies: the Longitudinal Study of Australian Children (LSAC) and the 2009 cohort of the Longitudinal Survey of Australian Youth (LSAY). Leveraging advanced statistical methods, this presentation examines the influence of multiple school-level factors on a broad range of RRR students' outcomes at multiple points of the life course.

School-level factors are conceptualised using a multidimensional construct of school climate and comprise both objectively measured school characteristics and subjective teacher/student reports on school practices. They include safety factors (e.g., teachers' perceptions of school disciplinary practice and students' experiences of being bullied), academic factors (e.g., teacher-reported teaching practices and students' perceptions of teacher-student relationships), community factors (e.g., school diversity, as captured by the proportion of low socio-economic status and ethnic-minority students), and institutional environment (e.g., school size, teaching staff numbers and school funding).

The outcomes of interest are captured at different points of the young people's educational and work trajectories. They include academic achievement (e.g., administrative records on student performance in secondary education), post-school transitions (e.g., enrolment into university, degree completion), labour-market outcomes (e.g., paid employment, working full-time, occupational status, earnings) and wellbeing (e.g., mental health, socio-emotional development).

## 09:30-10:00

/BREAK/

Research

10:15-10:45 Research

#### Parallel session 1B - Disadvantaged students

By identifying the school-level factors that are particularly relevant in shaping long-term outcomes of RRR students, this research makes significant contributions to the international academic literature on school climate, as well as to the development of policies and practices aimed at improving education equity in Australia.

# Improving access to career support programs for Australian students experiencing disadvantage: Who gets career advice at school, and does it relate to education and employment outcomes?

- Ms Anne HAMPSHIRE, The Smith Family; Dr Kirsten Hancock, The Smith Family

The Smith Family is an Australian not-for-profit organisation supporting over 57,000 children and young people experiencing financial disadvantage through a long-term educational scholarship program, Learning for Life. The Pathways, Engagement, and Transitions (PET) longitudinal survey examines post-school engagement in education, employment, and training for 4,420 senior high school students who were on Learning for Life program in 2020, including 1,710 who have since left school. Initial survey results from early 2021 highlight that where young people received career advice at school, 74.3% were engaged in employment, education, or training at least part-time. In contrast, only 65.2% of young people were engaged if they did not receive career advice at school. This engagement gap was wider for female (78.3% vs. 67.5%) than male (69.5% vs. 62.4%%) young people. Engagement outcomes did not significantly vary according to perceptions of how useful that advice was. This presentation discusses these findings in the context of The Smith Family's Growing Careers Project, which aims to enhance the delivery of careers programs to students in disadvantaged schools in Australia.

#### 10:45-11:15 Research

## Australian young peoples' careers and skills: inequalities in both envisaged future and its attainment

 Dr Elizabeth KNIGHT, Victoria University; Dr Shuyan Huo and Dr Melissa Tham, Centre for International Research on Education Systems, Victoria University, Australia

The economic shock brought by the COVID-19 pandemic has resulted in disproportional job losses and disruptions to the education and training of young people globally. As a result, young people are facing greater challenges to gaining the skills they require for making successful transitions into employment. Despite having relatively high university participation rates, Australia faces greater skills shortages compared to other developed countries. Yet, there are few Australian studies that investigate young peoples' aspirations, the skill level requirements related to their aspirations and their occupation attainment in adulthood.

This research draws on data from the 2009 cohort of the Longitudinal Surveys of Australian Youth (LSAY) to explore the aspirations of 16-year-olds and analyses the degree to which these match their obtained occupations at age 25.

One in two (49.1%) young people are working in a job where their occupational skills match to the level of skills reported in their aspired occupations. Four in ten participants are working in a job requiring lower level skills compared to their aspired jobs. One in ten young people work in a job of higher skills than what they hoped for 10 years earlier.

#### Parallel session 1B - Disadvantaged students

10:45-11:15 Research The results vary according to socio-economic status (SES), with high SES youth the most likely to attain a job that matches their levels of aspired skill levels (58%), compared to low SES youth, with only a 39.8% match. Students' skill aspiration also varies alongside SES when comparing groups of high, medium and low academic performers in maths and reading. Disadvantaged high-achievers aspire less frequently to high skill occupations than similar performing advantaged students.

The skill aspiration gap between high and low SES students widens as students' performance levels decreases. The findings highlight that Australian young people aspire to become highly skilled citizens, but these dreams are less likely to come true for disadvantaged youth. The research underscores the importance of addressing disadvantage as part of post-pandemic economic recovery efforts.

# Afternoon Parallel session 2A – Engaging with employers

15:00-15:30 Practice

#### Practical work-experience period as a student entitlement in Finland

 Dr Raimo VUORINEN, Dr Jaana Kettunen, Finnish Institute for Educational Research/University of Jyväskylä

In Finland, career education is a compulsory element in the curriculum, comprising 76 hours of scheduled activities in students' timetables during classes 7-9. In addition, there is an entitlement for individual guidance and group counselling, and practical work-experience periods (TET) in companies. In grades 1-6, quidance is embedded in the work of the classroom teachers. This paper presents in more details the content of the TET period and a platform which is used as a joint working space to enhance and manage cooperation between schools and work places. The National Agency for Education draws the core curriculum which sets key learning objectives for learning within comprehensive education, including career education. The local institutions are required to have an institutional curriculum, which includes a description of co-operation with the local labour market and business community. Classroom visits by labour market representatives, visits to workplaces, project work, the use of different sectors' information materials and TET periods are central parts of this co-operation. The instruction in the different subjects is to include modules that connect the knowledge and skills provided by the subject to the demands and possibilities of working life. The emphasis is on the promotion of lifelong career management skills, not only on the choice of next school level. According to the core curricula, the objective is to help the student to understand the importance of work for one's own life and society and to understand the link of different subjects with future studies and for the skills and competences needed in the working life. The local environment and workplaces are crucial contexts for learning in addition to school and online environments. During grades 7-9 the school is required to organise practical introduction-to-working life periods (TET) in order to create a basis for educational and career choices and to increase labour market awareness. In most schools, the TET-period consists of two weeks outside the school, one week on grade 8 and one week on grade 9. During the TETperiod, students are practicing those skills needed in the workplace in a real working environment. TET is implemented in cooperation with the other school subjects utilizing their content and working methods.

## Parallel session 2A - Engaging with employers

15:00-15:30 Practice

In connection with the work experience program, students are encouraged to evaluate with their peers the knowledge and experience they gained. TET-tori (https://peda.net/tet) is created as a tool for guidance counsellors as well as for students and parents so that it would be easier, more versatile and more efficient to find TET placements. At the same time, the tool also helps companies and workplaces to easily create contacts with pupils and bring working life closer to school. The tool is structured according to geographic regions and serves as an information and communication channel. In sum, TET-tori is an online tool that aims to facilitate the role of all people involved in the TET periods of the Finnish education system. The tools support education guidance provision in two ways, and namely: • It supports the implementation of the TET which is a key element of the last 2 years of compulsory education. It offers a broad range of information on the students' future education options as well as information on professions along with their skills and training requirements, thus, offering a more integrated education and career quidance information. This paper is connected to another proposal by Economy and youth TAT on virtual practical work experience. This paper provides a wider framework for TET as part of structured career education programme and the Economy and youth TAT provides an example of pedagogical online application of the TET

15:30-16:00 Practice

## Development of virtual practical work-experience period in practice - case Finland

Mr Lauri VAARA, Ms Riikka LEHTINEN, Economy and Youth TAT

Career education in Finnish curriculum is compulsory for all the students during grades 7-9 (age 13 to 16 years old students) in comprehensive education. Students will also participate 1-2 week(s) long practical work-experience periods (TET) in companies practicing working life skills in real working environments. Economy and Youth TAT has been active developer for practical work-experience periods (TET) in practice both with companies and schools for over 40 years. The digitalization of the work environment has challenged us in TAT to consider the contents and implementation of the practical work-experience periods. In 2019 TAT executed a TET-survey (TET-tutkimus) for 8.-9.th grade students who had completed their practical work-experience in companies (TET). Based on this TET-survey (n=700) the students estimated that this experience played an important factor for choosing their future education and professions / careers as well as learning new set of working life skills. However, the students also wished more knowledge from different industries and more versatile work tasks during the practical work-experience to learn needed skills for the future working life. This TET-survey with the COVID-19 pandemic accelerated the already begun development of a virtual practical work-experience model. This paper of practice presents in more details about the recent development of practical work-experience period (TET) to new virtual model. In autumn 2020 TAT and a large-scale company from finance sector in cooperation piloted two virtual TET periods for one week with 10 students. After the successful virtual TET pilots, TAT started to cooperate with EK, Confederation of Finnish Industries. In spring 2021 TAT and Finance Finland (member of EK) and its four finance sector companies executed a virtual TET for 200 8.-9.th grade students. TAT worked closely with schools and career and guidance counsellors during the development and execution of Virtual TET periods. In practice the virtual TET was a week-long period coordinated by TAT making sure that the virtual TET meets the criteria of the curriculum and pedagogy. In addition, the companies received guidance and cooperation planning (ca. 5 hours) from TAT working life and pedagogy specialists on how to execute the virtual TET.

## Parallel session 2A - Engaging with employers

15:30-16:00 Practice The week was structured to imitate the typical work week in the finance field with similar working hours, breaks and work tasks. The aim of this was to teach students the versatility of working life and include them to a genuine work community.

/BREAK/

During the week companies use digital platform and learning environments to engage and organize work and learning. The students heard company and industry representatives' presentations about the industry relevant skills and talent needs for the future, career stories from employees as well as had virtual company tours and did project work for companies. Before virtual TET the students received a learning material from TAT to help students to the upcoming learning process of virtual TET and the importance of future education and career planning to enter working life. Based on the data-analysis of students feedback answers (n=140) after virtual TET it was revealed that the overall score for virtual TET was 4,5/5 and 82% would recommend virtual TET to a friend as a way to get to know working life in practice. Students also described to have learnt vital working life skills for the future, such as creativity, team work, problem solving, self-management and digital skills. Based on the experience of virtual TET it can be concluded that the virtual TET was a successful trial and the collaboration with companies and schools were beneficial. The development of virtual TET will continue in November 2020 with five different industry fields and their companies. Already 2000 students all over Finland has registered to the upcoming virtual TET. Virtual TET is finding its place as a modern way to experience and practice working life.

16:15-16:45 Practice

# Building resilience and skills through virtual work placements during the pandemic

- Mr Funbi AKANDE, Rachael Saunders, Speakers for Schools

When the lockdown was announced on Monday, March 23 2020, employers cancelled all inperson work experience placements that were planned for young people in secondary schools and colleges. This happened at a time where the majority of schools did not yet have the infrastructure in place to immediately pivot to online learning, so young people who were disenfranchised also felt isolated. Speakers for Schools is a charity with a mission to raise career ambitions among young people attending state schools in the UK by sending some of the UK's most inspiring individuals into schools to deliver talks that help increase the resilience of students, and we also facilitate work experience with the top UK employers for students. When employers cancelled all planned work placements and speakers could no longer into schools, we introduced virtual work placements and virtual talks programmes. Since then, 25,000 virtual work experience placements have been accessed by young people and over 200,000 have joined a virtual talk or broadcast. This paper will look at the challenges faced by young people and schools in accessing virtual programmes, and the benefits gained by both the young people and the employers or volunteers who provided the opportunities.

16:45-17:15 Practice

#### Inspiring encounters with professionals

Mr Juan Jose JUAREZ, Sara Sanchez, Bertelsmann Foundation

Helping secondary students to discover different professions and to take more mindful decisions about their future career path. Due to the COVID-19 pandemic, schools have faced difficulties to provide orientation activities to their students. To address this challenge, the initiative "Inspiring encounters with professionals" promoted by the Fundación Bertelsmann and Empieza Por Educar with the support of the J.P. Morgan Chase Foundation, aims to shorten the gap between schools and the labor market by organizing online encounters between professionals and secondary school students (age 15-16) from 100 different schools

#### Parallel session 2B – Measuring career readiness

15:00-15:30 Research Youth Career Development Competency (YCDC) Scale: Factor Structure and Scale Validation among Hong Kong Youth

 Dr Steven Sek-yum NGAI, The Chinese University of Hong Kong; Dr. Chaukiu Cheung, City University of Hong Kong; Dr. Lin Wong, The Chinese University of Hong Kong

The challenging labor market conditions concomitant with the COVID-19 pandemic have made youth career development competence (YCDC)—young people's ability to navigate transitions through education into productive and meaningful employment—especially important. This study seeks to develop and validate a holistic instrument to measure YCDC in Hong Kong. The sample consisted of 682 youths aged 15-29 years (387 male, mean age=19.5 years) who participated in a territory-wide project titled CLAP@JC, which aims at empowering young people to become active path navigators and change agents of their own career and life development pathways. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed to investigate the factor structure of the YCDC scale. Internal consistency, subgroup consistency, and bivariate correlations served to determine the reliability, stability, and concurrent validity of the scale. EFA of the 17-item YCDC scale resulted in four competence factors—engagement in new career or social experience, selfunderstanding, career and pathway exploration, and career planning and management which accounted for 78.95% of the total variance. The final CFA results indicated a good model fit (CFI=0.96, TLI=0.95, RMSEA=0.06, 90% CI [0.05, 0.07], SRMR=0.03) and good factor loadings (0.78-0.91). Moreover, the results demonstrated satisfactory internal consistency in the subscales (0.89-0.93) as well as subgroup consistency across gender, age, and years of residence in Hong Kong. In addition, correlations between the YCDC scale and subscales with other career-related or psychosocial outcome indicators (i.e., career outcome expectancy, career adaptability, civic engagement, social contribution, and social integration) showed good concurrent validity. The results indicated that the YCDC scale is a valid tool for measuring youth career development competence in the Hong Kong context. Its development sheds light on how career professionals can holistically assess young people's navigation competence during their school-to-work transitions. (Acknowledgement: The study was derived from part of a larger evaluation study of the CLAP@JC Project created and funded by The Hong Kong Jockey Club Charities Trust.)

15:30-16:00 Research

# Development of a Student Career Readiness Index to assess the impact of good career guidance in England

Dr Jill HANSON, International Centre for Guidance Studies, University of Derby;
 Professor Tristram Hooley, University of Derby; Vanessa Dodd, Nottingham
 Trent University

Career readiness as a short-term outcome of career guidance interventions is gaining attention at policy-level in England. This paper describes the development of a career readiness measure in England and the results of testing the relationship between career guidance interventions and career readiness on secondary school students. The survey instrument was piloted on young people in secondary schools in North East England taking part in a career guidance pilot programme. The instrument fitted a nine-item one factor structure using principal axis factoring. It was found that the factor structure was a good fit to the data using confirmatory factor analysis. The paper also describes a test of the relationship between career guidance activities and career readiness.

#### Parallel session 2B - Measuring career readiness

15:30-16:00 Research / BREAK /

16:15-16:45 Research Through the use of multiple hierarchical regression, it was found that greater participation in career guidance activities was significantly associated with increased career readiness. These findings have implications for both policymakers and researchers.

# The shape and consequences of teenage career concentration: Analysing an English cohort born in 1989/90

 Mr Chris PERCY, University of Derby; Professor Ingrid Schoon, University College London (UCL)

Early analysis by the OECD has identified teenage "career concentration" as a potential indicator for future labour market outcomes. Where teenagers pick one of the top ten most common job choices for their gender (as c. 50% of teenagers do), it is hypothesised that some of them are following default preferences/pathways, which they may not have scrutinised closely and which they may later regret. Analysis of Swiss, Danish and Australian datasets of teenage aspirations around age 15 point to inconsistent interpretations to date, suggesting this may be a subtle and context dependent indicator that needs review on further datasets to improve our understanding of its significance and reliability among different subgroups. We test this hypothesis using a large-scale longitudinal dataset from England (LSYPE1), which asked teenagers born in 1989/90 at age 13/14 about their future job aspirations (coded at 4-digit SOC level), slightly younger than the PISA datasets analysed to date. The dataset tracks respondents through to their labour market outcomes at age 25. In line with previous research, we confirm that the aggregate distribution of young people's aspirations correlate to highly visible and high status jobs in a way that is widely out-of-sync with projected job demand.

Focusing on wages among those in full-time work at age 25, we find that teenage career concentration is associated with lower wages among young women, but not among young men. Employing a broad range of controls, including socio-economic background, academic attainment, neighbourhood deprivation/rurality, family circumstances, and risky behaviours, we find that having a gender-popular job choice is associated with lower wage outcomes for women, particularly among those who do not go onto work in that broad area (3-digit SOC code) and do not have a backup plan. Having a backup plan appears to mostly neutralise this average disadvantage. For men, findings are not significant, although the same pattern prevails regarding the benefits of backup plans and attaining work in the same occupational area of interest.

A different headline emerges focusing on general life satisfaction at age 25. Among everyone in the sample regardless of employment status, women report higher life satisfaction if they had a gender-popular aspiration at age 13/14. However, this favourable relationship appears to weakly reverse among the small sample (c.10%) who achieve that popular aspiration. These findings also hold among the subsample of women in full-time employment. The study also shows that the relationships are not significant among young men, although the same patterns prevail.

#### Parallel session 2B - Measuring career readiness

16:45-17:15 Research Perceptions of career conversations for the development of student career competencies

- Ms Cristina SANTOS, University of Cambridge

The study aims to investigate how transferrable and effective career conversations could be in the context of academic Portuguese secondary schools with the view of improving students' career competencies. It does so by analysing: 1) the extent to which students' perceptions of career conversations relate with their existing career competencies, 2) the extent to which these two separate parameters relate with student demographic characteristics, 3) how patterns in perceptions of head teachers and teachers at a school, regarding the implementation of career conversations, correlate to the views students of that school have on career conversations and to school background characteristics. Conclusions from the pilot-study indicate that student perceptions scores on content and relationship in career conversations change according to their career competencies, and the type of school. Statistically significant differences in perceptions of career conversations were found for subgroups based on gender, and parent educational level.

# Morning Parallel session 3A – Cultural and social context

09:00-09:30 Practice

Applying the Cultural Preparedness Process Model for Intervention Development Amongst High School Students: A Report from India and Bangladesh

 Mr Abhishek GHOSH, Joseph Chakma, Poonam Jain, Rayan Miranda, Gideon Arulmani, The Promise Foundation Community College affiliated to Martin Luther Christian University

In 2005, The Promise Foundation, an Indian non governmental organisation conducted a national survey to understand work orientations and career choices of Indian students in the age range of 14 to 18 years (Arulmani & Nag, 2005). Qualitative and quantitative data were collected in 7 different languages from a sampling of approximately 10,000 students, parents and teachers from 13 different provinces. Findings were presented at the National Consultation of Career Psychology (NCCP) to researchers, practitioners, teachers, students and government officers. Recommendations from NCCP led to Jiva, a culturally mediated career guidance model. Jiva means "life" in India and it signifies that career and life are intrinsically connected. Jiva has been practiced in India and adapted for use in other countries over the last 15 years. Cultural forces (enculturation and acculturation) engage with career development tasks to create unique culturally defined career development environments. Taking a culture sensitive approach Jiva aims at improving students' preparedness for career development (career preparation status) by addressing social cognitions (e.g., career beliefs), cultural influences (e.g., parent and family) and career home learning environments. Jiva counsellors engage with students and their parents through the four steps of career discovery path: 1) Understanding self, 2) Understanding the world of work, 3) Developing career alternatives and 4) Career preparation. Jiva counselling impacts career thinking as follows: a) linking personal potentials and career possibilities, b) self-mediating career development across the life span, c) awareness of the influence of career beliefs and d) parents' orientation to career learning environments. This presentation will draw upon our 15 years of experience of practicing Jiva amongst a wide range of client groups, including tribal populations and make suggestions for career guidance practice that could have cross cultural relevance.

09:30-10:00 Practice

## Fostering Innovative Career Thinking with Parents & Students in Pakistan

- Mr Raza ABBAS, Pathway Global

Parents / Family relationships have been considered influencing for children's school/career development. The Life Design paradigm (Savickas et al 2009) places particular emphasis on parent's role. In Pakistan, career thinking is heavily influenced by parents. It is important to broaden the aspirations of students and to give parents the confidence and the tools they need to support their children's career exploration. A good starting point is having a career dialogue with the parents of students in grades 8-12 (ages 13-18) at public and private educational institutions. The practice is aimed at educating parents about diverse career fields commonly known in the country and also enlightening them about emerging career fields which will have bright future career prospects based on research. The parents complete a 15-20 minute evidence based questionnaire, which is designed to help them realize the limitations of their children's career aspirations and the extent of resources available to them. This prompts a mutually engaging dialogue about what makes for a good job/livelihood and how to find useful information about jobs, careers, education and training pathways.

#### Parallel session 3A - Cultural and social context

09:30-10:00 Practice

/BREAK/

10:15-10:45 Research Both parents and children are encouraged to become more proactive and investigative about future plans, including consideration of newly emerging industries. One important activity is a careers and vocational fair where they have the opportunity to meet with people working in jobs of interest, employers and representatives of post-secondary education and training and vocational institutions. Parents come into this process with partial career information and with many assumptions. An enlightened counsellor and practitioner will empower them by helping them to understand how sustainable careers are crafted. Afterwards, many students are pursuing a career that they didn't even know existed at the start of the process which contributes to their economic livelihood and prosperity which is need of current times.

# Models of Workplace Engagement K-12 NSW an alternative practice to work experience

 Ms Glenda O'BRIEN, New South Wales Department of Education; Megan O'Connell

The world of work is changing at a rapid pace, bringing with it challenges for the social and economic participation of all young people. Research shows that young people who have developed capabilities like communication and problem solving, and who have significant workplace experience, will make the transition to work quicker than others. Workplace engagement and work-related projects which include authentic and contextualised employer engagement; vocational exploration and building of aspirations; experiential learning; and personal accomplishment – lead to better outcomes for young people. Some of the most effective activities help to build student's belief that they can succeed. There is a need to design workplace engagement models which are authentic, valued and beneficial for improving school to work transitions. It is within this context that the NSW Department of Education and Training funded the Models of Workplace Engagement pilot. Eleven schools participated in the pilot, with each developing and implementing individual projects to engage a cohort of students in Year 9 and / or Year 10 in workplace engagement activities. Individual projects varied tremendously, from pre-work experience activities, to site visits and experiential learning. Students involved in the pilots also varied, from those with a keen desire to learn about an industry to those who were relatively disengaged with learning and school.

The aim of this research report is to reflect the pilot project experience, particularly from the student viewpoint. Data was also collected on what types of experiences and needs Year 7 and pilot project students have. Initial research questions centred on student needs and expectations around the world of work.

Through surveys and case studies we seek to reflect student voice and articulate their experiences of the pilot projects. Taken together, the research aims to fill a gap in current understanding around what will motivate young people to engage in workplace learning.

10:45-11:15 Research

#### Gender as a predictor of planning a career with work-from-home options

Dr Joanna SIKORA, Australian National University

During the pandemic, work from home became a norm for many workers worldwide, particularly among the better-paid and highly skilled workers in developed countries. Recently, Dingel and Neiman (2020) have identified occupations that are more amenable to being performed from home. Professional jobs are more compatible with remote work than non-professional jobs, but some professions trump others on this characteristic.

#### Parallel session 3A - Cultural and social context

10:45-11:15 Research In this paper, data from the Longitudinal Survey of Australian Youth Y09, which followed an Australian PISA 2009 cohort until 2019, are explored to find out whether the long-established gender segregation in youth preferences for particular professions could affect young people's employment in times of a pandemic. The paper considers to what extent the stronger leaning of females towards socio-cultural and life science professions sets them up for careers with options for remote work that differ from those typical for jobs preferred by males.

The analysis, based on a life course approach to longitudinal data and a series of logistic regressions, involves three steps:

- 1) Career expectations of teenage males and females are compared and assessed against the list of occupations identified by Dingel and Neiman as those most accessible to performing from home.
- 2) The extent to which gendered preferences for these occupations remain stable between adolescence and young adulthood is explored.
- The analysis highlights how likely young males and females are to enter their nominated careers by the time they reach their mid-twenties.

The significance of this analysis for career counsellors in secondary education lies in highlighting potential systematic disparities attributable to gendered preferences for different careers. For future cohorts of teenagers, the ability to work from home might become an essential consideration in choosing a career.

## Parallel session 3B - Getting ready for work

09:00-09:30 Research

## The Effects of Students' Career Readiness and Self-conception on Outcomes in the Labor Market

- Dr HwaChoon PARK, Dr Hangu Ryu, Korea Research Institute for Vocational Education and Training

This study aims to examine Korean students' career readiness and self-conception on achievements later in the labor market. The 4th and 12th surveys of Korean Education Longitudinal Study 2005 (KELS2005) were used as a data set, which the Korea Educational Development Institute (KEDI) annually conducts to investigate the growth and development of students aged from 15 to 28 and to promote educational policies. Out of the KELS 2005 participants, the third-year middle school students were selected for this study. For career readiness, career certainty, career ambition, career alignment, school attitude, occupational preparation, school-mediated work exploration, part-time employment, and volunteering were set as predicting variables. For self-concept, social, family, physical, and academic efficacies were measured. For achievements in the labor market, NEET, full-time job earning, and adults' cognitive competencies (e.g., self-directed learning and problem-solving skills) were selected as outcome variables. Industry classification, firm size, and labor time were controlled. Data were analyzed employing descriptive statistics and the logistic regression model. Participants' gender, parents' SES, middle school scores, school location, and the high school track were treated as background variables. The findings revealed that more than 80% of students showed career certainty when they were in the 3rd year of middle school; that motivation for a better job, having career ambition, and school-mediated work exploration had positive effects on preventing students from falling into NEET; that career ambition, career alignment, and advice from relatives increased full-time job earnings;

#### Parallel session 3B - Getting ready for work

09:00-09:30 Research

09:30-10:00 Research

/BREAK/

10:15-10:45 Practice and that career certainty, career ambition, career alignment, school satisfaction, career conversation satisfaction, job site visit, and volunteering attitude had positively influenced on adults' cognitive competencies. Different results of the finding by gender, further studies, and implications are discussed in detail.

## How schools can better prepare young people for working life: Evidence from China

- Dr Wangyang Ll, Beijing Normal University

This paper aims to examine the role of career readiness in explaining young people's ultimate employment outcomes, within the context of contemporary China. We use data from the China Family Panel Studies, an on-going, nationally representative, and longitudinal survey launched biyearly between 2010 and 2018 by the Institute of Social Science Survey (ISSS) at Peking University. Multivariate regression models are used. Our findings partially support the view that how teenagers (i) think about their futures in work and what they do to (ii) explore and (iii) experience workplaces outside of schools is associated with better employment outcomes in emerging adulthood. Cultural and institutional variations are expected to be responsible for the differences between East-West disparities in career readiness.

#### Youth Career Readiness - A multi-stakeholder approach

- Ms Roopali MEHRA, Transform Foundation; Mr. Rohit Choudhri

Transform An organization created to help young students connect their education to employment through timely information, connections and stakeholder participation. Youth employability and career readiness is much debated topic especially today when we see clear rising trend of educated unemployment and underemployment. The main cause attributed to this problem is the mismatch between education choices made by the youth and the work opportunities available in the labour market. Transform aims to bridge this gap by imparting timely career guidance to the students and enhance the employability of youth by connecting their learning to work and minimizing mismatch between youth qualifications/skills and industry demands by bringing youth, educators, employers and government on a common platform. Scalability The product is a web-based platform and hence accessible to all and scalable within and beyond national geographies. As the number of internet users continue to grow in India along with improved internet connectivity and penetration beyond major cities and towns into the rural regions, the software is well poised for growth and usage. Inclusivity & Equity A member of UNDP Business Call to Action and UN Global Compact, Transform promotes inclusivity in society by offering the platform through government/institutional partnerships to all young people irrespective of their economic status, educational status, urban/rural background, religious/community affiliation, or gender. Thus, from a career guidance and information point of view, Transform creates a level playing field. Transform's paper was also selected by International Association for Educational & Vocational Guidance under the theme Equity through Guidance. Accreditation & Certification Transform is certified by Education Alliance Finland (EAF). EAF offers a detailed quality verification and is trusted by education industry worldwide. Transform has been certified by EAF for being a well-designed educational solution that aligns with learning science principles. Transform is also certified by ISO 9001 2015 for quality management system. Current Users & Growth Our >100,000+ beneficiaries come from more than 500 government/private schools and colleges across India. Society 5.0 Transform supports Society 5.0 in the sense that it is youth centered technology solution that enables economic advancement integrating cyberspace and physical space providing online guidance and connecting youth to educators, employers, and government.

#### Parallel session 3B - Getting ready for work

#### 10:45-11:15 Research

# How Gen Z career readiness is shaped by their backgrounds & what can we do? A UK perspective

- Ms Dasha KARZUNINA, Group GTI

UK's largest market research consultancy focused on the student career journey is looking to share insights from over 80,000 school and university students. The session will cover Gen Z career priorities and how these have been impacted by the pandemic, barriers to entry related to students' backgrounds, and what educators and employers can do to level the playing field.

# Afternoon Parallel session 4A – Looking to the future

# 15:00-15:30 Practice

## Building and Sustaining Successful Alumni Relations in VET Schools: How To Guide

 Mr Iván DIEGO RODRÍGUEZ, VALNALON, Tim van der Ploeg, Alfa College; Paolo Nardi, Cometa

Attempts by TVET Schools to engage alumni are unlikely to be successful if they represent a 'bolt-on' to mainstream activities. Alumni engagement, therefore, should be contemplated as a strategic endeavour that requires a whole-school approach. The How-To-Guide showcases a range of approaches considering the whole span of school-to-work transitions and needs from different types of alumni: from school leavers to graduates entering employment or seeking to continue their education. Through the examples of good practice and the guidelines it provides, this How-To-Guide is expected to inspire and support practitioners, institutions and policymakers across Europe in developing or further strengthening alumni culture in VET Schools. Yet, the added value of the How-To-Guide resides in the inclusion of useful processes and protocols for VET institutions willing to build and sustain successful alumni relations based in real examples of practice gathered from VET schools in 5 European countries (Estonia, Italy, Netherlands, Spain and the UK) and recommendations from other institutions elsewhere in the world. Last but not least, the guide includes a list of policy recommendations. Each section describes the background context and includes some basic tasks with a view to prompt discussion and (collective) action at VET provider level.

#### 15:30-16:00 Practice

#### Challenges of Teenagers in their Career Decision in Kosovo

Mr Sovran BERISHA, Kosovo Career Development Foundation (KCDF); Mrs. Lumnie Mehmetaj

The purpose of the paper is to elaborate on the blended model of career guidance endorsed by the Ministry of Education and all public education institutions in the Republic of Kosovo. This paper presents practices adopted by teachers and explains their role, the role of students, parents, the national career guidance information system — Busulla.COM, and the business community. The paper then looks into the impact of such practices in students' career decisions and in addressing existing problems. This will be achieved by conducting a quantitative primary research with students of grades IX to XII (of ages 14 to 18, respectively).

#### Parallel session 4A - Looking to the future

16:15-16:45 Research Ready for work? Students' experiences in middle school and labor market outcomes. Comparisons between Uruguayan First and Second PISA Longitudinal Study (2003 & 2009)

 Mr Santiago CARDOZO, Maximiliana CEDREZ, Tabaré FERNANDEZ and Ángela RÍOS, University of Uruguay

Our paper draws on the First Uruguayan PISA Longitudinal Study (PISO3-UYLS), which follows school and working trajectories of a sub-sample of Uruguayan students assessed by PISA 2003 main national Study, through two follow-up Surveys, carried out, respectively, in 2007 and 2012. PISO3-UYLS is one of the few longitudinal studies based on PISA worldwide. We propose to do a replication of these analysis using the Second Uruguayan Longitudinal Study (PISA09-UYLS).

We use binomial logistic regressions to model the risk of ending up in a NEET position by age 25 and a Heckman's two-step maximum likelihood regression to model Wages, in order to control for sample selection. In both cases, we focus on the effects of a set of career readiness input indicators, while accounting for a set of control variables, including PISA academic proficiency levels and socioeconomic background. We run separate analysis by gender, PISA outcomes and social class origin, together with the whole-sample model.

16:45-17:15 Research

#### Prediction of employment for youth with Autism

Mr Hassan ENAYATI, Cornell University

Youth with autism spectrum disorder (ASD) face significant obstacles as they transition from high school to early adulthood. Gaps start in educational attainment and continue to employment: 37% of youth with ASD report employment within eight years of high school compared to 91% of all youth with disabilities (Newman et al., 2011). At the same time, the combination of disability and poverty produce a sharp double jeopardy for youth during this transition.

The cornerstone of this study leverages unique access to rich administrative and survey data from the New York State Promoting Readiness of Minors in SSI (NYS PROMISE). NYS PROMISE was a federally-funded \$33.5 M randomized control trial, which ended in September 2019, aimed at improving the well-being of youth on Supplement Security Income (SSI) by engaging them in work-based opportunities and related services in the transition from high school. The six-year intervention collected information on school engagement, service receipt, and health and employment outcomes. NYS PROMISE recruited 2,090 SSI-eligible youth aged 14 to 16 living in three urban centers across NYS. There are 371 youth in this existing sample with a Social Security Administration (SSA) disability type of ASD.

This study leverages the research design and data of NYS PROMISE to conduct a rigorous examination of the predictors of successful transition for the vulnerable population of 371 youth with ASD on SSI compared to 1,719 youth from other disability groups. The analysis tests 19 of the known 23 predictors of transition for all youth with disabilities. Evidence from this project empirically documents that the majority of known predictors of successful transition for the population of youth in special education hold true for youth with Autism. Importantly, we find nine predictor-outcome pairings that indicate a bonus positive impact for youth with Autism.

#### Parallel session 4B - Career policies and career education

15:00-15:30 Practice

New Brunswick's Centres of Excellence for Education: Enhancing Equitable Career Awareness through Virtual and Experiential Learning

 Mr Mike CUSACK, Ransford Lockhart, Education and Early Childhood Development, New Brunswick

Currently the Province of New Brunswick is facing the effects of a long-term labour shortage. In the next ten years, the province is projecting over 120,000 job openings. During this time, for every person joining the workforce two will exit. To ensure a skilled workforce, the need to invest in early career education has never been greater. The Department of Education and Early Childhood Development has launched the Centres of Excellence initiative to help combat this challenge. Focusing on Centres for Energy, Health, Entrepreneurship, and the Digital Economy; this initiative seeks to ensure that youth across the province are connected to virtual and experiential learning opportunities that foster career-awareness and promote readiness for post-secondary and career opportunities.

15:30-16:00 Practice

#### Applying universal design as a pathway to inclusive career education

Ms Tricia BERRY, Mr Andrew Culberson, New Brunswick Department of Education and Early Childhood Development

/ BREAK /

Universal Design for Learning (UDL) is a framework based in cognitive neuroscience that allows educators to design learning experiences that work across a wide spectrum of learners. This is accomplished by simultaneously providing rich supports for learning and reducing barriers to the curriculum, while maintaining high achievement standards for all students. UDL allows educators to anticipate learner variability and provide every student with equal opportunities to learn (www.cast.org). Universal design for career education is designing career development experiences to meet the needs of all learners. Using the CAST (www.cast.org) UDL Guidelines tool, the New Brunswick Department of Education and Early Childhood Development (EECD)'s career education strategy was designed and is being delivered using multiple means of engagement, expression and representation. Using UDL allows us to address systemic barriers that result in inequitable access to career education. This is a means to social justice.

16:15-16:45 Practice Using technology in careers practice: a city-wide collaborative approach

 Dr Deidre HUGHES, DMH Associates & Associate Fellow, University of Warwick IER, England, Dan Heffernan, Senior Careers Hub Lead D2N2 Local Enterprise Partnership, East Midlands, England

In the UK, there are growing concerns about impact of the pandemic on the well-being of children and families. While every part of the United Kingdom is affected by both Covid-19 and Britain's exit from the European Union, cities (and large towns) play a particularly important role in social and economy recovery. Our research and practice focuses on a city with a population of around 258,746 located in the East Midlands region of England. The relatively low incomes and high unemployment rates in Derby translate into problems with equality and social mobility. We focus on how a city-wide careers strategy is being implemented, including the use of innovative technology to enhance careers practice including a new universal careers portal for primary and secondary schools/academies and the use of virtual reality (VR) headsets within careers education. We also highlight lessons learned from these and the unfolding of a careers chatbot, powered by artificial intelligence (AI) and machine learning, to support young people, parents and teachers in developing career agility and resilience in the face of challenging labour markets

### Parallel session 4B – Career policies and career education

16:45-17:15 Practice A District Wide Approach to Integrating Career Development Starting in Primary

 Mr Ed HIDALGO, Cajon Valley Union School District; Dr. Ian Martin, University of San Diego; Dr. David Miyashiro, Cajon Valley Union School District

This paper describes a district-wide pedagogical model of children's career development, known as the World of Work Initiative (WoW), deployed by teachers in the primary grades within the Cajon Valley School District (CVUSD), California, USA. The WoW approach is grounded in complementary career theories, that includes community partners and families, with an innovative emphasis on the use of Holland's RIASEC. The initiative is designed to holistically access students' self-awareness, explore academic and career options, and construct their unique career narratives to make more informed educational and career decisions.

### Plenary - Closing session

17:30-18:00

Summary and closing remarks

NEW SKILLS ♣ WORK J.P.Morgan

