EDUCATION & SKILLS

Building on the Gatsby Benchmarks: New Ways of Measuring Effective Career Guidance

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www.oecd.org/education/career-readiness

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OECD
BETTER POLICIES FOR BETTER LIVES

The Gatsby Benchmarks, developed in 2013 and adopted in England in 2018

1 A stable careers programme.

2. Learning from career and labour market information.

3. Addressing the needs of each pupil.

4. Linking curriculum learning to careers.

5. Encounters with employers and employees.

6. Experiences of workplaces.

7. Encounters with further and higher education.

8. Personal guidance.

Based on:

International reviews of guidance systems (including by the OECD)

Literature on adolescent psychological career development

Qualitative studies of career interventions

Limited quantitative, longitudinal data

Why longitudinal data is so important

Longitudinal data is the gold standard for social research:

- It allows us to be confident that change has happened because of an intervention
- Two primary types: randomised control trials (experimental studies) and cohort studies (quasi-experimental).
- Both allow large numbers of students who received an intervention while in school (intervention group) to be compared to students who did not (the control group).
- Both approaches follow the intervention and control group into adulthood to see if students who received the intervention did better than the control group – after taking account of the factors that we know influence how well people do (academic attainment, gender, social class, migrant background, ethnicity, geographic location)
- If a significant relationship is identified, we can be 90%+ confident that the better outcome is not a coincidence.
- By comparing studies, we find patterns to guide policy.
- These studies are rare because they are expensive and difficult.

Longitudinal analyses of career-related interventions available when the Gatsby Benchmarks were produced were very limited

Hughes, D. et al. (2016), *Careers Education: International literature review*. UK: Education Endowment Foundation

Country	Documents reviewed		Broad outcome measure			
	No.	%	Education	Economic	Social	Combination of measures
Australia	1	1%			1	
Canada	5	7%	3		1	1
England	8	11%	2	1	4	1
Finland	1	1%		1		
Netherlands	3	4%	1		1	1
UK	10	14%	3	4	1	2
USA	46	63%	14	9	4	19

The research literature is ”limited”, it is “not broad and not deep.”

“The frequent **difficulty identified from the literature lies in verifying the relationship between quality outcomes and the specific careers education interventions**. Often the measures of such outcomes are crudely measured and the precise interventions are not adequately isolated or the ‘treatment’ fully described.”

We now have much better international, longitudinal evidence on the impacts of career-related teenage interventions

https://www.oecd.org/education/career-readiness/

We looked at datasets in Australia, Canada, China, Denmark, Germany, South Korea, Switzerland, United Kingdom, United States and Uruguay. Many of these datasets have never been studied before.

Following an initial literature review, we took a broader approach to career readiness – investigating career-related activities, experiences and **attitudes** typically at age 15.

Looking at the datasets, we wanted to know if statistically significant relationships were found between these potential indicators/ predictors with three outcomes at age 25:

- lower NEET rates
- higher wages
- greater job satisfaction.

We then integrated our new findings into the existing research literature.

Longitudinal data: some limitations

Not every country has longitudinal data

Data is necessarily old

We can’t ask new questions – we have to rely on what the research teams decided and this can cause frustrations!

Some questionnaires ask very few questions of relevance to our study

When comparing them, you have to focus on what is most comparable

Sample sizes fall over time sometimes causing problems

Because they are complicated, many of the datasets we looked at were analysed by different experts using different methodological approaches

We published our results in three OECD papers

Mann, A. et al. (2020), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*

Covacevich, C., et al. (2021), *Thinking about the future: Career readiness insights from national longitudinal surveys and from practice*

Covacevich, C., et al. (2021), *Indicators of teenage career readiness: An analysis of longitudinal data from eight countries*

And in summary policy briefs available at: https://www.oecd.org/education/career-readiness/

New longitudinal analyses: the datasets

Country	Data collection period	Baseline data collection	Age at baseline data collection	Follow-up source (surveys)	Age at last follow-up	Sample size at last follow-up
Australia	2010 to 2019	PISA 2009	15-16	Longitudinal Surveys of Australian Youth (LSAY)	25-26	2933
	2004 to 2013	PISA 2003	15		25	3741
Canada	2002 to 2010	YITS & PISA 2000	15	Youth in Transition Survey-Reading Cohort (YITS) & The T1 Family File (T1FF)	25, 29-30	10927
China	2012 to 2018	CFPS 2010 (in 'Thinking about the future'); CFPS 2014 (in 'Experiencing' the future)	10 to 15 (Thinking); 14 to 18 (Experiencing)	China (People's Republic of) Family Panel Studies (CFPS)	18-23 (Thinking); 18-22 (Experiencing)	2078 (Thinking); **1210** (Experiencing)
Denmark	2011 to 2012	PISA 2000	15	OECD Programme for the International Assessment of Adult Competencies [PIAAC]	26/27	1881
Germany	2010 to 2018	NEPS Starting Cohort 4 2010-2011	14 to 16	The National Educational Panel Study (NEPS)	23-25	5589
Korea	2006 to 2018	KELS 2006	14/15	Korean Education Longitudinal Study 2005 (KELS2005)	25/26	3720
Switzerland	2001 to 2007, 2010, 2014	PISA 2000	15	Transitions from Education to Employment (TREE 1)	25	3423
United Kingdom	1996, 2004	BCS70 - 1986	16	British Cohort Study (BCS70)	26	4547
	2005, 2006, 2007, 2015-16	LSYPE 2004 (February)	14	Longitudinal Study of Young People in England (LSYPE)	25-26	7707
United States	1997 to 2011	NLSY79 - 1997	12 to 16	National Longitudinal Survey of Youth 1997 (NLSY97)	25-29	5466

Overview of results: 11 new career readiness indicators

Better employment outcomes around age 25 are associated with the following teenage activities, experiences and attitudes around the age of 15:

Exploring the future	*Experiencing the future*	*Thinking about the future*
Engaging with people in work through career talks or job fairs	**Part-time working**	**Career certainty**
Workplace visits or job shadowing	**Volunteering**	**Career ambition**
Application and interview skills development activities		**Career alignment**
Occupationally-focused short programmes		**Instrumental motivation towards school**
Career conversations – inc. with teachers		
…and probably	…and probably	…and probably
School-based career reflection activities, including career questionnaires & career classes	Work placements	Career originality

Exploring the future

Counties in bold show new data

Indicator	Studies that find beneficial and significant associations	Positive associations found in	Examples
Engaging with people in work through career talks or job fairs	4 out of 7 studies from 6 countries	**Australia, Canada,** United Kingdom, **Uruguay**	In Uruguay, individuals who had attended a career talk by age 15 were 3 percentage points less likely to be NEET at age 25
Workplace visits or job shadowing	4 out of 6 studies from 6 countries	**Australia, Canada, Korea, United States**	In Korea, individuals who had visited a job site or factory at 15 were 1.23 times less likely to be NEET at 25
Application and interview skills development activities	3 out of 4 studies from 4 countries	**Australia, Canada, United Kingdom**	In the United Kingdom, individuals who felt they had working knowledge of completing job application forms by age 16 experienced an average of 1.5 months less unemployment by the age of 26
Occupationally-focused short programmes	14 out of 17 studies from 3 countries	Australia, **Canada, United States**	In Canada, individuals who participated in occupationally-focused short courses by age 15 earned 3% more at age 30
Career conversations – inc. with teachers	7 out of 10 studies from 6 countries	**Australia, Canada, United Kingdom, United States**	In the United Kingdom, individuals who had a career conversation with a teacher aged 14-16, had a 0.11 point increase in the life satisfaction 0-10 scale aged 26
…and probably			
School-based career reflection activities, including career questionnaires & career classes	2 out of 7 studies from 6 countries		

Experiencing the future

Indicator	Studies that find beneficial and significant associations	Positive associations found in	Examples
Part-time working	20 out of 27 from 6 countries	Australia, **Canada, United Kingdom, United States**	In the United Kingdom, individuals who had experience of paid work by age 16 earned **6%** more in weekly wages at age 26 relative to comparable peers who did not by age 16
Volunteering	8 out of 9 studies from 5 countries	**Australia, Canada, Germany, United Kingdom**, United States	In the United Kingdom, individuals who volunteered by age 16, experienced 0.6 fewer months of longest unemployment duration by age 26 than comparable peers who reported not having experience of volunteering by age 16
…and probably			
Work placements	2 out of 5 studies from 4 countries		

Thinking about the future

Indicator	Studies that find beneficial and significant associations	Positive associations found in	Examples
Career certainty	15 out of 20 studies from 9 countries	Australia, **Canada, Denmark, Switzerland, United Kingdom, United States**	In the UK, individuals who were career certain at 16 had an increase of 0.12 points in the 0-10 life satisfaction scale at 26 relative to comparable peers who were uncertain
Career ambition	15 out of 19 studies from 9 countries	Australia, **China, Korea, Switzerland**, United Kingdom, United States	In Korea, ambitious teenagers earned 5% more at age 25/26
Career alignment	9 out of 11 studies from 7 countries	**Australia, Canada, China, Korea,** United Kingdom, United States	In Australia, individuals who were aligned as teenagers earned 8% more at age 25/26 than the average earnings
Instrumental motivation towards school	13 out of 15 studies from 8 countries	**Australia, Canada, Denmark, Korea, United Kingdom, United States**	In the United Kingdom individuals who strongly agreed that school was a waste of time at age 14 were 9 percentage points more likely to be NEET at age 25/26 (than those who strongly disagreed)
Career originality	2 out of 4 studies from 4 countries		

We could then use OECD PISA data to understand what percentage of students in many countries meet indicators and how the indicators influence each other

www.oecd.org/education/pisa

600 000 students

representing about **32 million** 15-year-olds in the schools of the **79 participating countries and economies** sat the **2-hour** PISA test in 2018

but also responded to questions about their aspirations for their future careers, and from where they learn about the world of work

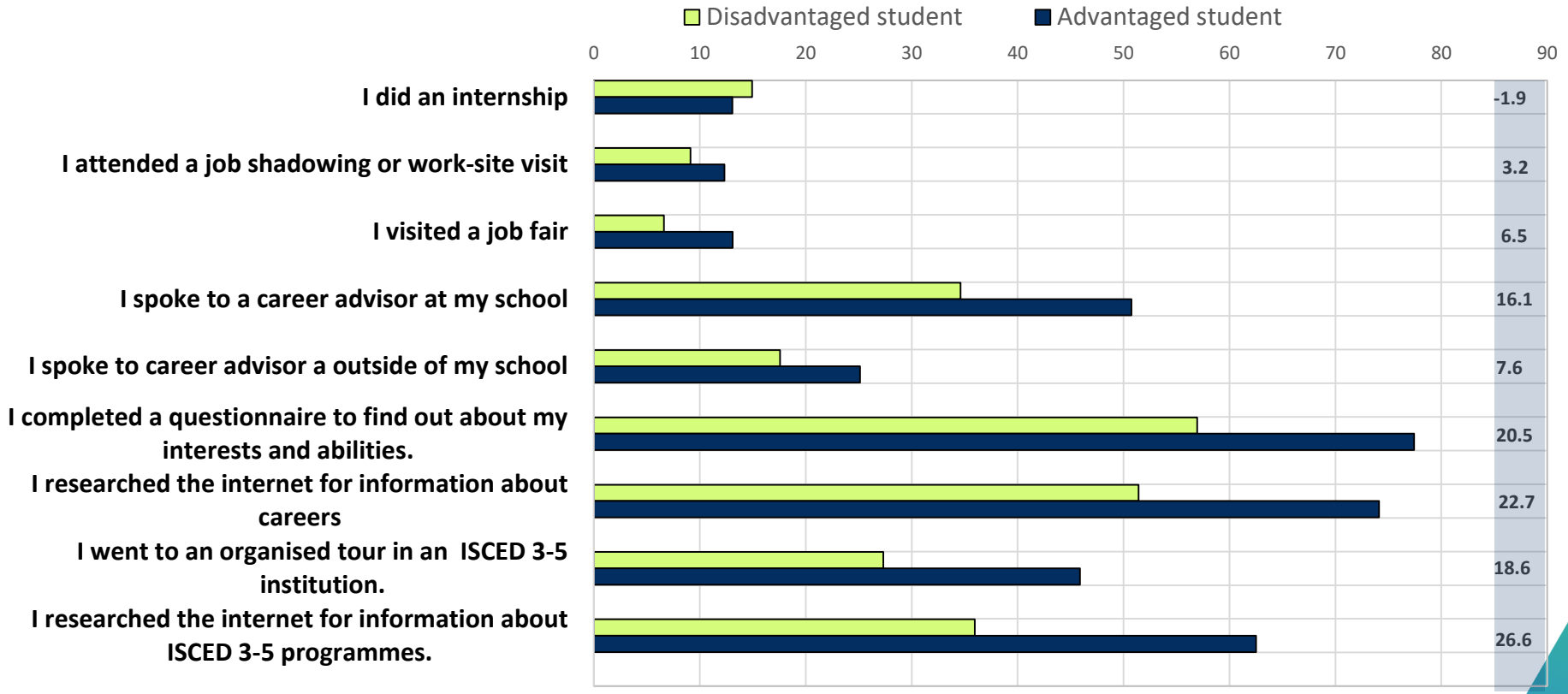
The relation between guidance activities, workplace experiences and more beneficial career thinking

Activity/ experience	Career certainty	Career ambition	Career alignment	Instrumental motivation
Career advisor	√	√		√
Career conversation	√	√	√	√
Questionnaire	√	√	√	√
Research internet	√	√	√	√
Job fair	√			
Workplace visit	√		√	
Volunteering	√	√	√	
Part-time working	√			

Career thinking needs time to develop & is advanced through guidance

Statistically significant relationships (up to 5%).

Career guidance participation in Hong Kong, PISA 2018



What's happening: Career guidance and transitions

Exploring

Career talks, job fairs, workplace visits, job shadowing, recruitment skills, conversations

Experiencing

Part-time working, volunteering, internships

Thinking

High clear ambitions that understand how education links to jobs

Human Capital

* Relevant work experience
* New skills

Social Capital

* New, trusted information
* Useful people (advice, recommendations, job offers)

Cultural Capital

* Visualising and planning a future
* Personal confidence/agency
* The 'rules of the game'

Gatsby	New international data
1 A stable careers programme.	• Careers programmes should begin young – from primary school as career thinking begins in childhood.
2. Learning from career and labour market information.	
3. Addressing the needs of each pupil.	• PISA shows that students from the most disadvantaged backgrounds and lowest achievers commonly are in greatest need of additional guidance. • Individual needs assessments should be integrated into guidance practice.
4. Linking curriculum learning to careers.	• Students should be encouraged to engage in career conversations with school staff as well as with friends and families. • Occupationally-focused short programmes within general education should be made available to students.

Gatsby	New international data
5. Encounters with employers and employees.	Encounters with employers should include: • Workplace visits • Job shadowing (from lower secondary education) • Career Talks from Guest Speakers • Job fairs (especially career carousels) • Encounters should be frequent, varied and feel authentic to students, beginning in primary school, while enabling strong labour market signalling
6. Experiences of workplaces.	• As well as work placements (OECD recommends at least two during secondary education ideally in occupations of interest), schools should encourage and enable students to volunteer in the community and work part-time (up to 10 hours a week)
7. Encounters with further and higher education.	• Encounters with further and higher education should begin young, in primary and lower secondary education, helping students to understand the academic levels required for preferred programmes of study and entry to jobs of interest.
8. Personal guidance.	• Guidance should encourage, enable and require cultures of continued reflection on the relationships between education and employment, preparing for and reflecting on encounters with employers, including use of psychometric questionnaires & supported internet research.

Gatsby	New international data
	• Application and interview skills development: By the age of 15, students should learn how to create a CV and perform in a job interview with recruiters from workplaces helping them to understand how they can best present themselves in applications.
	• Career thinking Schools should regularly survey students to understand their occupational and educational expectations & ability to see the relationship between education and employment, using results to inform guidance interventions and 1-2-1 guidance interviews.

Creating new frameworks for career guidance in schools

A range of existing frameworks (articulating the competencies and experiences that students should have engaged with by certain ages) have been developed by countries. However, to date, none were fully based on review of empirical evidence and none have taken account of the substantial new longitudinal data that now exists.

New Brunswick in Canada in working with the OECD to develop a new, simple K-12 framework for guidance provision.

Thank you. Please stay in touch

- Over the next two years we will be focusing on:
  - How guidance can best respond to social inequalities
  - How guidance can best support students into green jobs
  - Best practice in relation to the Career Readiness Indicators
  - How digital technologies can make guidance more effective, efficient and equitable
  - Country reviews of guidance systems
- Visit: www.oecd.org/education/career-guidance
- Email to join our mailing list for regular updates: Career.Readiness@oecd.org
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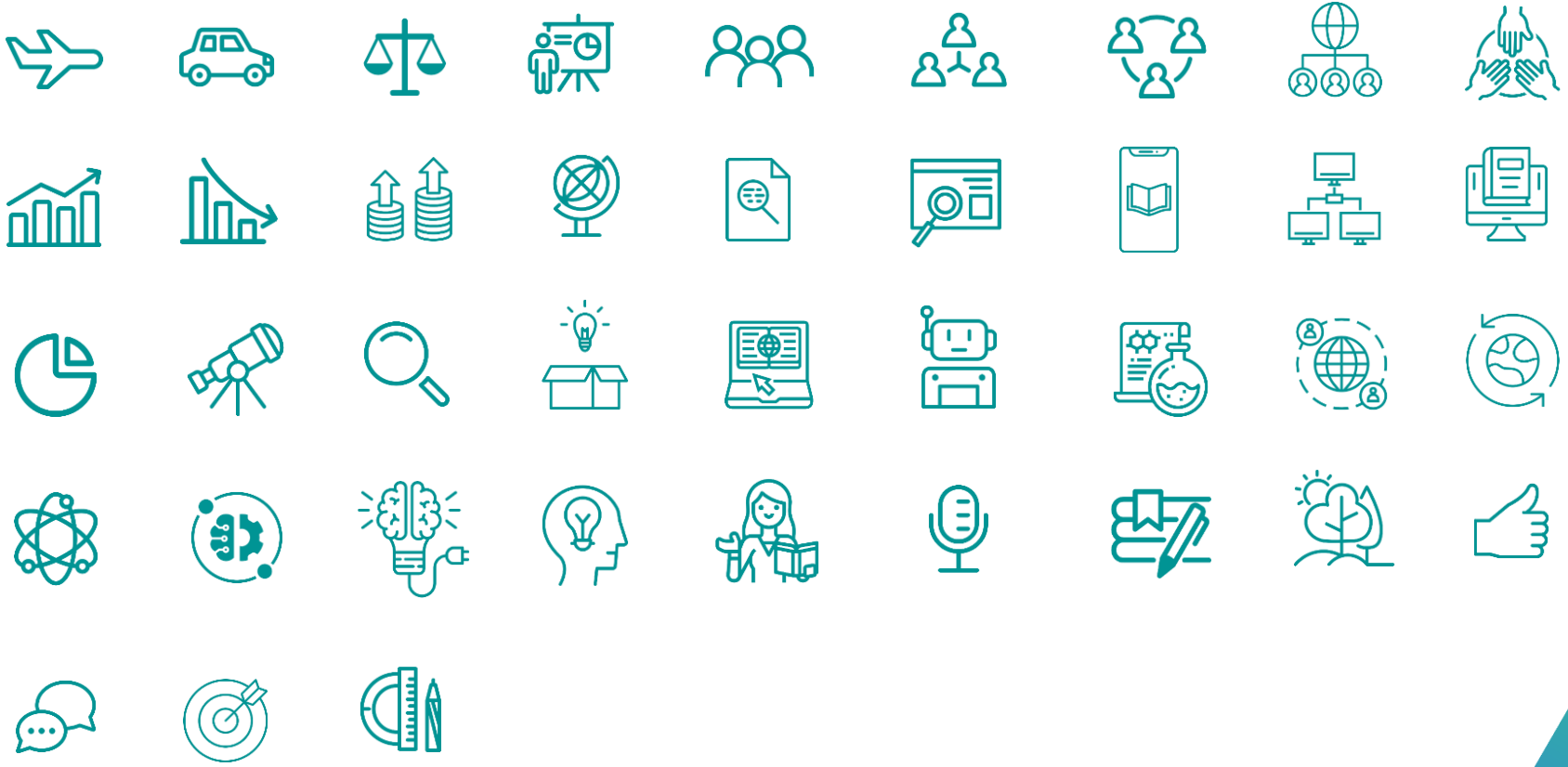
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