



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Lifelong guidance and welfare to work in Wales: linked return on investment methodology

Chris Percy and Deirdre Hughes

Please cite this presentation as: Percy, C. and Hughes, D. (2022, March, 22). Lifelong guidance and welfare to work in Wales: linked return on investment methodology. [Power point]. <https://www.cedefop.europa.eu/en/events/supporting-careers-and-learning-towards-common-standards-monitoring-and-evaluation-europe>.





CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Session overview

- **“Linked ROI”**: Six-step method to estimate ROI by connecting internal programme data to impact evidence from comparable third party research with a counterfactual
- **Why?** Growing funder/stakeholder pressure for economic impact estimates but (quasi-)experimental evidence often not appropriate/feasible for every programme
- **Case study:** Welfare-to-work in Wales (new five-year vision + political pressure): Worked example in a rapid project to identify a 1.6x fiscal ROI (likely underestimate)
- **Wider organisational benefits:** Promotes thinking about data/evidence gathering in structured way – on track to stronger ROI evidence in the future





CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning Towards common standards for monitoring and evaluation in Europe

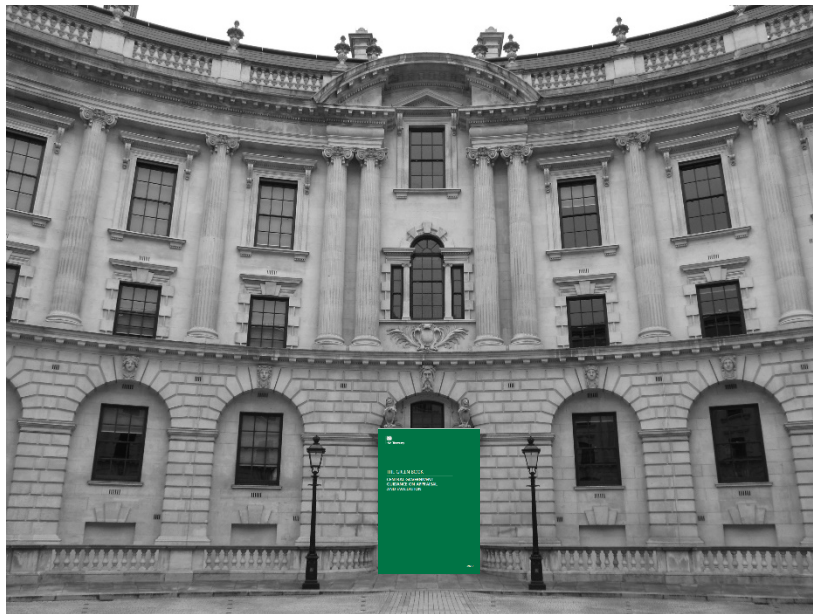

21 and 22 March 2022
Virtual event

#lifelongguidance

Our motivation

Stakeholder/funder pressure

Great evidence exists, but costly to generate & operational challenges

IMPACT OF THE REEMPLOYMENT AND ELIGIBILITY ASSESSMENT (REA) INITIATIVE IN NEVADA

January 2012

Task Order No: DOLF091A21507

Authors:

Marios Michaelides
Eileen Poe-Yamagata
Jacob Benus
Dharmendra Tirumalasetti

Psychological Bulletin
2014, Vol. 140, No. 4, 1009–1041

© 2014 American Psychological Association
0893-3200/14/\$12.00 DOI: 10.1037/xap0000023

Effectiveness of Job Search Interventions: A Meta-Analytic Review

Songqi Liu
Pennsylvania State University

Jason L. Huang
Wayne State University

Mo Wang
University of Florida

The current meta-analytic review examined the effectiveness of job search interventions in facilitating job search success (i.e., obtaining employment). Major theoretical perspectives on job search interventions, including behavioral learning theory, theory of planned behavior, social cognitive theory, and coping theory, were reviewed and integrated to derive a taxonomy of critical job search intervention components. Summarizing the data from 47 experimentally or quasi-experimentally evaluated job search interventions, we found that the odds of obtaining employment were 2.67 times higher for job seekers participating in job search interventions compared to job seekers in the control group, who did not participate in such intervention programs. Our moderator analysis also suggested that job search interventions that contained certain components, including teaching job search skills, improving self-presentation, boosting self-efficacy, encouraging proactivity, promoting goal setting, and enlisting social support, were more effective than interventions that did not include such components. More important, job search interventions effectively promoted employment only when both skill development and motivation enhancement were included. In addition, we found that job search interventions were more effective in helping younger and older (vs. middle-aged) job seekers, short-term (vs. long-term) unemployed job seekers, and job seekers with special needs and conditions (vs. job seekers in general) to find employment. Furthermore, meta-analytic path analysis revealed that increased job search skills, job search self-efficacy, and job search behaviors partially mediated the positive effect of job search interventions on obtaining employment. Theoretical and practical implications and future research directions are discussed.

Keywords: job search training interventions, self-regulation, employment outcomes, self-efficacy, job search behaviors



Linked ROI as a middle way?

Hypothetical ROI



Linked ROI ?

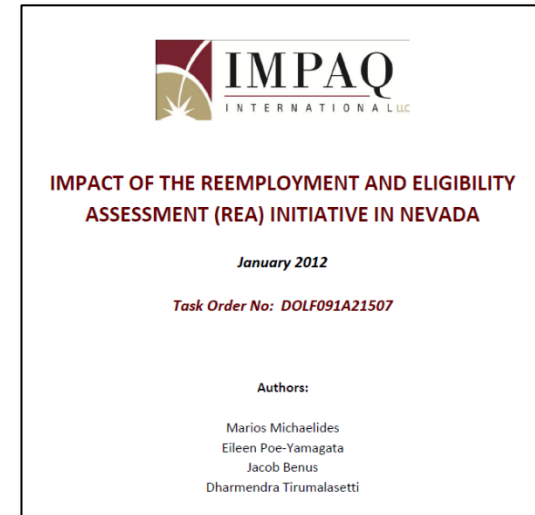


ROI from in-project RCT

Table 1 – Breakdown of Job and Learning Outcomes, Costs and Benefits of the National Careers Service: Yorkshire and the Humber Face-to-Face Service³⁹

	2016-2017	2017 – 2018 (Projected)	Predicted Change
Cost of Service	£5.6 million	£5.5 million	£62k Reduction
Number of Clients	57,321	54,280	5% Reduction
Entered Learning or Training	7,566	9,390	24% Increase
Entered sustained employment	9,917	9,934	0.2% Increase
Progressed in existing employment	688	652	5% Reduction
ROI ⁴⁰	£50.6 million	£50.6 million	
Lowest Attribution Rate before Costs > Fiscal Benefits	5.5%	5.5%	
Total 'knock-on' effects	£126.1 million	£126.4 million	£300k increase
Lowest Attribution Rate before Costs > Total Benefits	2.2%	2.2%	
Effects of 24% Funding Cuts			
o Cost			£1.38 million saving per annum
o Fiscal Benefits			£12.1 million fall per annum
o Societal Benefits			£30.2 million fall per annum

Source: National Careers Service, Yorkshire and the Humber contract figures





Linked ROI method overview

$$\frac{\text{Estimated benefit NPV (partial)}}{\text{Total cost NPV (complete)}} = \text{ROI multiplier} \quad (1x = \textit{breakeven})$$

Principles:

- Use already available data
- Favour fiscal ROI at first
- Acknowledge uncertainty (err conservative)
- Engage stakeholders
- Treat as ongoing process

Process:

- Step 1: Identify and prioritise impact strands*
- Step 2: Identify total budget across activities*
- Step 3: Data review to specify ROI calculation chain*
- Step 4: Construct model with internal and external data*
- Step 5: Document assumptions with conservative choices*
- Step 6: Review, refine, and discuss implications*



Working Wales: Steps 1 & 2

Initial customer status	Distribution of 1:1 adviser time (Feb 19-Oct 20)
Not in paid work	67%
Unemployed	62%
Not available for EET	3%
Not ready to enter EET	1%
Voluntary work	0.4%
In work	21%
Key Stage 3-4	5%
FE	4%
Apprenticeship/Traineeship	2%
Sixth Form	1%
Other	1%

Step 1: Impact strand selection

- Unemployed adults getting back to work (c. 67% of clients)
- Only one benefit of several direct and indirect benefits that might come from supporting that client group → “partial benefit”

Step 2: Cost estimate

- Focus only on fiscal ROI so apply 67% of total organisational budget of £11m p.a. → £7.3m (*top-down cost allocation method; bottom up ingredients model is an alternative*)



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 3 Data review 1/2

Internal data: Distribution of IAG support to adults not in paid work (Feb 2019 - Oct 2020)

Total one-to-one support	Customer share (%)	One-to-one support (minutes)	Receiving 3rd party referral (%)	Receiving internal referral (%)
Zero	9%	0	5%	4%
Up to 30 mins	6%	10	11%	6%
30-59 mins	16%	41	23%	22%
1-2 hrs	41%	68	25%	32%
2-3 hrs	16%	111	23%	50%
3-5 hrs	9%	171	30%	56%
5+ hrs	3%	334	37%	63%



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 3 Data review 2/2

Third party evidence on comparable programmes

- Scopus English language search 2000-mid-2021, broad scan for any ROI related work in guidance/education
→ 3,993 articles
- Title/abstract relevance filter + Input from 7 sector experts to identify additional literature, especially grey literature
- Must result in an ROI/CBA estimate in the field of career guidance supporting unemployed adults
→ 11 articles (of which 9 are grey literature)
- Choose single closest fit to WW based on (i) activities involved in the intervention; (ii) scale/cost of the intervention; (iii) labour market context; and (iv) delivery provider type
→ RES/REA RCT in Nevada



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 4 Build model

Need to adjust WW data to better fit the type of programme evaluated in Nevada:

→ Assume zero benefit if 1:1 support was less than 30 minutes, assume 25% of benchmark impact if 30-59 mins

Translate impact conservatively into Welsh context

→ 3.1 week reduction in unemployment insurance claims → Apply to typical standard allowance for single persons aged 25 and older under universal credit, being set at £GBP 410 per month

→ 3% increase in earnings → Applied to GBP 20,000 annual gross salary (70% of the Wales full-time gross median salary in 2019) and 46% direct tax take on marginal increase in income

GBP 850 in direct fiscal return cashed over 2 years → £11.8m accrued per year of operation → Fiscal ROI 1.6x



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 5 Be cautious

Key conservative assumptions

1. No economic multiplier effects on economic activity (income tax and employer contributions only);
2. Tax take only applied for two 2 years post return to work on the marginal wage gain;
3. Any benefits for those receiving less than one 1 hour of one-to-one support are mostly treated as upside;
4. Any benefits to an individual or the State beyond leaving benefits and a marginal wage gain are excluded (e.g. improved resilience for future job uncertainty, mental wellbeing gains, spillover benefits for family)

However: key assumption of no displacement: Jobs gained are not at the expense of those who would otherwise go into similarly long-lasting unemployment.



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 6 Review 1/2

Key challenge	Implications / limitations conveyed to leadership
Holistic programme	Guidance on its own is rarely the only activity helping a person achieve their goals → Need to use counterfactual studies to drive an ROI
Diverse possible long-term benefits	Improved motivation, confidence, mental health, progress, “career success” , ... → Anything we measure is only a partial picture
Diverse, often small scale work	Often highly tailored; typically few hours compared to overall education/work → Needs large, careful studies to identify effects (few studies have been funded)
Non-economic goals	Sometimes guidance should reduce (some) economic benefits – where it helps someone achieve other goals (stability, passion, balance, system-change etc.) → Important to treat fiscal ROI as only one input into prioritisation/decision-making
Changing practice	Studies are inevitably historical and local in coverage, esp. long-term outcomes → Data can only ever be indicative for future impact of current practice and past research should be used conservatively to drive ROI assumptions

“Treat exact numbers as indicative and one input among several into evaluating a programme – part of an ongoing process of research and learning – and as conservative partial estimates, it is likely the full ROI is higher”



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Working Wales: Step 6 Review 2/2

- Welcomed by board and senior team, used in new five-year vision, and discussed with stakeholders
- Supported awareness of different nature of returns/ROI of school-age vs. adult interventions
- Identified options for better data collection and retention to support future research
- Prompted research exercise to expand scope of ROI for adults to incorporate wellbeing benefits, combined with an operational pilot for supporting practitioners to embed wellbeing more explicitly into their work
- Galvanised ambition to do more impact evidence building internally (formal government evaluation underway, review by inspectorate, and current research planning workshops underway)
- Important to be aware of limitations of ROI evidence in itself and as an input into policy making (one input among many, only captures some features of interest, comparability is challenging)





CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Key limitations

- **Third party study inexact match to WW programme**
(e.g. US context and compulsory)
- **Limited literature scan**
(e.g. English language, limit to full ROI estimates only)
- **WW programme and data based on early & partial roll-out**
(e.g. new programme in start-up phased then covid disruption, rest of referral framework not yet procured by government)
- **Limited ability to cross-check findings with internal data**
(e.g. customer satisfaction data and partial outcome data support the ROI directionally)
- **Rapid analysis scope**
(e.g. limited scope for robustness checks)





CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

Other ROI estimates?

Authors	Context	Example ROI
ICF International (2016)	US (Ohio) - training and supportive services to individuals interested in healthcare, manufacturing, or construction	0.3x (construction) – 3.2x (health) in 10 year fiscal ROI
Maibom, Rosholm, & Svarer (2012)	Denmark - one-to-one and groupwork interventions to support individuals to move from unemployment into work (experiment B)	2.9x in 2 year multi-aspect ROI
Oxford Economics (2008)	Northern Ireland – public employment service adult guidance provision	9.0x in fiscal ROI (low end 3.4x)
Fleissig (2014)	US (California) - one stop career centres (public employment centre)	6x-13x participant ROI
Hasluck, McKnight, & Elias (2000)	UK - A personal advice service to help lone parents to access jobs, training and other support services e.g. childcare.	0.9x in 2 year fiscal ROI

Note: Methodologies and counterfactual sources vary widely – studies need to be interrogated individually not directly compared

* Studies simplified for table presentation; some address multiple interventions. Full details in the underlying papers.



CEDEFOP

European Centre
for the Development
of Vocational Training



Supporting careers and learning
Towards common standards for monitoring
and evaluation in Europe

21 and 22 March 2022
Virtual event

#lifelongguidance

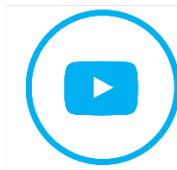
Appendix: ROI sensitivity table

		Proportion of relevant customer base in scope for average reduction in weeks unemployed					
		0%	20%	40%	60%	80%	100%
Reduction in weeks unemployed (as sole benefit; excl. earnings increase)	0	0.00	0.00	0.00	0.00	0.00	0.00
	2	0.00	0.10	0.20	0.30	0.40	0.50
	4	0.00	0.20	0.40	0.60	0.80	1.00
	6	0.00	0.30	0.60	0.90	1.20	1.50
	8	0.00	0.40	0.80	1.20	1.60	2.01
	10	0.00	0.49	0.98	1.47	1.96	2.45

Thank you

www.cedefop.europa.eu

Follow us on social media



Reference: Percy, C. and Hughes, D. (2022). Lifelong guidance and welfare to work in Wales: linked return on investment methodology. In Cedefop et al. (2022). *Towards European standards for monitoring and evaluation of lifelong guidance systems and services (Vol. I)*. Luxembourg: Publications Office of the European Union. Cedefop working paper; No 9, pp. 109-138.

<http://data.europa.eu/doi/10.2801/422672>

Contact: chris@cspres.co.uk; deirdre.hughes3@btinternet.com

Further webinar session planned on this topic via DMH Associates 2022 Webinar Series, May 2022.



CEDEFOP

European Centre for the Development
of Vocational Training