

Rapid Synthesis

Examining the Effects of Youth Skills-development Programs

17 April 2019



McMaster
University 

FORUM+

EVIDENCE >> INSIGHT >> ACTION

**Rapid Synthesis:
Examining the Effects of Youth Skills-development Programs
30-day response**

17 April 2019

Forum+

The goal of Forum+ is to generate action on the pressing social-system issues of our time, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. We aim to strengthen social systems – locally, nationally and internationally – and get the right programs, services and products to the people who need them. By social systems we mean the following government sectors and program areas: citizenship, children and youth services, community and social services, consumer protection, culture and gender, economic development and growth, education, employment, financial protection, food safety and security, government services, housing, infrastructure, public safety and justice, recreation, and transportation. With Forum+, we are building on McMaster’s expertise in advancing human and societal health and well-being.

Authors

Kerry Waddell, M.Sc., Lead Evidence Synthesis, Forum+

Michael G. Wilson, PhD, Assistant Director, Forum+, and Assistant Professor, McMaster University

Timeline

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. This synthesis was prepared over a 30-business day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on the Forum’s Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

Funding

The rapid-response program through which this synthesis was prepared is funded by Blueprint. Forum+ receives both financial and in-kind support from McMaster University. The views expressed in the rapid synthesis are the views of the authors and should not be taken to represent the views of Blueprint or McMaster University.

Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

Acknowledgments

The authors wish to thank Grace Zhou and Sabrina Lin for assistance with identifying, reviewing and synthesizing literature. We are especially grateful to Matthew Webb and Morley Gunderson for their insightful comments and suggestions.

Citation

Waddell K, Wilson MG. Rapid synthesis: Examining the effects of youth skills-development programs. Hamilton: McMaster Health Forum, 17 April 2019.

Product registration numbers

ISSN 2292-7999 (online)

KEY MESSAGES

Questions

- What are the effects of skills-development programs on labour-market outcomes for youth?
- What characteristics of skills-development programs improve transitions into the labour market?

Why the issue is important

- Improving labour-market participation of youth (people aged 16-24) is critical to developing a strong economy, as well as for ensuring the inclusion of youth in society.
- However, a number of factors have challenged advanced economies in the meaningful participation of youth in the labour market, including: changes in demographics and age of retirement; increasing rates of under-employment; increased self-employment, unpaid work and temporary contracts among youth; and a mismatch between skills being taught and those required by the labour market.
- Addressing these challenges requires a multipronged approach that combines education policies that ensure the right skills are being developed with labour market policies and incentives to support youth in their job search and in promoting labour demand.
- This rapid response will focus on determining the effects of skills-development programs on labour-market outcomes for youth, and what components are most effective in improving transitions to the labour market and in achieving positive employment outcomes.

What we found

- We identified 22 systematic reviews that related to the two questions.
- For the first question, we organized findings according to one of seven policy interventions: 1) improving educational attainment through attendance obligations or conditional cash transfers; 2) promoting vocational learning through expanded apprenticeships; 3) enhancing the quality of learning and equality of access through investments in educational infrastructure and teaching quality; 4) improved educational choice through better labour market information and career guidance; 5) investing in job-search assistance and job-skills training programs; 6) strengthening employment protection regulations and adjusting non-wage labour costs, such as required social security contributions; and 7) setting the right minimum wage.
- The majority of the literature, and particularly for the fifth policy intervention (investing in job-search assistance and job-skills training programs) found that skills-training programs led to improved employment outcomes and higher earnings. However, some of the studies included in the reviews that reported these findings were conducted in low- and middle-income countries which may skew the results, as these programs tend to be more successful in those settings.
- Similarly, three older medium-quality reviews found that programs focused on vocational training were effective among a range of outcomes for youth, including improving the transition to independence and employment among young adults with intellectual disabilities, improving successful employment and independent living among youth leaving the foster care system, and reducing recidivism rates among young offenders.
- We did not identify any reviews that directly address the second question, however findings from the reviews included in the first question provide some insights into the characteristics of skills-development programs that improve transitions into the labour market.
- For example, one recent medium-quality review found that longer employment-training programs (more than six months) generate greater employment gains when the content is skill-intensive, but shorter programs (less than six months) may be effective for less formal training.
- Additional findings were also noted for specific populations including characteristics that make training programs successful for: individuals with intellectual or developmental disabilities; individuals with visual impairment; individuals with mental health problems; and previously incarcerated youth.

QUESTIONS

- 1) What are the effects of skills-development programs on youth?
- 2) What characteristics of skills-development programs improve transitions into the labour market?

WHY THE ISSUE IS IMPORTANT

Improving labour-market participation of youth is a common objective across most advanced economies. Achieving this goal is critical to developing a strong economy, as well as for ensuring the social cohesion and inclusion of youth in society.⁽¹⁾ However, countries around the world face the significant challenge of ensuring youth have the skills they need to enter the labour market and to get fulfilling jobs that make use of their education. These challenges stem from a range of factors, including (but not limited to):

- changes in demographics and age of retirement;
- increasing rates of under-employment;
- increased self-employment, unpaid work and temporary contracts among youth; and
- mismatch between skills being taught and those required by the labour market.⁽¹⁾

Addressing these challenges requires a multipronged approach that combines education policies that ensure the right skills are being developed with labour-market policies and incentives to support youth in their job search and in promoting labour demand. A recent publication from the Organisation for Economic Cooperation and Development identified a range of policy options directed at youth employment. Key options include:

- 1) improving educational attainment through attendance obligations or conditional cash transfers;
- 2) promoting vocational learning through expanded apprenticeships;
- 3) enhancing the quality of learning and equality of access through investments in educational infrastructure and teaching quality;
- 4) improved educational choice through better labour market information and career guidance;
- 5) investing in job-search assistance and job-skills training programs;
- 6) strengthening employment-protection regulations and adjusting non-wage labour costs, such as required social security contributions; and
- 7) setting the right minimum wage.⁽¹⁾

Given the association between higher skills and better labour-market outcomes, this rapid response will focus on determining the effects of skills-development programs on labour-market outcomes for youth, and what components are most effective in improving transitions to the labour market and in achieving positive employment outcomes. In particular, this rapid response focuses on youth aged 16 to 24, and where possible considering those youth who may be in vulnerable positions that may affect labour-market outcomes.

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the Forum's Rapid Response program. Whenever possible, the rapid synthesis summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The rapid synthesis does not contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum's Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

This rapid synthesis was prepared over a 30-business-day timeframe and involved four steps:

- 1) submission of a question from a policymaker or stakeholder (in this case, Blueprint);
- 2) identifying, selecting, appraising and synthesizing relevant research evidence about the question;
- 3) drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence; and
- 4) finalizing the rapid synthesis based on the input of at least two merit reviewers.

WHAT WE FOUND

We identified 22 systematic reviews that related to the two questions. The findings for each of the questions are summarized below, however we provide more details about each systematic review in the Appendix.

Question 1: What are the effects of skills-development programs on youth?

The majority of the literature we identified related to the first question. Three reviews provided general findings about programs designed to improve employability of youth. The first identified three key components to the concept of employability:

- capital - which is defined as anything an individual possesses that can be seen as leading to an increased probability of economic outcomes and may include human capital, social capital, or psychological capital;
- career management – which relates to an individual’s competence in navigating the labour market in order to achieve their personal career goals through training and employment opportunities; and
- contextual components – which are the surrounding events and systems that make up each individual employment opportunity and that influence the capital demanded of an individual.

These are critical to keep in mind when considering how different programs may work in combination with skills development to enhance youth employment.(2)

The other two older high-quality reviews found that employment programs and active labour-market policies tend to yield positive effects. One of the reviews found that employment programs aimed at influencing the number of workers and their skills sets increased the likelihood of employment for participants by an average of 10%.(3) However the impact was noted as being significantly greater for some interventions than for others.(3) For example, the review found that public-sector employment programs are relatively ineffective whereas job-search assistance is effective in the short term.(3) The second review found that in general, the effects of training and employment programs tend to be larger when evaluated in the medium and long term (e.g, two to three years following initiation) rather than in the short term.(8)

We also found two ‘empty’ reviews (i.e., no relevant studies were identified from their searches), with one focused on pre-graduation transition programs to improve employment for those with autism spectrum disorder and the other examining employment-oriented mentoring programs for vulnerable populations.(4; 5)

Box 2: Identification, selection and synthesis of research evidence

We identified research evidence (systematic reviews and primary studies) by searching (in March 2019) Social Systems Evidence (www.socialsystemsevidence.org), EconLit and ERIC. In Social Systems Evidence we applied the following filters: Employment (job training/retraining. In EconLit, we used the following search strategy: (employment AND training) AND (systematic review OR meta-analysis). In ERIC, we used the following search strategy: (education OR skills OR training) AND (employment OR job OR labour) AND (systematic review). We also hand searched systematic reviews from the Campbell Collaboration and the What Works Centre for Local Economic Growth.

The results from the searches were assessed by one reviewer for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

For each systematic review we included in the synthesis, we documented the focus of the review, key findings, last year the literature was searched (as an indicator of how recently it was conducted), methodological quality using the AMSTAR quality appraisal tool (see the Appendix for more detail), and the proportion of the included studies that were conducted in Canada. AMSTAR ratings provide an assessment of the overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. Additional details on AMSTAR ratings and the score for each included document can be found in the appendices. For primary research (if included), we documented the focus of the study, methods used, a description of the sample, the jurisdiction(s) studied, key features of the intervention, and key findings. We then used this extracted information to develop a synthesis of the key findings from the included reviews and primary studies.

We have grouped the remaining findings according to the seven interventions detailed in the OECD report. While some of these interventions are not comprised of skills development (interventions 1, 6, and 7 from the list below), findings from these interventions may be considered in combination with skills development to address these many facets of employment and ensure the right incentives are in place in the labour market. The policy interventions are:

- 1) improving educational attainment through attendance obligations or conditional cash transfers;
- 2) promoting vocational learning through expanded apprenticeships;
- 3) enhancing the quality of learning and equality of access through investments in educational infrastructure and teaching quality;
- 4) improved educational choice through better labour-market information and career guidance;
- 5) investing in job-search assistance and job-skills training programs;
- 6) strengthening employment protection regulations and adjusting non-wage labour costs, such as required social security contributions; and
- 7) setting the right minimum wage.

We summarize findings from the literature for each of these below, with greater detail provided about each in Table 1.

Improving educational attainment through attendance obligations or conditional cash transfers

We were unable to find any systematic reviews that addressed the first policy option of attendance obligations or conditional cash transfers.

Promoting vocational learning through expanded apprenticeships

We found one recent medium-quality review that found that apprenticeship programs improve skill levels, stimulate further study, and may have a positive effect on subsequent wages.⁽⁶⁾ It should be noted that this evidence stems largely from the U.K. where robust apprenticeship programs are in place.⁽⁶⁾

Enhancing the quality of learning and equality of access through investments in educational infrastructure and teaching quality

A recent medium-quality review found positive effects from the inclusion of educational psychologists in schools to help with the development of key functional and social skills for those with complex needs.⁽⁷⁾

Improved educational choice through better labour market information and career guidance

One recent high-quality review related to labour-market information and career guidance found that employment services such as counselling and job placements had a positive effect on employment-earning outcomes. However, the effects were found to be relatively small compared to interventions such as skills training. Further, the review found that most job placements were transitory (e.g., provided interim employment) rather than acting as a stepping stone to permanent positions within the organization.⁽⁸⁾ Another older high-quality review found that job-search assistance programs have generally had positive effects, notably in the short term, to assist individuals in identifying potential employment opportunities.⁽³⁾

Investing in job-search assistance and job-skills training programs

The majority of the literature we found related to interventions providing job-search assistance and job-skills training. In general, one recent high-quality review and one recent medium-quality review found that skills-training programs led to improved employment outcomes and higher earnings.^(8; 9) However, the reviews included studies from low- and middle-income countries which may skew the results, as these programs tend to be more successful in those settings.^(8; 9)

Four older medium-quality reviews focused on U.S. national employment programs (Job Corps, Service and Conservations Corps, Summer Training and Education Program, and JobStart) and found no effect on school retention or academic progress, with the exception of the JobStart program which found a small increase in the likelihood of receiving a GED certificate as well as a small negative effect of receiving a high-school diploma.(10-13)

Three older medium-quality reviews found that vocational training was effective among a range of youth, including improving the transition to independence and employment among young adults with intellectual disabilities, improving successful employment and independent living among youth leaving the foster care system, and reducing recidivism rates among young offenders.(14-16) One recent medium-quality review found that employment programs yielded positive effects on employment and earnings in about half the studies included in the review.(18) However, one older medium-quality review found that, on average, employment programs had no significant effect on reducing arrests among adult offenders.(17)

Finally, one recent medium-quality review found that massive open online courses had a positive effect on graduates’ employee-skills development by helping them to up-skill prior to employment.

Strengthening employment-protection regulations and adjusting non-wage labour costs, such as required social security contributions

Two recent high-quality reviews focused on public employment programs and job subsidies, with both finding that they have not effectively facilitated improvements in labour-market outcomes for youth and tend to be less successful than other types of active labour-market policies.(3; 8)

Setting the right minimum wage

We did not find any reviews that addressed the effects of adjusting the minimum wage on youth employment. However, one recent high-quality review found wage subsidies for youth were a more effective intervention in middle-income countries than in high-income countries. They were still found to have some effect on increasing employment, but this was largely dependent on the extent of conditions placed upon the subsidies, with more stringent conditions resulting in less employer uptake.(8)

Table 1. Key findings from systematic reviews

Intervention type	Key findings
Attendance obligations or conditional cash transfers	<ul style="list-style-type: none"> No reviews found
Apprenticeship programs	<ul style="list-style-type: none"> One recent medium-quality review found some evidence that apprenticeship programs improve skill levels, stimulate further study, have a positive effect on subsequent employment and increase wages, though the effects of these varied by the level of apprenticeship (e.g., how extensive the training is). <ul style="list-style-type: none"> The review found no evidence on whether the duration of the apprenticeship matters on wages or employment, or on whether firms participating in apprenticeships experience economic gains.(6)
Investing in educational infrastructure and teaching quality	<ul style="list-style-type: none"> One recent medium-quality review examined the inclusion of educational psychologists in schools to help with transitions for youth with complex needs and found that they effectively act as an advocate for the educational aspects of transition planning, and support individuals in developing key functional skills and social and emotional competencies that better equip young people for educational or vocational pathways.(7)
Labour-market information and career guidance	<ul style="list-style-type: none"> One recent high-quality review found employment services (e.g., job counselling, job-placement services and or financial assistance) to have a positive effect on employment and earnings outcomes, though the effects were relatively small as compared to other interventions such as skills training.

Intervention type	Key findings
	<ul style="list-style-type: none"> ○ The same review found that most job placements were transitory rather than acting as a stepping stone to permanent positions.(8) ● One older high-quality review found job-search assistance programs have generally had positive impacts, especially in the short run.(3)
Job-search assistance and job-skills training programs	<ul style="list-style-type: none"> ● One recent high-quality review found skills training programs lead to improved employment outcomes in both young women and men and also led to higher earnings. <ul style="list-style-type: none"> ○ However, the same review found that in high-income countries these training programs were unable to compensate for skills not acquired in school (e.g., they did not help to make up the gap between those who had attended secondary education and those who did not). ○ Further, the review also found that despite the growing emphasis on soft skills alongside technical skills, there is little evidence to show that the inclusion of soft skills increases effect size in high-income countries, and the availability of soft skills in the curriculum was correlated with lower employment rates for young individuals.(8) ● The same high-quality review found entrepreneurship-promotion interventions (e.g., business-skills training, business advisory services and access to credits or grants) led to positive effects on employment outcomes, earnings outcomes and business-performance outcomes, but most of the evidence originated from studies in low- and middle-income countries.(8) ● One medium-quality review found no reduction in recidivism rates from employment-focused interventions for those who had been previously incarcerated.(9) ● Three older medium-quality reviews found no significant effect from three national jobs programs (U.S. Job Corps; Service and Conservation Corps; and Summer Training and Education Program) on school retention or academic progress.(10-12) <ul style="list-style-type: none"> ○ However, one study (of three) included in the review on U.S. Job Corps did report a significant positive effect on encouraging participants who entered the program with no high-school diploma to complete school as compared to the control group.(10) ○ This program included individualized academic instruction, vocational training and residential living (which is unique to this program compared to those examined in the other two reviews).(10) ● A fourth older medium-quality review examining a similar program entitled JobStart, which provides an alternative education and training program aimed at improving the economic prospects of disadvantaged high school dropouts, found a small increase in the likelihood of receiving a GED certificate, as well as a small negative effect on the rate of receiving a high-school diploma.(13) <ul style="list-style-type: none"> ○ The intervention targeted youth who received public assistance, had a family income below the poverty line or were homeless, and had a reading comprehensive level below grade 8, with self-paced individualized education to prepare for the GED test.(13) ● One older medium-quality review found educational and vocation training showed promise in reducing recidivism rates among youth who have been previously incarcerated.(14) <ul style="list-style-type: none"> ○ Significant heterogeneity was reported among the interventions, with cognitive behavioural programs (e.g., those that emphasize thinking skills and problem solving) showing the greatest reduction in recidivism rates, followed by non-behavioural programs (e.g., mentoring, restorative justice and educational and vocational training), and non-significant results were found for intensive supervision and deterrence-based programs. ○ Of the non-behavioural programs, education and vocational training were found to be the most effective, with non-significant results reported for mentoring and restorative justice on rates of recidivism.(14)

Intervention type	Key findings
	<ul style="list-style-type: none"> • One older medium-quality review found that vocational training and transition programs for young adults with intellectual disabilities were effective at improving employment outcomes. <ul style="list-style-type: none"> ○ The same review found that individuals with higher social-functioning abilities and self-determination were associated with better employment outcomes.(15) • One older medium-quality review and meta-analysis found that, on average, community employment programs had no significant effect on reducing arrests among formerly incarcerated individuals.(17) • One recent medium-quality review found employment training generally had a positive impact on participants' employment or earnings in around half of the studies included in the review.(18) <ul style="list-style-type: none"> ○ In particular, the review found that in-firm and on-the-job training tend to work better for improving employment outcomes as compared to classroom-based training.(18) • One recent medium-quality review found that massive open online courses have a positive impact on the skills development of graduates and employees. <ul style="list-style-type: none"> ○ Further, the same review found that they play a significant role in helping graduates quickly up-skill before employment.(19) • One older medium-quality review found that career-development activities, parental involvement and work experience all helped visually impaired youth to improve career awareness and job-seeking skills.(20) • One recent medium-quality systematic review found that employment-oriented training for youth leaving the foster-care system had positive outcomes in terms of successful employment and independent living.(16) <ul style="list-style-type: none"> ○ While one study included found few long-term effects for youth, other studies showed a positive correlation between employment services received through independent living programs and employment outcomes for youth in foster care.(16) ○ In addition, the review found that housing support such as group homes and subsidized housing led to greater employment stability and economic security.(16) ○ The review found that longer relationships between youth and mentors produced positive effects including high-academic self-efficacy and higher rates of school completion.(16) <ul style="list-style-type: none"> ▪ Components of successful mentorship programs include: ongoing training for mentors; structured activities for mentors and youth; and monitoring of overall program implementation.(16)
Employment-protection regulations and adjusting non-wage labour costs	<ul style="list-style-type: none"> • One recent high-quality review found that public-employment programs (e.g., employment measures, higher earning and human capital accumulation) have not effectively facilitated improvements in youth labour-market outcomes.(8) • One recent high-quality review found that subsidized public-sector job programs tend to be less successful than other types of active labour-market policies.(3)
Adjustments to minimum wage	<ul style="list-style-type: none"> • One recent high-quality review found that wage subsidies for youth performed better in middle-income countries than in high-income countries. <ul style="list-style-type: none"> ○ Specifics on the conditions of the subsidies were critical to incentivize uptake, with some studies showing that stringent conditions reduced participation, whereas those that were compensated with relatively high subsidies seemed to cover the employer's opportunity cost adequately and enhanced the number of employers wanting to take part in the program. ○ However, the review found that what was critical to the success of the program was its ability to provide sufficient time and experience for youth to gain on-the-job training in new skills.(8)

Question 2: What characteristics of skills development programs improve transitions into the labour market?

We did not identify any reviews that directly address the second question, however findings from the reviews included in the first question provide some insights into the characteristics of skills-development programs that improve transitions into the labour market.

With regards to successful components of skills-development programs, one recent high-quality review reported improvements from entrepreneurship and skills training programs that included elements such as job specific technical skills, literacy and numeracy programs, and non-technical training that established core work skills.(8) Further, the review found that for entrepreneurship programs, interventions provided access to credit, start-up grants and technical support, and micro franchising mechanisms. However, it was relatively rare that these targeted youth in high-income countries.(8)

One recent medium-quality review found that longer employment-training programs (more than six months) generate greater employment gains when the content is skill-intensive, but shorter programs (less than six months) may be effective for less formal training.(18) Further, the same review found that on-the-job training programs outperformed classroom-based training programs, however the review was inconclusive with regards to private as compared to public delivery.(18) Similarly, an older high-quality review found that classroom and on-the-job training was more likely to yield positive results in the long term (e.g., after two years of running).(3) One older medium-quality review identified predictors of improved post-school labour-market outcomes, which included: vocational education coursework; completion of an internship; acceptance of post-internship job while in school; paid work; time spent in regular education; and strong social skills.

Additional findings were noted for specific populations including individuals with intellectual or developmental disabilities, individuals with visual impairment, individuals with mental health challenges, and previously incarcerated youth. One recent medium-quality and one older low-quality review found effective techniques for teaching those with intellectual or developmental disabilities, including autism spectrum disorder, about job skills include using videos, picture and tactile-delivered information, as well as behavioural skills training and text cueing.(15; 21; 22) Similarly, a third review found that participation in drama games, group activities with sighted peers, sports and group counselling improved social skills and self-concepts of youth with visual impairments, both of which are critical to gaining meaningful employment.(20) An older medium-quality review found that participation of individuals with mental health challenges in employment programs and in the labour market was improved when supportive interpersonal relationships were in place. The review found that such relationships could be established through regular conversations, collaboration and expressions of value of the other person.(23) Finally, an older medium-quality review found educational and vocational training for previously incarcerated youth is most effective when conducted in community settings, addresses high-risk offenders, and follows principles of specific responsibility (e.g., a sustained focus on changing one outcome).(14)

REFERENCES

1. Quintini G, Martin S. Same same but different: School-to-work transitions in emerging and advanced economies. Paris: Organisation for Economic Cooperation and Development; 2014.
2. Stella W, Dodd LJ, Steele C, Randall R. A systematic review of current understandings of employability. *Journal of Education and Work* 2016; 29(8): 877-901.
3. Card D, Kluge J, Weber A. Active labor market policy evaluations: A meta-analysis. Cambridge: National Bureau of Economic Research; 2010.
4. Westbrook J, Fong C, Nye C, Williams A, Wendt O, Cortopassi T. Pre-graduation transition services for improving employment outcomes among persons with autism spectrum disorders: A systematic review. *Campbell Systematic Reviews* 2013; 11.
5. Munthe-Kaas H, Nokleby H, Baiju N. Employment-orineted mentoring programmes for vulnerable populations: A systematic review. Oslo: Norwegian Institute for Public Health; 2018.
6. What Works Centre for Local Economic Growth. Apprenticeships. London: What Works Network; 2015.
7. Morris R, Atkinson C. The role of educational psychologists in supporting post-16 transition: Findings from the literature. *Educational Psychology in Practice* 2018; 34(2): 131-49.
8. Kluge J, Puerto S, Robalino D, et al. Interventions to improve the labour market outcomes of youth: A systematic review of training, entrepreneurship promotion, employment services, and subsidized employment interventions. Belfast: Campbell Collaboration; 2017.
9. Vischer C, Coggeshall M, Winterfield L. Systematic review of non-custodial employment programs: Impact on recidivism rates of ex-offenders. Belfast: Reviews CS; 2006.
10. What Works Clearinghouse. Job corps. Washington D.C.: Institute for Education Sciences; 2008.
11. What Works Clearinghouse. Summer training and education program (STEP). Washington D.C.: Institute for Education Sciences; 2009.
12. What works Clearinghouse. Service and conservation corps. Washington D.C.: Institute for Education Sciences; 2010.
13. What Works Clearinghouse. Jobstart. Washington D.C.: Institute for Education Sciences; 2008.
14. Koehler J, Losel F, Akoensi T, Humphreys D. A systematic review and meta-analysis on the effects of young offender treatment programs in Europe. *Journal of Experimental Criminology* 2013; 9(1): 19-43.
15. Davidson S. Vocational training programs, transition programs and work experience placements for employment of young adults with intellectual disability: A systematic review and a description of employment patterns and day occupations of young adults with intellectual disability residing in Queensland. Queensland: Edith Cowan University; 2011.
16. Woodgate R, Morakinyo O, Martin K. Interventions for youth aging out of care: A scoping review. *Children and Youth Services Review* 2017; (82): 280-300.

17. Visher C, Winterfield L, Coggeshall M. Ex-offender employment programs and recidivism: A meta-analysis. *Journal of Experimental Criminology* 2005; 1(3): 295-316.
18. What Works Centre for Local Economic Growth. Employment training. London: What Works Network; 2016.
19. Calonge D, Shah M. MOOCs, graduate skills gap, and employability: A qualitative systematic review of the literature. *International Review of Research in Open and Distributed Learning* 2016; 17(5).
20. Cavanaugh B, Giesen J. A systematic review of transition interventions affecting the employability of youths with visual impairments. *Journal of Visual Impairment and Blindness* 2012; 106(7): 400-13.
21. Bennett K, Charles D. Employment instruction for secondary students with autism spectrum disorder: A systematic review of the literature. *Education and training in autism and developmental disabilities* 2013; 48(1): 67-75.
22. Gilson C, Carter E, Biggs E. Systematic review of instructional methods to teach employment skills to secondary students with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities* 2017; 42(2): 89-107.
23. Sommer M, Ness O, Borg M. Helpful support to promote participation in school and work: Subjective experiences of people with mental health problems. *Social Work in Mental Health* 2018; 16: 346-66.
24. Test D, Mazzotti V, Mustian A, Fowler C, Kortering L, Paula K. Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals* 2009; 32 (3): 160-81.

APPENDICES

The following table provides detailed information about the systematic reviews and primary studies identified in the rapid synthesis. The ensuing information was extracted from the following sources systematic reviews, including the focus of the review, key findings, last year the literature was searched and the proportion of studies conducted in Canada.

For the appendix table providing details about the systematic reviews, the fourth column presents a rating of the overall quality of each review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered “high scores.” A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8).

All of the information provided in the appendix table was taken into account by the authors in describing the findings in the rapid synthesis.

Appendix 1: Summary of findings from systematic reviews about training programs

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
Examining interventions to improve labour-market outcomes of youth (8)	<p>The systematic review consisted of 113 studies to examine the effectiveness of interventions aimed at improving the labour-market outcomes of youth. The review considered four main intervention types: training and skills development (programs outside the formal education system); entrepreneurship promotion; employment services; and subsidized employment (incentivized hiring). Three labour-market outcomes were assessed - employment, earnings and business-performance outcomes.</p> <p>One key finding of the review was that investment in youth through active labour-market measures were found to significantly improve outcomes by increasing chances of finding or remaining in employment. On average, the impact in low- and middle-income countries were higher than in high-income countries. A proposed reason is that being unemployed/unskilled in a skill-intensive labour demand country disadvantages youth who compete with those who are well-educated. Additionally, programs were found to lead to better outcomes when targeted towards low-income and disadvantaged youth. There is no evidence on the role of public, private or civil society implementers.</p> <p>There were significant effects with entrepreneurship promotion and skills training that were not evident for employment services and subsidized employment. Overall, youth employment interventions were effective in increasing employment and earnings, but the effect is small and variable.</p> <p>The impact of the interventions was highly inconsistent across studies despite factoring in differences across interventions, indicating that intervention results varied depending on country context (such as country income level), participant characteristics, etc. Evidence from high-income countries was primarily based on quasi-experimental studies of national programs, whereas evidence from low- and middle-income countries was based on experimental impact evaluations of small-scale interventions by non-governmental organizations. However, the review does state that the results are robust in terms of the quality of the underlying evidence.</p>	2015	10/11 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining non-custodial employment programs and the impact on recidivism rates of ex-offenders (9)	<p>A quantitative synthesis of eight studies and 33 evaluations of educational, vocational and work programs in correctional facilities was conducted to evaluate the impact on recidivism rates.</p> <p>The review found no reduction in recidivism rates from employment-focused interventions for ex-offenders according to the included studies. Despite the implementation of many employment-focused interventions, the eight interventions demonstrated no significant effects on recidivism rates. In some of the studies, there was a better outcome in the experimental group, but the differences were not statistically significant. The included studies were highly heterogeneous, and thus, the results cannot be generalized.</p>	Not reported	6/10 (AMSTAR rating from McMaster Health Forum)	0/8
Examining the effectiveness of Job Corps (10)	<p>A review of two studies examined the impact of Job Corps, a federally funded education and job-training program for economically disadvantaged youth. The program consists of participants aged 16 to 24, who typically do not possess a high-school diploma or GED certificate.</p> <p>The participation in the program is voluntary, but the average participant spends approximately eight months in the program and receives 1,000 hours of education and training. The program offers remedial education in</p>	Not reported	6/9 (AMSTAR rating from McMaster Health Forum)	Not reported

Forum+

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>reading and math while teaching the skills necessary to work in specific trades (e.g., carpenters, welders). Additionally, the program offers job-placement assistance at the end. A distinct feature of Job Corps is that it provides residential living services alongside counselling, health services, social-skills training, recreational activities, and a biweekly living allowance. The typical cost for the program is \$19,500 per person.</p> <p>Overall, no discernable effects of Job Corps were identified. The review assessed three outcomes, including school retention, academic progress, and completion of school. There was no statistically significant difference between the intervention and control group in the participants' progress in school. There was a significant positive effect on encouraging participants to complete school, as evident by a 43% completion rate compared to a 26% completion rate in the control group at the 48-month follow-up period.</p> <p>The review computed an improvement index for each outcome domain, ranging between values of -50 to +50. The average improvement index was -3 and +13 percentile points for progressing in school and completing school, respectively.</p>			
Examining service and conservation corps (12)	<p>A review of 23 studies examined the effectiveness of the Service and Conservation Corps program. The program is targeted for economically or educationally disadvantaged youth to offer opportunities in full-time community service, job training and educational activities. Most participants remain in the program for six to 12 months, with 80% of their time completing community service projects. The remainder of their time is dedicated to educational training and development activities. The program also offers an allowance (equivalent or less than the minimum wage) and those who complete the program can be eligible for post-program educational stipends. The average cost for the program is \$13,000 per person.</p> <p>Overall, no discernable effects of Service and Conservation Corps were identified. The review assessed only one outcome which was rates of school completion. There was no statistically significant effect of the program on youth's self-reported rates of earning a high school diploma or GED 15 months following the conclusion of the program.</p> <p>The review computed an improvement index for each outcome domain, ranging between values of -50 to +50. The average improvement index was -2 percentile points for completing school.</p>	Not reported	6/9 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining the effects of young offender treatment programs in Europe (14)	<p>A review of 24 studies examined the effectiveness of young offender rehabilitation programs in Europe.</p> <p>The mean overall effect of the programs was significant and in favour of treatment. The effect of behavioural and cognitive-behavioural (CBT) treatments ranked the highest, with a 13% reduction in recidivism in the treatment group. Educational and vocational training programs were the most promising program types. Restorative justice programs and guidance and counselling programs had positive but non-significant effects. Programs with 'high' fidelity had a significant effect in favour of the treatment, while those with 'low' fidelity merely demonstrated a positive tendency. Those conducted in community settings had a significantly lower recidivism rate. There was no difference in positive rates between voluntary or mandatory rehabilitation programs. Purely deterrent and supervisory interventions had a slightly negative outcome. The programs were most effective when they addressed high-risk offenders, those with multiple criminogenic needs, and followed</p>	2009	7/11 (AMSTAR rating from McMaster Health Forum)	0/24

Examining the Effects of Youth Skills-development Programs

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	the principle of specific responsibility. The programs that followed the risk-need-responsivity principles had the strongest mean effect.			
Examining pre-graduation transition services for improving employment in people with Autism Spectrum Disorder (4)	The study aimed to examine the effectiveness of pre-graduation interventions for employment among individuals with autism spectrum disorder (ASD). However, upon review of the full text for 85 studies, none were eligible according to the study's inclusion criteria. The studies either did not assess an intervention, present relevant outcomes concerning employment, contain participants with ASD, or provide quantitative data. As no eligible studies were found, synthesis was not possible.	2012	6/6 (AMSTAR rating from McMaster Health Forum)	n/a
Examining summer training and education programs (STEP) (11)	<p>A review of three studies examined the effects of the Summer Training and Education Program (STEP) program. STEP is a summer “employment, academic remediation and life skills program” intended to decrease school dropout rates, reduce summer learning loss, and prevent teen parenthood. The program offers part-time summer work at a minimum wage, a daily reading and math curriculum, and classes focused on sexual behaviour, drug use, career counselling, and community involvement. It is targeted towards low-income 14- and 15-year-olds who test at below average reading and math levels. The cost for the STEP program is approximately \$2,455 per person, which is 60% higher than the average federal summer job program (\$1,535).</p> <p>Overall, there was no discernible effects of the STEP program. The review assessed three outcomes: school retention, academic progress, and completion of school. There was no statistically significant difference in regard to dropout rates and academic progress. The review computed an improvement index for each outcome domain, ranging between values of -50 to +50. The average improvement index was -2 percentile points for staying in school.</p>	Not reported	6/9 (AMSTAR rating from McMaster Health Forum)	0/3
Examining training programs and placements for employment of young adults with intellectual disability (15)	<p>A systematic review of nine studies examined the patterns and impact of vocational training programs, transition programs, and work experience placements on the employment of young adults with intellectual disability in Queensland, Australia.</p> <p>The review found such programs to be effective on employment outcomes. All studies identified the transition from special education high school services to post-school/adult school as a stressful time. Parents of youth with intellectual disabilities often felt judged and uncertain about the best option for their children. Both parents and professionals reported an overwhelming number of factors that have an impact on the employment of their children, categorized into family, personal, service and social factors.</p> <p>Family factors include understanding the system and supports that are available. Personal factors of the young adult include self-management abilities and motivation levels. The review found that higher social functioning abilities and self-determination were associated with better employment outcomes. Non-compliance, excessive absences, poor personal hygiene, and poor safety awareness had a negative impact on outcomes. Service-system factors that were positively associated with employment outcomes include a strong knowledge level of professionals and information on choices and transition plans. Lastly, social factors play a significant role in the transition process. Those without access to social-development opportunities outside of work and who were in competitive job markets had a difficult employment experience.</p>	2011	5/10 (AMSTAR rating from McMaster Health Forum)	1/9

Forum+

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
Examining supports for increasing participation in school and work for people with mental health problems (23)	<p>A review of 12 studies examined supports for increasing participation in school and work for people with mental health problems. A thematic analysis found three overarching themes helpful in promoting participation in school and work: supportive interpersonal relationships, integration of mental health and everyday issues with education/employment support, and person-centred support.</p> <p>A supportive interpersonal relationship, developed through regular conversations, collaboration and expressions of value for the person, was found to be a motivating factor for seeking or returning to education or work. The incorporation of mental health with education/work was proposed to be helpful in balancing both aspects in their daily lives. Many expressed a current exclusion of mental health care from education/work. Lastly, person-centred support entails matching the individual with a job that fits the person’s needs in addition to providing ongoing and flexible support. This support was found to be associated with increased motivation and ability to cope.</p>	2016	4/9 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining efficacy of JOBSTART in improving the economic prospects of disadvantaged high-school dropouts (13)	<p>A review of one study examined the effectiveness of JOBSTART, an alternative education and training program aimed at improving the economic prospects of disadvantaged high school dropouts. The program comprises four components including academic instruction, occupational skills training, training-related support services (e.g., transportation assistance, childcare), and job-placement assistance. Eligible participants include those who have dropped out of high school, read below a Grade 8 level, and meet one of the three criteria: receive public assistance, have a family income below the poverty line, or are homeless. The average cost of the program is \$9,700 per person. The program no longer operates.</p> <p>The randomized controlled trial evaluated the effectiveness of the program in 13 sites in nine states in the United States. According to a survey conducted at the 48-month follow-up, the study found a statistically small but significant difference in the likelihood of receiving a GED certificate between the intervention and control group. There was a small but statistically significant negative effect on the rate of receiving a high school diploma. The review computed an improvement index for each outcome domain, ranging between values of -50 to +50. The average improvement index was +14 percentile points for completing school, indicating a potentially positive effect on that outcome.</p>	2008	5/9 (AMSTAR rating from McMaster Health Forum)	0/1
Examining ex-offender employment programs and recidivism (17)	<p>This review included eight papers examining ex-offender employment programs and their efficacy in reducing recidivism.</p> <p>Overall, the results of the review indicated that this group of community employment programs for ex-offenders was not successful in reducing recidivism.</p> <p>The eight programs examined in this review include the Baltimore Living Insurance for Ex-Prisoners (LIFE) experiment, the Transitional Aid Research Project (TARP), the National Supported Work Demonstration, a job training program for probationers, the Job Training Partnership Act (JTPA), the JOBSTART program, the Job Corps program, and the Opportunity to Succeed (OPTS) program.</p>	2005	6/11 (AMSTAR rating from McMaster Health Forum)	0/8

Examining the Effects of Youth Skills-development Programs

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>The meta-analysis of all included studies revealed a mean effect size of 0.03, which is not statistically significant. This finding indicates that, on average, the employment interventions examined did not reduce arrest among the treatment group subjects by more than the amount expected by chance.</p> <p>The authors caution, however, that the sample size of this study is small and does not include some of the promising community employment programs that have emerged in the last decade.</p>			
Examining the efficacy of employment-oriented mentoring programs for vulnerable populations (5)	This study aimed to identify, critically appraise and synthesize relevant studies on employment-oriented mentoring programs for vulnerable populations. Unfortunately, no studies met the inclusion criteria, pointing to a gap in the literature about the effects of employment-oriented mentoring programs for vulnerable populations.	2018	4/5 (AMSTAR rating from McMaster Health Forum)	0/0
Examining the evidence regarding employment training (18)	<p>This review included 71 impact evaluations examining the effect of employment training on employment or earnings outcomes.</p> <p>It was found that training has a positive impact on participants' employment or earnings in around half of the evaluations reviewed. Shorter programs (less than six months) were found to be more effective for less formal training activity, while longer programs generate employment gains when the content is skill-intensive. Critically, it was found that in-firm/on-the-job training programs tended to outperform classroom-based training programs. Activities that closely mirrored actual job requirements appeared to be key design elements.</p> <p>The review was inconclusive with regards to comparing the efficacy associated with different intensity levels of training. It was also difficult to reach any strong conclusions on private-led versus public-led delivery on the basis of the limited evidence available.</p> <p>Authors found little evidence which provided robust, consistent insight into the relative value for money of different approaches as, most assessments of 'cost per outcome' fail to provide a control group for comparison. They also found no evidence that would suggest local delivery is more or less effective than national delivery.</p> <p>When evaluating the evidence, authors caution that policy-makers should ensure a comprehensive understanding of their specific situation and context in order to appropriately extrapolate research findings.</p>	2016	4/10 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining the evidence regarding apprenticeships (6)	<p>This review included 27 evaluations examining the impact of apprenticeships on firms and workers.</p> <p>The authors found some evidence that apprenticeships improve skill levels and stimulate further training or study. It was also found that apprenticeships can increase wages, although impacts also vary by type of participant. Apprenticeships tend to have a positive effect on participants' subsequent employment. Level 3 or higher apprenticeships, in particular, deliver substantially higher lifetime wage gains relative to lower level apprenticeships (based on the limited U.K. evidence available). There is some evidence that apprenticeships are more likely to increase employment than other forms of employment training (unless that training also involves an in-firm element).</p>	2015	4/10 (AMSTAR rating from McMaster Health Forum)	0/27

Forum+

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>It is unclear whether the duration of the apprenticeship matters for effects on wages or employment (although longer apprenticeships that deliver higher qualifications may have more positive effects).</p> <p>Limited evidence was found indicating that firms participating in apprenticeships experience economic gains, such as higher productivity or profits. There was too little evaluation evidence to draw clear conclusions on whether apprenticeships work better in some sectors than others. Similarly, there is no impact-evaluation evidence looking at the effect of apprenticeships on a given local area (rather than individual participants or firms). There is also no impact-evaluation evidence comparing the effects of nationally run programs versus locally run programs. To this end, none of the shortlisted studies looked at the effects of substantially scaling up apprenticeship provision, as is currently happening in the U.K.</p> <p>When evaluating the evidence, authors caution that policy-makers should ensure a comprehensive understanding of their specific situation and context to appropriately extrapolate research findings.</p>			
Examining active labour market policy evaluations (3)	<p>This review included 97 papers examining the impact of active labour-market policies (ALMPs).</p> <p>One of the major findings of this meta-analysis was that longer-term evaluations tend to be more favorable than short-term evaluations. Demonstrating this, many programs with insignificant or even negative impacts after only a year have significantly positive impact estimates after two or three years. It is thus important for policy analysts to examine longer term trends rather than solely year-to-year assessments. Classroom and on-the-job training programs, specifically, were found to be more likely to yield favorable medium-term than short-term impact estimates.</p> <p>Another finding highlighted that the data source used to measure program impacts matters. Evaluations (including randomized experiments) that measure outcomes based on time in registered unemployment appear to show more positive short-term results than evaluations based on employment or earnings.</p> <p>Finally, a third conclusion is that subsidized public-sector jobs programs are generally less successful than the other 28 types of ALMPs.</p>	2010	9/11 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining the role of educational psychologists in supporting post-16 transition (7)	<p>This review included seven papers examining the role of educational psychologists in supporting parents, young people with complex needs, and the staff supporting them, to navigate transition to and from post-age16 settings.</p> <p>In schools without an Education, Health and Care Plan (EHCP), it was found that educational psychologists can serve to support the development of organizational protocols outlining clear roles and responsibilities for school staff and external agencies in post-16 transition.</p> <p>During the transition process, another critical role of educational psychologists is to serve as an advocate for the educational aspects of transition planning: supporting schools to consider curricular objectives that develop key</p>	2018	6/9 (AMSTAR rating from McMaster Health Forum)	Not reported

Examining the Effects of Youth Skills-development Programs

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>functional skills and social and emotional competencies that better equip young people for educational or vocational pathways.</p> <p>In the development of supports for this vulnerable population, educational psychologists can support stakeholders' understanding of psychological aspects of transition, including: organizational and developmental psychology; emotional aspects of transition; teaching and learning, including scaffolding to support independent competencies; effective intervention practices; gaining the voice of young people; and person-centred approaches.</p> <p>Educational psychologists can also play a critical role in developing early intervention practices and supporting parents throughout the transition process.</p> <p>Authors note that this study may be limited by the dearth of available published literature, as 71% of the included studies were doctoral theses. The review also had a narrow inclusion criteria, which may have excluded some relevant studies.</p>			
Examining massive open online courses, graduate skills gaps, and employability (19)	<p>This review included 16 papers examining massive open online courses (MOOCs), graduate skills gaps and employability.</p> <p>A review of studies in the U.S., Australia, U.K., France and India showed that a mismatch exists between the skills needed by employers and the skills students have upon graduation. The literature also contained conclusive evidence to suggest that MOOCs have a positive impact on graduates' and employees' skills development. MOOCs have been shown to play a significant role in helping traditional and "new traditional" graduates quickly up-skill before employment. MOOCs have provided flexible, on-demand, collaborative, and emergent learning opportunities to obtain relevant and applicable skills.</p> <p>There are currently few journal studies in the published literature that investigate MOOCs' potential to help reduce the graduate skills gap. It is important to note that most of the reports in this paper were media stories, surveys, and interviews with academics/MOOC providers published in the education pages of international newspapers and websites.</p>	2016	4/9 (AMSTAR rating from McMaster Health Forum)	0/16
Examining employment instruction for secondary students with Autism Spectrum Disorder (21)	<p>This review included 12 papers examining the content and quality of employment instruction for secondary students with Autism Spectrum Disorder.</p> <p>All the included studies examined various tactics to increase independent completion of employment tasks or behaviours related to employment. The studies were conducted in vocational classrooms, academic classrooms, non-classroom school settings, stores, homes, and other community settings. Four of the studies investigated self-management strategies to enhance task completion. These studies taught self-management using component strategies of behavior skills training (e.g., instruction, modelling, practice, and feedback). They also used ancillary materials to facilitate self-management, including token systems, picture prompts, and Personal Digital Assistants. Six studies explored the effects of video modelling on skill development/enhancement. An additional</p>	2013	3/10 (AMSTAR rating from McMaster Health Forum)	Not reported

Forum+

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>study examined Behavior Skills Training with and without a text message cueing system, as well as the reverse. The remaining study investigated the effects of high versus low preferred items on task completion.</p> <p>In terms of efficacy, many of the studies reported positive effects resulting from the intervention or detailed more effective strategies for those studies comparing instruction tactics. Two studies presented a more modest appraisal of the effects of the intervention on employment skills.</p> <p>This review's narrow search criteria may have limited the range of included studies, which presents as one of its major limitations.</p>			
Examining current understandings of employability (2)	<p>This review included 16 papers examining current understandings of employability.</p> <p>Overall, findings from this review indicate that success in developing employability needs to be contextualized within a conceptualization of employability as a multifaceted construct.</p> <p>Employability was categorized into three main components by study authors: capital, career management and contextual components.</p> <p>Capital is defined as anything an individual possesses that can be seen as leading to an increased probability of positive economic outcomes, or other personal outcomes relating to the area of work. Features of this component include human capital, social capital, cultural capital and psychological capita.</p> <p>Career management relates to an individual's competence in navigating the labour market in order to achieve their personal career goals through access to relevant training and employment opportunities. Features of this component include signal management and self-management skills.</p> <p>Contextual components are the surrounding events and systems that make up each individual employment opportunity. The core features of this dimension are external circumstances that influence the capital demanded of an individual. Therefore, employability as seen from this dimension relates to the fit between the individual and the employer's current requirements compared to the fit of other individuals applying for this role. This dimension illustrates how the weights of various aspects of capital vary within each recruitment scenario.</p> <p>Employability is a qualitative concept, and as such, not all included manuscripts necessarily expressed employability from the same perspective or for the same purpose. Study authors thus advise researchers to extract findings from this review and apply them in a way so as to best inform their unique viewpoints.</p>	2016	4/9 (AMSTAR rating from McMaster Health Forum)	
Examining instructional methods to teach employment skills for secondary students with intellectual and	<p>This review included 56 papers examining instructional methods to teach employment skills for secondary students with intellectual and developmental disabilities.</p> <p>Four intervention approaches in this review emphasized technology or some other instructional stimulus. Examples include self-management devices, video-based, audio-based, picture and tactile-based stimuli. Four interventions focused on live instructors, such as direct instruction, augmentative and alternative</p>	2017	5/9 (AMSTAR rating from McMaster Health Forum)	Not reported

Examining the Effects of Youth Skills-development Programs

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
developmental disabilities (22)	<p>communication, simulation, and peer-delivered instruction. Among the 21 instructional methods used within these approaches, performance feedback, device-assisted instruction, response prompting, and community-based instruction were found to be the most common.</p> <p>All of the interventions showed a positive to strong-positive effect on employment-skills outcomes. Intervention approaches found to have mostly strong positive effects include: self-management, video, picture and tactile, and peer-delivered.</p> <p>This study is subject to publication bias, and study authors identify their narrow inclusion criteria as one of its main limitations.</p>			
Examining transition interventions affecting the employability of youth with visual impairments (20)	<p>This review included 15 papers examining transition interventions affecting the employability of youth with visual impairments.</p> <p>This meta-synthesis demonstrated the efficacy of several interventions to improve the career-awareness, job-seeking, independent-living, and social skills of the participants. Interventions that were found to enhance employability skills and self-constructs were also identified in correlational research as predictors of the successful employment of youths with visual impairments. There were no studies of interventions that directly resulted in employment.</p> <p>One study found evidence supporting social-skills training to enhance verbal skills in job interview situations. Using a pre-post single-group design, another study found evidence that students who participated in a two-week orientation and an eight-week work experience had improved their knowledge of work. Finally, a third study found that students who used the Partner's Program curriculum, along with blindness-specific job information and with parental involvement, had improved career certainty and salience and reduced career indecision.</p> <p>Of note, only three of the 15 studies used designs with random assignment to groups. Researchers should thus employ caution when interpreting the findings of this review.</p>	2012	5/9 (AMSTAR rating from McMaster Health Forum)	Not reported
Examining evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities (24)	<p>This review included 22 papers examining evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities.</p> <p>Based on results of this review, 16 predictor categories correlated with improved post-school outcomes in the areas of education, employment, and/or independent living were identified. Of the 16 predictor categories identified in this review, 11 significantly correlated with post-school education, five with post-school independent living, and all 16 predictor categories significantly correlated with post-school employment. The 16 predictor categories were comprised of 42 predictor variables that were analyzed across studies. The most common predictor variable analyzed was participation in vocational education coursework. The next most common predictor variables were acceptance of post-internship job while in school, internship completion, paid work, percentage of time spent in regular education placement, and social skills.</p>	2009	5/10 (AMSTAR rating from McMaster Health Forum)	Not reported

Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	<p>The authors note that the results of this study should be taken with caution as correlational designs are not the best way to establish causality. Despite this, correlational approaches that are statistically based or logic based can help inform causal inferences and evidence-based practice.</p>			
<p>Examining interventions for youth aging out of care (16)</p>	<p>This review included 68 papers examining the interventions available to youth aging out of the child welfare system.</p> <p>Study authors organized included interventions into the categories of housing, employment, education, mentorship, independent living and health. Interventions could include services, programs, and policies. It was found that the majority of studies fell under the category of “independent living interventions,” which included resources aimed at helping youth improve their state of housing, education and employment. Although most of the programs were administered by the government or public agencies, authors identified significant variability in their implementation.</p> <p>Studies included in the housing category demonstrated that youth who received housing interventions had better outcomes than a similar comparison group. They were also found to have greater employment stability and economic security, as well as fewer incidences of school attrition and substance abuse.</p> <p>Youth involved in employment interventions were found to have higher rates of successful employment. Outcomes for educational interventions were found to be similarly positive, with programs focusing on helping students overcome barriers to educational experiences.</p> <p>Mentorship programs sought to provide socio-emotional support to youth aging out of care through relationships between youth and their mentors. It was found that longer relationships resulted in more positive effects in helping youth transition to independent living. In general, studies on independent-living programs reported positive outcomes on their stated purposes, though their methods of evaluation were found to be methodologically weak.</p> <p>Finally, health-related interventions included mental health supports, therapy groups, rehabilitation clinics, and campus-based mental health services. The efficacy of these programs on mental health symptoms and employability outcomes was found to be mixed.</p> <p>The small sample sizes of included studies was cited as a common limitation.</p>	<p>2016</p>		<p>Not reported</p>



FORUM+

>> Contact us

1280 Main St. West, MML-417
Hamilton, ON, Canada L8S 4L6
+1.905.525.9140 x 22121
forum@mcmaster.ca

>> Look us up

mcmasterforumplus.org
socialsystemsevidence.org
mcmasteroptimalaging.org

>> Follow us

   [mcmasterforum](#)
 [@forumHSS](#)  [@mac_agingnews](#)