



Apprenticeships, basic skills training, life skills training, mentoring/coaching, off-the-job training and on-the-job training

Summary report of the Network Meta-Analysis conducted for the Youth Employment Toolkit and supplementary qualitative and contextual findings on these interventions

Summary report: Apprenticeships, basic skills training, life skills training, mentoring/coaching, off-the-job training and on-the-job training

- Youth Futures Foundation is the What Works Centre for youth employment. We aim to narrow employment gaps for young people facing the greatest challenges by identifying what works and why and investing in evidence generation to improve policy and practice.
- For more info about this guide or about the Youth Employment Toolkit, please send an email to:
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Contents

ABOUT THIS SUMMARY REPORT	IV
EXECUTIVE SUMMARY	V
BACKGROUND AND APPROACH	VI
BUILDING AN EVIDENCE BASE FOR THE YOUTH EMPLOYMENT TOOLKIT	1
NETWORK META-ANALYSIS	2
INTERVENTIONS	5
DEFINITIONS	5
<i>Apprenticeships</i>	5
<i>Basic skills training</i>	6
<i>Life skills training</i>	6
<i>Mentoring or coaching</i>	7
<i>On-the-job training</i>	8
<i>Off-the-job training</i>	8
OTHER ELEMENTS OF PROGRAMMES	9
INTERVENTIONS WITHIN PROGRAMMES	9
DURATION AND INTENSITY	10
REA APPROACH	11
INCLUSION CRITERIA	11
<i>Geography</i>	11
<i>Literature and literature searches</i>	11
<i>Types of study</i>	12
<i>Participants</i>	12
<i>Youth employment programmes</i>	12
<i>Types of comparison</i>	13
<i>Outcomes</i>	13
CONFIDENCE IN STUDIES	14
MEASURES OF TREATMENT EFFECT.....	15
<i>Effect size</i>	15
<i>Selecting and transforming a common effect size</i>	15
QUANTITATIVE SYNTHESIS.....	15
REA FINDINGS	16
IMPACT OF INTERVENTIONS ON YOUTH EMPLOYMENT	16
<i>CNMA findings – youth employment</i>	16
<i>CNMA findings – employment for young people with reported additional barriers to employment</i>	17
<i>Standard NMA findings – youth employment</i>	18
CONTEXTUAL FINDINGS FROM THE SUPPLEMENTARY RESEARCH	21
APPRENTICESHIPS	21

Summary report: Apprenticeships, basic skills training, life skills training, mentoring/coaching, off-the-job training and on-the-job training

BASIC SKILLS TRAINING.....	23
LIFE SKILLS TRAINING	24
MENTORING OR COACHING.....	26
OFF-THE-JOB TRAINING AND OFF-THE-JOB TRAINING	29
PARTICIPANT DEMOGRAPHICS	31
SAMPLE SIZE	31
MARGINALISATION AND DISADVANTAGE IN THE SAMPLE	31
YOUNG PEOPLE FACING ADDITIONAL BARRIERS	32
COSTS RATINGS	33
THE EVIDENCE ON COSTS	33
COSTS RATINGS FOR EACH INTERVENTION	34
<i>Apprenticeships</i>	34
<i>Basic skills training</i>	34
<i>Life skills training</i>	35
<i>Mentoring or coaching</i>	36
<i>Off-the-job training</i>	36
<i>On-the-job training</i>	37
IMPLEMENTING THE INTERVENTIONS	39
APPRENTICESHIPS	39
BASIC SKILLS TRAINING.....	44
LIFE SKILLS TRAINING	46
MENTORING OR COACHING.....	48
OFF-THE-JOB TRAINING	51
ON-THE-JOB TRAINING	55
REFERENCES.....	61
ANNEX 1 – SUMMARY OF IMPLEMENTATION AND PROCESS NOTES.....	78
ANNEX 2 – NOTES FROM EGM PROCESS STUDIES AND SUPPLEMENTARY MATERIALS.....	112

About this summary report

This report presents:

- A short summary of the Rapid Evidence Assessment (REA) containing findings from a network meta-analysis (NMA) of results on the impact of six different types of intervention to support youth employment, which was commissioned to inform the Youth Employment Toolkit. The technical report of the REA is published alongside this summary.

The full citation for the REA is:

Taylor, D., Featherston, R., Ott, E., Rowland, J., Newton, B., and Shlonsky, A. (2023). *A network meta-analysis of employment and skills interventions designed to assist young people to enter the labour market in high income countries*. Youth Futures Foundation.

- Supplementary literature reviewing conducted by Youth Futures staff to develop context and implementation information for the interventions examined in the NMA. The primary source for this was the Youth Futures Evidence and Gap Map, as well as a forthcoming qualitative synthesis of process studies of youth employment interventions (Apunyo et al., forthcoming).

This document is a derivative product, summarising information from the REA and a small number of other sources.

Executive Summary

This summary report presents findings from a Rapid Evidence Assessment (REA) that was commissioned as part of the development of the Youth Futures Foundation's first Youth Employment Toolkit. It also includes some findings on process and implementation information for the interventions examined in the REA, and some contextual information.

The REA uses a network meta-analysis (NMA) to assess the effectiveness for improving youth employment outcomes of six common interventions that are used to increase employment rates (often in combination with other aims) for young people, in particular those facing marginalisation and disadvantage. It summarises evidence from evaluations conducted in high income countries (HICs) whose labour markets and economies are broadly similar to those of England (Youth Futures' area of interest) and the wider UK.

The six outcomes examined are:

- Apprenticeships, where implemented as a targeted intervention to improve youth employment
- Basic skills training
- Life skills training
- Mentoring and/or coaching
- Off-the-job training
- On-the-job training

These approaches were chosen from a long list of possible 'candidates' for inclusion in the first version of the Youth Employment Toolkit. Additional interventions will be added to the Toolkit over time, and the evidence on established ones will be updated.

The REA was conducted using a NMA approach because of the challenges associated with meta-analysis of evaluations of youth employment interventions. These are most often delivered as multi-component programmes, in which young people experience several different kinds of intervention delivered together or in sequence. Evaluations of the whole programme generally cannot disentangle the impact of the individual components; as a result, findings are potentially less relevant to policymakers, practitioners and employers who are not in a position to replicate the whole programme.

The NMA approach allows researchers to examine *both* the impact of combinations of components, and the impact of individual components that make up larger programmes. The REA reports on two kinds of NMA analysis; a *standard NMA*, which examines the impact of combinations of components, and a *component network meta-analysis (CNMA)* that examines the impact of six different kinds of intervention that are used within larger programmes. The CNMA approach was also used for subgroup analysis, to explore whether

well-defined populations within the whole sample experienced different kinds of outcome associated with the interventions.

The CNMA includes findings from 60 studies, reported in 73 publications. Key findings include:

- Off-the-job training is likely to have a moderate average impact on youth employment; for every 19 young people who take part in this component of a programme, one will be employed who wouldn't otherwise have been. Its impact on its own (i.e., outside a programme of combined interventions) may be higher, although this finding is based on fewer evaluations.
- On-the-job training is likely to have a moderate average impact on youth employment; for every 17 young people who take part in this component of a programme, one will be employed who wouldn't have been otherwise. Its impact as a 'standalone' intervention may be higher (although this finding is based on fewer evaluations).
- Both on-the-job and off-the-job training are likely to have a high average impact on employment outcomes for young people who face additional barriers to employment, such as a disability, a history of involvement with the justice system, or having been in care.
- Apprenticeships are also likely to have a positive impact on youth employment outcomes; however, this finding is based on a very small number of evaluations. Findings from other kinds of research that were not suitable for inclusion in the CNMA supports this conclusion.
- Basic skills training, life skills training and mentoring or coaching are likely to have low or no impact on youth employment outcomes. However, they are associated with a range of other beneficial outcomes for young people. They are also part of *combinations* of interventions that are likely to have a moderate or high impact. Basic skills training combined with off-the-job training is likely to have a high impact on employment outcomes, as is a combination of mentoring/coaching and life skills training.

Implementation approaches vary considerably, but some common factors that can support the success of many approaches include:

- Levels of resource that are appropriate for programme ambitions and context.
- Alignment of skills interventions with job opportunities and skills needs in the local economy.
- Strong partnerships between stakeholders, including community organisations and employers.
- Personalisation of approaches, especially for young people who face marginalisation or additional barriers to employment.

Background and approach

Building an evidence base for the Youth Employment Toolkit

This report summarises findings from a Rapid Evidence Assessment (REA) that was commissioned as part of the development of the Youth Futures Foundation's first Youth Employment Toolkit. It also includes findings from supplementary literature searches exploring processes and implementation of the interventions examined in the REA, and some contextual information.

The REA examines the impact of six different kinds of intervention:

- Apprenticeships
- Basic skills training
- Life skills training
- Mentoring and/or coaching
- Off-the-job training
- On-the-job training

The aim of the REA is to review the evidence for the impact of these interventions on youth employment outcomes, and to identify which (if any) interventions or combinations of interventions have a positive impact on employment outcomes for young people.

The REA includes a meta-analysis of data from evaluations of youth employment interventions. All of the included studies use a comparison group design, and meet specified quality criteria. All are conducted in high income countries (HICs).

In the evidence summaries in the Youth Employment Toolkit, the findings from the meta-analysis in the REA are accompanied by findings from supplementary literature searches conducted by Youth Futures staff. These include the process and implementation studies in the Youth Employment Evidence and Gap Map (EGM) (White and Apunyo 2021), and a small number of additional studies. Youth Futures staff also examined information about processes and implementation in the studies included in the NMA, where this was available from the published texts or accompanying reports.

Network meta-analysis

The REA uses a network meta-analysis approach to synthesise evidence on the interventions of interest. The decision to use this method followed a scoping exercise for the Youth Employment Toolkit. Preliminary searches and short reviews ('scoping notes') were developed to identify the extent of the literature on each intervention that was suitable for inclusion in an evidence review. From this process, it became clear that youth employment initiatives typically involve *programmatically* delivery, with young people who take part experiencing multiple different kinds of intervention, as noted by previous reviewers (Puerto, 2022; Kluge, 2017). This approach to delivery lets young people receive different types of support and potentially diverse benefits as a result. However, it raises challenges for evaluation and meta-analysis because it is difficult to separate the impact of individual components of a programme from one another, or from that of the programme as a whole.

The evidence review team identified that a component network meta-analysis (CNMA) might be able to disentangle the relative impact of each of the components of interest that are frequently delivered in youth employment programmes. It could, potentially, also identify combinations of components that have an impact on youth employment outcomes. An extended scoping note explored how a CNMA method could be used, and tested the feasibility of the approach. Following the scoping exercise, the evidence review team, expert adviser and Youth Futures team concluded that this approach was both practical and desirable. A protocol was produced to guide the production of a CNMA.

Network Meta-Analysis (NMA) is a statistical technique originally developed in the medical sciences. It can be applied to evaluations of social interventions that seek to address the same problem, in the same kind of population, with the same outcome construct (Wilson et al., 2016). Network meta-analysis works by combining direct and indirect evidence in a network (Tsokani et al., 2022). In its simplest form, it is a weighted regression that synthesises both direct evidence (sourced from head-to-head experiments) and indirect evidence (obtained from comparisons across a common factor – for example using a study comparing intervention A vs B and one comparing

intervention B vs C to generate indirect evidence about (B) and enable comparison of multiple interventions (Petropoulou et al., 2021).

Three major types of NMAs can be used to disentangle individual effects within complex programme. These are standard NMA, Additive Component NMA and Interaction Component NMA.

- In a *Standard NMA* (or 'full- interaction' NMA), each combination of components identified by the review is considered to be a separate intervention and is assigned its own effect size.
- In an *Additive Component NMA*, each intervention component has a separate independent effect. Therefore, the total effect of an intervention is equal to the sum of the component effects (the 'additivity assumption').
- In an *Interaction Component NMA*, the additive component NMA is extended by allowing for the inclusion of interactions between two or more pairs (or trios etc.) of intervention components. This means that the total effect can be larger or smaller than the sum of its effects.

Since employment and skills programmes often consist of combinations of these components, an additive CNMA method was identified as the most appropriate method for this review, because it allowed researchers to separate out the relative contribution of each component. A standard NMA was also conducted as a complement to the CNMA, in order to identify the impact of combinations of components as they were delivered (i.e., as part of interventions). An interaction component NMA was also conducted. The findings reported in the Toolkit reflect the additive CNMA; significant findings from the standard NMA findings are also reported.

The review team developed and tested four separate CNMA specifications, each of which used different levels of detail on the combinations of intervention components and comparators. Because the programmes in the studies reviewed included interventions that were *not* among those selected for inclusion in the Toolkit, each model includes an approach to managing the 'other' category (the other 'active components' that were included in programmes but not one of the six specific components that were searched for). Examples of activities in the 'other' category include case management,

work experience and counselling. In the final NMA specification, a 'consolidated other' component is included, within a random-effects model that allows for heterogeneity in the nature of the 'other' elements of interventions.

The NMA compared interventions against 'services as usual' (SAU), or the support and opportunities that young people might receive outside specific programmes to improve youth employment. Again, the model allows for heterogeneity within SAU.

The CNMA approach allowed the evidence review team to identify the impact on youth employment outcomes of individual interventions where they were delivered as components of programmes and combinations of interventions in multi-component programmes. The standard NMA identifies the impact of combinations of components, where sufficient evidence on a particular combination was available from the included studies. For example, a combination of basic skills training with off-the-job training and another component appears more impactful than either basic skills training or off-the-job training on their own.

The NMA approach proved suitable for a quantitative synthesis of data on youth employment interventions. Its ability to examine the impact of individual interventions when delivered as components of a larger programme increased the number of studies that could be included in relation to each component beyond what would have been possible had only evaluations of 'standalone' delivery been used. It also offered a greater degree of precision than would have been the case had multi-component programmes been treated *just* as examples of their main component. For this reason, in future versions of the Youth Employment Toolkit we will assess whether new interventions are suitable for 'individual' reviews or whether they can be integrated into the existing CNMA framework.

The protocol for the REA is published on Open Science (Ott et al., 2022).

Further details of the use of the NMA report in this research can be found in the full Technical Report of the REA (published alongside the Toolkit).

Interventions

Definitions

The six interventions included in the network meta-analysis are used extensively in youth employment programmes across the world. Definitions vary to some extent between different international contexts. The literature searches identified a broad range of studies relevant to 'youth employment', which were then screened to see if they included relevant activities.

The REA considers these interventions where they are used as components of a targeted programme to improve youth employment outcomes. In some cases, activities of a similar type are part of a country's 'standard' and universally-offered compulsory or post-compulsory education system. For example, basic skills learning is provided in schools, and young people can apply independently to on- and off-the-job training courses. However, the activities considered in the Toolkit are *not* included in the REA when young people access them through these channels. In some cases, young people may join universally-offered programmes, such as a college course, as part of a targeted youth employment programme.

For the purposes of this research, the interventions are defined as follows. These definitions apply whether the intervention is delivered on its own or as one component of a larger programme.

Apprenticeships

- A structured training programme that includes:
 - Paid on-the-job training, and
 - Off-the-job training supplied by an accredited learning provider (Helper et al., 2016).
- Provision for the attainment of skills required for mastery of an occupational skill.

An apprenticeship:

- Lasts at least 12 months.
- Leads to a recognised qualification.

- Is distinct from off-the-job and on-the-job training.

The REA includes two evaluations of apprenticeships.

Basic skills training

- 'Basic skills' are fundamental skills that are essential for later learning or employment. They includes listening, speaking, reading, writing, mathematics (Naidu, Stanwick, & Frazer, 2020).
- Basic skills training generally focusses on numeracy and literacy skills. More recent examples increasing include digital skills as well.
- Programme format varies, depending on whether the aim is to help young people acquire a formal education or help them to get a job.
- Basic skills learning can also help young people to tackle barriers to accessing education or employment. They may overlap with or support life skills training at this point.
- Basic skills training as a targeted youth employment intervention does *not* necessarily lead to a qualification, although in some cases young people may participate in credit-bearing courses or be able to claim credit towards a qualification on the basis of their learning.

The REA includes 22 evaluations of programmes that include basic skills training.

Life skills training

- Life skills training treats the development of young people's interpersonal skills as a key driver of increased employability (UNICEF 2019, British Council, 2021).
- The term is often used interchangeably with 'soft skills' to focus on the interpersonal and psychosocial skills for employment.
- The specific focus of life skills programmes varies, and depends to a large extent on the context in which they are provided, e.g. the cohort of young people supported, the sectors of work associated with a programme, national norms, etc. (Hodge, Danish, & Martin, 2013)
- Life skills programmes are separate from provision for basic numeracy and literacy.

The REA includes 20 evaluations of programmes that include life skills training.

Mentoring or coaching

- The terms 'mentoring' and 'coaching' are sometimes used interchangeably. Because both approaches use similar tools and techniques, they are treated together in the review for the Toolkit.
- Mentoring and coaching interventions assign a mentor or coach to each young person involved in the programme. The mentor or coach offers the young person guidance and possibly also advice and practical support to address their goals and challenges. The mentor or coach may also offer more general personal support. Mentors and coaches use similar tools, such as asking questions, reflecting on responses, and engaging in discussion of problems and issues. They may do this by using guided or structured activities, sometimes within a wider programme that sets out stages and outcomes for the process.
- Mentoring interventions often last for a longer than coaching interventions. Mentoring may be primarily focused on employment or employment issues, such as preparation for employment or development at work. Alternatively, it may address employment issues in the wider context of a young person's life, or as part of a programme that addresses other issues such as citizenship, offending, or homelessness. Mentors may be more directive than coaches, offering advice (rather than guidance) as well as support, and possibly also acting as a role model. They may also offer practical support, for example providing lifts to job interviews, etc.
- Coaching interventions tend to last for short and defined periods, and often have a fairly narrow remit, such as building a strategy to achieve professional goals. Coaches are not directive but work collaboratively with the person being coached to identify goals; the coach then provides support, feedback and motivation to achieve these.

The REA includes evaluations of 25 programmes that include mentoring or coaching.

On-the-job training

- On-the-job training, or in-work learning and development, consists of a structured programme that is designed to develop skills for a specific occupation and/or sector, primarily through activities undertaken in the workplace. A wide range of different activities can be called 'on-the-job'. In the research for the Toolkit, the following were considered to be on-the-job training:
 - Structured training programmes for young people, where all or most of the training takes place in a workplace, and while engaged in practical activities associated with a particular job and/or sector.
 - Training programmes that include a partnership between a training provider and an employer, to facilitate training of the kind described above.
 - Programmes meeting the above definition that lasted between six weeks and twelve months.
- The following were *not* defined as on-the-job training, and are not included in this discussion:
 - Apprenticeships, which are defined as programmes that (i) combine a substantial element of on-the-job with off-the-job training, (ii) last for a year or more, and (iii) lead to a major nationally-recognised qualification.
 - Work experience and internship programmes, where young people may gain vocational skills through informal instruction and practice, but the programme does not include any structured training element.
 - Work experience gained through volunteering or through work that is not part of a youth employment intervention.

The REA includes seven evaluations of programmes that include on-the-job training.

Off-the-job training

- Off-the-job training aims to develop vocational skills for specific jobs and/or sectors. In this research, the term refers to interventions in which

technical and vocational training is delivered in any setting *other than* 'on-the-job', for example in classrooms or workshops.

- Because of its close relationship to the labour market, the range, content and format of off-the-job training may vary substantially to reflect economic needs and priorities. It may also vary between interventions, depending on their context and the opportunities available to young people where they are implemented. It includes:
 - 'technical education' which provides an understanding of the theoretical foundations of vocational learning,and
 - 'vocational education and training' that focusses on job-specific skills and preparation for employment in particular kinds of role and sector.

The REA includes evaluations of 20 programmes that include off-the-job training.

Other elements of programmes

During the process of coding components and comparators, the evidence review team noted that many programmes include additional components, beyond those that were the main focus of the review. An additional component 'other' was created to account for their residual contribution.

Interventions within programmes

The search approach identifies *both* cases where an intervention was delivered as part of a programme, and where it was delivered on its own (as a 'standalone' intervention). The research method allows for the inclusion of both in the meta-analysis. It was *not* possible to tell in advance the extent to which each intervention is delivered as part of a programme or as a standalone. In practice, apprenticeships turned out to be delivered *only* as a standalone in the included studies. Where all components of a programme were coded as 'other', that programme was not included in the NMA.

Counting 'other' as a single component, the majority of programmes included two (20 programmes) or three (20 programmes) components. Six included four or five components, and 14 included a single intervention. In six

cases this was off-the-job training. The only intervention not offered as a standalone in any of the included studies was mentoring or coaching.

The supplementary examination of the processes and implementation of programmes identified variations in programme format. In some cases, components were delivered in sequence, while in others they overlapped to some extent or were delivered simultaneously. For example, basic skills training was delivered as the first element of a programme in several cases.

Duration and intensity

The duration and intensity of programmes and components within them varied considerably. The shortest ones lasted for fewer than six weeks, and the longest for over a year.

This variation encompasses both variations in design, and in the way individual young people participated. Some programmes included an element of personalisation, in which young people could effectively work at a level of intensity and for a period of time that reflected their individual needs and circumstances. In a small number of cases, young people would remain involved in a programme until they got a job or progressed to another activity outcome (such as getting a job or entering education or training).

REA approach

Inclusion criteria

The following inclusion and exclusion criteria are used in the REA. Overall, 60 studies, reported in 73 publications, were included in the review. Studies reported in multiple papers were treated as a single study for the purposes of the REA. Appendix A of the full technical report provides details.

Geography

Only evaluations of programmes implemented in high income countries (HICs) are included in the REA, using the World Bank (2022) definition of HICs. This means the Toolkit includes evidence from studies that were conducted in labour markets and economies that are broadly similar to the English context. In addition, the targeting of programmes to aspects of disadvantage among young people is relatively similar in HICs.

The REA includes 40 studies of programmes delivered in the USA. The majority of the other studies were conducted in Europe.

Literature and literature searches

Published and grey literature are both included in the review. The evidence review team initially searched the studies included in the Youth Employment Evidence and Gap Map (White and Apunyo, 2021). Additional searches included clearinghouses and organisations that conduct or collate relevant research. The criteria below were used to identify suitable studies for inclusion. Full details are given in the technical reports for the REA and the Toolkit.

The REA includes 19 peer-reviewed studies and 41 studies from the 'grey literature'. All studies met a defined quality standard.

Literature published from 1990 onwards was included in the REA. It includes:

- 6 studies published between 1990 and 1999
- 10 studies published between 2000 and 2009
- 14 studies published between 2010 and 2014
- 26 studies published between between 2015 and 2019

- 4 studies published in 2020 – early 2022.

Types of study

The following experimental and quasi-experimental study designs are included:

- Randomised Controlled Trials (RCTs), including individual RCTs, cluster RCTs and Step-Wedge designs with random time allocation.
- Non-randomised studies that use quasi-experimental methods, including difference-in-difference estimation, synthetic control group methods, studies based on covariate matching, propensity score-based methods, doubly robust methods, regression adjustment, regression discontinuity designs, instrumental variable estimation and non-equivalent control group designs using parallel cohorts that adjust for baseline equivalence.

The REA includes findings from 32 randomised studies and 28 non-randomised studies.

Non-primary studies, including literature reviews and systematic reviews, are excluded. Also excluded are studies without a valid counterfactual, including all designs that do not use a parallel cohort that establishes or adjusts for baseline equivalence. This includes single group pre/post designs, control group designs without matching in time and establishing baseline equivalence, cross-sectional and non-controlled observational designs, case-control designs, case studies, and surveys.

Only studies published in English are included.

Participants

- People aged 16-30 who are not currently in formal paid employment.

Youth employment programmes

- Multi-component programmes that include one or more components that meet one of the definitions for the six interventions, or the use of one of these interventions on its own with the aim of improving youth employment outcomes.

Programmes that include only other components are excluded.

Types of comparison

- Interventions compared with 'services as usual' (SAU), or what an individual would have received had they not received the intervention.
- Interventions compared with another intervention, such as another intervention or employment and skills programme.
- Intervention compared with no intervention, or where there are no SAU or alternative services to the programme.
- Intervention compared to wait-list control, where the comparison is drawn from the waiting list for the same intervention.

Studies that use only other comparators are excluded.

Outcomes

Outcomes were considered if they were obtained by analysis of administrative data, survey or interview.

The *primary outcome* was entry to unsubsidised employment post intervention. The review team considered any outcome that represented an individual's subsequent employment status such as:

- Employment status
- Hours worked
- Earnings

For employment status, some studies reported multiple outcomes that investigated the same construct. To select the most appropriate outcome the review team developed a selection hierarchy in cases where multiple outcomes were reported:

- *Ever worked* — an individual was employed at any point, for any duration, after commencement of the intervention,
- *Worked in previous period* — an individual was employed at any point, in a defined period of time prior to measurement (e.g., the last 12 months) for any duration after intervention commencement,
- *Currently working* — an individual was employed, in any capacity, at time of measurement after intervention commencement,

- *Employment probability* — the probability an individual was employed, at any point, for any duration, after intervention commencement.

The *secondary outcome* was completion of educational qualifications. The review team considered any outcome that represented an individual's completion of an educational qualification. These were:

- Secondary school, high school or equivalent completion
- Vocational education commencement
- University commencement

Studies that use only outcomes other than these are excluded.

The authors attempted to conduct meta-analysis of data on wages and hours worked, but this was not practical because of the way in which results were reported. In future editions of the Toolkit, the possibility of extending the meta-analysis to additional outcomes of interest will be explored.

Confidence in studies

The REA authors used the Quality Assessment of Impact Evaluations tool (White et al., 2022) to assess the degree of confidence that could be placed in the findings of each included study. This scores studies as *low*, *medium* or *high* confidence across six domains:

1. If the study design can control for potential confounders
2. If the study has adequate sample size
3. If losses to follow up are presented and acceptable
4. If the intervention is clearly defined
5. If outcome measures are clearly defined
6. If there is baseline balance between treatment and comparison groups.

An overall confidence score is then assigned by taking the lowest rating across 1, 3, 5 and 6.

The REA includes:

- 11 studies that were rated as 'high confidence'
- 16 studies that were rated as 'medium confidence'
- 33 studies that were rated as 'low confidence'

Overall, the factors that drove the bulk of the 'low confidence' judgements were attrition (in 19 cases) and baseline bias (in 18 studies). This was due to a lack of information that made it difficult to judge how much confidence should be placed in a study. Had more detail been given, some of these studies could have been assigned a higher confidence judgement.

Measures of treatment effect

Effect size

Where multiple treatment effects are reported, the authors used the following hierarchy to select model results:

- Intention to Treat (ITT)
- Average Treatment Effect (ATE)
- Local Average Treatment Effect (LATE), a.k.a. Complier average causal effect (CACE)
- Average Treatment Effect on the Treated (ATET), a.k.a. Treatment on the Treated (TOT)

Where both means and regression adjusted means were reported, regression adjusted means were used.

Selecting and transforming a common effect size

Quantitative results were reported in a range of forms across studies. The Standardised Mean Difference (SMD) was selected as the most appropriate effect size for the data synthesis. Full details of the transformations involved are given in the REA technical report (pp.25-26 and Appendix A). SMD is expressed as Hedges' g in the report.

Quantitative synthesis

The studies were quantitatively synthesised using a network meta-analysis (NMA) as described above. Details of the method can be found in the REA (pp.28-30, 31-33, 40-43, 48-54, 59-66, 68-69, 72-73 and Appendices D and E).

REA findings

The full findings of the NMA are extensive and details can be found in the technical REA report. This section provides a summary of findings from the CNMA, and from the standard NMA where findings indicated a substantial impact on youth employment *and* tests for inconsistency/heterogeneity indicated that the evidence could be used with no more than a moderate degree of caution.

Impacts on education completion are *not* included in the first version of the Youth Employment Toolkit. This is because fewer studies overall reported on education outcomes, and none of the interventions, or combinations of interventions, had a medium or high impact on education completion supported by evidence with a strength above the 'low' band.

Impact of interventions on youth employment CNMA findings – youth employment

The CNMA findings indicate the *likely average impact of each intervention on youth employment outcomes, when that intervention is used as a component of a targeted youth employment programme.*

Overall, the CNMA found that off-the-job training had a statistically significant impact on youth employment ($g=0.13$, 95% CI: [0.01; 0.25], $p<0.05$).

On-the-job training had a slightly higher identified impact ($g=0.18$, 95% CI: [-0.00; 0.35], $p=0.05$), as did apprenticeships ($g=0.22$, 95% CI: [-0.08; 0.52], $p=0.16$), but neither was statistically significant at $p<0.05$. However, the authors found some indications that the network may be under-powered for detecting small but meaningful differences. Mentoring and coaching, life skills training and basic skills training had small effects that were not statistically significant.

For use in the Toolkit, the REA authors converted SMD for all statistically significant impacts to a 'number needed to treat' (NNT) using a method proposed by Furukawa and Leucht (2011) that utilises the SMD and a reasonable estimate of the control group event ratio (CER) i.e., the rate at

which an event occurs in the general population from which a sample is drawn without the presence of the intervention. For the employment status outcome, a CER of 0.45 was estimated, based on a weighted average of results reported in included studies. To calculate the NNT an R implementation of Furukara and Leucht’s method was used; this is included the *dmetar* package (Harrer et al., 2019).

SMD was also converted to a percentage change by converting *d* to an odds ratio using the Excel formula $OR = \exp(SMD \times \sqrt{3})$. This was used to calculate treatment event rates using the above CER, from which a relative percentage change was calculated.

Table 1: CNMA findings for the impact of each intervention expressed as SMD, where interventions are used as components of a youth employment intervention

	SMD (g)	95%-CI	P	NNT	% change	# of studies
Apprenticeships	0.22	[-0.08; 0.53]	0.16	10	22	2
Basic skills	0.00	[-0.13; 0.14]	0.96	n/a	n/a	22
Mentoring/ coaching	0.06	[-0.07; 0.18]	0.39	37	6	25
Life skills	0.05	[-0.09; 0.19]	0.46	44	5	20
Off-the-job training	0.13	[0.01; 0.25]	0.04	19	13	20
On-the-job training	0.18	[-0.00; 0.35]	0.05	12	18	7

CNMA findings – employment for young people with reported additional barriers to employment

17 of the included studies were either targeted to young people who face additional barriers to employment. These include living with a disability, a history of involvement with the criminal justice system, or having been in the out-of-home care system.

Subgroup analysis of the NMA findings identified substantial and statistically significant impacts on employment outcomes for these groups for two kinds of intervention, on-the-job training and off-the-job training.

Table 2: CNMA findings for the impact of on-the-job training and off-the-job training on youth employment outcomes for young people who face additional barriers in the labour market

	SMD (g)	95%-CI	NNT	% change
On-the-job training	1.58	[0.88-2.28]	2	108
Off-the-job training	0.59	[0.08-1.11]	4	57

Subgroup analysis did *not* identify any high or moderate impacts of other components, or any other statistically significant impacts, on youth employment outcomes for this group of young people. The subgroup analysis did not identify any impacts on young people who did not report additional barriers that were markedly different from those of the main CNMA.

Standard NMA findings – youth employment

The standard NMA identified five combinations of components that, when delivered together, show a statistically significant and high impact on youth employment outcomes, compared to SAU. One of these (the interaction for basic skills training + off-the-job training + other) is reported in the Toolkit. The findings relating to on- and off-the-job training alone or in combination with other are not reported because they are relatively close to the findings for these components in combination, *and* because of a high identified level of heterogeneity between direct and indirect evidence for these findings. The findings for life skills training + mentoring or coaching + other is *not* reported due to a high identified level of heterogeneity between direct and indirect evidence for this finding (see Appendix E of the REA).

Table 3: Standard NMA findings for the impact of combinations of components, expressed as SMD, where these impacts were both 'high' and statistically significant at $p \leq 0.05$

	SMD (g)	95%-CI	NNT	% change
On-the-job training + other	0.48	[0.11, 0.84]	5	47
Basic skills training + off-the-job training + other	0.30	[0.12, 0.48]	8	30
On-the-job training only	0.25	[0.05, 0.46]	10	25
Life skills + mentoring/coaching + other	0.24	[0.08, 0.39]	10	24
Off-the-job training only	0.23	[0.06, 0.40]	11	23

The full findings of the standard NMA, which treats each combination of components as an intervention and compares this with services as usual, are as follows.

Table 4: Standard NMA findings for the impact of combinations of components, expressed as SMD

	SMD (g)	95%-CI	% change	# of studies
On-the-job training & other	0.48	[0.11; 0.84]	47	2
Basic skills training + off-the-job training + other	0.30	[0.12; 0.48]	30	5
On-the-job training	0.25	[0.04; 0.46]	25	3
Apprenticeships	0.25	[-0.08; 0.39]	25	2
Life skills training + mentoring/coaching + other	0.24	[0.08; 0.39]		
Off-the-job training	0.23	[0.06; 0.40]	23	6
Basic skills training + life skills training + off-the-job training + other	0.21	[-0.17; 0.58]	21	1
Life skills training + off-the-job training + other	0.16	[-0.18; 0.49]	16	2
Basic skills training + life skills training + mentoring/ coaching + other	0.13	[-0.19; 0.46]	13	2
Basic skills training	0.10	[0.15; 0.35]	10	1
Off-the-job training + on-the-job training + other	0.09	[-0.04; 0.21]	9	2
Mentoring/coaching + other	0.08	[-0.28; 0.45]	8	10
Basic skills training + life skills training + other	0.07	[-0.15; 0.29]	7	5
Basic skills + mentoring/ coaching + other	0.04	[-0.32; 0.39]	4	3
Basic skills training + life skills training + off-the-job training + mentoring/coaching + other	0.03	[-0.29; 0.36]	3	3
Life skills training + other	0.03	[-0.15; 0.21]	3	2
Basic skills training + off-the-job training	0.02	[-0.25; 0.29]	2	1
Basic skills training + other	0.01	[-0.34; 0.36]	1	5

Overall, the strength of the evidence for the findings on basic skills training, mentoring or coaching, on-the-job training and life skills training is rated as moderate, because of the number of studies available for each and the aggregate confidence rating for these. The strength of the evidence for apprenticeships is rated as 'low' because of the small number of studies available (although these studies are both 'medium confidence' evaluations), and the fact that this finding is not statistically significant. The strength of the evidence for on-the-job is rated as 'low' because of the number of studies, their aggregate confidence rating, and the fact that this finding just misses statistical significance.

Contextual findings from the supplementary research

The supplementary research explored how the REA findings related to the findings of other good quality studies of these interventions, including evidence that was not suitable for inclusion in the REA. The primary source of studies was the Youth Employment Evidence and Gap Map (White and Apunyo, 2021). Other sources including publications of the UK Government and IZA were also examined, and a small number of studies were identified through expert advice.

This work sought to answer two questions:

- How do the findings of the REA relate to other evidence for the intervention and its impact on youth employment?
- How does this intervention impact on outcomes other than employment that are important for young people?

Apprenticeships

The searches examined the impact of apprenticeships where they are used as a targeted intervention to improve youth employment, *rather than* where they are a part of the universal education and training system¹. In fact,

¹ Cross-country studies of the effectiveness of different types of vocational training on labour market outcomes 'typically find a comparative advantage in countries with a dual apprenticeship system', while 'country-specific studies also identify a relative advantage of dual apprenticeship training' (Eichhorst and Rinne 2016).

relatively few studies evaluate the returns to apprenticeships in relation to unemployment risks (Riphahn and Zibrowius 2015). This is partly due to methodological challenges such as selection effects (Albanese et al., 2017). In addition, the studies that are available tend to report comparisons between outcomes for graduates from different kinds of education provision, for example general education and vocational education. The comparison in these cases is different from that between *young people who are at risk of marginalisation in the labour market* who take part in targeted programmes, and young people with similar risk factors who do not (for example Hanushek et al., 2017, Neyt et al., 2018).

Comparisons between graduates of apprenticeships that are offered within a universal education system and 'unskilled' workers do suggest a positive impact for this kind of training (e.g., Riphahn and Zibrowius 2015). In a quasi-experimental study comparing apprentices with other temporary workers², apprentices 'show[ed] a hazard function towards permanent jobs significantly higher than that of [other] temporary workers' (Picchio and Staffolani, 2013). In an earlier study, Clark and Fahr (2001) found returns to apprenticeships for 'even the lowest ability school-leavers', a group who may also face labour market disadvantage.

A literature review for the What Works Centre for Local Economic Growth (WWCLEG 2015) found 11 evaluations that examine employment outcomes for people of all ages who have taken part in an apprenticeship programme:

- 5 look directly at employment directly after completion: three found positive effects and two found 'more mixed' results.
- 4 look at unemployment after completion; all of these found that apprenticeships reduce the chances of being unemployed.
- One study found a positive impact on getting a permanent position as a first job post-apprenticeship.
- One study found positive impacts for moving from low-to higher-skilled occupations.

² In this study, contract-type was identified at around age 30, so the people involved are slightly older than Youth Futures' target groups and partially outside the range for the REA.

This review also found that, in general, apprenticeships bring a wage premium.

Foster et al. (2021) used income and employment data from the Longitudinal Education Outcomes dataset (LEO) to examine a range of outcomes for apprenticeship participants in Wales. This identified both a 'strong benefit to cost ratio' relative to non-apprenticeship provision. The same analysis identified a 29% increase in job entry rates, and an increase of 119 days in employment, as well as £7,866 in earnings. These findings relate to apprentices of all ages.

Basic skills training

Evidence on the impact of *basic skills training interventions on youth employment* is limited. However, several studies examine the relationship between employment outcomes and adult learning 'below Level 2' in English education (equivalent to GCSE grades 4-9), for adults of all ages. The bulk of this evidence relates to *attainment of the relevant skill* rather than to *participation in the training*. Therefore, an important future research question is 'how does basic skills training most effectively support the development of key skills?'

In general, attainment in basic skills is related to better employment outcomes, as well as a small earnings premium. For example:

- Across several HICs, basic literacy and numeracy skills levels are predictive for unemployment among young people, controlling for overall education level (Lundetrae et al., 2010).
- In England, young people aged 19-24 who achieve a qualification between 'entry' level and Level 2 in English and/or Mathematics are 1.7 percentage points more likely to be employed 3-5 years after completing the programme, compared to people without a qualification at this level (Cerqua and Urwin, 2016).
- Attainment in learning below level 2 was associated with an increase in employment rates of three percentage points for people aged 19-24 four years after participation, compared to people who did not attain a qualification at this level. The findings relate to *all* learning below level

2, including vocational qualifications as well as general basic skills (BMG Research/IES 2013).

Employment outcomes for people whose highest qualification is below Level 2 are strongly affected by economic cycles (BMG research/IES 2013). The latter figure may be comparatively low because it relates to the period following the 2008/09 recession.

Evidence relating to some large-scale programmes of adult basic skills learning suggests that their positive impacts on employment may only become apparent several years after participation. For example, a US study of people who had participated in 100 hours or more of adult basic skills learning found that their earnings premium (relative to non-participants) was greater around nine or 10 years after the programme than after five years. It is possible that young people who participate in the programmes evaluated in the studies considered here *will* see gains at a point later than the one at which data was collected (Reder, 2014).

Basic skills training may have a positive impact on outcomes related to, but distinct from, employment. For example, learners of all ages who had studied English and Mathematics as part of the Skills for Life programme felt that this had helped them to find work. It had also increased both their confidence at work and their ability to do their job. The same report found that basic skills learning supports progression into other kinds of vocational and academic learning and training (LWI, 2021).

Life skills training

The evidence base for the impact of life skills training on employment in HICs is very limited. Some evidence from middle- and low-income countries, however, does identify a small but significant impact of life skills training on employment outcomes:

- A systematic review of evaluations of life skills training interventions for women's empowerment in developing countries found a small positive impact on employment outcomes, as well as other positive economic and social effects (Singh et al., 2022).

- A systematic review of interventions to support adults with physical and/or sensory disabilities in low- and middle-income countries, many of which included life-skills elements, found a positive impact on employment outcomes, as well as on incomes and on professional social skills (Tripney et al., 2015).
- An evaluation of the 'Passport to Success' programme indicates higher employment rates for participants, as well higher wages, better education outcomes, and improved wellbeing outcomes (IFY, 2020).

There is also some evidence for a relationship between various psychosocial skills and employment-related outcomes. For example, a 2020 evidence review identified a causal link between life skills interventions and improved social and emotional wellbeing among children and young people. The same study found evidence for associations between skills such as communication, perseverance and self-esteem, and higher wages; the same review identified a link between inter- and intra-personal skills and job performance (Angus et al., 2020).

Process evaluation findings for life skills training suggest that it is effective in developing the kind of skills that it targets. For example:

- An process evaluation of the YouthReach programme in Ireland (Smyth, 2019), which provides 'second chance' education for young people with complex needs but prioritises the development of personal and social skills, found positive impacts on psychosocial outcomes and engagement in training and education. The programme also appeared to have an impact on levels of unemployment, but this could relate to the education and training elements. As the study does not use a comparison group it was not eligible for inclusion in the REA.
- A process evaluation of the Essential Life Skills programme (Cutmore et al., 2020) in England's 'Opportunity Areas' found that participants reported improved confidence, resilience, relationship building skills and social and emotional intelligence, as well as commitment and organisational skills.
- An evaluation of the Liverpool City Region Youth Employment Gateway (Ray et al., 2018), which included a substantial life skills

element, found that participation was associated with improved life skills among participants.

Many occupations at all levels need workers with interpersonal skills including problem solving, communication, dealing with other people, working well with customers and colleagues, etc, and mastering these skills is cognitively challenging (Lerman, 2013).

Mentoring or coaching

Mentoring and coaching are widely included in programmes to support youth employment, but rigorous evaluations are relatively limited in number, as (unsurprisingly) are systematic reviews of the evidence.

Qualitative findings may include positive feedback from young people about the mentoring they have received. These interventions are also included in many programmes in which getting a job is only one of a range of goals for young people. For example, programme aims may include reducing involvement in crime or violence, building engagement in learning, personal and social development and independent living.

Mentoring and coaching are shown to improve outcomes *other than* employment for young people, including outcomes that over the longer-term could support engagement in work and learning. Other What Works Centres report on these in their evidence resources. For example:

- Research for the Youth Endowment Fund shows that mentoring has a *moderate* positive impact on youth offending, reducing all offending by young people by around 14% and young people's involvement in violent crime by around 21%. Mentoring also improves some behavioural and mental health outcomes (YEF, 2022).
- Research for the College of Policing found that mentoring interventions generally reduce crime, although there are some exceptions (College of Policing, 2016).
- Research for the Education Endowment Foundation found a *small* positive impact from mentoring on children's attainment at school (EEF, 2021).

- Research for the What Works Centre for Transforming Access and Student Outcomes in Higher Education shows that mentoring and coaching have a small positive impact on student aspirations, attitudes, behaviours and outcomes (TASO, n.d.).

Mentoring and coaching are shown in several qualitative and quantitative studies to have an impact on outcomes *related to* youth employment, and that could increase the likelihood of a young person getting a job at a later stage. For example:

- Sharpe et al. (2023) cite a large-scale meta-analysis of the effectiveness of mentoring, which notes its usefulness across 'multiple areas' of a young person's development, and a large-scale review that notes its positive impacts in areas such as self-esteem, developing adult thinking patterns, reducing anti-social behaviour and becoming more receptive to advice.
- Lindsay et al. (2015), in a systematic review of mentoring interventions for disabled young people, found that mentoring has an impact on a range of psychosocial and personal skills, including self-determination and self-efficacy, empowerment, confidence, decision-making, problem-solving, self-regulation and independence. Several employment-related outcomes also saw positive results; these were knowledge of the transition to employment and educational planning (medium effect), preparedness for further learning and employment and transition-related goals and planning (small effect). However, the review found no significant differences in job interviewing skills, performance in job interviews, or expectations for work. The likelihood or otherwise of entry into employment was not examined.
- Rodriguez-Planas (2014) found that, overall, rigorous studies show that mentoring has 'positive but modest' effects on some young people, with stronger impacts on social skills and on young people who experience higher levels of disadvantage and risk. Gains are more marked in social and non-cognitive skills than in education and employment. They also appear to dissipate quickly over time.

These authors note that the level and nature of positive impacts of mentoring varies considerably between studies; this may reflect differences in implementation. Some studies also found *negative* impacts on certain outcomes, including socio-emotional factors, attitudes and beliefs, and behavioural outcomes, although this is not universal.

The benefits of mentoring may also be seen over the longer-term rather than within a relatively short period during which programme evaluation is conducted. For example:

- Shiner et al. (2004) found that the 'Mentoring Plus' programme (UK) had an impact on a wide range of social and personal outcomes for young people, such as personal efficacy, social inclusion, involvement in risky behaviours, and engagement in education or work. At the end point of the programme, the percentage of the cohort who were in paid employment had risen from around 2% to around 5%. However, rises in educational engagement were much bigger during the programme lifetime; this included an increase in college or university study from around 7% of the cohort to around 24%, which in time may translate to an increase in employment.
- Rodriguez-Planas (2010) in a randomised trial of mentoring alongside other types of intervention, found that mentoring has a range of psycho-social benefits for young people. However, employment gains five years after programme completion were small and were found only for women, with men *not* seeing an employment gain.

A systematic review of mentoring in relation to youth offending, conducted for the Youth Endowment Fund, found that the evidence indicates that mentoring is generally cost effective. Thirteen of the studies reviewed included information on cost effectiveness, and all but one indicated that the interventions were cost effective. Actual programme costs vary very considerably depending on design, duration, and intensity of delivery.

This is the case even outside the relatively narrow field of youth employment. For example, Schmidt and Park (2021) in their systematic review of interventions to support postsecondary activities in high-poverty rural

populations found that ‘... the body of rigorous evidence for mentoring is small’ and that many programmes have either not been evaluated or did not show an impact. Similarly, a systematic review and meta-analysis of school-based mentoring programmes for adolescents found only very small and largely non-significant impacts (Wood and Mayo-Wilson, 2012).

Off-the-job training and on-the-job training

The findings of the REA in relation to off-the-job training (and also on-the-job training) were similar to those of other large-scale systematic reviews and meta-analyses in this area³.

Puerto et al. (2022) found that youth employment programmes whose major component consists of skills training had a positive impact on youth employment outcomes. Ghisletta et al. (2021) reviewed recent evidence from recent impact evaluations of youth employment programmes for young people outside the formal education system, conducted in HICs and lower- and middle-income countries. They did not separate the impact of different components of these programmes, which also included non-vocational learning elements (in life skills or business skills), and other services such as employment support, entrepreneurship support, or subsidised employment.

This study found a statistically significant positive impact of training interventions on employment outcomes, of $SMD=0.099$ in HICs. For all countries, $SMD=0.11$ for employment outcomes. They found that in-classroom training interventions had a *smaller* impact overall than interventions delivered only in the workplace, while both of these had lower impacts than training delivered in both locations. However, the finding for workplace-only training is less robust, partly because the authors (like the REA authors) found substantially fewer evaluations of interventions of this kind.

Tripney et al. (2013) examine the literature on training and vocational education interventions (TVET) in low- and middle-income countries, for young people aged 15-24. For this group, they identified an impact on ‘overall paid employment’ outcomes of 0.134 (95% CI [0.024; 0.243]), and on

³ In Ghisletta et al. (2021) and Tripney et al. (2013), SMD is expressed as Hedges’ *g*, as in the REA.

'formal employment' of 0.199 (95% CI [0.055; 0.344]), in both cases statistically significant. These findings, despite the different group of countries included, are relatively close to those of the current REA. Like Ghisletta et al. (2021) and Puerto et al. (2022), this review does *not* disaggregate the impacts of training elements of programmes from other components delivered, and therefore findings are not directly compatible with the current REA. They also did not find a difference between training delivered in different settings, and found no suitable evaluations of apprenticeship programmes.

A review for the What Works Centre for Local Economic Growth (WWCLEG 2015) found 71 evaluations that look at the returns to employment training (this also includes apprenticeships). Of these, 17 look at forms of training that includes an 'in-firm element', of which only 4 found no or negative impacts and 13 found positive impacts. This compares to 40 out of 67 for training without an 'in-firm' element. Overall, the broad picture of effectiveness for both off- and on-the-job training once again emerges, with the latter emerging as slightly more impactful but less frequently evaluated.

Participant demographics

Sample size

The total sample size for the network used to identify impacts on employment outcomes is **676,664**. This entire sample was used to generate direct and indirect comparisons, but the sample size involved in any single comparison within the network may be much smaller, depending on the elements involved.

Marginalisation and disadvantage in the sample

The Youth Futures Foundation's primary interest is in labour market opportunities for unemployed young people. Targeted youth employment interventions typically involve young people who have spent some significant period without work, training or education. This experience is more common among groups who are at risk of various kinds of social marginalisation or disadvantage. On that basis it can fairly safely be assumed that the young people who find themselves on any of the programmes in the Toolkit are more likely than average to be at risk of marginalisation or disadvantage.

Within that larger cohort, some programmes are specifically designed for — or serve — populations that are particularly vulnerable. This vulnerability often relates to structural disadvantages and/or additional barriers to employment such as known trauma or disability. The evidence review team sought to identify these by coding studies based on whether they reported (or were designed to serve):

- *A population living with a disability*: interventions are coded as serving this population if more than 50 per cent of the young people receiving the programme or intervention report that they have either a self-identified or diagnosed physical or intellectual disability, or if the programme was specifically targeted at populations living with a disability.
- *A population with known elevated risks*: interventions are coded as serving this population if more than 50 per cent of the population receiving the programme or intervention has one or more of the following reported characteristics: current or former experience with the out-of-

home care system, self-identified or diagnosed mental health condition, current or former experience with the juvenile justice system, identifies as member of First Nations community, identifies as LGBTQ+, is a single parent, or if the programme was specifically targeted populations with one or more of these characteristics.

In the analysis, the review team opted to combine these two groups into a new construct 'young people facing additional barriers'. Seventeen studies fell into this group.

Young people facing additional barriers

Overall, 43 of the studies in the REA report that the intervention evaluated was specifically designed for or targeted to young people with one or more characteristics that are associated with disadvantage or marginalisation in the labour market, beyond being out of work at the time of entering the intervention. This includes the 17 studies listed above.

The remaining studies did not include any indication of the population to which they were offered. However, most if not all would have been taken up by young people who were without work at the point of entry.

The issues mentioned⁴ in the 43 studies are:

- Low educational attainment and/or early withdrawal from secondary education (14 studies)
- Low income and/or socio-economic disadvantage (including homelessness) (12 studies)
- Long-term unemployment/status equivalent to NEET (7 studies)
- Living with a disability (7 studies)
- Experience of the criminal justice system and/or risk of becoming involved in offending and anti-social behaviour (6 studies)
- Experience of the out-of-home care system (5 studies)
- Other issues (7 studies)

⁴ Note that several studies mentioned more than one issue.

Costs ratings

The evidence on costs

As noted by Puerto et al. (2022), relatively few evaluations of youth employment interventions include cost and/or cost-benefit information. Even where this is available, it relates to the whole programmes that are evaluated, rather than to the components within them whose effectiveness is evaluated in the REA. It was not practical to extract this information from the studies in the meta-analysis.

A further challenge in estimating the costs of youth employment interventions for the Youth Employment Toolkit relates to its broad intended audience. Many of the interventions in this edition of the Toolkit are delivered by several different stakeholders working in partnership. The costs to each partner may vary considerably for the same intervention, as may the relationship between costs and benefits. Costs will also vary depending on the intensity and duration of delivery; different implementations of the same intervention may be delivered with substantial variations in both of these.

The essential inputs for different interventions also go beyond financial costs. For example, many need specific expertise or a time commitment. These can be expressed in monetary terms, but doing so fails to capture some of the complexities involved.

For these reasons, we have used the approach described in the Technical Guide for the Youth Employment Toolkit to estimate the costs of the interventions included in the REA. This involves analysing the inputs that are typically required for each intervention (where it is implemented well), and checking the required components against the following list.

The checklist is as follows:

- **How many inputs?** Costs are higher where there are several inputs.
- **How long are they required for?** Costs are higher when inputs include elements of continuous oversight or assessment, or ongoing activities. Intensity of delivery is also associated with higher costs.

- **Who provides them?** Costs are higher when inputs come from multiple sources, e.g. central government, employers, education providers.
- **Do they need particular expertise or specialisms?** Costs are higher when an intervention includes a need for expertise or specialist advice.
- **Where is the intervention delivered?** Costs are higher when the intervention may involve specialised equipment or settings.
- **Are they required only for this intervention?** Costs are higher when the intervention inputs can't easily be combined with those required for other activities or business as usual.

Costs ratings for each intervention

Apprenticeships

Cost rating - high

- **Number of inputs:** multiple, including two different kinds of training and associated feedback and supervision, a work placement, a recruitment and selection process, partnerships between different stakeholders, wages for the apprentices, and substantial administration.
- **Duration of inputs:** long-term, usually for a year or more.
- **Sources of inputs:** multiple, including government, an apprenticeship provider, an employer, and possibly also intermediaries, student support professionals, recruiters and advisers, etc.
- **Expertise:** substantial and varied, including teaching and training, the specific job or sector, and to develop local labour market intelligence on which to base content and provision. Developing the curriculum for the various parts of an apprenticeship is also an expert task.
- **Settings:** specialised, in the workplace that are suitable for on-the-job training. Off-the-job training may also require workshops, spaces for simulated work activities, etc..
- **Intervention-only inputs:** multiple, including apprenticeship wages and recruitment and assessment procedures.

Basic skills training

Cost rating - moderate

- **Number of inputs:** usually fairly limited, including a single and focussed curriculum, a single setting for delivery, and support for learners.

- **Duration of inputs:** short-term in most cases, especially where young people engage in this learning as a preparatory phase before engaging in vocational training. Programmes normally last for a fairly short period of time, or are delivered in short sessions alongside more substantial activities.
- **Sources of inputs:** limited, possibly to a single education provider.
- **Expertise:** specialist expertise is necessary, to develop and/or select and tailor the curriculum, and also to provide appropriate support to adult learners. Expertise in assessing skills levels and progress, providing feedback, and applying learning to other aspects of the programme may also be needed.
- **Settings:** Basic skills training does not require specialist settings.
- **Intervention-only inputs:** Basic skills training does include several inputs that will only be used for this activity.

Life skills training

Cost rating - low

- **Number of inputs:** Usually fairly limited. Programmes need a curriculum that is appropriate for the cohort of young people involved and the professional setting, but this may be delivered by people who have another role in relation to the young people.
- **Duration of inputs:** short-term, in most cases. Dedicated courses rarely last more than a few weeks. Alternatively materials may be delivered in short sessions across a programme, or they may be embedded in the programme.
- **Inputs from a limited number of sources:** limited, to a single provider or team (which may have another role in relation to the programme).
- **Expertise:** Some expertise in programme design and delivery may be needed, but many life skills for employment will fall within the general knowledge of staff who work with young people or current employees in a workplace.
- **Settings:** Life skills training does not normally require specialist settings.
- **Intervention-only inputs:** Life skills training can be integrated with other aspects of work experience or on-the-job training.

Some life skills programmes may involve far greater levels of input, for example where programmes are residential, include in-depth specialist counselling or other services, and/or where skills are taught through extensive activity or practical programmes. These approaches will have substantially higher costs.

Mentoring or coaching

Cost rating - moderate

- Number of inputs:** Multiple, including recruitment of mentors, a framework for matching young people with a mentor or coach; a strategy and rationale for their interactions, including monitoring and oversight; training and support for the mentor; and the work of the mentor in personalising their advice and guidance to the young person's needs. Partnerships between stakeholders can also support mentoring interventions.
- Duration of inputs:** Mentoring programmes can last for a short period or for a year or more. Meetings vary in their frequency, from once every few months to weekly or even more frequently.
- Inputs from a limited number of sources:** The key sources of inputs are the mentor or coach, and the programme owners.
- Expertise:** Either the mentors/coaches or those responsible for their training need a degree of expertise; if untrained mentors or coaches deliver the intervention, then they will need to gain some expertise.
- Settings:** Mentoring and coaching do not normally require specialist settings.
- Intervention-only inputs:** In most cases mentoring and coaching include inputs that will only be used for this activity. In some cases the mentor/coach and the young person may already be in touch (for example, where they are work colleagues) but the mentoring or coaching relationship will normally be to some extent separate from their other interactions.

Off-the-job training

Cost rating – high

- Number of inputs:** multiple inputs, including avocationally-specific curriculum that is engaging and relevant for learners, and which

provides the skills they need for a particular occupation/role/sector; specialist tutors or trainers, with sectoral knowledge and the ability to teach adults; possibly also mechanisms for feedback and assessment; and course administration.

- **Duration of inputs:** Programmes generally last several months.
- **Inputs from a limited number of sources:** Inputs from education providers, employers and possibly also central or local government agencies.
- **Expertise:** substantial and varied, including teaching and training, the specific job or sector, and to develop local labour market intelligence on which to base content and provision. Developing the curriculum is also an expert task.
- **Settings:** Some off-the-job training may require workshops, spaces for simulated work activities, etc. Other programmes may be entirely classroom-based.
- **Intervention-only inputs:** The majority of inputs will be used only for delivering off-the-job training.

On-the-job training

Cost rating - moderate

- **Number of inputs:** multiple inputs, including avocationally-specific curriculum that is engaging and relevant for learners, and which provides the skills they need for a particular occupation/role/sector; specialist tutors or trainers and/or training for managers and other staff to support their delivery; possibly also mechanisms for feedback and assessment; and course administration.
- **Duration of inputs:** Programmes generally last several months.
- **Inputs from a limited number of sources:** Inputs from education providers, employers and possibly also central or local government agencies.
- **Expertise:** substantial and varied, including teaching and training, the specific job or sector, and to develop local labour market intelligence on which to base content and provision. Developing the curriculum is also an expert task.
- **Settings:** Workplace settings that are suitable for learners and for delivering programme content.

- **Intervention-only inputs:** Some off-the-job training can be combined with regular tasks undertaken in the workplace; others will be specific to the intervention.

Implementing the interventions

Alongside the development of the NMA, researchers at Youth Futures examined the studies from which quantitative data was extracted to identify key features of the programmes included in the research and any information on their effectiveness in supporting young people into work. This was supplemented with process studies for the same interventions, where this was available, the process and implementation studies in the Youth Futures Evidence and Gap Map, and an earlier study conducted for the Youth Futures Foundation (Newton et al., 2020). In addition, we draw on a forthcoming synthesis of qualitative findings on youth employment based on the EGM (Apunyo et al., forthcoming).

We also conducted a small number of additional literature searches on key topics (e.g., of UK Government and IZA⁵ publications), as well as advisory materials from expert organisations and a small number of peer-reviewed publications. The summaries that follow reflect these qualitative findings and discussions of practice, rather than the type of comparison group analysis used in the evaluations in the meta-analysis.

Apprenticeships

Although impact evaluations that separate out the effects of different approaches to or elements of apprenticeships are very limited, a small number of publications explore the kinds of practice in the implementation of apprenticeships that are associated with learner and employer satisfaction and satisfactory completion rates. The studies in the REA (Hollenbeck and Huang 2006, Hollenbeck and Huang 2016) note that apprenticeship *completion* appeared to have a higher positive impact on employment outcomes than *participation* alone. For this reason, in the section on implementation, we have focussed on approaches that young people and practitioners felt were likely to support completion of an apprenticeship.

Studies exploring good practice in apprenticeship policy include Tate and Greatbatch (2020), WWCLEG (2015), LWI (2020) and Smith and Kemmis (2013). The Learning and Work Institute (LWI, 2023a) publish extensive

⁵ Institute of Labor Economics <https://www.iza.org/>

resources on good practice in apprenticeship provision, including guidance on how to provide good experiences for apprentices (LWI, 2023b).

Outreach and recruitment including targeted initiatives

Several reviews note the importance of well-designed and targeted recruitment in order to equalise access to apprenticeships. For example, CIPD (2014) recommends recruitment and outreach activities that emphasise the benefits of apprenticeships, and working with current and graduated apprentices as role models. They also note the importance of accurate presentation of apprenticeships in advertisements, including details of the balance between learning and employment.

To increase recruitment from under-represented groups, providers can:

- Use proactive outreach through diverse channels, including online platforms, employment fairs, work with schools and parents, etc.
- Maintain engagement with young people who don't get a place on their first choice apprenticeship, or following their first application, signposting them towards other opportunities or providing advice about how to improve their prospects.
- Consider skill-based or strength-based selection practices.
- Engage with other services and organisations that signpost young people towards training and employment opportunities.
- Work with community organisations, charities and other bodies that are in direct contact with target groups for recruitment.
- Create recruitment materials that address under-represented groups, for example women in construction and men in caring professions.
- Tailor programmes to address barriers to participation that may affect specific under-represented groups.

Provide adequate wages and subsidise other costs

Low wages can be a barrier to the recruitment and retention of young people to apprenticeships, particularly those from disadvantaged backgrounds (Julius et al., 2021). Increasing training wages relative to alternative employment options can also have a positive impact on completion rates (WWCLEG, 2016).

Preparatory learning including support with basic and workplace skills

Preparatory or pre-apprenticeship programmes that identify and address skills gaps (relating both to basic skills and interpersonal and workplace skills) can improve both recruitment and completion (Eyster et al., 2010; CIPD, 2014; Hughes and Monteiro 2005; WWCLEG, 2015). In the UK, the Learning and Work Institute has developed a comprehensive guidance resource for pre-apprenticeship providers (LWI, 2023b).

An orientation period that builds realistic expectations of the programme

Young people who have gained a place on an apprenticeship programme can benefit from an orientation period that builds realistic expectations of the programme. This period can help apprentices to understand how they will use their time, what challenges they may face, and how to overcome these. The orientation period can also help to challenge mistaken or unrealistic beliefs about what is involved in an apprenticeship (To, 2017; CIPD, 2014; Hughes and Monteiro, 2005).

Specialist support for apprentices with additional needs

Research for the Department for Education (Jones and Davies 2018) found that some apprentices may benefit from additional support for diagnosed or undiagnosed learning disabilities, mental health issues, and social and economic factors. In general, apprenticeship providers take responsibility for identifying and assessing these needs, with employers identifying additional needs that impact on workplace activities.

A range of different kinds of support are put in place to address different needs, including one-to-one specialist support, adaptations to learning materials and workplace tasks, referrals to additional services, provision of equipment and other forms of material support, flexibility in programme activities, and training for tutors and managers.

Clear guidance on progression routes into and beyond apprenticeships

Several studies found that apprentices can benefit from clear guidance throughout the programme on how their apprenticeship relates to career paths and progression in their chosen field. These can include formal learning and development plans, as well as opportunities to discuss their aspirations

during and beyond the programme (Foster et al., 2021; CIPD, 2014; Hughes and Monteiro, 2005).

Support on-course for apprentices

Several studies (CIPD, 2014; Hughes and Monteiro, 2005; WWCLEG, 2015) suggest that apprentices may benefit from on-course support, and from approaches to training that ensure they are learning and progressing effectively. Good practice includes:

- Frameworks for monitoring learning progression, including clear 'staging' or transition points within the programme.
- Progress reviews, including target-setting, constructive feedback and recognition of attainment as well as opportunities to reflect on progress and share success stories.
- Quality assurance of teaching and learning practices, including off-the-job and on-the-job provision.
- Pastoral support or mentoring, particularly for students who are at risk of social disadvantage.
- Support and training for line managers. The Learning and Work Institute publishes a guide for line managers who manage apprentices (part of LWI, 2023b).

The Learning and Work Institute provides a guide for training providers (part of LWI, 2023b) to help them plan and appraise their support offer for apprentices. Richmond and Regan (2022) explore apprenticeship *quality* in depth, focussing on the importance of the training element within an apprenticeship.

A close match to local economic priorities

Writers on apprenticeships are in broad agreement that provision is most effective when it is closely matched to opportunities in the local labour market and the skills needs of local employers. This depends on collaboration between stakeholders, including employers, education providers, and local and regional policymakers, as well as communities and organisations concerned with youth employment. Some of the themes raised include:

- A strong business case for apprenticeships and their role in local economic and social development.

- Support for the needs of small firms as well as large employers.
- Flexibility within national or regional frameworks to meet the needs of specific groups of learners, sectors, and employers.
- Where possible, a strong 'lead voice' for apprenticeships to ensure that they are considered in discussions of economic development and opportunities for learners.

(Eyster et al., 2010; Foster et al., 2021; Hughes and Monteiro, 2005; Reed et al., 2012; Hendra et al., 2016; Alexander, 2014; James Relly and Laczik, 2022).

This relies on close collaboration between employers and other partners in delivering apprenticeships. Some features of the latter are:

- Collaboration that goes beyond the contractual relationship.
- Detailed examination of the relationship between classroom, workshop and workplace elements, involving tutors, team leaders and managers.
- A designated individual in each organisation with responsibility for the relationship; regular meetings to discuss progress and emerging issues.
- Regular opportunities for staff training, good practice sharing, and monitoring of quality and performance.
- Sufficient time in within the workplace element for apprentices to reflect on their learning, and engage in on-the-job training activities.
- Opportunities for college tutors to spend time in the workplaces where apprentices are based, to improve their own understanding of contemporary industry practice.

A good balance between theoretical, technical and 'soft' skills

The balance between different kinds of skills development within an apprenticeship is important in ensuring that apprentices can complete their programme, gain permanent roles on graduation, and progress within their career. In the contemporary workplace, this means finding appropriate opportunities for learning:

- Vocation-specific and practical skills, largely gained in the workplace.
- 'Theoretical' underpinnings and foundational vocational knowledge, gained in college workshops and classrooms.
- Critical thinking skills and transferrable learning.
- Interpersonal skills and knowledge of workplace behaviours.

(To, 2017; Foster et al., 2021; Hughes and Monteiro, 2005; James Relly and Laczik, 2022; CIPD, 2014; Tate and Greatbach, 2020; Richmond and Regan, 2022)

Findings on the impact of apprenticeship *duration* are mixed. Higher level apprenticeships often last longer, which may explain differences in outcomes, such as employment rates and earnings (WWCLEG, 2015).

Basic skills training

The studies in the REA include several descriptions of programmes that include a basic skills training component. The summary that follows reflects key themes from evaluations of interventions that had a positive impact overall on youth employment, supplemented by additional findings from studies included in the Youth Employment Evidence and Gap Map (White and Apunyo, 2021). Several common factors emerge from this literature as being effect in delivering basic skills training.

Individualised identification and support with basic skills gaps

Several programmes use initial assessments that identify gaps in basic skills, in particular those which could impact on a young person's ability to engage with or complete a vocational training programme. These initial assessments may use formal tools for assessing basic skills such as numeracy and literacy (Henderson et al., 2021). Outcomes from these initial assessments can then be used to formulate an educational plan that reflects individual needs and goals (Rosholm et al., 2019; Quint et al., 1997). The plan may include engagement in classes, and/or individually tailored instruction and academic support (Miller et al., 2016; Wiegand et al., 2015). Once young people are involved in a programme, regular assignments and feedback can help to identify and monitor progress (Miller et al., 2016; Wiegand et al., 2015).

Small groups and high support

The research suggest that basic skills training is frequently delivered through small groups tutoring, with high staff-to-learner ratios. This was seen as valuable both in building trusting relationships, and providing individually tailored learning support (Henderson et al., 2021; Rosholm et al., 2019; Miller et al., 2016; Wiegand et al., 2015). Some programmes use one-to-one support;

this can be offered alongside the use of self-directed and independent work (Valentine et al., 2015). It can be difficult to maintain young people's engagement in basic skills provision, so programmes should consider how to retain students and improve retention and motivation. This may include addressing external personal and social barriers (Quint et al., 1997).

Expert staff and appropriate teaching methods

Basic skills training may involve tutors with specific expertise in providing literacy and/or numeracy development to young people, including those who face challenges to learning and work. Another site for expertise is programme design. Collaboration with education providers such as colleges can provide access to relevant experience (Miller et al., 2016; Wiegand et al., 2015; Rosholm et al., 2019; Fraker et al., 2018).

Avoiding 'school-like' experiences

Young people who enter employment interventions may have had poor experiences at school. They may be keen to improve their skills, but wary of returning to settings that recall those of compulsory education. Two studies noted that young people felt positive about learning opportunities that felt *different* from school (Miller et al., 2016; Wiegand et al., 2015). Approaches can include varying the nature of tasks, holding classes in workplaces rather than classrooms, encouraging independent and self-paced work, and fostering respectful and adult relationships between staff and students.

Embedding basic skills training with other employment-related activities

Programmes often include basic skills training as part of a broad (and sometimes intensive) schedule of activities which also includes life skills development and/or vocational learning, or link numeracy and literacy training with themes and issues that young people encounter in their vocational learning (Rosholm et al., 2019; Miller et al., 2016, Wiegand et al., 2015; Schaeffer et al., 2014). This emphasises links between basic skills learning to tasks young people might encounter in the workplace (Miller et al., 2005). They can also be linked to life skills and personal development (Quint et al., 1997).

Life skills training

Several of the studies in the meta-analysis describe how life skills training was implemented. This summary draws on those descriptions, as well as studies in the Youth Futures Evidence and Gap Map and related publications.

Integrating workplace skills into specific vocational training

The development of general workplace skills is a part of many youth employment interventions. Programmes frequently integrate at least some of this with occupation-specific vocational training. For example:

- Off-the-job training that includes group and project-based work, and/or a focus on practical problem-solving within its curriculum.
- On-the-job programmes that 'model' workplace culture and expectations, for example in how staff and learners interact, in the presentation of materials, assignments, etc.
- Training sessions that include learning about general workplace skills and behaviours alongside job-specific instruction.
- Activities that enhance confidence at work and in using interpersonal skills (Mawn et al., 2017).

Selected specialist curricula that match programme aims and the needs of the young people on a programme

Many different training packages for 'work readiness' and other aspects of life skills are available. Some of these are designed using research evidence, and may themselves have been subject to evaluation. The research includes examples of their use in interventions, including work with young people who face specific kinds of disadvantage. Programmes that use this kind of curriculum may seek a close match with overall programme aims and suitability for a specific cohort of young people.

Examples from the research include:

- The University of Tennessee's Center for Literacy, Education and Employment job readiness curriculum, 'Equipped for the Future' (Bauer et al., 2014).
- The 'Preparing Adolescents for Young Adulthood' curriculum developed by the Massachusetts Department for Social Services as an

evidence-based tool for life skills development (Skemer and Valentine, 2016).

- The USA National Institute of Corrections 'Thinking for a Change' programme, which aims to change thinking patterns that are associated with criminal behaviour and promote social and emotional learning (Wasserman et al., 2019).

A focus on student engagement

Programmes for young people who face complex social and psychological needs, such as involvement with the criminal justice system, may encounter challenges with attendance and engagement. Responses include:

- Offering incentives for attendance.
- Activities to build cohort cohesion and trust in instructors.
- Learning about the specific challenges that affect attendance, and making specific responses to these.
- Individualised life skills provision for young people with very complex needs.

Online delivery may present some barriers to participation and engagement. It depends on young people having sufficient technological skills, and access to sufficient IT resources, to take part (Wasserman et al., 2019).

Specialist staff for young people who face additional barriers

Life skills training programmes for young people who face additional social and psychological barriers may seek to recruit expert tutors, with professional experience and/or training to deliver a specialised programme.

For example, one US intervention employed graduates with a social work credential and experience of working with adolescents. They received bespoke training and shadowed other outreach workers before taking on their own caseloads (Courtney et al., 2019). Expert support workers can develop individual plans with young people, including engagement with wider support services, and actions to support independent living, skills development and employability. The programme as a whole is 'relationship

based' and trusting relationships between workers and participants are key. This is reinforced with regular meetings over at least an extended period.

Mentoring or coaching

Several of the studies in the REA describe how mentoring and coaching were implemented. This summary draws on those descriptions, as well as studies in the Youth Futures Evidence and Gap Map. We also consulted a small number of other publications that examine effective mentoring in contexts related to youth employment outcomes, but do not explore specific impacts on probability of employment.

Recognising the continuum in practice between interventions that are called mentoring and coaching, only the former term is used here. It appears to be more common in descriptions of youth employment interventions.

Individualisation with a clear framework and programme goals

Programmes often seek to offer a degree of flexibility and personalisation to the goals and circumstances of individual mentees, within a robust framework designed to limit risks and maximise impact. This may be supported by tools such as a structured content plans or curricula, common outcomes frameworks, frameworks for assessing and monitoring quality, etc.

Some common features of programmes include:

- Consistent and regular guidance from mentors to mentees, and collaboration in identifying goals and establishing plans to meet these.
- Programme governance and monitoring to make sure practice and delivery match programme intentions and design (Shiner et al., 2004). This may involve a paid co-ordinator or other expert who has continued oversight of the programme.
- Programmes need to be accessible, engaging and safe for participants. For young people who experience disadvantage and/or personal and social challenges, risk management and safeguarding are prominent in programme design and implementation (Lindsay et al., 2015; Shiner et al., 2004; Wasserman et al., 2019; Rosholm et al., 2019; Skemer and Valentine, 2016; Chrichton and Dixon, 2017).

Delivery approaches

The literature presents mixed evidence for certain approaches, for example:

- Remote contact (online and/or by phone) can make it easier for young people to keep in touch with their mentors. It can also reduce the focus of sessions on factors such as disadvantage or disability, which young people may welcome. However, heavy reliance on remote contact can limit the development of a strong relationship between mentor and mentee.
- Group mentoring can foster bonds between young people and peer relationships. However it may also lead to an over-focus on disadvantage or difficulties. Some group settings could even reinforce negative or risky behaviours.

(Wasserman et al., 2019; Rosholm et al., 2019; Skemer and Valentine, 2016; Chrichton and Dixon, 2017; Roder and Elliott, 2014; Rodriguez-Planas 2014; Lindsay et al., 2015)

Sufficient resources

Many mentors are volunteers, while others act as mentors in addition to their paid role. However, mentoring interventions need sufficient resources – including money, time, expertise and governance – to meet their aims and remain congruent with programme vision and design. Key issues include:

- Sufficient time for mentors to spend with young people. The number of meetings between mentor and mentee needs to be sufficient to meet programme aims and provide meaningful support, as does the duration of the programme as a whole. Longer programmes tend to allow stronger relationships to develop.
- Mentors also to engage in sufficient training, and to be realistic about the time they required for *ad hoc* support for young people.
- The staff who oversee and manage mentoring programmes also need sufficient time to do this effectively, monitoring progress and managing issues that arise.
- Changing mentors can be disruptive for young people and for programmes. This can be avoided by effective matching of mentor to

mentee at the start of the programme, and reducing turnover of mentors as far as possible.

Individualisation

Individualised support for mentees is a feature of several programmes.

Approaches include:

- Mentors build a profile of individual participants, including their interests, support needs, experiences, and personal, work and social history. They tailor advice and guidance to this profile within the programme framework. This may include an individual mentoring plan, developed using frameworks and tools specific to the programme.
- Mentors and mentees develop a one-to-one personal relationship, within appropriate boundaries. This is characterised by trust, reciprocity, listening and respect, and in most cases includes at least a degree of informality. Mentees should feel that they can raise difficult or problematic topics, within the boundaries of the programme aims, and the mentor should show a genuine interest in their individual charges.

Employment- and education-focussed mentoring activities often include reflection on the relationship between longer-term goals and short-term experiences as part of a programme. Mentors may also provide specific advice about how to identify and apply for job opportunities, overcome issues in learning or work experience, and tackle barriers to engagement.

Matching of mentors to mentees

The success of a mentoring programme relies heavily on individual interactions: ‘... outcomes depend on the quality of the mentoring relationships with greater benefits for mentees in stronger relationships and neutral or even negative outcomes for mentees with less effective relationships’ (Rodriguez-Planas, 2014). The research indicates that ‘matching’ between mentors and mentees is important. This may include:

- Demographic similarities, e.g. in gender, class or ethnic background, and living in the same area or a similar kind of area.

- Similarities in skills and lived experiences, including experience of the kinds of challenges that young people face and of overcoming these.
- Relevant professional experience; mentors in programmes that focus primarily on getting a job and/or progressing in work often come from a local business community or from the sector that young people want to join. For training interventions that include a mentoring component, people who have graduated from the same programme may be chosen as mentors.
- Mentors who have the 'cultural competence' to communicate effectively with young people from the communities and social groups that can benefit from the intervention, and offer a 'bridge' between different kinds of experience.

Off-the-job training

An extensive literature explores pedagogy and curriculum design in technical and vocational education. This summary of findings from Apunyo et al (forthcoming) as well as the studies in the meta-analysis and the Youth Futures Evidence and Gap Map focusses on training interventions that aim to improve employment outcomes, primarily for young people who are at risk of marginalisation. Note that many factors are common to both off-the-job and on-the-job training.

Recruitment and orientation activities

Many programmes assess the suitability of young people for the intervention before they enrol, or include an orientation phase where factors such as current skills levels, motivation and interests are explored (Skemer et al., 2017; Berk et al., 2021; Apunyo et al, forthcoming). Some have a short enrolment phase where young people are given detailed information about the intervention, stressing the level of commitment required (e.g., Miller et al., 2005).

Content that reflects employment opportunities and skills needs in the local economy

Many off-the-job interventions focus strongly on skills needs and job opportunities within the local economy. Approaches include:

- Employer involvement in the design and delivery of programme content, seeking a match to local skills priorities and job opportunities.
- Opportunities for classroom and off-the-job tutors to spend time in firms.
- Extensive ongoing collaboration between education providers and employers, to address emerging issues and identify challenges.
- Working through partnerships that already exist, or building partnerships that last over multiple iterations of the programme and bring together a wide range of stakeholders in the local economy.

Interventions may use learning ‘packages’ to develop occupation-specific skills. These introduce participants to occupational skills and let them develop skills that are transferrable within the sector. These are sometimes used as a core on which individual programmes can build, flexing material to a particular context and/or supplementing them to reflect local employer needs and employment opportunities. Multi-site interventions may use bespoke curricula but allow local flexibility; learning objectives are common across sites but content can be adapted (Apunyo et al, forthcoming; Wegman et al., 2014; Byam, 2002; Skemer et al., 2017; Roder and Elliot, 2014, Johnson et al., 2001; Alexander, 2014; Berk et al., 2021; Miller et al., 2005; Swinney and Hepburn, 2018; Byam and Blanchard, 2002; Ecorys, 2016; Berk et al., 2020; Scottish Government, 2018b; McGarry and Fitzpatrick, 2015).

Integration with education providers and qualifications

Education providers can be key partners for those designing and managing interventions. In the US, relationships with community colleges are frequently mentioned. As well as building links to the local economy, integration can build systems that allow young people to earn recognised qualifications as a result of their participation, or credit towards these. It can also foster participants’ longer-term goals for engagement with learning and education, including learning while in work (Roder and Elliot, 2014; Fein and Hamadyk, 2018; McGarry and Fitzpatrick, 2015).

Curriculum content that includes professional behaviours alongside vocational skills

Alongside a primary focus on technical and vocational skills, off-the-job training is a potential site for learning about professional behaviours and

workplace expectations. Programmes can integrate this with occupation-specific learning, for example through group and project-based work, and a focus on problem-solving. Some programmes include classes on behaviours at work, interpersonal skills, and workplace communications. (Miller et al., 2005, Fein and Hamadyk, 2018 ; Theodos et al., 2017 ; Jetha et al., 2019).

Programme practice and culture that mirrors work rather than school

Young people who enter youth employment interventions may have had poor experiences of school, which can impact on their engagement with off-the-job training and learning opportunities. Some programmes use aspects of their design and culture to counter this, making learning environments more like workplaces and less like school.

For example:

- Fostering respectful relationships between staff and students.
- Providing feedback in ways that reflect professional settings.
- Allowing a high degree of independent work, with appropriate support.
- Co-location of learning activities with on-the-job experiences were possible, or using a 'worklike' setting if available.
- A training schedule that is similar to a work one, including a requirement for regular attendance similar to that of a job.
- Field trips, tours of business sites and workplaces, talks and visits from professionals and employers in the relevant field.
- Opportunities to apply skills, e.g. in workshop settings.

Feedback and assessment offer a site for learning, with feedback delivered in ways that provide a basis for subsequent learning. Learners can also be offered guidance in how to use negative as well as positive feedback (Wiegand et al., 2015; Miller et al., 2005; Wehman et al., 2014; Roder and Elliot, 2014).

Learning paced for individuals

The research describes several approaches that involve independent working and curricula 'paced' to match the progress of individual learners.

One programme combined a high degree of independent working with individual tutoring, so that participants gained confidence and skills in a supportive environment with opportunities for guidance and feedback. Others describe largely 'self-paced' approaches, which let learners focus on key content and concentrate on grasping elements of the programme in sequence. These approaches foster confidence and motivation. Although the term is not widely used, several appear to use a framework similar to 'mastery learning' (Hattie, 2009), in which learners move on to a new element of the curriculum only when they have demonstrably grasped the previous one (Wiegand 2015; Miller et al., 2005).

A strong system of learner support

As well as learning support, participants in off-the-job training can benefit from access to services that can help them deal with personal and social challenges that could impact on their ability to engage with the programme. These are often similar to the 'student services' offered in colleges. Where programmes are delivered in collaboration with an educational institution, learners may be able to access the support that is available to all students.

Young people may be offered supplementary tutoring, career counselling, signposting to services including financial help, support with mental or physical health, and access to services such as childcare. Curricula and delivery may be designed with the needs of young people who face long-term unemployment or other social and personal challenges in mind. For example, the timetable can accommodate family or transport factors, and the pace of learning can be adapted to match learner needs (Johnson et al., 2001, Fein and Hamadyk, 2018; McGarry and Fitzpatrick, 2015; Apunyo et al., forthcoming; Berk et al., 2021).

Small class sizes and high staff to student ratios

Small class sizes allow tutors to provide individually tailored support to learners. One-to-one tutoring is also used in some programmes. A high staff to learner ratio may help to foster the development of strong and trusting learning relationships. The research notes the importance of tutors with occupational experience, as well as an understanding of how to work with the cohorts of learners on the programme. By contrast, high levels of staff

turnover can prove problematic (Wiegand et al., 2015; McGarry and Fitzpatrick, 2015; Johnson et al., 2001; Cave et al., 1993).

On-the-job training

Resources that match programme ambitions

On-the-job training interventions for disadvantaged young people need a level of resource that will allow them to achieve their aims throughout the programme lifetime. This includes adequate learner support, as well as facilities for learning on-the-job. Many of the implementation features outlined here will need relatively substantial sustained funding over time (Apunyo et al., forthcoming; Atkinson, 2017).

Expert instruction

Interventions may seek to recruit expert tutors, with a knowledge of both the specific vocational area and of teaching and learning (pedagogy). Training in the latter area may be offered to staff whose primary role is *not* as a trainer (Alexander, 2014; Berk et al., 2021; Apunyo et al., forthcoming).

A high trainer-to-learner ratio

Programmes frequently assign a small number of learners to each trainer, and keep learner groups small. Some use one-to-one training for at least parts of the programme. These ratios allow trainers to observe and respond to individual learner progress and support young people with specific issues and queries. They may also help to build positive and trusting relationships.

Recruitment that fosters good learner-to-programme matching

Some programmes use recruitment practices designed to help young people to engage with the programme because it matches their interests, abilities, and motivation. These practices also provide young people with information designed to let them form a good understanding of what the training will be like. Content may include some or all of the following:

- Application processes that assess young people's interests, experience, preferences and abilities, as well as potential barriers to participation.
- Meetings with potential programme participants.
- Extensive information about the programme for potential entrants.
- A formal application process, which may include an interview.

- Pre-course assessments to identify skills gaps that could impact on young people's engagement with the programme. Where these assessments are conducted, young people should take part in preparatory sessions to improve their skills.

As well as recruitment activities, the literature includes examples of orientation phases at the start of on-the-job training programmes. These aim to provide realistic expectations of programme content and build group cohesion between learners, both of which can support learner engagement.

Programme content and organisation

The following features of programme content and organisation are commonly used in on-the-job training:

- A structured approach with clear learning outcomes throughout the programme.
- A balance between broad and transferrable workplace skills, and skills that are highly specific to the role and the local labour market.
- An approach that supports learning from mistakes.
- Opportunities for group work and project-based learning.
- Opportunities for learners to 'debrief' and reflect on their learning.
- Opportunities to gain recognised qualifications, or credit towards qualifications. Partnerships with colleges and other learning providers may facilitate this.

Some programmes are designed in ways that consider the potential barriers to engagement that disadvantaged young people may face. Partnerships with youth and community organisations in the local area and/or who work with particular groups of young people can help programme designers to understand specific needs and apply this knowledge to programme design.

Modelling workplace culture and behaviours

Programmes often integrate learning about the world of work, as well as about particular kinds of job and sector. This both helps learners prepare for

employment, and differentiates on-the-job training from school—which is important for young people who may have had poor experiences in education. For example:

- ‘Modelling’ workplace culture and expectations throughout the programme, for example in how learners are addressed, providing feedback in ways that mirror workplace reviews rather than school assignments, etc.
- Fostering cultures of mutual respect between learners, trainers, and colleagues.
- Integrating learning about general skills for work, such as workplace behaviours, with learning about the specific job and sector.

Alignment with local opportunities and skills needs; employer partnerships
Programmes often focus strongly on skills needs and job opportunities within the local economy. Approaches include:

- Programme content planning that uses local labour market intelligence.
- Matching technical skills for particular occupations closely to the needs of local employers, even within bespoke sectoral or occupational training.
- National or large regional programmes that allow flexibility for local providers to reflect the current and anticipated needs of local employers, with support for local matching while maintaining overall programme goals and models.
- Agility that allows providers to adjust programmes in response to changing local contexts and opportunities.

This relies on strong partnerships with local employers as well as good-quality labour market intelligence.

Off-the-job training is often designed and/or delivered through strong partnerships with employers in the local area where a programme is delivered. Their engagement in programme design can help to achieve a close alignment between the skills that young people gain through on-the-job and opportunities in the local labour market. Typical aims include:

- Employer commitment throughout the intervention lifecycle, from design through delivery and including supporting learners who complete the programme.
- Regular contact and mutual feedback opportunities, with opportunities to identify what is working well or less well, address emerging issues and concerns, and establish and nurture relationships between partners.
- Formal agreements that document the level and nature of commitment at each stage, and clearly set out roles and responsibilities.
- Links to job openings for young people who complete a training programme.
- The involvement of sectoral organisations as well as individual employers.

The research indicates that employer partnerships are resource intensive to set up and maintain. Successful examples often build on existing relationships and collaborations. (Apunyo et al, forthcoming; Wegman et al., 2014; Skemer et al., 2017; Byam, 2002, Roder and Elliot, 2014, Johnson et al., 2001; Alexander, 2014; Berk et al., 2021; Miller et al., 2005; Swinney and Hepburn, 2018; Byam and Blanchard, 2002; Ecorys, 2016; Berk et al., 2020; Scottish Government, 2018b; McGarry and Fitzpatrick, 2015; Koleva-Demonty, 2016).

Provision for young people who face additional barriers to employment

The network meta-analysis found that on-the-job training can have a very high impact on employment outcomes for young people who face additional barriers to employment. This includes young people living with a disability, and/or young people with known additional risks of marginalisation, such as experience of the care system, a mental health condition, and current or former experiences of the youth justice system.

Some of the approaches to on-the-job training for these groups of learners include:

- Work with specialist partners (such as youth organisations, community organisations, charities, statutory services and others) to understand the particular challenges faced by learners in the target group.
- Design programmes with sufficient flexibility to accommodate the needs of young people who experience specific barriers to participation in on-the-job training.
- Identify the barriers and areas of difference experienced by individual students that may impact on their engagement with the programme; provide specialist support or resources within the programme, or ensure that learners access suitable external support.
- Improve trainers' understanding of barriers to engagement, and develop their skills to work with young people who experience these.

Working with autistic young people

The following features are described in relation to one programme for autistic young people:

- Analysis of the tasks in specific occupations and workplaces to develop suitable adaptations for autistic young people. This analysis should be conducted by experts in autism at work and in education.
- Analysis of the activities involved in on-the-job training to understand how these will work for autistic young people. This includes scored task analyses, structured repeated trials for discrete tasks, behavioural rehearsal for specific social skills, visual and self-directed prompting procedures for behavioural challenges, and reinforcement for socially-expected 'professional' behaviours.
- Programmes that offer a higher intensity of opportunities to learn both technical vocational skills, and social interaction skills. For example, the programme design gave learners the opportunity to practice job-specific skills in a generalised setting with a very high number of trials. The principles of mastery, fluency and generalisation of skills were core to programme design.
- Support for autistic young people to understand common work statements in behavioural terms, e.g. behaviours associated with workplace values and phrases.

- Regular review of programmes and collection of data to assess how they are working for autistic young people, with the option to adjust plans for instruction and behavioural management on the basis of findings.
- Access to specialist educational support for young people, or embedded educational support in workplace learning settings.
- Additional training for trainers on how to support autistic young people.
- Assessment of individual student needs, and support for programme participation.

One study reported the value of allowing employers to observe autistic young people over time and in different professional situations. This lets them demonstrate their work ethic and the value they add as employees. In turn, greater employer understanding builds 'buy in' for the employment of autistic young people.

References

- Albanese, A., Cappellari, L. & Leonardi, M. (2017). *The effects of youth labor market reforms: Evidence from Italian apprenticeships*. IZA DP No.10766. IZA Institute of Labor Economics. IZA Institute of Labor Economics.
<https://docs.iza.org/dp10766.pdf>
- Alegre, M. À., Casado, D., Sanz, J., & Todeschini, F. A. (2015). The impact of training-intensive labour market policies on labour and educational prospects of NEETs: Evidence from Catalonia (Spain). *Educational Research*, 57(2), 151–167. <https://doi.org/10.1080/00131881.2015.1030852>
- Alexander P. (2014). *Social Empowerment and Institutional Strengthening with Emphasis on Youth*. New York: UNDP, pp.64. Available at:
<https://erc.undp.org/evaluation/evaluations/detail/5773>
- Angus, A., Millard, W., Joshua, V., Baars, S. & Bowen-Viner, K. (2020). *How do essential skills influence life outcomes?* Centre for Education and Youth.
- Armitage, H., Heyes, K., O’Leary, C., Tarrega, M. & Taylor-Collins, E. (2020). *What makes for effective youth mentoring programmes: A rapid evidence summary*. NESTA. https://www.nesta.org.uk/report/what-makes-effective-youth-mentoring-programme/?gclid=CjwKCAjwkLCkBhA9EiwAka9QRo9OaA5BcYfzon8qqNL1dRet5vnEPvrN0hsGINk7b9ykHJSQc1rjcRoCbYUQAvD_BwE
- Atkinson, I. S. (2017). *Youth Employment Initiative Process Evaluation: Assessment of Strategic Fit, Design and Implementation*. London: Department for Work and Pensions UK
- Apunyo, R., Olike, C., Katairo, K., Kyaterekera, M., Baremirwe Bekoreire, M., Niyadurupola, V. & White, H. (forthcoming). *Interventions to increase youth employment: A qualitative review*. Youth Futures Foundation
- Bauer, E. L., Crosse, S., McPherson, K., Friedman, J., Zacharia, Z., Tapper, D., & Clarke, R. (2014). *Evaluation of the New York City Justice Corps: Final*

Outcome Report (p. 179). WeStat and Prisoner Reentry Institute, John Jay College of Criminal Justice.

<https://www1.nyc.gov/assets/opportunity/pdf/Westat-Justice-Corps-Evaluation.pdf>

Berk J, Spitzer K, Stein J, Needels K, Geckeler C, Paprocki A, Gutierrez I, and Millenky M. (2021). *Evaluation of the National Guard Youth ChalleNGe/Job ChalleNGe Program*. : , pp.. Available at:

https://www.mdrc.org/sites/default/files/NGYCJC_FinalReport_February2021.pdf

Bloom, H. S., Orr, L. L., Cave, G., Bell, S. H., & Doolittle, F. (1993). *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months* (p. 458). Abt Associates.

BMG Research/IES [Institute for Employment Studies] (2013). *Evaluation of the impact of learning below Level 2*. BIS Research Paper Number 150.

Department for Business, Innovation and Skills.

Brunetti, I., & Corsini, L. (2017). Workplace training programs: Instruments for human capital improvements or screening devices? *Education + Training*, 59(1), 31–46. <https://doi.org/10.1108/ET-09-2014-0104>

Byam, N. (2002). *Evaluation of the First Nations and Inuit Youth Employment Strategy*. Project 00/03. Department of Indian Affairs and Northern Development Corporate Services Departmental Audit and Evaluation Branch.

Caliendo, M., Künn, S., & Schmidl, R. (2011). *Fighting Youth Unemployment: The Effects of Active Labor Market Policies*. IZA.

<https://doi.org/10.2139/ssrn.1977808>

Calmfoers, L., Forslund, A. & Hemström, M. (2001) Does active labour market policy work? Lessons from the Swedish Experiences, *Swedish Economic Policy Review* 85: 61-124

Canzian, G., Foubert, J., Meroni, E. C., & Santangelo, G. (2020). *Active Labour Market Policies in Flanders. Evaluation of the ESF "Work Experience for Young Persons" programme* (EUR 30144 EN). Publications Office of the European Union. doi:10.2760/623819

Cave, G., Bos, H., Doolittle, F., & Toussaint, C. (1993). *JOBSTART: Final Report on a Program for School Dropouts*. Manpower Demonstration Research Corporation. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/jobstart-final-report-program-school-dropouts#:~:text=This document is the final report on the,the employment and earning prospects for school dropouts.>

Centeno, L., Centeno, M., & Novo, A. A. (2008). *Evaluating Job Search Programs for Old and Young Individuals: Heterogeneous Impact on Unemployment duration* [Estudos e Documentos de Trabalho]. Banco de Portugal Eurosistema.

Cerqua, A. & Urwin, P. (2016). *Returns to maths and English learning (at level 2 and below) in further education*. BIS Research Paper Number 286. Department for Business, Innovation and Skills.

CIPD [Chartered Institute of Personnel and Development] (2014). *The Match Factor: Good Practice in Apprenticeship Recruitment*. Chartered Institute of Personnel and Development. https://www.cipd.co.uk/Images/the-match-factor-good-practice-in-apprenticeship-recruitment_2014_tcm18-10943.pdf

Clark, D. and Fahr, R. (2001). *The promise of workplace training for non-college-bound youth: Theory and evidence from German apprenticeship*. IZA Discussion Paper No. 378. IZA Institute of Labor Economics. <https://docs.iza.org/dp378.pdf>

College of Policing (2016). Mentoring. Entry in the College of Policing Toolkit. <https://www.college.police.uk/research/crime-reduction-toolkit/mentoring>

Courtney, M. E., Valentine, E. J., & Skemer, M. (2019). Experimental evaluation of transitional living services for system-involved youth: Implications for policy

and practice. *Children and Youth Services Review*, 96(June 2018), 396–408.
<https://doi.org/10.1016/j.chilyouth.2018.11.031>

Courtney, M. E., Zinn, A., Johnson, H., & Malm, K. E. (2011). *Evaluation of the Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care: Final Report* (OPRE Report #2011-14). Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

<https://www.acf.hhs.gov/opre/report/evaluation-massachusetts-adolescent-outreach-program-youths-intensive-foster-care-final>

Courtney, M. E., Zinn, A., Koralek, A., & Bess, R. J. (2011). *Evaluation of the Independent Living – Employment Services Program, Kern County, California: Final Report* (OPRE Report #2011-13). Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

<https://www.acf.hhs.gov/opre/resource/evaluation-of-the-independent-living-employment-services-program-kern>

Cutmore, M., Llewellyn, J. & Atkinson, I. (2020). *Process evaluation of the Essential Life Skills programme: Final evaluation report*. Government Social Research/Department for Education

Davis, J. M. V., & Heller, S. B. (2017). *Rethinking the Benefits of Youth Employment Programs: The Heterogeneous Effects of Summer Jobs* (Working Paper 23443). National Bureau of Economic Research.
<http://www.nber.org/papers/w23443>

De Giorgi, G. (2005). The New Deal for Young People Five Years On. *Fiscal Studies*, 26(3), 371–383.

Donato, L., Migliore, M. C., & Poy, S. (2018). Employment Effects of Vocational Training: An Evaluation Using Propensity Score Matching. *Politica Economica*, 34(3), 273–296. <https://doi.org/10.1429/92121>

Duarte, N., Geraci, A., Granato, S., Mazzarella, G., & Mortagua, M. J. (2020). *The evaluation of the Youth Employment Initiative in Portugal using Counterfactual Impact Evaluation methods* (JRC Technical Report). Joint Research Centre.
<https://publications.jrc.ec.europa.eu/repository/handle/JRC120942>

EEF [Education Endowment Foundation] (2021). Mentoring. Entry in the EEF Toolkit. <https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/mentoring>

Ehlert, C. R., Kluve, J., & Schaffner, S. (2012b). *Temporary Work as an Active Labor Market Policy: Evaluating an Innovative Program for Disadvantaged Youths*. Institute for the Study of Labor. <https://doi.org/10.2139/ssrn.2096800>

Eichhorst, W. & Rinne, U. (2016). *Promoting youth employment in Europe: Evidence-based policy lessons*. IZA Policy Paper No. 119. IZA Institute of Labor Economics.
<https://www.econstor.eu/bitstream/10419/162530/1/876731418.pdf>

Eyster, L., Nightingale, D., Barnow, B., O'Brien, C., Trutko, J. & Kuehn, D. (2010). *Implementation and Early Training Outcomes of the High Growth Job Training Initiative: Final Report*. The Urban Institute on Labor, Human Services, and Population

Fraker, T. M., Baird, P., Black, A., Mamun, A. A., Manno, M., Martinez, J., Rangarajan, A., & Reed, D. (2011). *The Social Security Administration's Youth Transition Demonstration Projects: Interim Report on Colorado Youth Wins*. Mathematica Policy Research.
<https://www.mathematica.org/publications/the-social-security-administrations-youth-transition-demonstration-projects-interim-report-on-colorado-youth-wins>

Fraker, T. M., Black, A., Broadus, J., Mamun, A., Manno, M., Martinez, J., McRoberts, R., Rangarajan, A., & Reed, D. (2011). *The Social Security Administration's Youth Transition Demonstration Projects Interim Report on the City University of New York's Project*. Mathematica Policy Research.

<https://www.mathematica.org/publications/the-social-security-administrations-youth-transition-demonstration-projects-interim-report-on-the-city-university-of-new-yorks-project>

Fraker, T. M., Black, A., Mamun, A., Manno, M., Martinez, J., O'Day, B., O'Toole, M., Rangarajan, A., & Reed, D. (2011). *The Social Security Administration's Youth Transition Demonstration Projects: Interim Report on Transition WORKS* (Mathematica Reference Number: 06209.125). Mathematica Policy Research.

<https://www.mathematica.org/publications/the-social-security-administrations-youth-transition-demonstration-projects-interim-report-on-transition-works>

Fraker, T. M., Cobb, J., Hemmeter, J., Luecking, R., & Mamun, A. (2018). Three-Year Effects of the Youth Transition Demonstration Projects. *Social Security Bulletin*, 78(3), 19–41.

Fraker, T. M., Crane, K. T., Honeycutt, T. C., Luecking, R. G., Mamun, A. A., & O'Day, B. L. (2018). The youth transition demonstration project in Miami, Florida: Design, implementation, and three-year impacts. *Journal of Vocational Rehabilitation*, 48(1), 79–91. <https://doi.org/10.3233/JVR-170917>

Foster, R., Winterbotham, M., ni Luanaigh, A., Morris, S., Downing, C. & Felton, J. (2021) *Evaluation of ESF Funded Apprenticeships 2015 to 2019: Final Report*, Social Research Number 10/2021. Welsh Government

Fraker, T., Manum, A., Honeycutt, T., Thompkins, A. & Valentine, E.J. (2014). *Final Report on the Youth Transition Demonstration Evaluation*, Mathematica Center for Studying Disability Policy

Fraker, T., Manum, A., Honeycutt, T., Thompkins, A. & Valentine, E.J. (2014). *Final Report on the Youth Transition Demonstration Evaluation*, Mathematica Center for Studying Disability Policy, https://www.mdrc.org/sites/default/files/Final_Report_on_the_Youth_Transition_Demonstration_Evaluation.pdf

Fraker, T., Black, A., Manum, A., Manno, M., Martinez, J., O'Day, B., O'Toole, M., Rangarajan, A. & Reed, D. (2011) *The Social Security Administration's Youth Transition Demonstration Projects: Interim report on Transition WORKS*, Mathematica Policy Research, Inc.,
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1849503

Geckeler, C., Betesh, H., Diaz, H., Folsom, L., Kim, H., & Paprocki, A. (2017). *Helping Dropout Youth Find Education and Employment: Final Impact Report for the Evaluation of the Los Angeles Reconnections Career Academy (LARCA) Program* (p. 153). Social Policy Research Associates.
<https://strategies.workforcegps.org/resources/2019/12/18/21/05/Impact-Report-for-the-Evaluation-of-the-Los-Angeles-Reconnections-Career-Academy-LARCA-Program>

Ghisletta, A., Kemper, J. & Stöterau, J. (2021). *The impact of vocational training interventions on youth labor market outcomes. A meta-analysis*. Swiss Programme for Research on Global Issues for Development/Swiss National Science Foundation/Swiss Agency for Development and Co-operation SDC

Gupta, S. (2015). *Reconnecting disconnected young adults: Preliminary findings from Linking Innovation, Knowledge, and Employment (@LIKE) Program*. Presentation to the National Association of Welfare Research and Statistics Annual Workshop, August 26, 2015, <https://nawrs.org/wp-content/uploads/2015/09/9C-Gupta-LIKE.pdf>

Gupta, S., Srinivasan, M., Chen, Y., Patterson, L., & Griffith, T. (2016). *Evaluation of the Linking Innovation, Knowledge, and Employment Program: Final Evaluation Report* (p. 113). IMPAQ International LLC.
<https://strategies.workforcegps.org/resources/2018/05/19/00/12/Evaluation-of-the-Linking-Innovation-Knowledge-and-Employment-Program-Final-Evaluation-Report>

Hämäläinen, K., & Tuomala, J. (2008). *Vocational Labour Market Training in Promoting Youth Employment*. Government Institute for Economic Research.

Hendra, R., Greenberg, D.H., Hamilton, G., Oppenheim, A., Pennington, A., Schaberg, K. & Tessler, B.L. (2016). *Encouraging evidence on a sector-focussed advancement strategy: Two-year impacts from the WorkAdvance Demonstration*. MDRC.

Hanushek, E., Schwerdt, G., Woessmann, L. & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. *Journal of Human Resources* 52 (1): 48-87

Henderson, R., Reinhard, A., Porter, M., Jankovic, C., Elliott, W., Barber, P., Pham, M., Gonzales, S. & Wu, Y. (2021). *Transition to Work; Final evaluation report*. Australian Government, Department of Education, Skills and Employment

Hollenbeck, K., & Huang, W.-J. (2006). *Net Impact Estimates of the Workforce Development System in Washington State*. Upjohn Institute for Employment Research. <https://doi.org/10.17848/tr06-020>

Hollenbeck, K., & Huang, W.-J. (2016). *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington State* (Upjohn Institute Technical Report 16-033). W.E. Upjohn Institute. <https://doi.org/10.17848/tr16-033>

Hughes, M. & Monteiro, H. (2005). *Identifying effective practice in the delivery of apprenticeships: Making work-based learning work*. Learning and Skills Development agency

IYF [International Youth Foundation] (2020). *Evidence of the impact of IYF's Passport to Success (PTS) Life Skills Training*. IYF Evidence Brief 1.

Izzo, M. V., Cartledge, G., Miller, L., Growick, B., & Rutkowshi, S. (2000). Increasing Employment Earnings: Extended Transition Services that Make a Difference. *Career Development for Exceptional Individuals*, 23(2), 139–156.

- James Relly, S. & Laczik, A. (2022) Apprenticeship, employer engagement and vocational formation: A process of collaboration. *Journal of Education and Work* 35 (1), 1-15. DOI: [10.1080/13639080.2021.1983524](https://doi.org/10.1080/13639080.2021.1983524)
- Jastrzab, J., Masker, J., Blomquist, J., & Orr, L. (1996). *Impacts of Service: Final Report on the Evaluation of American Conservation and Youth Service Corps*. Corporation for National Service. <https://eric.ed.gov/?id=ED400420>
- Jones, E. & Davis, E. (2018). *Explorign the funding and support for apprentices with additional support needs*. Research Report. Government Social Research/Department for Education.
- Julius, J., Faulkner-Ellis, H. & O'Donnell, S. (2021). *Putting apprenticeships to work for young people*. National Foundation for Educational Research. <https://www.nfer.ac.uk/putting-apprenticeships-to-work-for-young-people/>
- Kemple, J., Doolittle, F. & Wallace, J. (1993) *The National JTPA study: site characteristics and participation patterns*, Manpower Demonstration Research Corporation, <https://files.eric.ed.gov/fulltext/ED357249.pdf>
- Kim, Y., Ju, E., Rosenberg, R., & Farmer, E. (Betsy) M. Z. (2019). Estimating the effects of independent living services on educational attainment and employment of foster care youth. *Children and Youth Services Review*, 96(August 2018), 294–301. <https://doi.org/10.1016/j.childyouth.2018.11.048>
- Koleva-Demonty, R. (2016). *First results of the Youth Employment Initiative: A final report to DG Employment, Social Affairs and Inclusion of the European Commission*. European Commission.
- Kopečná, V. (2016). Counterfactual Impact Evaluation of the Project Internships for Young Job Seekers. *Central European Journal of Public Policy*, 10(2), 48–66. <https://doi.org/10.1515/cejpp-2016-0026>
- Larsson, L. (2003). Evaluation of Swedish youth labor market programs. *Journal of Human Resources*, 38(4), 891–927. <https://doi.org/10.2307/1558784>

Lerman, R. (2013). *Skill development in middle level occupations: the role of Apprenticeship training*. IZA Policy Paper No.61. IZA Institute of Labor Economics. <https://docs.iza.org/pp61.pdf>

Lindsay, S., Hartman, L. & Fellin, M. (2015) A systematic review of mentorship programs to facilitate transition to post-secondary education and employment for youth and young adults with disabilities. *Disability and Rehabilitation*. DOI: 10.3109/09638288.2015.1092174

Lundetrae, K., Gabrielsen, E. & Mykletun, R. (2010). Do basic skills predict youth unemployment (16- to 24-year-olds) also when controlled for accomplished secondary school? A cross-country comparison. *Journal of Education and Work* 23 (3). 233-254

LWI [Learning and Work Institute] (2023a). *Apprenticeships*. Web page. <https://learningandwork.org.uk/what-we-do/apprenticeships-technical-education/apprenticeships/>. Accessed 1 June 2023.

LWI [Learning and Work Institute] (2023b). *Improving the apprentice experience*. Web page. <https://learningandwork.org.uk/resources/research-and-reports/improving-apprentice-experience/>. Accessed 1 June 2023.

LWI [Learning and Work Institute] (2021). *Getting the basics right: The case for action on adult basic skills*. Learning and Work Institute. <https://learningandwork.org.uk/resources/research-and-reports/getting-the-basics-right-the-case-for-action-on-adult-basic-skills/>

LWI [Learning and Work Institute] (2020). *All change: Where next for apprenticeships? Ten essays on quality, access and the future*. Learning and Work Institute. <https://learningandwork.org.uk/wp-content/uploads/2020/04/All-Change-Where-next-for-Apprenticeships-Essay-collection.pdf>

LWI [Learning and Work Institute] (n.d.) *Supporting individuals to choose the right apprenticeships*.

Maibom, J., Rosholm, M., & Svarer, M. (2014). *Can Active Labour Market Policies Combat Youth Unemployment?* Institute of Labor Economics. <https://docs.iza.org/dp7912.pdf>

McClanahan, W. S., Sipe, C. L., & Smith, T. J. (2004). *Enriching Summer Work: An Evaluation of the Summer Career Exploration Program*. Public/Private Ventures. <https://eric.ed.gov/?id=ED503188>

Mawn, L., Oliver, E. J., Akhter, N., Bambra, C. L., Torgerson, C., Bridle, C., & Stain, H. J. (2017). Are we failing young people not in employment, education or training (NEETs)? A systematic review and meta-analysis of re-engagement interventions. *Systematic reviews*, 6, 1-17.

Millenky, M., Schwartz, S. E. O., & Rhodes, J. E. (2014). Supporting the Transition to Adulthood among High School Dropouts: An Impact Study of the National Guard Youth Challenge Program. *Prevention Science*, 15(4), 448–459. <https://doi.org/10.1007/s11121-013-0388-4>

Miller, C., Cummings, D., Millenky, M., Wiegand, A., & Long, D. (2018). *Laying a Foundation: Four-year Results from the National YouthBuild Evaluation* (p. 155). MDRC. https://www.mdrc.org/sites/default/files/YouthBuild_Final_508%20compliant.pdf

Miller, C., Bos, J. M., Porter, K. E., Tseng, F. M., & Abe, Y. (2005). *The Challenge of Repeating Success in a Changing World: Final Report on the Center for Employment Training Replication Sites* (Issue September, p. 200). MDRC. <http://search.proquest.com/docview/62011515?accountid=13042>

Muñoz-Repiso, J. M. C., & Braza, A. S. (2011). Effectiveness of Public Training Programs Reducing the Time Needed to Find a Job. *Estudios de Economía Aplicada*, 29(1), 1–26. <https://doi.org/10.25115/eea.v29i1.3946>

Nadon, M. L. (2020). Making the transition: How asset building services can promote positive adult outcomes for foster youth. *Children and Youth Services Review*, 115, 105083. <https://doi.org/10.1016/j.childyouth.2020.105083>

Neyt, B., Verhaest, D. & Baert, S. (2018). *The impact of dual apprenticeship programs on early labour market outcomes: A dynamic approach*. IZA DP No.12011. IZA Institute of Labor Economics. <https://docs.iza.org/dp12011.pdf>

Pastore, F., & Pompili, M. (2019). *Assessing the impact of off-and on-the-job training on employment outcomes. A counterfactual evaluation of the PIPOL program*. Global Labour Organization. <http://hdl.handle.net/10419/193688>

Pereira, C., Godinho, R., Simões, A., Seiceira, F., Ferreira, G., Rauch, M.J., Duarte, N. & Alves, T. (2020) *Impact Evaluation of the Youth Employment Initiative (YEI)*. Programa Operacional Inclusão Social e Emprego/Portugal 2020/European Social Fund, https://portugal2020.pt/wp-content/uploads/sumario_executivo_en_avalicao_iej_2018_fevereiro2021.pdf

Picchio, M. and Staffolani, S. (2013). *Does apprenticeship improve job opportunities? A regression discontinuity approach*. IZA Discussion Paper No. 7719. IZA Institute of Labor Economics. <https://docs.iza.org/dp7719.pdf>

Richmond, T. & Regan, E. (2022). *No train, no gain: An investigation into the quality of apprenticeships in England*. EDSK. <https://www.edsk.org/publications/no-train-no-gain/>

Price, C., Williams, J., Simpson, L., Jastrzab, J., & Markovitz, C. (2011). *National Evaluation of Youth Corps: Findings at Follow-up*. Corporation for National and Community Service. <https://www.abtassociates.com/insights/publications/report/national-evaluation-of-youth-corps-findings-at-follow-up>

Quint, J. C., Bos, Johannes, M., & Polit, D. F. (1997). *New Chance. Final Report on a Comprehensive Program for Young Mothers in Poverty and Their Children*. Manpower Demonstration Research Corporation.

Ray, K., Crunden, O. & Murphy, H. (2018). *Liverpool City Region Youth Employment Gateway (YEG) Evaluation: Final report*

Reder, S. (2014). *The impact of ABS program participation on long-term economic outcomes*. US Department of Education, Office of Career, Technical and Adult Education.

Reed D, Liu A, Kleinman R, Mastri A, Reed D, Sattar S and Ziegler J (2012) *An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States*, Mathematica Policy Research

Riphahn, R. & Zibrowius, M. (2015). *Apprenticeship, vocational training and early labor market outcomes in East and West Germany*. IZA DP No.8901. IZA Institute of Labor Economics.

<https://www.iza.org/publications/dp/8901/apprenticeship-vocational-training-and-early-labor-market-outcomes-in-east-and-west-germany>

Roder, A., & Elliott, M. (2014). *Sustained Gains: Year Up's Continued Impact on Young Adults' Earnings*. Economic Mobility Corporation.

Rodriguez-Planas, N. (2014). *Do youth mentoring programs change the perspectives and improve the life opportunities of at-risk youth?* IZA World of Labor 2014:62, doi: 10.15185/izawol.62

Rodríguez-Planas, N. (2012). Longer-term impacts of mentoring, educational services, and learning incentives: Evidence from a randomized trial in the United States. *American Economic Journal: Applied Economics*, 4(4):121–139.

Rosholm, M., Mikkelsen, M. B., & Svarer, M. (2019). Bridging the gap from welfare to education: Propensity score matching evaluation of a bridging intervention. *PLOS ONE*, 14(5), e0216200.

<https://doi.org/10.1371/journal.pone.0216200>

Schaeffer, C. M., Henggeler, S. W., Ford, J. D., Mann, M., Chang, R., & Chapman, J. E. (2014). RCT of a promising vocational/employment program for high-risk juvenile offenders. *Journal of Substance Abuse Treatment*, 46(2), 134–143. <https://doi.org/10.1016/j.jsat.2013.06.012>

Schmidt, R. A. & Park, C. J. (2021). *Nonacademic interventions for postsecondary enrolment and success in rural high-poverty schools: A*

systematic evidence review. Arlington, VA: SRI International, Regional Education Laboratory Appalachia.

<https://files.eric.ed.gov/fulltext/ED610978.pdf>

Schochet, P. Z., Burghardt, J., & McConnell, S. (2006). *National Job Corps Study and Longer-Term Follow-Up Study: Impact and Benefit-Cost Findings Using Survey and Summary Earnings Records Data*. Office of Policy Development and Research: Research and Evaluations, Employment and Training Administration, U.S. Department of Labor.

https://wdr.doleta.gov/research/FullText_Documents/National%20Job%20Corps%20Study%20and%20Longer%20Term%20Follow-Up%20Study%20-%20Final%20Report.pdf

Schwartz, S.E.O., Rhodes, J.E., Spencer, R. & Grossman, J.B. (2013). Youth initiated mentoring: investigating a new approach to working with vulnerable adolescents. *American Journal of Community Psychology*. 52 (1-2): 155-69

Sharpe D, Canitrot D, Morocza N, Ravenscroft A, Galicia Mesa L, Hanafiah A and Narayan V (2023) *New Deal for Young People Mentoring Research Report: Summary evidence of qualitative and quantitative research from local authorities, funding bodies community organisations, young people, and analysis of secondary data*, Institute for Connected Communities/University of East London

Shiner M, Young T, Newburn T and Groben S (2004) *Mentoring disaffected young people: An evaluation of Mentoring Plus*, Joseph Rowntree Foundation/Breaking Barriers

Singh, S., Prowse, M., White, H., Warsame, A., Waddington, H.S., Vijayamma, R., Umezawa, H., Tolin, L., Reumann, A., Puri, J., Mendiratta, V., Kim, D.S., Kabeer, N., Islam, S., Gupta, N., Disse, S., Cavatassi, R., Beltchika, N. & Arslan, A. (2022). *Effectiveness of skills training interventions for the empowerment of women in developing countries: A systematic review*. Independent Evaluation Unit Learning Paper, Green Climate Fund/Independent Evaluation Unit/International Fund for Agricultural Development

Skemer, M., & Valentine, E. J. (2016). *Striving for independence: Two-year impact findings from the Youth Villages transitional living evaluation*. MDRC. https://www.mdrc.org/sites/default/files/Youth%20Villages_2016_FR.pdf

Smith, E. and Kemmis, R.B. (2013). *Towards a model apprenticeship framework: A comparative analysis of national apprenticeship systems*. International Labour Organisation. http://www.ilo.org/newdelhi/whatwedo/publications/WCMS_234728/lang-en/index.htm

Smyth, E., Banks, J., O'Sullivan, J., McCoy, S., Redmond, P. & McGuinness, S. (2019). *Evaluation of the National Youthreach Programmes*. Research Series Number 82. Economic and Social Research Institute/SOLAS Learning Works.

TASO [Transforming Access and Student Outcomes in Higher Education] (n.d.). *Mentoring, counselling, coaching and role models (post-entry)*. Entry in the TASO Toolkit. <https://taso.org.uk/intervention/mentoring-counselling-role-models-post-entry/>

Stromback, T. (2010). *Earnings, Schooling and Vocational Education and Training*. 13(3), 23.

Tate, S. & Greatbatch, D. (2020). *International progression report: good practice in technical education*. Final report. Government Social Research/Department for Education. https://dera.ioe.ac.uk/id/eprint/36759/1/International_progression_report_good_practice_in_technical_education.pdf

Theodos, B., Pergamit, M. R., Hanson, D., Edelstein, S., Daniels, R., & Srin, T. (2017). *Pathways after High School: Evaluation of the Urban Alliance High School Internship Program* (p. 206). Urban Institute. <https://www.urban.org/research/publication/pathways-after-high-school-evaluation-urban-alliance-high-school-internship-program>

Tripney, J., Roulstone, A., Vigurs, C., Hoglebe, N., Schmidt, E. & Stewart, R. (2015). *Interventions to improve the labour market situation of adults with*

physical and/or sensory disabilities in Low- and Middle-income Countries: A systematic review. Campbell Systematic Reviews.

Tripney, J. S. and Hombrados, J. G. (2013). Technical and vocational education and training (TVET) for young people in low-and middle-income countries: a systematic review and meta-analysis. *Empirical Research in Vocational Education and Training*, 5(1):3

To, O.C. (2017). *A program evaluation of an apprenticeship program using Stufflebeam's CIPP Model.*

Valentine, E. J., Skemer, V. M., & Courtney, M. E. (2015). *Becoming Adults: One-year impact findings from the Youth Villages Transitional Living Evaluation.* MDRC.

Wasserman, K., Walter, J., Luczywek, B., Wagner, H., & Redcross, C. (2019). *Engaging Young Men Involved in Chicago's Justice System: A Feasibility Study of the Bridges to Pathways Program* (OPRE Report 2019-79). Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
<https://files.eric.ed.gov/fulltext/ED601141.pdf>

Wehman, P. H., Schall, C. M., McDonough, J., Graham, C., Brooke, V., Riehle, J. E., Brooke, A., Ham, W., Lau, S., Allen, J., & Avellone, L. (2017). Effects of an employer-based intervention on employment outcomes for youth with significant support needs due to autism. *Autism*, 21(3), 276–290.
<https://doi.org/10.1177/1362361316635826>

White, H., & Apunyo, R. (2021). *The effectiveness of interventions to increase youth employment: An evidence and gap map.* Youth Futures Foundation.

Wiegand, A., Manno, M., Leshnick, S. Treskon, L., Geckeler, G., Lewis-Charp, H., Sinicrope, C., Clark, M. & Nicholson, B. (2015). *Adapting to Local Context: Findings from the Youthbuild Evaluation Implementation Study.* New York: MDRC

Wood, S. & Mayo-Wilson, E. (2012). School-based mentoring for adolescents: A systematic review and meta-analysis. *Research on Social Work Practice*. 22(3): 257-269

WWCLEG [What Works Centre for Local Economic Growth] (2016). *Apprenticeships Toolkit: Financial Incentives*. What Works Centre for Local Economic Growth. <https://whatworksgrowth.org/resource-library/apprenticeships-toolkit-financial-incentives/>

WWCLEG [What Works Centre for Local Economic Growth] (2015). *Evidence Review 8: Apprenticeships*. What Works Centre for Local Economic Growth. <https://whatworksgrowth.org/resource-library/apprenticeships/>

YEF [Youth Endowment Fund] (2022). Mentoring. Section in the Youth Endowment Fund Toolkit. <https://youthendowmentfund.org.uk/toolkit/mentoring-2/>

Annex 1 – Summary of implementation and process notes

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #1: Alegre et al. (2015)	PQPI	<ul style="list-style-type: none"> • Off-the-job training • On-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Spain <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> not reported (Intervention: n=1220; Comparison: not reported)</p>	<p>Participants: Unemployed young people aged 16-25 who left school without a standard school leaving qualification.</p> <p>Duration varies individually.</p> <p>This intervention combines vocational training, work internship and education preparation intervention.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #2: Bauer et al. (2014)	New York City Justice Corps	<ul style="list-style-type: none"> • Basic Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • High school (or equiv.) completion • Vocational Education commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=553 (Intervention: n=291; Comparison: n=242)</p>	<p>Participants: Young people with experience of the justice system, resident in a defined region.</p> <p>6 months programme, but some variation in individual engagement</p> <ul style="list-style-type: none"> - 3 week orientation and educational assessment; some basic skills training during this phase - Community projects (minimum of 3 months), possibly some educational services - Paid internship (minimum of 6 weeks), with some basic skills learning for certain participants - Post-programme support. <p>Note the difficulty of providing 'education services' to young people. Other challenges included hiring expert staff, providing bespoke support services, and managing complex programmes.</p> <p>Barriers included a lack of experience among staff of working with justice-system experienced young people.</p> <p>The authors note the need for supportive services (such as mentoring and coaching to last for longer periods of time.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #3: Bloom et al. (1993)</p> <p>Process evaluation: Kemple et al. (1993)</p>	<p>Job Training Partnership Act (JTPA) — Classroom training</p>	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States (16 sites) <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=1571 (Intervention: not reported; Comparison: not reported)</p>	<p>Participants: 'Disadvantaged Americans', including those who face additional barriers such as previous justice system involvement or being 'out of school' or having limited education, as well as economic disadvantage.</p> <p>Duration varies to some extent with individual engagement. Median length of enrolment is 3.6 months for all young people, with an average of 5.3 months for those taking part in off-the-job training.</p> <p>Agencies are funded to assign participants to employment and training services, which may be provided by other organisations. These include classroom instruction in occupational skills and basic education including options to complete high school leaving programmes. The programme includes an initial assessment of skills and suitability.</p> <p>Sites that are identified as having better outcomes tend to focus on more disadvantaged young people.</p>
<p>Study #4: Bloom et al. (1993)</p>	<p>Job Training Partnership Act (JTPA) — OJT/JSA</p>	<ul style="list-style-type: none"> • On-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=1160 (Intervention: not reported; Comparison: not reported)</p>	<p>See study #3</p> <p>Median length of involvement is 3.1 months for those taking part in on-the-job training.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #5: Bloom et al. (1993)	Job Training Partnership Act (JTPA) — Other services	<ul style="list-style-type: none"> • Basic Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1317 (Intervention: not reported; Comparison: not reported)</p>	See study #3
Study #6: Brunetti & Corsini (2017)	Workplace Training Programs	<ul style="list-style-type: none"> • On-the-job training 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Randomised <i>Location:</i> Italy <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=4087 (Intervention: n=252; Comparison: n=3835)</p>	<p>Participants: Young people not in work Training lasted between two and six months. Training was organised by employers, for young people in roles that required new skills. This could not be seasonal or 'cover' work.</p>
Study #7: Centeno et al. (2008)	Inserjovem	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Portugal <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=35,390 (Intervention: n=10,879; Comparison: n=24,511)</p>	<p>Participants: young people who have been unemployed for less than six months. The programme sought to improve the quality and range of training available to young people, to increase recruitment to training, and to increase the intensity of training.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #8: Caliendo et al. (2011)	Preparatory Training (PT)	<ul style="list-style-type: none"> • Basic Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Germany <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> not reported (Intervention: n=1522; Comparison: not reported)</p>	<p>Participants: "Lower educated" young people</p> <p>The programme focusses on transitions from general education to vocational schooling or training, and from that to employment, in the context of the German dual system.</p> <p>The 'preparatory training' courses are very short and address basic skills that support the job search process.</p>
Study #9: Caliendo et al. (2011)	Short-Term Training (STT)	<ul style="list-style-type: none"> • Basic Skills 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Germany <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> not reported (Intervention: n=2864; Comparison: not reported)</p>	<p>Participants: "Lower educated" young people</p> <p>This programme provided short courses in literacy, numeracy and digital skills.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #10: Caliendo et al. (2011) IM	Further Training Measures (FTM)	<ul style="list-style-type: none"> On-the-job training 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Germany <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> not reported (Intervention: n=924; Comparison: not reported)</p>	<p>Participants: "Lower educated" young people who leave the vocational education system but need further qualifications and learning to succeed in the labour market.</p> <p>Programmes generally last between 5 and 7 months. They are practically oriented, and aimed at overcoming 'structural problems of integration in the labour market'. Both part- and full-time options are available.</p>

<p>Study #11: Cave et al. (1993)</p>	<p>JOBSTART Demonstration</p>	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Off-the-job training • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> High <i>Sample size:</i> n=1941 (Intervention: n=988; Comparison: n=953)</p>	<p>Participants: Young people facing serious economic disadvantage and whose reading skills are poor.</p> <p>On average participants engage in a total of 400 hours of activities, with an average duration of engagement of 6.8 months. Time spent on the programme varies considerably, from a few months to over a year. More intense participation may achieve better results for individual participants.</p> <p>Provision includes:</p> <ul style="list-style-type: none"> - Basic skills training: curricula are determined locally and individualised; young people can proceed at their own pace as they develop literacy and digital skills. Young people are assessed for progress and this determines the pace of learning. Courses were 'competency-based' and demonstrated progress to students, rather than focussing on remote goals such as 'get a GED'; students were encouraged to master each topic before moving to the next, and found individualised and self-paced instruction more useful than the approaches they had encountered in high school. - Vocational classroom training, including with theory and hands on experience. This element occupied at least 500 hours. Training is intensive and closely supervised, developed in co-operation with local employers and focussing on 'high demand' occupations. Some wider business skills are integrated into vocational learning. - Life skills are taught with a focus on increasing motivation and engagement, by staff with expertise in supporting adult learners; students get 'personalised' learning support. - Counselling and support services, - Support with work readiness and life skills, <p>Active outreach and recruitment through multiple channels, including seeking out young people in spaces where they congregate. Pre-programme assessment identifies 'fit' with provision and support needs; some young people are 'screened out' as unsuitable.</p> <p>The programme focusses on reducing personal and social barriers to learning and gaining work.</p>
<p>Study #12: Courtney et al. (2011)</p>	<p>Massachusetts Adolescent</p>	<ul style="list-style-type: none"> • Life Skills 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with</i></p>	<p>Participants: Foster care/out of home care system leavers (all have been in 'intensive foster care' placements. The overall programme aim is to prepare them for the 'transition to adulthood' of which employment is one element.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
	Outreach Program	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 		<ul style="list-style-type: none"> • Wages or earnings • High school (or equiv.) completion 	<p><i>additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=179 (Intervention: n=88; Comparison: n=91)</p>	<p>The programme lasts for 22 months.</p> <p>The programme is 'relationship-based' with a high level of personalisation and a focus on goal-setting. Key is engagement between young people and the outreach worker, who supports them through 'individualised services'. Activities include:</p> <ul style="list-style-type: none"> • Educational assistance. • Employment services, including support to fill out applications and engage with other employment programmes. • A wide range of life skills programmes. • Forming positive connections with adults – individualised, hands on, building trust and the worker acting as an advocate. Outreach workers also 'try to be role models' but one said they felt more like an 'informal therapist'. • The link between life skills and mentoring was crucial for participants; the former supports engagement with the latter. <p>Training and experience of outreach workers are important; they need knowledge and experience relevant to supporting the young people on the programme as well as programme-specific training.</p> <p>They have a caseload of up to 15 young people, meeting one-to-one each week. The programme aims to build trusting relationships.</p> <p>Young people have some involvement in 'driving' the programme content and setting the agenda for their own engagement.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #13: Courtney et al. (2019)</p> <p>Process information from Skemer and valentine (2016) and Valentine et al. (2015)</p>	YVLifeSet	<ul style="list-style-type: none"> • Life Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> High <i>Sample size:</i> n=1114 (Intervention: n=659; Comparison: n=455)</p>	<p>Participants: Out-of-home care system leavers.</p> <p>Average of 9 months participation.</p> <p>Initial assessments are followed by development of individual plans for participation. Life skills provision is delivered through weekly one-hour sessions with high staff to participant ratios. The programme offers individualised and evidence-informed activities, including counselling and co-ordination with education services. The programme is CBT-informed and trauma-focussed.</p> <p>Outreach workers support young people directly, with a maximum caseload of 15. The programme encourages the formation of trusting relationships between young people and outreach workers, who act as their advocates.</p> <p>Young people receive instruction in workplace behaviours and support for interpersonal and communication skills at work, as well as instruction in workplace behaviours and job search and application skills.</p> <p>Flexibility to customise the curriculum is widely valued.</p> <p>Matching of participants to work sites involves considerable discussion and consideration of participants' strengths, interests and goals as well as the worksites' environments, cultures and needs.</p> <p>Programme uses evidence-informed tools and practices to support life skills development, as well as individualised employment and education support.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #14: Canzian et al. (2020)	Work experience for young people (WIJ!)	<ul style="list-style-type: none"> • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Belgium <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=68,046 (Intervention: n=4935; Comparison: n=63,111)</p>	<p>Participants: Young people who have been unemployed for over a year, with low levels of educational attainment.</p> <p>Engagement varies from six to 27 months, with a median of 14 months.</p> <p>Phase 1: Caseworkers give individualised “intensive guidance” on labour market orientation and produce a personalised action plan. Phase 2: Coaching with focus on competence strengthening, ensuring qualification requirements are achieved, providing ‘educational internships’, job-hunting and interview support. ‘Aftercare’ is offered to young people who get a job.</p> <p>The knowledge and skills of caseworkers, and details of how individuals manage the approach to guiding young people, is thought to be influential in determining individual outcomes.</p>
Study #15: Davis & Heller (2017)	One Summer Chicago Plus — 2012	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=1334 (Intervention: n=591; Comparison: n=743)</p>	<p>Participants: Disadvantaged adolescents who attend schools with high rates of youth at risk of violence.</p> <p>The programme lasts 6-8 weeks.</p> <p>Young people are assigned a mentor, who is available to support their learning and to help them deal with potential barriers to employment. They gain work experience and engage in a CBT programme.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #16: Davis & Heller (2017)	One Summer Chicago Plus — 2013	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=3742 (Intervention: n=1870; Comparison: n=1872)</p>	See study #16
Study #17: Donato et al. (2018)	Vocational Training, Piedmont	<ul style="list-style-type: none"> • Off-the-job training 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Italy <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1217 (Intervention: n=601; Comparison: n=606)</p>	<p>Participants: Unemployed young people Recruitment through advertisements and employment agencies. The programme content is aligned closely to sectoral skills needs and skills requirements in the local economy. Learners have the option of gaining credit for learning during the programme and using this towards a qualification.</p>
Study #18: De Giorgi (2005)	New Deal for Young People	<ul style="list-style-type: none"> • Basic Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> United Kingdom <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> not reported (Intervention: n=895; Comparison: not reported)</p>	SEE WS report

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #19: Duarte et al. (2020)</p> <p>Process study is Pereira et al. (2020)</p>	Youth Employment Initiative	<ul style="list-style-type: none"> • Off-the-job training • On-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings 	<p><i>Design:</i> Non-randomised <i>Location:</i> Portugal <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> not reported (Intervention: n=42,044; Comparison: not reported)</p>	<p>Participants: Young people not in education, employment or training (NEET young people). There is some focus on disadvantage and on young people with the lowest levels of qualification.</p> <p>Programme content is designed to match the needs of the local labour market, and includes 'practical on-the-job' learning as well as technical and vocational education.</p> <p>Programme approaches include strengthening local partnerships for delivery, integrate with other youth programmes and services, and tailoring programmes to young people's aspirations, in relation to different demographic groups and local labour markets. It seeks to increase support for employers to make it easier for them to support the most disadvantaged young people. Provision is individualised and personalised, with case managers in jobcentres playing a key role. As well as vocational training, young people may be referred to to supplementary support. Young people with disabilities receive an offer of specialised support.</p>
<p>Study #20: Ehlert et al. (2012a)</p>	Temporary Work ALMP	<ul style="list-style-type: none"> • Basic Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Germany <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=314 (Intervention: n=211; Comparison: n=103)</p>	<p>Participants: Disadvantaged young people with no or low qualifications, and/or no experience in the labour market.</p> <p>Duration varies for different participants. The evaluation found a link between longer engagement (6 months or more) and positive outcomes in relation to youth employment.</p> <p>The programme offers individual coaching, basic skills training through classroom sessions, and coaching. Provision is individualised and tailored to the needs of each young person, following an initial skills assessment and individual profiling. Content can vary between places, individual needs and local labour market needs.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #21: Fein & Hamadyk (2018)	Year Up, Multi-site	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Off-the-job training • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Wages or earnings • Hours worked 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=2496 (Intervention: n=1638; Comparison: n=858)</p>	<p>Participants: Economically disadvantaged young people.</p> <p>The programme is delivered in two six-month phases, during which young people attend for a regular 'work week'.</p> <p>Employers are strongly engaged throughout including programme design, support and delivery of content, and keeping programme staff current with knowledge of industry. Content is tailored to the local labour market. The core programme includes general learning objectives but local offices can 'choose or develop curricula to meet the needs of local employers and generate credit through arrangements with local colleges'.</p> <p>Life skills are 'embedded' in the programme, drawing on situations and tasks that arise in professional environments. Young people engage in group work and problem-based learning. The organisational culture emphasises the world of work and seeks to be 'work like' rather than 'school like' throughout. 'Learning communities' seek to foster a supportive social environment.</p> <p>Young people are supported to access social services and help with issues such as mental health and housing. The 'wraparound' support begins during an orientation phase and is available throughout the programme. A good advising system is considered important to its success although providing this consistently was challenging.</p> <p>Young people are paired with mentors from the business community, who offer them an opportunity to meet and network with people in settings that are relevant to their occupational interests. Mentors are trained through local offices.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #22: Fraker et al. (2018)</p> <p>Process information from Fraker et al. (2011), Fraker et al. (2018)</p>	<p>Youth Transition Demonstration Evaluation, Transition WORKS, Erie County, NY</p>	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=718 (Intervention: n=397; comparison: n=321)</p>	<p>Population: Young people who receive disability benefits</p> <p>The programme seeks to improve general transition to adulthood of which gaining employment is one aspect. It focusses strongly on empowerment and self-determination for young people.</p> <p>Young people take part in an initial assessment before engaging with a specialist programme delivered through an individualised approach. The programme staff are specialised in providing different kinds of support, and trained in understanding transitions and self-determination. Partnerships with employers and between support organisations are important to delivery. Staff are supported by a range of experts (including nonprofits) with knowledge of how to design and implement provision for young people with disabilities. Barriers include geographical dispersion of participants, large caseloads and competing demands on staff time; multiple office locations and numerous different staff working with young people; difficulties engaging young people and low intensity of involvement; unstable living situations; lack of transport; low family expectations; high caseloads; staff turnover; and a lack of access to health and social services.</p>
<p>Study #23: Fraker et al. (2018)</p>	<p>Youth Transition Demonstration Evaluation, Broadened Horizons, Brighter Futures, Miami-Dade County, NY</p>	<ul style="list-style-type: none"> • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=685 (Intervention: n=375; Comparison: n=310)</p>	<p>Population: Young people who receive disability benefits</p> <p>See also study #22 for programme approach</p> <p>Barriers include a lack of focus of service hours on employment, and limited engagement with employers in relation to disabled young people.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #24: Fraker et al. (2018)	Youth Transition Demonstration Evaluation, YTDP, Bronx NY	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> High <i>Sample size:</i> n=740 (Intervention: n=420; Comparison: n=320)</p>	<p>Population: Young people who receive disability benefits See also study #22 for programme approach The relatively short duration was identified as a potential barrier to positive impacts on employment</p>
Study #25: Fraker et al. (2018)	Youth Transition Demonstration Evaluation, Career Transition Program, Montgomery County, MD	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Medium <i>Sample size:</i> n=595 (Intervention: n=320; Comparison: n=275)</p>	<p><i>Effective on earnings but not employment and some other domains</i> <i>Individualised services, developing individualised plan with transition goals for employment, education etc; work-based experience used to support these</i> <i>Support with benefits etc – partnerships used to build inputs from different sources</i> <i>Challenges: staff time required for recruitment meant that it was hard to balance recruitment and delivery; lack of supervision for specialist coaches; turnover of coaches and ongoing staff vacancies, leading to weaker relationships; and transition from small-scale and hands-on to a more formal management-structure reliant programme</i></p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #26: Fraker et al. (2018)	Youth Transition Demonstration Evaluation, Youth Works, West Virginia	<ul style="list-style-type: none"> • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> High <i>Sample size:</i> n=676 (Intervention: n=365; Comparison: n=311)</p>	<p>Population: Young people who receive disability benefits</p> <p>See also study #22 for programme approach</p> <p>This delivery was characterised by intensive delivery with a strong focus on employment and systematic monitoring of outcomes during the programme lifetime.</p> <p>Young people received referrals for vocational rehabilitation, mental health services and other services to support job readiness. Some funding was available to improve access for transportation to work experience.</p>
Study #27: Geckeler et al. (2017)	Los Angeles Reconnections Career Academy (LARCA)	<ul style="list-style-type: none"> • Life Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> High <i>Sample size:</i> n=1247 (Intervention: n=649; Comparison: n=598)</p>	<p>Participants: Young people who have dropped out of high school, and who are identified as having a low income.</p> <p>Programme services last for between 12 and 34 months, with follow-up for at least 6 additional months.</p> <p>Activities include work-readiness training, financial literacy and life skills. Vocational training and other educational opportunities are provided through links to community colleges and other providers.</p> <p>The programme is delivered through a partnership between six agencies (including community organisations) with individual agencies given freedom to structure content and sequence of activities. Staff include specialist counsellors.</p> <p>Delivery challenges include participant engagement, sometimes for social reasons such as housing issues.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #28: Gupta et al. (2016)</p> <p>Process information From Gupta (2015)</p>	<p>Linking Innovation, Knowledge, and Employment Program (@LIKE)</p>	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • High school (or equiv.) completion 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=7387 (Intervention: n=644; Comparison: n=6743)</p>	<p>Participants: Unemployed young people with low incomes and at least one other social barrier such as gang involvement, previous offending, public assistance receipt and/or being a 'recently separated veteran'.</p> <p>The programme focusses on social and psychological development towards resilience and self-efficacy, through life coaching alongside more traditional training. Resilience and confidence building are key aims. Data on participation and progression is collected throughout.</p> <p>Participants are screened at the start of the programme to identify individual social and/or psychological needs.</p> <p>Challenges include frequent staff turnover; difficulties in engaging employers; creating robust partnerships with community colleges; creating career pathways; and recruiting young people to take part.</p>
<p>Study #29: Hämäläinen & Tuomala (2008)</p>	<p>Labour Market Training</p>	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Finland <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=32,355 (Intervention: n=17,030; Comparison: n=15,325)</p>	<p>Participants: Unemployed young people.</p> <p>Duration: A 'short' preparatory training period followed by an average of 5 months in vocational learning.</p> <p>The authors suggest that engaging young people after they have been unemployed for 4-6 months may lead to better outcomes.</p>
<p>Study #30: Hollenbeck and Huang (2006)</p>	<p>High School Career and Technical Education Programmes, Washington — 2006</p>	<ul style="list-style-type: none"> • Off-the-job training 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=51,076 (Intervention: n=25,538; Comparison: 25,538)</p>	<p>Participants: Young people in vocational education</p> <p>The programme consists of 360 hours of sequenced vocational classes</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #31: Hollenbeck and Huang (2006)	Workforce Investment Act, Youth Program, Washington — 2006	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=10,769 (Intervention: n=5398; Comparison: n=5398)</p>	<p>Participants: Young people aged 14-21 from families with an income below 70% of the 'lower living standard' or who are food stamp recipients or who have been homeless. Participants must be identified as having and 'educational deficiency'.</p> <p>A pre-programme assessment lets programme staff develop individual support programmes to help young people towards learning or development.</p>
Study #32: Hollenbeck and Huang (2006)	Workforce Investment Act, Apprenticeship Programs — 2006	<ul style="list-style-type: none"> • Apprenticeships 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Non-randomised: <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> 10,608 (Intervention: n=5304; Comparison: 5304)</p>	<p>Participants: Young people</p> <p>Programmes typically last for more than a year, with around 2000 hours of on-the-job training and at least 144 hours of off-the-job training in a year.</p> <p>Programme's content reflects opportunities and needs of the local economy.</p>
Study #33: Hollenbeck and Huang (2016)	High School Career and Technical Education Programmes, Washington — 2016	<ul style="list-style-type: none"> • Off-the-job training 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=131,708 (Intervention: n=67,520; Comparison: n=64,188)</p>	<p>See study #30</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #34: Hollenbeck and Huang (2016) NOT EFFECTIVE	Workforce Investment Act, Youth Program, Washington — 2016	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=6746 (Intervention: n=3373; Comparison: n=3373)	See study #31
Study #35: Hollenbeck and Huang (2016)	Workforce Investment Act, Apprenticeship Programs — 2016	<ul style="list-style-type: none"> • Apprenticeships 	<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=12,572 (Intervention: n=6286; Comparison: n=6286)	See study #32 Completers appear to have better employment outcomes than non-completers.
Study #36: Izzo et al. (2000)	Extended Transition Services	<ul style="list-style-type: none"> • Life Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Off-the-job training 	<ul style="list-style-type: none"> • Employment status • Wages or earnings 	<i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=47 (Intervention: n=30; Comparison: n=17)	Participants: Young people with disabilities The vocational training component typically lasts around 477 hours. Young people take part in a 'competency-based curriculum' that is matched to the needs of local business and industry. An intensive vocational assessment at the start of the programme seeks to match skills to programme requirements and opportunities. Young people take part in 'community based' vocational training, guided by job coaches who are specialists in this kind of work. Delivery is personalised, and based on the young person's needs. They typically receive a high level of 'wraparound support'.

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #37: Jastrzab et al. (1996)	Youth Conservation and Service Corps	<ul style="list-style-type: none"> Life Skills 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status Hours worked 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=2382 (Intervention: not reported; Comparison: not reported)</p>	<p>Participants: Young people</p> <p>The programme includes a wide range of activities that are 'designed to enhance participants' personal development, promote additional education and increase future employability'.</p>
Study #38: Kim et al. (2019)	Independent Living Services	<ul style="list-style-type: none"> Coaching & Mentoring Other 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status High school (or equiv.) completion 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=4206 (Intervention: n=2757; Comparison: n=1149)</p>	<p>Participants: Foster care/out of home care system leavers</p>
Study #39: Kopečná (2016)	Youth Guarantee	<ul style="list-style-type: none"> On-the-job training 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status Wages or earnings 	<p><i>Design:</i> Non-randomised <i>Location:</i> Czechia <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1503 (Intervention: n=772; Comparison: n=731)</p>	<p>Participants: Unemployed young people</p> <p>Participants explored different options for on-the-job training in different businesses (most were small firms) and could then apply to take part in those which were of interest to them.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #40: Larsson (2003)</p> <p>Process information from Calmfoers et al. (2001)</p>	Youth Practice	<ul style="list-style-type: none"> • Basic Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings 	<p><i>Design:</i> Non-randomised <i>Location:</i> Sweden <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=2810 (Intervention: n=606; Comparison: n=2204)</p>	<p>Participants: Unemployed young people</p> <p>Challenges included expanding programmes quickly without appropriate infrastructure in place. A match to demand is recommended.</p>
<p>Study #41: Maibom et al. (2014)</p>	Danish Active Labor Market Policies (ALMPs) for Uneducated Youth	<ul style="list-style-type: none"> • Basic Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Randomised <i>Location:</i> Denmark <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=2268 (Intervention: n=1115; Comparison: n=1153)</p>	<p>Participants: Unemployed young people who had been out of work for at least 14 weeks, with qualifications below a defined level.</p> <p>Young people had the option of taking part in a 1 or 2 day 'skills clarification' course to identify basic skills needs; those who could benefit from development in this area were assigned to training which continues during their subsequent activities.</p> <p>The main programme activity was weekly contact with a job centre for 32 weeks. After 6 weeks young people are assigned a mentor and enrolled into one of 3 options: (i) an activation programme, (ii) a job with an educational purpose, or (iii) work practice in a local business centre. Mentors may be hired externally, or they may be caseworkers either from the job centre or the programme management. A final meeting is followed by the development of a future plan.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #42: Maibom et al. (2014)	Danish Active Labor Market Policies (ALMPs) for Educated Youth	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Randomised <i>Location:</i> Denmark <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1112 (Intervention: n=568; Comparison: n=544)</p>	<p>Participants: Unemployed young people who had been out of work for at least 14 weeks, with qualifications above a defined level.</p> <p>Participants meet with a mentor at the job centre every week for 14 weeks. After this period they are enrolled into a work-related activity until their total engagement with the programme is 32 weeks. At this point they attend a final meeting and plan future activities.</p>
Study #43: McClanahan et al. (2004)	Summer Career Exploration Program (SCEP)	<ul style="list-style-type: none"> • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1574 (Intervention: n=1076; Comparison: n=498)</p>	<p>Participants: Young people from lower income households.</p> <p>Young people engaged in summer work in private sector organisations. Jobs were matched to their interests, as far as possible.</p> <p>Participants were selected through interviews and/or a paper exercise. They took part in workplace readiness development activities, as well as activities to encourage them to value education. They also received personalised support from mentors.</p> <p>Mentors were college students; they received between 8 and 16 hours of training, with some supplementary training during the programme. Two-thirds of participants saw their monitor at least once a week to talk about work and college plans. They could also talk about personal development but only around a fifth elected to do so.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #44: Millenky et al. (2014)</p> <p>Information about mentoring from Schwartz et al. 2013</p>	National Guard Youth ChalleNGe	<ul style="list-style-type: none"> • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> High <i>Sample size:</i> n=1173 (Intervention: n=722; Comparison: n=451)</p>	<p>Participants; Young people who have dropped out of high school and who face multiple social challenges including involvement with the justice system.</p> <p>The programme lasts for 17 months including a residential phase. Young people take part in a range of different activities and the programme uses a regimented and 'military'-style approach.</p> <p>This programme used the 'Youth Initiated Mentoring' approach. Young people nominate mentors from adults in their networks, whose role is to support them after the residential phase of the programme and help them integrate them back into their communities.</p> <p>Mentors are screened and trained before they start to work with young people. They work on a voluntary basis. They are required to meet with young people for a minimum of four engagements a month, following a formal structure for meetings. Mentors submit reports of these meetings to the programme.</p>

<p>Study #45: Millenky et al. (2018)</p> <p>Process information from Miller et al. (2018), Wiegand et al. (2015)</p>	<p>YouthBuild</p>	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • High school (or equiv.) completion • Vocational Education commencement • University commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> High <i>Sample size:</i> n=3929 (Intervention: n=1794; Comparison: n=937)</p>	<p>Participants: Young people who have dropped out before completing high school and have experience of one or more of the following: low-income or migrant family, involvement in the foster care system, involvement with the justice system, having incarcerated parents, living with a disability</p> <p>The programme lasts for 6-12 months.</p> <p>Recruitment through multiple channels including 'word of mouth'. At the start of the programme participants do a basic skills test and a one-to-one interview. This initial assessment is used to design individual instruction plans.</p> <p>The elements of the programme are integrated, with a focus on youth development. They engage in:</p> <ul style="list-style-type: none"> - Basic skills training, leading to attainment of a high school leaving certificate or equivalent. They may receive other support for engagement with education. - Vocational training related to the construction industry. - 'Leadership skills' development through a structured curriculum and applied learning within work experience. - Support services including counselling, case management and other support, including practical help with childcare, housing, etc. <p>Programmes are tailored to local economic and community contexts. Delivery partners include community organisations and employers. Delivery is informed by a philosophy of 'firm and loving challenge' and 'profound respect for the young people's intelligence'. A culture that is <i>unlike</i> school is encouraged and fostered through diverse design features and programme practices. Delivery is learner-centred, with proactive support especially to those who are struggling. There is a focus on 'what people need to learn and build their skills'. Small classes, high tutor to learner ratios, learner-centred, project-based and interactive teaching methods are 'key structural elements', and independent working is paired with one-to-one tutoring. The programme seeks expert instructors for vocational training. Small class sizes and low participant to instructor ratios were key structural elements that supported learning; pairing of independent work with individual tutoring was very important. Self-paced learning supported engagement and learning. Opportunities to practice material learned during off-the-job training was important.</p> <p>A 'supportive but realistic environment' where young people could give but also learned to take feedback.</p>
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Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #46: Miller et al. (2005)	Centre for Employment Training Replication, San Jose	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> High <i>Sample size:</i> n=1136 (Intervention: n=595; Comparison: n=541)</p>	<p>Participants: Economically disadvantaged 'out of school' young people. An enrolment and orientation phase is 'extensive' and provides detailed information about the realities of the programme.</p> <p>The programme is delivered in 'worklike' settings that mirror the workplace rather than school. Workplace behaviours are encouraged e.g. the schedule is similar to that of a job. Young people have the opportunity to learn at their own pace and advance by demonstrating that they have attained specific competencies. Participation is 'intensive' and regular attendance is strongly encouraged.</p> <p>Basic skills training is delivered in the context of tasks that might be encountered in the workplace.</p> <p>Employers are involved in programme planning and delivery; the programme content is 'responsive' to employer needs. Dedicated staff work with local employers, fostering and nurturing connections with industry continuously throughout the programme. Relationships are important</p> <p>Facilitators include stable funding and staffing and good management.</p>
Study #47: Muñoz-Repiso & Braza (2011)	Training Schools Program	<ul style="list-style-type: none"> • Off-the-job training 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Spain <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=225 (Intervention: n=150; Comparison: n=75)</p>	<p>Participants: Unemployed young people</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #48: Nadon (2020)	Independent Living, Budgeting and Financial Education and Post-Secondary Education Services	<ul style="list-style-type: none"> Life Skills 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=2374 (Intervention: n=1187; Comparison: n=1187)</p>	Participants: Foster care/out of home care system leavers
Study #49: Nadon (2020)	Independent Living, Post-Secondary Education Services	<ul style="list-style-type: none"> Basic Skills Other 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=2374 (Intervention: n=1187; Comparison: n=1187)</p>	Participants: Foster care/out of home care system leavers
Study #50: Pastore & Pompili (2019)	PIPOL, Training	<ul style="list-style-type: none"> Off-the-job training 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status 	<p><i>Design:</i> Non-randomised <i>Location:</i> Italy <i>Population with additional barriers:</i> No <i>Study confidence:</i> Medium <i>Sample size:</i> n=10,964 (Intervention: n=1798; Comparison: n=9166)</p>	Participants: Young people receiving certain out of work benefits. Participants are directed towards diverse types of vocational training. Some are associated with a qualification while others are part of a 'lifelong learning' option.

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #51: Price et al. (2011)	Youth Corps	<ul style="list-style-type: none"> • Life Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • University commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=1349 (Intervention: n=935; Comparison: n=414)</p>	<p>Participants: Young people</p> <p>Provision is organised at multiple locations by local community-based organisations and local and state government agencies. Programme models and delivery vary between sites. The study in the meta-analysis uses a selection of programs from organisations in The Corps Network, an advocacy group whose primary objective is to sustain and develop support for corps programs.</p>
Study #52: Quint et al. (1997)	New Chance	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion • Vocational Education commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> High <i>Sample size:</i> n=2079 (Intervention: n=1401; Comparison: n=678)</p>	<p>Participants: Young mothers who had given birth as teenagers; participants did not have school leaving qualifications.</p> <p>Programme duration varied, but most participants were engaged for 18 months or longer.</p> <p>Participants took an initial assessment to identify their basic skills needs. Study was self-directed with individualised instruction. Life skills training was delivered through a bespoke curriculum; skills taught were relevant to employment but were also linked to issues in participants' personal lives.</p> <p>Challenges included delivering employability skills training. This was partly because of the difficulty in finding tutors with suitable experience and qualifications. Engaging young people in life skills training was sometimes hard because of the tendency for young people to 'live in the moment'.</p> <p>The programme included a strong focus on engagement, participation and motivation. External social barriers could damage engagement even for young people who felt positively about the programme.</p> <p>Early focus on and identification of 'at risk' students is a strength of the programme; this is achieved at orientation and programme start, and then through regular discussions. One-on-one and/or group counselling sessions help to mitigate risk.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #53: Roder & Elliot (2014)	Year Up, Pilot Study	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Off-the-job training • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=164 (Intervention: n=120; Comparison: n=44)</p>	<p>Participants: Young people with low incomes</p> <p>The programme lasted on year</p> <p>Participants received sector-specific off-the-job training in fields such as IT and financial operations. Content was developed with a focus in strong sectors of the local economy, with employer engagement in programme design and delivery. The training is regularly updated to meet the needs of the program's corporate partners.</p> <p>As well as vocational content, participants learn about business communications, workplace behaviours, etc. Programme design models workplace culture and respectful interactions between young people and staff. Participants have the option of gaining college credit for their study. Weekly group meetings are held, where young people receive feedback and can feed back on the programme.</p> <p>Staff advisers are available to discuss programme issues, while other staff (described as 'social workers') are available to provide counselling and help students access services and support. 'Wraparound' support is provided alongside the programme, and participants may also get some financial support. Each young people is assigned a mentor from outside the programme.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #54: Rosholm et al. (2019)	Bridging the Gap between Welfare and Education	<ul style="list-style-type: none"> • Basic Skills • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Off-the-job training • On-the-job training • Other 	<ul style="list-style-type: none"> • Employment status • High school (or equiv.) completion 	<p><i>Design:</i> Non-randomised <i>Location:</i> Denmark <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> not reported (Intervention: n=2405; Comparison: n=not reported)</p>	<p>Participants: Young people who are not in education, employment or training, with low/no formal qualifications and in receipt of certain benefits.</p> <p>Recruitment is conducted through 'dialogue' with young people to identify the most suitable programme for them and to assess their needs and suitability for the programme.</p> <p>An education plan is developed through discussion between the young people, the job centre and an education institution. This reflects individual skills and aspirations. Young people are assigned to a specific contact person who can help to sort out any difficulties that arise. Initial screening to assess basic skills levels are also conducted, and additional support is allocated as required.</p> <p>Classroom-based sessions, on a fixed schedule, deliver basic skills and life skills training. Participants take part alongside students who enter this learning as part of a 'universal' offer. They are assigned a mentor who supports them with personal and educational issues. Participation ends when the young people enters a 'formal internship' or a job.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #55: Schaeffer et al. (2014)	Community Restitution Apprenticeship-Focused Training	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Hours worked • High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=97 (Intervention: n=50; Comparison: n=47)</p>	<p>Participants: Young people who have been involved with the justice system or who are at risk of becoming involved in offending.</p> <p>Young people take part in sector-specific training. This includes working in simulated learning environments and highly specialised training settings. Their basic skills training and 'theoretical' learning is linked to 'real world' problems that are encountered in work, specifically in the sectors targeted by the training. Training is individualised to some extent. Basic skill training is delivered through classroom sessions and one-to-one tutoring.</p> <p>Alongside this, they are offered 'wraparound support' including help with specific issues such as substance abuse, where relevant. They are offered individualised advising and attendance plans. There is also some post-programme support.</p> <p>Well-equipped and realistic classrooms; opportunities to practice skills in project work. Mixture of theory and practical learning.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
<p>Study #56: Schochet et al. (2008)</p> <p>Process information from Johnson et al. (2001)</p>	Job Corps	<ul style="list-style-type: none"> • Basic Skills • Off-the-job training • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion • Vocational Education commencement • University commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> High <i>Sample size:</i> n=11,313 (Intervention: n=6,828; Comparison: n=4,485)</p>	<p>Participants: Young people who are 'economically disadvantaged' and 'live in an environment characterised by disruptive home life, high crime rates, or limited job opportunities'.</p> <p>Training is provided at residential 'centers' that can accommodate between 200 and 2600 learners. Participants receive intensive vocational training, academic education, and a wide range of other services. Learning is individualised and self-paced, with a 'mastery' approach in some elements. Classroom instruction is supplemented with some 'workplace learning experiences' and opportunities to practice skills. Staff with occupational experience as well as expertise in training are recruited to deliver the course, and work with placement staff. Partnerships with community colleges helped young people to access student services.</p> <p>Vocational curricula are developed with input from business and labour organisations, and aligned with opportunities and needs in the local economy. Basic skills are delivered using a common curriculum across sites.</p> <p>Pace of instruction was tailored to learners facing specific challenges.</p> <p>Programme success relies on good partnership between key stakeholders, including federal agencies, private contractors, trade unions and others. Also important are early identification of and focus on 'at risk' young people, and action plans for this group that connect them to support and positive peers; and expert tutors who themselves work with industry.</p> <p>Strong partnerships with employers, bringing together different organisations and building on existing structures and relationships.</p> <p>Good quality student support.</p> <p>Facilitators include continuity over time, which have led to a good infrastructure and strong knowledge about the programme.</p> <p>Barriers to success include heavy caseloads</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #57: Stromback (2010)	Vocational Education and Training	<ul style="list-style-type: none"> Off-the-job training 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Wages or earnings 	<p><i>Design:</i> Non-randomised <i>Location:</i> Australia <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> not reported (Intervention: not reported; Comparison: not reported)</p>	No information
Study #58: Theodos et al. (2017)	Urban Alliance High School Internship Program	<ul style="list-style-type: none"> Life Skills Coaching & Mentoring Other 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status Wages or earnings High school (or equiv.) completion 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=555 (Intervention: not reported; Comparison: not reported)</p>	<p>Participants: Young people who are 'at risk of not transitioning to further education or meaningful work', with low GPA scores.</p> <p>In the first phase of the programme, young people are offered training in life skills alongside some work experience. This is organised through a 'training centre'. They are assigned a coach who is a member of training centre staff. In the second phase they continue in work experience and are assigned a workplace mentor. Coaches were frontline staff with caseloads of around 30-35 young people per person. They track individual performance across the programme and have regular check-ins on work behaviours for the young people. In addition, young people get a 'job mentor' who is a supervisor or colleague at their workplace. This person is responsible for making sure that their work is adequate and appropriate, and generally supporting them. They also assess performance.</p> <p>Challenges included heavy staff caseloads and participant attrition.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #59: Wasserman et al. (2019)	Bridges to Pathways	<ul style="list-style-type: none"> • Life Skills • Coaching & Mentoring • Other 	<ul style="list-style-type: none"> • Services as usual 	<ul style="list-style-type: none"> • Employment status • Wages or earnings • Hours worked • High school (or equiv.) completion • Vocational Education commencement 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> No <i>Study confidence:</i> Low <i>Sample size:</i> n=228 (Intervention: n=137; Comparison: n=91)</p>	<p>Participants: Young men, including those with experience of the justice system or at risk of justice system involvement.</p> <p>Young people took part in life skills workshops that used two different curricula developed for social and emotional learning. One of these, 'Thinking for a Change', focusses on social skills and general self-management. The other concerns soft skills for education, work and citizenship. Participants had opportunities to put this learning into action in community-focussed projects. They also had in some one-on-one life skills and workforce readiness training, delivered by mentors. Mentors were similar to the young people in race, class, experience and where they had lived. Mentors built a profile of young people and developed an action plan with goals for education and employment. They were also responsible for internship placements.</p> <p>In early presentations of the programme instructors were not trained in how to deliver 'Thinking for a Change' but this is now mandatory for any organisation that uses the curriculum. Overall the delivery of the life skills elements became more 'individualised' over time .</p> <p>Challenges included attendance: young people struggled with access to transport, housing, family and childcare issues, the need to work and make money, ongoing legal obligations, and 'gang affiliation'. The evaluation also reports 'emotional and psychological barriers' such as distrust of adults, trauma and hopelessness. Problems with attendance led to an increased use of online delivery, but this was unpopular with some young people. A lack of IT resources and/or technological skills could present barriers.</p>

Reference in NMA report	Intervention	Components	Comparison components	Outcomes	STUDY DETAILS	Notes on programme participants and implementation
Study #60: Wehman et al. (2017)	Project SEARCH, plus ASD supports	<ul style="list-style-type: none"> On-the-job training Other 	<ul style="list-style-type: none"> Services as usual 	<ul style="list-style-type: none"> Employment status Wages or earnings 	<p><i>Design:</i> Randomised <i>Location:</i> United States <i>Population with additional barriers:</i> Yes <i>Study confidence:</i> Low <i>Sample size:</i> n=49 (Intervention: n=31; Comparison: n=18)</p>	<p>Participants: Autistic young people</p> <p>The programme focussed on the transition to employment for young people with ASD who did not access the general education curriculum</p> <p>Programme features included:</p> <ul style="list-style-type: none"> - Analysing work tasks to reflect the learning needs of ASD young people; structured repeated trials for discrete tasks; assistance for young people to understand common work statements in behavioural terms. - Regular data collection; programme staff adjusted instructional and behavioural plans on the basis of this. - Assessment of support needs by trained assessors; classroom support for young people. - Additional training for staff to support ASD young people - Working with a highly trained autism employment specialist who provided applied behavioural analysis for skill development and behaviour management. - Letting employers observe ASD participants in different situations where they can demonstrate their work ethic and the value they add. - Intensive staff-training for instructors. - Collaboration between partners was key to success. - Job coaching; coaches work with individual young people to set goals and support them to gain job skills and seek work.

Annex 2 – Notes from EGM process studies and supplementary materials

The following list includes the studies in the Youth Employment Evidence and Gap Map that provide information from HICs about design and implementation of the interventions in the NMA, as well as a small number of supplementary studies on which the discussion in this report draws. In a few cases, these supplement the comparison group studies included in the NMA. However, most use research methods that were ineligible for inclusion in the meta-analysis.

Reference	Interventions	Notes – processes, effectiveness factors, facilitators, barriers
Dexis [Deixis Consulting and Management Systems International] (2013), A Ganar & Caribbean Youth Empowerment Program mid-term performance evaluation, US Aid, https://pdf.usaid.gov/pdf_docs/pdacy247.pdf	Life skills Basic skills Other	<p>Factors associated with programme success:</p> <ul style="list-style-type: none"> - Depth of curriculum, flexible but consistent content and pedagogy: - Partnerships for leveraging resources and building in sustainability - Incentives for staff to improve retention and engagement - Building 'organisational capacity - 'Tight targeting' of young people who can benefit by age and educational profile - Knowledgeable and motivated tutors - Suitable curriculum <p>Both life skills training and basic skills training demand sufficient time and integration with the rest of the programme.</p>
Sevilla, R. M. (2016). <i>SIDA-ILO Partnership Programme 2014-17-Phase 1 (2014-15): ACI 2: Jobs and Skills for Youth</i> . International Labor Organisation. https://www.ilo.org/global/topics/dw4sd/search-resources/gp/WCMS_586586/lang--en/index.htm	N/A	This study does not include practice information

<p>Englehardt (2011). <i>Creating youth employment through improving youth entrepreneurship</i>. International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---ed_mas/---eval/documents/publication/wcms_161035.pdf</p>	<p>N/A</p>	
<p>Swinney, J. & Hepburn, J. (2018). <i>Developing the young workforce: Scotland's Youth Employment Strategy</i>. Scottish Government. https://www.gov.scot/binaries/content/documents/govscot/publications/progress-report/2018/12/developing-young-workforce-fourth-annual-progress-report-2017-18/documents/00544673-pdf/00544673-pdf/govscot%3Adocument/00544673.pdf</p>	<p>Off-the-job training Other</p>	<ul style="list-style-type: none"> - Alingment with local labour market needs and opportunities and regional planning - Support leaders and staff to develop relevant skills to meet programme ambitions - Maximise employer engagement <p>Support college leaders and staff to develop skills to meet the ambitions</p> <p>Maximise employer engagement</p>
<p>Graham, N. (2018). <i>Evaluation of the Youth Employment Initiative in South West Scotland</i>. EKOS Economic and Social Development/Scottish Government. https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2016/01/yei-evaluation-report-2014-2020/documents/youth-employment-initiative-second-evaluation-report-for-the-2014-2020-scottish-operational-programmes-december-2018/youth-employment-initiative-second-evaluation-report-for-the-2014-2020-scottish-operational-programmes-december-2018/govscot%3Adocument/Final%2BReport%2B-%2BYouth%2BEmployment%2BInitiatve%2BEvaluation%2B-%2B28th%2BDec%2B2018.pdf</p>	<p>Off-the-job training On-the-job training Other</p>	<ul style="list-style-type: none"> - Person-centred approaches - Tailoring to meet specific aspirations and needs of participants - Flexible provision - Involving employers in the design of interventions that build skills for specific sectors

<p>Jackman, R. & Corbanese, V. (2007). <i>Evaluation of the Active Labour Market Measures & Employment Programme in Macedonia</i>. UNDP Independent Evaluation Office. https://erc.undp.org/evaluation/plans/detail/768</p>	<p>Other</p>	<p>Strong case for measures specifically targeted on identifiable vulnerable groups, such as those living with a disability</p>
<p>Byam, N. (2002). <i>Evaluation of the First Nations and Inuit Youth Employment Strategy</i>.</p>	<p>On-the-job Off-the-job Other</p>	<ul style="list-style-type: none"> - Matching to local labour market opportunities - Culturally sensitive and relevant activities
<p>Dixon, S. & Chrichton, S. (2017). <i>Evaluation of the Impact of the Youth Service: NEET programme</i>. The Treasury, New Zealand. https://www.treasury.govt.nz/publications/wp/evaluation-impact-youth-service-neet-programme.html</p>	<p>Mentoring/coaching</p>	<p>Mentoring had an impact on education engagement.</p> <ul style="list-style-type: none"> - Clear goals, structure, training, targeting, customised support and guidance. Goal-setting by young people. - Well-resourced and supported programme. - Targeted enrolment <p>Mentors work with young people to discuss and set goals for education, work and training, develop an action plan setting out agreed activities and how the provider will help with this. They also help with referrals on, through regular meetings. Progress is monitored.</p>
<p>Berk, J., Kahn-Lang Spitzer, A., Stein, J., Needels, K., Geckeler, C., Paprocki, A., Gutierrez, I. & Millenky, M. (2020). <i>Evaluation of the National Guard Youth ChalleNGe/Job ChalleNGe Program</i>. Mathematica. https://www.mdrc.org/sites/default/files/NGYCJC_FinalReport_February2021.pdf</p>	<p>Mentoring/coaching Other</p>	<p>Partnerships with community colleges helped to provide access to student support Partnerships helped to deliver outreach and recruitment</p>
<p>Scottish Government (2016). <i>Evaluation of the Youth Employment Scotland Fund (YEAR) for the Scottish Government</i>. Scottish Government. https://www.gov.scot/binaries/content/documents/govscot/publications/impact-assessment/2016/09/youth-employment-scotland-fund-yesf-evaluation-report/documents/00505036-pdf/00505036-pdf/govscot%3Adocument/00505036.pdf</p>	<p>Apprenticeships Other</p>	<p>Outreach and recruitment using case studies, advocacy, and providing 'opinion leaders' with information to help engage young people. Social media campaigns can also be useful. Flexibility to local labour market needs and opportunities Practical support to employers to recruit and support young people Flex to respond to local need and circumstances within a robust framework Practical support to employers to recruit and support</p>

<p>Capgemini Consulting (2016). Evaluation of the impact of the European "Youth Employment Initiative" programme 2015.</p>	<p>N/A</p>	<p>Limited local implementation information</p>
<p>McGarry, S. & Fitzpatrick, F. (2015). Evaluation of the operation of the Youth Employment Initiative (YEI) element of the European Social Fund (ESF) Programme for Employability, Inclusion and Learning (PEIL) 2014-2020. Irish Department of Education and Skills. https://eufunds.ie/wp-content/uploads/2020/12/yei-evaluation.pdf</p>	<p>Off-the-job training On-the-job training Life skills training Mentoring/coaching Basic skills training Other</p>	<p>'Community based' approach with support for disadvantaged young people and partnerships with community groups Outreach designed for NEETs and 'hard to reach' groups, understanding why they are hard to reach Tailoring to particular challenges of the long-term unemployed. One-to-one support, including additional training time to address key issues. Designed with reference to labour market intelligence on likely future employment trends. Tailored to the particular challenges that face the long-term unemployed. Includes 'sustainability in employment', and unusually is structured to bring together people in the target age group with older workers. Certification is 'important/desirable' but the main focus is on experience and skills. Participants get one-to-one support, including additional training time to address key issues with labour market integration. Addressing 'confidence and motivation' and encouraging people to 'understand the value of work beyond money'. Challenges include 'mismatching of learners' with those involved suggesting that an interview process would be useful.</p>
<p>Koleva-Demonty, K. (201). <i>First results of the implementation of the Youth Employment Initiative</i>. European Commission. https://www.todofp.es/dam/jcr:265a8956-ca62-4443-85a2-b62ad3332f8c/ke-01-16-710-en-n----final-report-pdf.pdf</p>	<p>Off-the-job training On-the-job training Other</p>	<p>Initial needs assessment leads to personalised action plans Communication with the target group by effective channels e.g., standard media, social media, careers fairs and public employment services Identifying and reaching out to the young people most in need Matching work offers to the young people Matching local labour market intelligence and growth areas Good quality training; quality is enhanced by linking education/ TVET institutions with the offer</p>

<p>Brakel, K. (n.d.) <i>Local impact of the Youth in Action Programme Action 3 in Euro Mediterranean Co-operation</i>, SALTO, https://www.salto-youth.net/downloads/4-17-3189/Youth%20in%20Action%20EuroMed%20Impact%20Study.pdf</p>	<p>N/A</p>	<p>Limited process information relevant to this project</p>
<p>Harris-Madden, D. (2017). <i>Measuring the Effects of Youth Participation in a Government-Funded, Urban After-School Employment and Training Program: A Case Study Summative Evaluation</i>. Doctoral Dissertation, Paper 306, St John Fisher University. https://fisherpub.sjf.edu/education_etd/306/</p>	<p>On-the-job training Off-the-job training Life skills training Other</p>	<p>Limited process information relevant to this project</p>
<p>Bancroft, L. (2017). Not so NEET: A critical policy analysis of Ontario's Youth Job Connection Program. <i>Social Justice and Community Engagement</i>. 27. https://scholars.wlu.ca/brantford_sjce/27</p>	<p>Off-the-job training Life skills training Other</p>	<p>Wider life challenges could stop young people participating, e.g., mental health conditions, homelessness, lack of means to communicate with staff. 'If employment counsellors working with marginalised youth expect a linear pattern of success for each participant, they are likely to be ill-prepared for many unexpected outcomes'. The article goes on to discuss the importance of systemic barriers as well as individual ones.</p>
<p>Fitzpatrick Associates (2018). <i>Programme for Employability, Inclusion and Learning 2014-2020 – Mid-term evaluation</i>. European Union/Government of Ireland. https://eufunds.ie/wp-content/uploads/2020/12/peil-mte-and-yei-evaluation.pdf</p>	<p>Off-the-job training Basic skills training Life skills training Mentoring/coaching Other</p>	<p>Partnerships with employers; collaborative programme development and integration of work-based learning with TVET. Initial needs identification takes place through an orientation period. Integration of basic skills with off-the-job training. For the mentoring element, matching is key; also relationship building and goal-setting. Mentors are provided with 'structure and processes for ongoing review and closure' of the relationship The life skills element is supported by the 'experience, knowledge and networks' of providers. It is designed to be practical and culturally sensitive. Practical barriers, such as difficulty with housing or childcare, are addressed. Basic skills training is delivered by expert tutors and to some extent embedded in off-the-job training</p>

<p>Jeffrey, P., Naylor, I., Parissaki, M. Pagnini, C., Gianetto, A., Rabemiafara, N., Fuller, A., Roidou, E., Buiskool, B-J. & Lindeboom, G-J. (2020). Study for the Evaluation of ESF Support to Youth Employment.</p>	<p>Apprenticeships Off-the-job training On-the-job training Basic skills training Other</p>	<p>Remunerated apprenticeships were considered to be the most effective type of intervention; TVET and basic skills training were also considered effective. Targeting people most likely to benefit. Strong partnerships between stakeholders Flexibility in implementation and individualisation; Barriers; difficulty in outreach; lack of partnership; not being able to flex offers to socioeconomic context; mismatch of provision with participant needs</p>
<p>Barbetti, D. (2015). <i>The European Youth Guarantee: Evaluation and Analysis</i>. Dissertation. Libera Università Internazionale Degli Studi Sociali. https://tesi.luiss.it/15391/1/071332.pdf</p>	<p>N/A</p>	<p>No relevant process information</p>
<p>Wallace Consulting (2013). <i>The Wider Horizons Programme: Capturing the Learning</i>. International Fund for Ireland. https://www.internationalfundforireland.com/images/documents/reviews_evaluations/WHP_Capturing_the_Learning_client_final.pdf</p>	<p>Life skills training Mentoring/coaching Other</p>	<p>The programme was closely embedded in communities. Opportunities were matched to local labour market opportunities</p>
<p>Gibbons, G., Hussain, S. & Al-Hamdan, N.S. (2011). UNDP Bahrain Final Evaluation of Country Programme 2003-2007. UNDP Independent Evaluation Office</p>	<p>N/A</p>	<p>No process information relevant to this project</p>
<p>European Commission (2016). Youth Employment Initiative (YEI) - Evaluation Report. European Commission</p>	<p>N/A</p>	<p>No process information relevant to this project</p>
<p>Atkinson, I., Kirchner-Sala, L., Meierkord, A., Smith, K. & Wooldridge, R. (2017). <i>Youth Employment Initiative Process Evaluation: Assessment of Strategic Fit, Design and Implementation</i>. Research Report No 945. Department for Work and Pensions. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650511/youth-employment-initiative-process-evaluation.pdf</p>	<p>Off-the-job training On-the-job training Mentoring/coaching Other</p>	<p>Outreach and engagement Flexibility around lives of young people</p>

<p>Aigner, D. (2010). <i>Youth Employment and Migrant Joint Programme</i>. UNDP. https://erc.undp.org/evaluation/evaluations/detail/2098</p>	<p>N/A</p>	<p>No process information relevant to this project</p>
<p>Scottish Government (2016). <i>Evaluation of the Youth Employment Scotland Fund (YEAR) for the Scottish Government</i>. Scottish Government. https://www.gov.scot/binaries/content/documents/govscot/publications/impact-assessment/2016/09/youth-employment-scotland-fund-yesf-evaluation-report/documents/00505036-pdf/00505036-pdf/govscot%3Adocument/00505036.pdf</p>	<p>Off-the-job training On-the-job training Other</p>	<p>Outreach included multiple channels; influencing, leadership, social media etc. Recruiting and working in partnership with employers was important. Local flexibility to match labour market opportunities and needs Support to employers, especially those working with young people who face additional barriers</p>
<p>Escudero, V. & Lopez Mourelo, E. (2017). <i>The European Youth Guarantee: A systematic review of its implementation across countries</i>. International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_572465.pdf</p>	<p>Off-the-job training On-the-job training Other</p>	<p>Well-resourced provision was important Working through networks</p>
<p>To, O.C. (2017). <i>A program evaluation of an Apprenticeship Program using Stufflebeam's CIPP Mode</i>. Dissertation. Gardner-Webb University. Education Dissertations and Projects. 233. https://digitalcommons.gardner-webb.edu/education_etd/233/</p>	<p>Apprenticeships</p>	<p>Strengths included:</p> <ul style="list-style-type: none"> - Opportunities for ongoing evaluation and reflection on learning; help with basic skills - Wraparound support for learners & individual support - Paced and flexible studies - Good match of and practical training - High-quality settings for training - Adequate rates of apprenticeship pay. - Support with basic skills for learning, especially technology - Partnerships with community colleges inc. for learner support - 'Mastery learning' approaches - Good understanding of the programme and managed expectations.

<p>Henderson, R., Reinhard, A., Porter, M., Jankovic, C., Elliott, W., Barber, P., Pham, M., Gonzales, S. & Wu, Y. (2021). <i>Transition to Work: Final Evaluation Report</i>. Australian Government; Department of Skills and Employment.</p>	<p>Life skills training Basic skills training Mentoring/coaching Other</p>	<p>Recruitment: Diverse channels including self-referrals and 'walk ins'; extended application periods are avoided. Aims to remove practical and personal barriers to participation Flexibility that allows providers to create culture and expectations that are part of a 'mindset' for the organisation Working with specialists who can help to support the needs of specific cohorts of young people</p> <p>Life skills Specialist staff, e.g., youth workers. Personalised learning Flexibility to address individual needs and responsiveness to these Tailored assistance, engagement, achievable and relevant goals, to build confidence</p> <p>Basic skills Small groups and options for individual tuition. Regular face-to-face meetings Assessment of employment and training needs of individuals, which again may be tailored. Assessment tools to understand learner needs, along with a more qualitative approach through interviews. Assessment of vocational and non-vocational barriers. Formal tools for assessing; skills; non-vocational needs; work readiness; literacy/numeracy; health (mental, physical, substances); and readiness for change. Flexible delivery which allows innovation in service design and also flexibility Training staff with specialist expertise</p> <p>Mentoring Mentors with similar backgrounds to young people Flexibility to address individual needs <i>and</i> also challenges that emerge and/or that are seen in particular locations or times.</p>
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<p>Alexander, P. (2014). <i>Social Empowerment and Institutional Strengthening with Emphasis on Youth</i>. UNDP Independent Evaluation Office.</p>	<p>Off-the-job training Other</p>	<p>Facilitators include: Qualified trainers and appropriate equipment Good communications and partnerships with employers Wide-ranging partnerships; public, private, government</p>
<p>Mawn, L., Oliver, E. J., Akhter, N., Bamba, C. L., Torgerson, C., Bridle, C., & Stain, H. J. (2017). Are we failing young people not in employment, education or training (NEETs)? A systematic review and meta-analysis of re-engagement interventions. <i>Systematic reviews</i>, 6, 1-17.</p>	<p>Diverse</p>	<p>Successful interventions: - are 'high contact', e.g., six months, 884 hours, or residential programmes over several months. - tend to target deprivation. - include work-based placements and basic skills provision - Involve local employers - Offer accredited courses</p> <p>'... of note, narrative reviews have suggested that confidence-enhancing activities are beneficial' 'There was some evidence that contextual factors influenced intervention effectiveness... site level differences in effects and problems where different providers were responsible for different services'</p>
<p>Eyster, L., Nightingale, D., Barnow, B., O'Brien, C., Trutko, J. & Kuehn, D. (2010). <i>Implementation and Early Training Outcomes of the High Growth Job Training Initiative: Final Report</i>. The Urban Institute on Labor, Human Services, and Population</p>	<p>Apprenticeships Off-the-job training On-the-job training Other</p>	<p>Facilitators: Partnerships between multiple employers working together local to support programme development, identifying sector needs Pre-apprenticeship programmes that prepare learners for entry and make completion more likely Support for small firms to get involved and participate fully Outreach to under-represented communities to boost engagement e.g., women in the trades Appropriate support for learners with additional needs, e.g., those with lower basic skills Design that considers the needs of under-represented communities in balancing life and work. Qualified instructors Partnerships with businesses are vital. Employers need to buy into the idea that the training is high quality.</p>

<p>Reed D, Liu A, Kleinman R, Mastri A, Reed D, Sattar S and Ziegler J (2012) <i>An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States</i>, Mathematica Policy Research</p>	<p>Apprenticeships</p>	<p>Collaboration between partners at the local level including businesses, those involved in pointing young people towards training opportunities, secondary and postsecondary education, and adult education career pathways. Local apprenticeship agencies need to have 'a seat at the table' of planning education and training and be in a position to put their work on the map. This was also helpful in establishing pathways for specific groups such as ex-offenders</p>
<p>Lindsay S, Hartman L and Fellin M (2015) A systematic review of mentorship programs to facilitate transition to post-secondary education and employment for youth and young adults with disabilities, <i>Disability and Rehabilitation</i> DOI: 10.3109/09638288.2015.1092174</p>	<p>Mentoring/coaching</p>	<p>Mentoring programmes provide a 'promising approach to reducing barriers to PSE and employment' for young people with disabilities and other risks. They seem to be 'possibly effective' although employment is an area in which they are less effective. They appear to have more impact on self-determination, quality of life, knowledge of supports and social skills but are less good on actual job training, work ethic and practical skills. Effective programmes are safe, feasible, effective, and acceptable to participants. Effective programmes are:</p> <ul style="list-style-type: none"> - Longer, lasting more than six months which meant that they allowed stronger relationships to develop - Structured, often with a planned curriculum and a paid program co-ordinator who trained the mentors and provided continuing oversight of the program <p>Effective practice includes:</p> <ul style="list-style-type: none"> - Tailoring to the program's objectives, e.g. social skills, vocational skills, specific job tasks - Took into account various aspects of the young people's environment - Addressed the transition process at various points - Positioned the mentor/mentee relationship as important for supporting the transition to employment or other outcomes - Group-based settings could be effective

<p>Ray, O., Crunden, J. & Murphy, H. (2018). <i>Liverpool City Region Youth Employment Gateway (YEG) Evaluation</i>. Learning and Work Institute</p>	<p>Life skills Other</p>	<p>One-to-one adviser support was effective. Advisers were valuable when they gave good advice and support, developed good relationships with young people, gave the right support at the right time, understood individual needs, and were knowledgeable.</p> <p>Wider partnerships were also important – advisers working with employer engagement teams on job matching, making links with external provision including health and wellbeing support, developing new employability courses in-house and co-ordination of support. This provision was especially important for young people with additional needs.</p> <p>Challenges included:</p> <ul style="list-style-type: none"> - Time pressures - Disengagement between young people - Gaps in support with external barriers and with basic skills
<p>Rodriguez-Planas, N. (2012). Longer-term impacts of mentoring, educational services, and learning incentives: Evidence from a randomized trial in the United States. <i>American Economic Journal: Applied Economics</i>, 4(4): 121-139</p>	<p>Mentoring/coaching</p>	<p>Findings on mentoring – short-term educational effects were modest. Over the long-term impacts on risky behaviours were actually detrimental.</p>

Supplementary studies not in the EGM

<p>Foster R, Winterbotham M, ni Luanaigh A, Morris S, Downing C and Felton J (2021) <i>Evaluation of ESF Funded Apprenticeships 2015 to 2019: Final Report</i>, Social Research Number 10/2021, Welsh Government</p>	<p>Apprenticeships</p>	<p>Facilitators Clear progression routes between apprenticeships Strong role for 'lead contractors' working between organisations. Good relationships between training providers, with strong support from 'lead contractors' as guides through the apprenticeship process; regularly scheduled support visits, regular training days to share best practice, and dissemination of useful resources to ensure consistency across delivery. Thinking of sub-contractors as part of the lead provider's business; monitoring of teaching quality, and other performance measures. Working collaboratively beyond contractual relationships, e.g. sharing benchmarking information, referring learners between providers Detailed information for employers about the nature of apprenticeships prior to enrolment Flexibility around start dates Focus on the needs of all employers including small firms Focus on soft as well as hard skills in the apprenticeship</p> <p><i>A benefit cost analysis using income and employment data from LEO indicated a strong benefit to cost ratio for the Programme (1.48 to 1.59, depending on the assumptions used) relative to non-apprenticeship provision (the 'counterfactual'), even on a very short (two year) time horizon.</i></p> <p><i>The impacts of the Programme according to this analysis included a 29% increase in the job entry rate relative to other provision (the 'counterfactual'), and, in the first year after completion, an increase of 119 days in employment and £7,866 in earnings.</i></p>
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<p>Shiner M, Young T, Newburn T and Groben S (2004) <i>Mentoring disaffected young people: An evaluation of Mentoring Plus</i>, Joseph Rowntree Foundation/Breaking Barriers</p>	<p>Mentoring</p>	<p>Programme integrity depends on a close relationship between the stated aims and the methods being used Programmes need good management and skilled practitioners. Content may be less important than the process by which it is implemented, delivered and managed. 'Overload' of staff and an expectation that people will overwork can lead to 'burn out'. Staff shortages can mean that key programme elements get missed out, and new staff who come in don't have the relevant skills and knowledge.</p> <p>Longevity: newly established projects were particularly vulnerable to high turnover, downward spirals and low programme integrity. Location: advantages to locations that are accessible, safe and appealing for young people. '... workers voiced concerns that the projects were inaccessible and/or unappealing because they were located a long way from where the young people lived and/or because they were based in unsafe and inappropriate locations'</p> <p>Funding needs to be sufficient to meet programme ambitions.</p> <p>Engaging with young people:</p> <ul style="list-style-type: none"> - Proactive outreach, e.g. frequent calls, messages, etc, and using different channels - 'Cultural competence' in outreach, to connect with young people from particular communities that can benefit <p>Matching is important in the mentoring relationship</p> <ul style="list-style-type: none"> - The mentor needs to be a credible 'role model'. - Both parties need to invest in the relationship. - The ideal mentoring relationship assumes taking actions towards particularly goals 'through substantive work', but the assumption of linear development towards this can place burdens and unrealistic expectations on mentors (and
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		<p>mentees). You need to embrace the relative mundanity and reactivity of much of it.</p> <ul style="list-style-type: none"> - The realities of working with highly disadvantaged young people mean that 'notions of risk and risk management should be at the forefront of programme design and implementation'. - Mentoring cannot be reduced to a simple model as it contains many elements, phases and stages.
<p>Armitage, H., Heyes, K., O'Leary, C., Tarrega, M. & Taylor-Collins, E. (2020). <i>What makes for effective youth mentoring programmes: A rapid evidence summary</i>. NESTA. https://www.nesta.org.uk/report/what-makes-effective-youth-mentoring-programme/?gclid=CjwKCAjwkLCkBhA9EiwAka9QRo9OaA5BcYfzon8qqNL1dRet5vnEPvrN0hsGINK7b9ykHJSQc1rjcRoCbYUQAvD_BwE</p>	<p>Mentoring</p>	<p>Youth mentoring programmes can improve outcomes across academic, behavioural, emotional and social areas of young people's lives. These impacts are small, but nevertheless significant.</p> <ul style="list-style-type: none"> - Huge diversity in design and delivery: themes are common across different kinds of programme - Mentor recruitment is key, as is their motivation. 'Experts' including those with experience of working with 'vulnerable young people' tend to have better outcomes. - Mentors benefit from ongoing training and opportunities to talk to their peers about emerging issues. - Mentors may benefit from facilitated activities and guidance on what to do with their sessions. - Specific goals and clarity of purpose can be more effective. - Mentee motivation and engagement is important; building rapport and trust is key. - 'Matching' of mentor and mentee is crucial, as is cultural sensitivity and awareness. Matching based on interests and values may be associated with effectiveness. - Letting mentees have some say in the choice of their mentor may also be effective. - Longer mentoring relationships may be more effective (over one year) - Mentors need to have time to fulfil the role.

<p>Rodriguez-Planas, N. (2014). <i>Do youth mentoring programs change the perspectives and improve the life opportunities of at-risk youth?</i> IZA World of Labour 2014: 62, doi: 10.15185/izawol.62</p>		<p>Rigorous studies of the effectiveness of mentoring programmes find positive but modest impacts on some mentees. “robust research does indicate benefits from mentoring for some young people, in some circumstances, in relation to some outcomes.”</p> <p>They are better at improving noncognitive and social skills rather than academic performance.</p> <p>Positive role models may promote resiliency, and mentors may help to build social skills. However positive effects are small and tend to dissipate quickly. Mentors may ‘overprotect’ youth, reducing the costs of engaging in risky behaviours. Community-based after-school programmes can create safe havens where young people can express themselves and receive useful guidance. Social- and emotional skills programmes are most effective among younger children and at-risk youth. Grouping high-risk youth can actually lead to negative peer influences.</p> <p>Overall programme quality is key in determining effectiveness; strong personal relationships between mentors and mentees have more benefits, as do adequate support and structure, and frequent contact.</p> <p>Overall, more good quality evaluations are needed.</p>
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