

Rapid evidence review: The impact of local economic growth interventions on minority ethnic and immigrant groups

Introduction

The What Works Centre for Local Economic Growth (What Works Growth) aims to understand the impact of policies on local economic outcomes. Our evidence reviews and toolkits summarise the evaluation evidence on a range of policies – access to finance, apprenticeships, area-based initiatives, broadband, business advice, employment training, estate renewal, innovation, sports and culture, and transport.¹

This rapid evidence review looks at whether the studies in our evidence reviews and toolkits report different effects for individuals from minority ethnic and immigrant groups. As the focus in our original reports was on overall effects, we did not systematically record these differences, and we sometimes excluded studies that targeted specific groups. This was an opportunity missed, as there is a large body of evidence showing that, on average, these groups often experience poorer economic and social outcomes.² Understanding differences in effectiveness could help design interventions that work better for all.

1 For more information on how we rank the robustness of evaluations, see our introduction to the [Maryland Scientific Methods Scale](#).

2 For example, minority ethnic households in the UK are two to three times as likely to live in poverty as their white counterparts (Social Metrics Commission, 2020); minority ethnic households, with exception of Indian households, are more likely than white British households to be in the bottom two income quantiles (ONS, 2020); and minority ethnic and immigrant workers were more likely than white British workers to be made redundant rather than furloughed during the pandemic (Hu, 2020).

We have focused on those policies where we think ethnicity or immigration background is most likely to influence impacts – apprenticeships, employment training, business advice, and interventions designed to increase take-up.

We only considered our existing evidence reviews and toolkits. We have not conducted new systematic searches, nor looked for policies which target specific groups. These issues will be considered in our ongoing evidence review work.

Things to consider

Policy lessons

- For each of the policy areas we examined, our evaluation evidence base suggests that individuals from minority ethnic and immigrant groups tend to benefit less from interventions than those from majority ethnic or non-immigrant groups. Policymakers should carefully consider how interventions can be designed to overcome these disparities, for example, by providing additional support or adjusting how support is delivered to better reflect needs. Policymakers should monitor and evaluate interventions so that disparities can be identified and addressed.
- A few studies reveal exceptions to the overall trend, with individuals from minority ethnic or immigrant groups appearing to benefit more, on average, from interventions. One reason for this might be that these interventions successfully addressed barriers that minority ethnic or immigrant groups face. Policy design should be informed by evidence on barriers faced by minority ethnic or immigrant groups.
- Minority ethnic and immigrant groups are often under-represented among intervention participants. Few studies consider whether this reflects lower take-up by these groups, discrimination or bias in eligibility or selection processes, or other factors. Policymakers should review whether their programme participation reflects the demographic structure of the eligible populations and put in place mechanisms to address disparities. Where disparities appear to be due to differences in take-up, our [take-up toolkit](#) provides insights that may be helpful. The [evidence](#) produced by the Behavioural Insights Team on applying behavioural insights to business policy may also be useful.

Need for more evidence

- There is a need for more evidence on the impacts of local economic growth policies on minority ethnic or immigrant groups, with few existing evaluations considering differences across groups.
- None of the studies in our evidence base explore the issue of ‘what works better’ for minority ethnic or immigrant groups, either in terms of improving outcomes or increasing participation.³ New evaluations which investigate ‘what works better’ are essential if existing disparities in participation and outcomes are to be addressed.
- Other evidence gaps include a lack of evidence on how and why participation varies across groups, and on the transferability of findings across countries, minority ethnic groups, and context.

³ ‘What works better’ questions evaluate whether different interventions or design features are more effective in achieving an outcome.

Evaluation evidence

Terminology

This paper explores whether studies in our evidence base provide information on differences in effects for individuals from minority ethnic groups or for immigrant groups.

- The individual studies use a wide range of terminology. To avoid confusion, when referring to the results from individual studies, we use the study terminology. Our use of these terminologies should not be perceived as an endorsement of the language used.
- When talking about the overall evidence base, we use the terms ‘minority ethnic’ or ‘ethnicity’ and ‘immigrants’ or ‘immigration background’.
- The term minority ethnic is chosen over other terms as this helps communicate that everyone has an ethnicity and avoids treating all people of minority ethnicity as a single group.⁴
- The term immigrants can refer to first and second-generation immigrants. In some studies, immigrants may include refugees and asylum seekers, but few studies explicitly discuss whether these are included in their analysis.

What Works Growth evidence base

We identified 33 studies in our evidence base for apprenticeships, employment training, business advice, and improving take-up that provide information on differences in effects for minority ethnic or immigrant groups. Only around a fifth of studies compare across groups. Nine studies relate to apprenticeships, 13 to employment training, eight to business advice, and three to increasing take-up of policies.

A different search process, designed specifically to identify evidence on outcomes for minority ethnic and immigrant groups, may have identified more studies but is outside the scope of this review. The aim is to understand what existing What Works Growth evidence reviews can tell us about outcomes and participation for minority ethnic and immigrant groups and to make this information available to policymakers.

Evidence standards

Our evidence reviews use studies that the What Works Growth team has scored as three or above on the Maryland Scientific Methods Scale (SMS), which classifies evaluations based on methodological robustness and implementation.⁵ Our toolkits and rapid evidence reviews also include studies with a score of two or above when these add to the evidence base (for example, where there are no or few studies that score SMS 3 on a policy or outcome).

Almost two-thirds of studies identified as part of this review (21) were scored SMS 3, with five SMS 5, five SMS 4, and two SMS 2. All scores reflect the overall empirical approach, rather than assessing the minority ethnic or immigrant-specific aspect of the study.

⁴ For more discussion on these issues, see The Law Society's [guide to race and ethnicity terminology and language](#).

⁵ For more information on how we rank the robustness of evaluations, see our introduction to the [Maryland Scientific Methods Scale](#).

Table 1: Evidence quality of review studies

Topic	No. of studies	SMS 2	SMS 3	SMS 4	SMS 5
Apprenticeships	9	1	7	1	0
Employment training	13	0	7	4	2
Business advice	8	1	6	0	1
Increasing take-up	3	0	1	0	2
Total	33	2	21	5	5

Transferability

Our evidence base focuses on studies from OECD countries, in English. Only five studies evaluate interventions from the UK. Eleven studies are from the US, five from Germany, three from Sweden, and two from Norway. The remaining seven studies each come from a different country.

Most of the UK and US studies identified consider ethnicity, that is, they compare outcomes for different ethnic groups, whilst most of the European studies consider immigration background. This reflects different philosophies and institutional structures in different countries.

Minority ethnic and immigrant groups face different barriers in different countries, and immigrants have different legal statuses. These differences can impact on the transferability of findings to the UK. Diversity across and within minority ethnic and immigrant groups in terms of lived experience and barriers faced may mean that findings that relate to a specific minority ethnic or immigrant group are not transferable to other groups.

Report structure

The findings are organised by policy and by whether they relate to minority ethnic or immigrant groups. Our primary focus is on the effect of interventions on local economic outcomes. We also report findings on participation.

Evidence on impacts and participation

Apprenticeships

Our [evidence review](#) published in 2015 draws on 27 impact evaluations that met our evidence standards. While apprenticeship models vary across countries, they share many common features. We define apprenticeships as paid employment within a business, alongside training that is usually provided by government, the employer, or a trade union, targeted specifically at school leavers. The apprentice often acquires a formal qualification by the end of the programme.

Impacts of apprenticeships

Two studies report findings for minority ethnic groups, and two for immigrant groups.

Reported findings for minority ethnic groups are mixed.

- Study 960 compares labour market outcomes for a minority ethnic group (Roma) and the

majority ethnic group (non-Roma) for an apprenticeship programme in Hungary. It finds that one to two years after completion participants from a Roma background were more likely to be employed but less likely to have long-term contracts, and had lower wages compared to participants from a non-Roma background.

- Study 985 looks at the impact of apprenticeships on earnings and employment in England, finding positive impacts on both although only the earnings impact is significant. The study looks at several different measures of employment and earnings, across three different time periods. For one measure and time period effects are larger for non-white participants, for another smaller, with no differences for the remaining measures and time periods.

Reported findings for immigrant groups are also mixed.

- Study 1045 from Norway finds that outcomes are worse for immigrants. Young people from a non-Western background were less likely to be in employment post-apprenticeship completion than young people who were ethnically Norwegian with the same grades and competence levels.
- Study 939 from Italy evaluates whether apprenticeships are effective pathways into permanent jobs compared to other forms of temporary jobs, and whether immigrants from inside and outside the EU are more likely than Italians to enter the labour market through an apprenticeship. It finds that immigrants from outside the European Union were more likely than Italians to enter the labour market through an apprenticeship, whilst those from inside the European Union were less likely.

Participation in apprenticeship programmes

One study looks at participation by minority ethnic groups, one looks at both participation and completion, and one looks at dropout. Three studies look at participation by immigrant groups.

The studies that look at participation and completion find those from minority ethnic groups have similar rates as those from majority ethnic groups. The one study that looks at dropout reports positive effects of a targeted programme.

- Study 964 looks at participation in apprenticeships in the US between 1997 and 2001 and finds that individuals who were black or Hispanic were as likely to participate in apprenticeships as those who were white.
- Study 862, looking at a cohort of males born in the UK in 1958, finds no significant difference in access or completion between those from white and non-white backgrounds.
- Study 73 evaluates dropout from a mentoring programme that matched Indigenous Australian apprentices with mentors from their community. The programme was successful in reducing apprenticeship dropout, suggesting that targeted interventions can make a difference to outcomes for minority ethnic groups.

The three studies that look at participation for immigrant groups tend to show that those from an immigrant background were less likely to participate in apprenticeships.

- Study 1045, from Norway, looks at participation in apprenticeships and finds that young people from non-Western backgrounds (either first or second generation) were less likely to be participating than those who are ethnically Norwegian.
- Study 979, from Germany, looks at the impact of an apprenticeship bonus paid to employers for taking on individuals who had been looking for an apprenticeship for over a year. Individuals from a migration background were over-represented in subsidised apprenticeships, suggesting that those from migrant backgrounds find it more difficult to find

a non-subsidised apprenticeship place.

- Study 838, from France, compares full-time vocational training and apprenticeships. The study finds that participants with a foreign father had lower probability of participating in an apprenticeship programme than those with a French father and were less likely to graduate. However, this difference was no longer significant once other factors were considered.

Key messages

The evaluations in our evidence base suggest individuals from minority ethnic and immigrant backgrounds are less likely to participate in apprenticeships. Policymakers may want to consider what additional support they could put in place to increase participation (see the take-up section later in this paper).

The evaluations in our evidence base suggests that both minority ethnic and immigrant groups may be less likely to see the full benefits of undertaking an apprenticeship in terms of future employment and wages. Further work is needed to understand how this could be addressed.

Employment training

Our [evidence review](#) published in 2016 draws on 71 impact evaluations that met our evidence standards. We have also published several toolkits that draw on additional studies. We define ‘employment training’ programmes as:

- Including training targeted at the over 18s, day-release and short courses, and retraining.
- Excluding training in schools, higher education and apprenticeships and targeted training, for example, for those with mental health problems, those with criminal records, or particular ethnic groups. We did this to focus on general programmes, but it means that there are likely to be evaluations that would provide insights into ‘what works’ for minority ethnic or immigrant groups that were excluded.

Impacts of employment training

Four studies report findings for minority ethnic groups, and six for immigrant groups.

All four of the studies that look at the impact on minority ethnic groups are from the US. Two studies find that those from minority ethnic groups are less likely to benefit.

- Study 134 looks at the impact of the Jobs Corps programme and finds that participants who are black, Hispanic and other ethnicities are less likely than those of white ethnicity to be in employment four years after selection for the programme.
- Study 227b looks at training delivered through Individual Training Accounts in the US and finds that a ‘Maximum Choice’ model – which placed increased emphasis on customer choice and reduced emphasis on counsellor guidance – was effective at increasing employment and earnings for white, non-Hispanic customers, but not for customers of other racial or ethnic backgrounds.⁶

⁶ In undertaking this review, we identified that there are two studies in our publications labelled as Study 227 – one in the employment training evidence review and one in the careers counselling toolkit. In this review, we have labelled these as Studies 227a and 227b respectively.

Two studies find that impacts vary across minority ethnic groups.

- Study 138 looks at two programmes delivered as part of the Workforce Investment Act and compares outcomes for Hispanic, white non-Hispanic, non-white non-Hispanic, and other ethnicities. The study finds no consistent picture with some ethnicities doing better than others on some measures, and similar or worse on others.
- Study 209 looks at the US Jobs Corps and finds that earning gains four years after participating are similar for white and African American participants but that participants that were Hispanic or other ethnicities saw no earnings gains.

Three studies find that those from immigrant groups were less likely to benefit from employment training than non-immigrants.

- Study 127, from Sweden, finds that a vocational training programme increased the likelihood of being in employment for Swedish-born participants but had no significant effect for foreign-born participants.
- Study 227a, from the Netherlands, looks at the Vocational Training for Adults programme and finds that Dutch participants were likely to find employment faster than non-Dutch participants.
- Study 234a, from Norway, finds that immigrants from non-OECD countries participating in active labour market policies found it more difficult to find employment than Norwegian citizens.⁷ Acquiring citizenship increases employment.

Three studies find mixed results.

- Study 219, from Denmark, finds participants from an immigration background generally have the same outcomes (employment and earnings gains) as Danish participants although there are some exceptions.
- Study 235, from Germany, finds that classroom training in East Germany only increases employment rates for Germans without a migration background. In West Germany, classroom training was effective for both Germans without migration background and foreigners or Germans with migration background. The difference between East and West Germany may reflect differences in migration backgrounds. For company-based training, comparisons were only available for West Germany and showed slightly larger effects for Germans without a migration background on most measures.
- Study 223 finds that a Swiss adult education voucher did not have an impact on wages, employment or further education for either Swiss or immigrant participants.

Whilst the evidence review excluded programmes that were targeted on specific groups, there is one study in a toolkit that evaluates a programme that provided targeted support for immigrants. Study 234b looks at a programme that provided intensive counselling and coaching for new immigrants in Sweden and finds that those receiving treatment were more likely to be in employment 22 to 30 months after registering than those that received the standard treatment.

Participation in employment training programmes

Only one study reports findings for participation by minority ethnic groups, and four studies for immigrant groups.

⁷ In undertaking this review, we identified that there are two studies in our publications labelled as Study 234 – one in the employment training evidence review and one in the careers counselling toolkit. In this review, we have labelled these as Studies 234a and 234b respectively.

Looking first at the study that reports findings for participation by minority ethnic groups, this study (227b) evaluates training delivered through Individual Training Accounts in the US. It looks at participants of white, black, Hispanic and other ethnicities, and finds that black individuals were less likely to participate in training, regardless of the delivery model.

Results for immigrant groups were mixed with some finding immigrants were less likely to participate and others finding similar participation rates.

- Two studies (116 and 146) examine German training courses. One compares Germans with foreigners, the other compares Germans without a migration background to foreigners and Germans with a migration background. Both find foreigners are less likely to receive training than Germans.
- Study 235 also looks at Germany and finds that foreigners and Germans with migration background had similar or worse access to training, with a few exceptions (mainly relating to the former East Germany) where they had better access.
- Study 219 finds that immigrants from Western and non-Western countries are as likely as Danish individuals to participate in all categories of compulsory employment training for unemployed except private sector training.

Key messages

The evaluations in our evidence base suggest individuals from immigrant groups may be less likely to participate in employment training. Policymakers may want to consider what additional support they could put in place to increase take-up (see the take-up section later in this paper).

The evaluations in our evidence base tend to suggest those from minority ethnic or immigrant groups are less likely to benefit from employment training. Further work is needed to understand how this could be addressed.

Business advice

Our [evidence review](#) published in 2016 draws on 23 impact evaluations that met our minimum standards. We have also published several toolkits that draw on additional studies. We include business advice programmes which:

- Support individuals to set up their own businesses.
- Support existing businesses to grow.

Support to access to finance was excluded as this was covered by a separate [evidence review](#). Incubator programmes were also excluded from the evidence review but covered in a later [toolkit](#).

Impacts of business advice

Three studies report findings for minority ethnic groups, none for immigrant groups.

All three studies relating to minority ethnic groups are from North America. Findings are mixed.

- Study 236 looks at the impact of a face-to-face counselling programme in the US finding positive effects for survival and mixed for financial performance. There are no significant differences in outcomes for non-white participants (including Hispanic, African-American, native American, Asian, and Pacific islander) compared to white participants.

- Study 282 looks at the impact of an US entrepreneurship training programme and finds that there was no impact on employment, sales, turnover, or ownership up to 60 months after participation. This was also the case for minority ethnic participants.
- Study 180 looks at an entrepreneurship training and incubation programme for undergraduate students in North America and finds that positive impact on short-term survival is smaller for minority ethnic participants, but longer-term impacts were only positive for minority ethnic participants. The study suggests that this is because the programme brings forward benefits for the majority ethnic group but helps overcome barriers for minority ethnic participants.

Participation in business advice programmes

Three studies report findings for minority ethnic groups and two for immigrant groups.

Three studies (238, 284, and 285) look at participation in the Business Link service in England in 2003. All three find that there was no difference in the probability of receiving assistance for minority ethnic groups compared to majority ethnic groups.

The evidence on immigrant groups was mixed.

- Study 239, from Sweden, finds that first- or second-generation immigrants were less likely to participate in an entrepreneurial training programme for upper secondary school students.
- Study 19, from Germany, looking at start-up training finds that those from immigrant groups were more likely to participate in coaching but were much less likely to receive financial assistance. However, the study notes that this may reflect special measures in place for immigrants within the programme.

Key messages

More evidence is needed on whether participation in business advice varies by ethnicity or immigrant status. The small number of evaluations in our evidence base and their mixed findings mean it is not currently possible to draw any conclusions.

The evaluations in our evidence base on business advice suggest outcomes for minority ethnic groups are similar or better than those for majority ethnic groups. Further evaluation could help policymakers understand the extent of this finding, and what lessons could be learned from business advice to improve outcomes in other policy areas.

Increasing take-up

We published a [toolkit](#) on increasing take-up in 2020. It draws on seven evaluations of interventions aiming to increase take-up. All the evidence comes from the US and covers a range of policies targeted at low-income households, including food stamps, tax credits, cash transfers to disabled people, and unemployment insurance.

None of the studies in our evidence base set out to test what works better in encouraging take-up for specific groups, but three studies considered whether the effect of interventions to increase take-up differed across ethnicities. No studies look at how impacts varied across immigrant groups.

The evidence was mixed, with one study finding larger positive effects for a minority ethnic group, a second no difference, and a third smaller positive effects. One reason for this difference may be that the policies are different.

- Study 7 finds that letters were effective in encouraging individuals in the US who were claiming unemployment insurance (UI) to enrol in post-secondary education, with the effects largest for UI recipients who were black.
- Study 4 finds that assistance to apply for student financial aid increased submission of aid applications, college enrolment, and receipt of aid compared to no intervention. It finds positive effects for all participants. Although black participants were more likely to enrol in college than non-black participants, the differences were not statistically significant.
- Study 1 trialled two interventions to increase participation in the Supplemental Nutrition Assistance Program (SNAP) in the US – information, and information and assistance. It finds that both interventions increased applications and enrolments for SNAP, with larger effects for individuals who were white and have English as their first language.

Key messages

More evidence is needed on the effectiveness of interventions to improve take-up of policies for different minority ethnicity or immigrant groups. The mixed findings from our current evidence base mean it is not possible to draw any conclusions.

Annex: Studies included in review

Study no.	Study	What Works Growth source	SMS rating	Country
1	Finkelstein, A. and Notowidigdo, M. (2019). "Take-up and targeting: experimental evidence from SNAP", <i>The Quarterly Journal of Economics</i> , vol. 134(3), pp. 1505-1556.	Increasing take-up toolkit	5	US
4	Bettinger, E. P., Long, B. T., Oreopoulos, P., and Sanbonmatsu, L. (2012). "The role of application assistance and information in college decisions: results from the H&R block FAFSA experiment", <i>The Quarterly Journal of Economics</i> , vol. 127(3), pp. 1205-1242.	Increasing take-up toolkit	5	US
7	Barr, A. and Turner, S. (2018). "A letter and encouragement: Does information increase postsecondary enrolment of UI recipients?", <i>American Economic Journal: Economic Policy</i> , vol. 10(3), pp. 42-68.	Increasing take-up toolkit	3	US
19	Eckl, V., Rothgang, M., and Welter, F. (2009). Public policy and success of business start-ups in Germany. <i>Ruhr Economic Papers</i> No. 143.	Business advice – Public advisors toolkit	3	Germany
73	Trendle, B. (2013). The effect of a mentoring program on indigenous apprenticeship completion in Queensland. 22nd National Vocational Education and Training Research Conference 'No Frills': refereed papers, pp. 53-60.	Business advice – Mentoring toolkit	2	Australia
116	Fitzenberger, B. and Speckesser, S. (2007). "Employment effects of the provision of specific professional skills and techniques in Germany", <i>Empirical Economics</i> , vol. 32, pp. 529-573.	Employment training evidence review	3	Germany
127	Andren, T. and Andren, D. (2006). "Assessing the employment effects of vocational training using a one-factor model", <i>Applied Economics</i> , vol. 38(21), pp. 2469-2486.	Employment training evidence review	4	Sweden
134	Lee, D. (2009). "Training, wages, and sample selection: Estimating sharp bounds on treatment effects", <i>Review of Economic Studies</i> , vol. 76(3), pp. 1071-1102.	Employment training evidence review	4	US

Study no.	Study	What Works Growth source	SMS rating	Country
138	Heinrich, C.J., Mueser, P., Troske, K.R., and International, LLC. (2009). Workforce Investment Act non-experimental net impact evaluation.	Employment training evidence review	3	US
146	Kopf, E. (2013). "Short training for welfare recipients in Germany: which types work?", International Journal of Manpower, vol. 34(5), pp. 486–516.	Employment training evidence review	3	Germany
180	Lyons, E. and Zhang, L. (2017). "The impact of entrepreneurship programs on minorities", American Economic Review, vol. 107(5), pp. 303-307.	Business advice – Accelerators toolkit	3	US
209	Schochet, P.Z., Burghardt, J., and McConnell, S. (2008). "Does Job Corps Work? Impact findings from the National Job Corps Study", American Economic Review, vol. 98(5), pp. 1864-1886.	Employment training evidence review	5	US
219	Blache, G. (2011). Active labour market policies in Denmark: A comparative analysis of post-program effects.	Employment training evidence review	4	Denmark
223	Schwerdt, G., Messer, D., Woessmann, L., and Wolter, S.C. (2012). "The impact of an adult education voucher program: Evidence from a randomized field experiment", Journal of Public Economics, vol. 96(7-8), pp. 569-583.	Employment training evidence review	5	Switzerland
227a	Koning, J., de, Koss, M., and Verkaik, A. (1991). "A quasi-experimental evaluation of the Vocational Training Centre for Adults", Environment and Planning C: Government and Policy, vol. 9(2), pp. 143-153.	Employment training evidence review	3	Netherlands
227b	Perez-Johnson, I., Moore, Q., and Santillano, R. (2011). Improving the effectiveness of Individual Training Accounts: Long-term findings from an experimental evaluation of three service delivery models. Mathematica Policy Research for US Department of Labor.	Employment training – Career counselling toolkit	3	US
234a	Zhang, T. (2003). Identifying treatment effects of active labour market programmes for Norwegian adults. University of Oslo, Department of Economics, Memorandum No. 2003,26.	Employment training evidence review	4	Norway

Study no.	Study	What Works Growth source	SMS rating	Country
234b	Joona, P.A., and Nekby, L. (2012). "Intensive coaching of new immigrants: An evaluation based on random program assignment", <i>Scandinavian Journal of Economics</i> , vol. 114(2), pp. 575–600.	Employment training – Career counselling toolkit	3	Sweden
235	Wolff, J. and Jozwiak, E. (2007). Does short-term training activate means-tested unemployment benefit recipients in Germany? Institute for Employment Research, Nuremberg, Germany.	Employment training evidence review	3	Germany
236	Solomon, G.T., Bryant, A., May, K., and Perry, V. (2013). "Survival of the fittest: Technical assistance, survival and growth of small businesses and implications for public policy", <i>Technovation</i> , vol. 33(8-9), pp. 292-301.	Business advice – Public advisors toolkit	2	US
238	Mole, K.F., Hart, M., Roper, S., and Saal, D.S. (2009). "Assessing the effectiveness of business support services in England. Evidence from a theory-based evaluation", <i>International Small Business Journal</i> , vol. 27(5), pp. 557-582.	Business advice – Tailored support toolkit	3	UK
239	Elert, N., Andersson, F., and Wennberg, K. (2015). The impact of entrepreneurship education in high-school on subsequent entrepreneurial performance. IFN Working Paper No. 1063, Sweden.	Business advice – Training toolkit	3	Sweden
282	Fairlie, R.W., Karlan, D., and Zinman, J. (2012). Behind the GATE experiment: Evidence on effects of and rationales for subsidized entrepreneurship training. National Bureau of Economic Research Working Paper 17804.	Business advice evidence review	5	US
284	Mole, K., Hart, M., Roper, S., and Saal D. (2006). Economic impact study of Business Link local service. Department for Business, Enterprise and Regulatory Reform.	Business advice evidence review	3	UK
285	Mole, K., Roper, S., Hart, M., Storey, D., and Saal, D. (2008). "Differential gains from Business Link support and advice: a treatment effects approach", <i>Environment and Planning C</i> , vol. 26(2), pp. 315-334.	Business advice evidence review	3	UK

Study no.	Study	What Works Growth source	SMS rating	Country
838	Alet, E. and Bonnal, L. (2011). Vocational schooling and educational success: Comparing apprenticeship to full-time vocational high school. Toulouse School of Economics, Working Paper.	Apprenticeship evidence review	3	France
862	Booth, A.L. and Satchell, S.E. (1994). "Apprenticeships and job tenure", Oxford Economic Papers, vol. 46(4), pp. 676-695.	Apprenticeship evidence review	3	UK
939	Picchio, M. and Staffolani, S. (2013). Does apprenticeship improve job opportunities? A regression discontinuity approach. IZA Discussion Paper 7719.	Apprenticeship evidence review	4	Italy
960	Horn, D. (2013). School-based vocational or workplace-based apprenticeship training? Evidence on the school-to-work transition of Hungarian apprentices. European University Institute, Max Weber Programme Working Paper MWP 2013/10.	Apprenticeship evidence review	3	Hungary
964	Neumark, D. and Rothstein, D. (2005). Do school-to-work programs help the "forgotten half"? IZA Discussion Paper 1740.	Apprenticeship evidence review	3	US
979	Fries, J., Gobel, C., and Maier, M.F. (2014). "Do employment subsidies reduce early apprenticeship dropout?", Journal of Vocational Education and Training, vol. 66(4), pp. 433-461	Apprenticeship evidence review	3	Germany
985	BIS (2011). Intermediate and low level vocational qualifications: economic returns, Department of Business, Innovation and Skills Research Paper No. 53.	Apprenticeship evidence review	3	UK
1045	Storen, L. A. (2011). "Key factors behind labour market marginalization of young immigrants: limited access to apprenticeships, 'state dependence' or low qualifications?", YOUNG, vol. 19(2), pp. 129-158.	Apprenticeship evidence review	3	Norway

This work is published by the What Works Centre for Local Economic Growth, which is funded by a grant from the Economic and Social Research Council, the Department for Business and Trade, the Ministry of Housing, Communities and Local Government, and the Department for Transport. The support of the Funders is acknowledged. The views expressed are those of What Works Growth and do not represent the views of the Funders.

Every effort has been made to ensure the accuracy of the report, but no legal responsibility is accepted for any errors omissions or misleading statements.

The report includes reference to research and publications of third parties; What Works Growth is not responsible for, and cannot guarantee the accuracy of, those third party materials or any related material.

August 2024

What Works Centre for Local
Economic Growth

info@whatworksgrowth.org
@whatworksgrowth

www.whatworksgrowth.org

© What Works Centre for Local
Economic Growth 2024



HM Government



Economic
and Social
Research Council