

2019 SNAPSHOT

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OVERVIEW

The Education Endowment Foundation (EEF), an independent charity dedicated to breaking the link between family income and educational achievement, and JPMorgan Chase launched a joint initiative in 2016 to identify effective interventions to help youth ages 16 to 18 achieve a passing rate on the General Certificate of Secondary Education (GCSE) exams in English and mathematics.¹ The launch of the initiative followed closely on the heels of a significant policy shift in England in 2014 that requires all young people who fail to achieve a grade of C or better (now a level 4 or higher) on the English and mathematics GCSE exams by age 16 to continue taking the exams until they pass or reach the age of 18. The goal of this “resits” policy was to enable young people ages 16 to 18 — particularly disadvantaged, out-of-school and unemployed youth — to progress further in their studies to improve their career prospects.

THE GENERAL CERTIFICATE OF SECONDARY EDUCATION (GCSE)

In England, full-time compulsory education spans ages five to 16. Primary education is for students ages five up to 11. Students ages 11 to 14 move to secondary education, during which they study a broad range of academic subjects. Students then move to secondary school graduation, which covers a two-year period when students study for and take the GCSE examinations. The GCSE exams, offered in more than 20 subjects, are designed and graded by independent examination boards. There is no limit on the number of GCSE exams a student may take, but all students must take the English and mathematics exams, which became compulsory in 2014, until they pass or reach the age of 18. However, the number of exams students take and the scores they receive are deciding factors in which path students take at age 16, referred to as post-16 education: Students may choose to leave school and enter into an apprenticeship or continue with school for another two years in what is referred to as further education (vocational or technical) or sixth form college (during which students prepare for and take additional exams for university entrance, referred to as A-levels). At age 18, students may choose to move to tertiary education at a university to earn a three-year degree.²

THE GENERAL CERTIFICATE OF SECONDARY EDUCATION (GCSE) *CONTINUED*

Achieving passing rates on the GCSE exams is associated with significantly higher lifetime productivity.³ Yet, as with other countries, disadvantaged students in England struggle to achieve passing rates, even on assessments of basic skills such as English and mathematics. Disadvantaged students are also more likely to enter further education than sixth form college — an often overlooked sector among education providers in terms of funding and quality.⁴ A report from Impetus analyzing data that included the first year of implementation of the GCSE resit policy found that the majority of students who were eligible for free school meals who failed their GCSE exams in English and mathematics the first time were unlikely to achieve passing rates by age 19, calling for a series of modifications to the policy.⁵

Helping students in the 16-to-18 age range pass the GCSE exams has proven to be challenging. These students are more likely to be disengaged than their peers, having failed to achieve passing rates after studying English and mathematics for 11 years, and research on effective strategies is limited.⁶ Further, the post-16 providers charged with helping students obtain passing rates found themselves scrambling to offer courses and find high-quality instructors to match the sudden volume of students requiring support, with funding levels from the government often failing to match the actual costs of delivering remediation.⁷ Yet, an analysis by FE Week⁸ released in May 2019 found promising results after a few more years of implementing the GCSE resit policy: The proportion and number of students achieving passing rates on both the English and mathematics GCSE exams after age 16 has more than doubled, from 9 percent (21,721) in 2014 to 21 percent (46,886) in 2018.⁹

The GCSE compulsory policy has not been without controversy on several fronts, most notably that the new policy tied per-pupil funding to passing rates on the English and math exams, creating a strain on schools serving the post-16 population as GCSE resits surged by 156 percent in the first year of implementation.¹⁰ Since 2014, the government has continued to put in place a progression of policies related to the GCSE, including a requirement in 2015 for students to enroll in remedial coursework until they pass both exams and a phased-in change in scores from letter grades to number levels aligned with the roll out of a more rigorous curriculum.¹¹ A £2 million investment from the JPMorgan Chase New Skills for Youth initiative and a £3 million commitment from EEF helped launch an initiative to identify, implement and evaluate the most promising approaches to helping students who fail the GCSE exams in English or mathematics to achieve passing rates.

“The problem is lots of kids who failed the GCSE exam once don’t enjoy school. Before the resits policy, they had an opportunity to do something they wanted to do in college, whether it was carpentry, or learning to be a car mechanic, or learning about how a restaurant works. Now there is no escaping the maths or the English. So there is some tension in the system among people that think just doing the same thing again is probably not the right way to go for these kids.”

—Teacher

JPMORGAN CHASE NEW SKILLS FOR YOUTH INITIATIVE

Launched in 2016, New Skills for Youth¹² is a \$75 million, five-year global initiative aimed at transforming how cities and states ensure that young people are career ready. The overarching goals of the initiative are to:

- Dramatically increase the number of students who successfully complete career pathways that begin in secondary school and culminate in postsecondary degrees or credentials tied to high-wage, high-demand jobs; and
- Catalyze transformational approaches to the design and delivery of programs and policies to increase students' career readiness and disseminate lessons learned around the world.

This snapshot is part of a series documenting the progress of the local investments from across the globe that aim to identify and implement the most promising ideas in career education, with a special focus on communities with the greatest needs.

THE IMPROVING OUTCOMES FOR DISADVANTAGED 16- TO 18-YEAR-OLD STUDENTS INITIATIVE

EEF designed an initiative to identify promising approaches and programs to improve outcomes and employment prospects for 16- to 18-year-olds who are taking remedial coursework in English or mathematics to receive a passing rate on the GCSE exams. Core components of this initiative are:

- Convening an advisory board of further education providers and sixth form colleges, as well as sector experts, to inform the initiative and provide perspectives of the post-16 learning and work environments;
- Launching a call for proposals to scale and evaluate interventions with promising outcomes;
- Reviewing and ranking applications with a final decision made by a panel of independent evaluators following meetings with applicants;

- Working with the chosen providers to scale up the promising programs to optimize impact; and
- Disseminating findings to ensure that learning is put to use on the front line by colleges, centers and other providers.

In 2016, JPMorgan Chase and EEF commissioned a literature review conducted by AlphaPlus to identify effective interventions and approaches, as well as gaps in the research, including international research.¹³ The literature review revealed enormous gaps in research about how to help students achieve passing scores, beyond evidence connected to the use of technology to motivate students to improve attainment in math and positive effects of peer tutoring on English scores.¹⁴ Results from the literature review served as the foundation for the call for proposals.

EEF identified three priority areas (Greater London, the South West and the North of England) and requested applications whose programs addressed one of the following categories:

- **Employer engagement:** projects testing approaches linked to practical application of math and English in real-world contexts as well as to clearer career pathways;
- **Teaching:** projects testing new pedagogical approaches and investigating how to maximize the impact of the interaction between teacher/tutor and student;
- **Targeted support:** projects testing individualized, focused and often intensive approaches that try to improve outcomes for students who have yet to reach their potential; and
- **Community and parent engagement:** projects testing engagement with peers or parents to support learning.

EEF posted four calls for funding for the initiative beginning in 2016, and any type of provider was eligible to apply. There were 70 applicants for the first round of funding, yet few of the proposals were scalable or evidence based — meaning they did not provide sufficient evidence that the interventions proposed would yield promising outcomes, which was a requirement for consideration. Only three applicants were selected for funding. EEF adapted the call for proposals to allow more time to help applicants better understand the requirements for awarding funds for interventions. In total, five interventions were funded, all of which included a detailed methodology for evaluating each of the programs.

The EEF application process has multiple stages. First, the EEF program team assesses which projects meet the proposal requirements. From that list of eligible projects, the EEF program team further evaluates and prioritizes a short list of proposals to recommend for funding. Next, the EEF Grants Committee, consisting of EEF trustees, reviews and provides initial approval for projects recommended by the EEF program team. EEF then brokers introductory meetings between the applicants (intervention leads) and prospective evaluators.

Evaluators are charged with designing a methodology to evaluate the programs. EEF appoints independent evaluators for each project and partners with the intervention lead and the independent evaluator to design a detailed project plan, methodology and budget. Finally, the EEF Grants Committee then gives formal approval to the short list of projects, with input from JPMorgan Chase. Once awarded, intervention leads move to recruit sixth form colleges or further education colleges to participate in projects and train staff. A stipulation of funding is that each further education college or sixth form college is permitted to participate only in one project/intervention.

The first four projects launched in 2018, with the final project launching in early 2019. The projects are in various stages of intervention and evaluation. Findings were published on the Embedding Contextualisation in Maths and English pilot intervention in July 2019.¹⁵

Interventions and Evaluations Funded by the Initiative

Project	Intervention	Scale	Evaluation Methodology	Intervention Lead	Evaluator
Texting Students and Study Supporters	Send 35 text messages over a year to students and “study supporters” on course content; academic resources, such as practice websites; upcoming deadlines; details of extra tutorial sessions; and exam dates.	31 colleges; nearly 4,000 learners	Randomly allocate students within colleges to one of four conditions: (1) Student receives text messages; (2) study supporter receives text messages; (3) both student and supporter receive text messages; and (4) control group. The primary outcome will be the percentage of students that pass their GCSE mathematics or English exams after one year. Secondary outcomes will include attendance, percentage of students taking exams and student attitudes toward learning.	Behavioural Insights Team	NatCen
Embedding Contextualisation in Maths and English	Develop resources and provide training and support to enable providers to embed enhanced contextualization approaches with post-16 learners.	Six settings; at least 2,000 learners	Assess whether the pilot is feasible, shows evidence of promise and is ready for trial. One hundred providers were recruited in spring 2018 to an efficacy randomized controlled trial starting in summer 2018. Outcomes will be collected when the learners sit their GCSE or other exams in 2019.	Association of Employment and Learning Providers	National Institute of Economic and Social Research and London School of Economics
Maths for Life	Teach concepts through problems designed to re-engage learners and cement their understanding of fundamental areas.	100 settings; 4,600 learners	Conduct a formative pilot in the first year. The full trial involves approximately 100 providers recruited and randomized into one of two groups: one that selects two teachers to participate in the project and one that is the control group. Settings are a mix of further education colleges and sixth form colleges. Recruitment took place in spring/summer 2018, with delivery beginning in September 2018. Outcomes will be collected when the learners sit their GCSE or other exams in 2019.	University of Nottingham	Behavioural Insights Team
Assess for Success	Use an assessment to gauge post-16 English skills based on short, handwritten exercises, complemented by ongoing bite-size assessments focusing on particular skill areas.	Six settings; at least 1,200 learners	Collect qualitative and quantitative data to assess whether the model is feasible (e.g., whether other colleges can use the approaches), has evidence of promise (e.g., appears to improve teaching and learning behaviors), and is ready for scale (e.g., there is a clear model that could be adopted across a larger number of settings).	The Manchester College	Behavioural Insights Team

Interventions and Evaluations Funded by the Initiative

Project	Intervention	Scale	Evaluation Methodology	Intervention Lead	Evaluator
The 5Rs Approach to GCSE Maths Resits	Use an intervention that consists of both a set lesson structure and lesson content and three short initial diagnostic tests to determine weaknesses in nine underpinning mathematical skills.	80 settings; 5,000 learners	Conduct a two-armed randomized control trial, at efficacy stage, targeted at students re-taking GCSE math exams at sixth form colleges or further education colleges, including private providers meeting certain criteria, with 40 settings in the intervention and 40 in the control group. The primary outcome is GCSE math attainment, using standardized GCSE raw scores as well as GCSE passing rates. It will also measure impact on student attitudes toward math as a secondary outcome.	Association of Colleges	University of York

Source: Education Endowment Foundation¹⁶

EEF is in the third year of an implementation timeline for the activities supported by the New Skills for Youth initiative and has made significant progress since the launch in 2016. Two themes stand out among EEF's efforts: the timely response to identifying and scaling effective strategies to support

post-16 providers and disadvantaged students affected by a significant shift in national policy and the focused attention the work is bringing to an overlooked population of disadvantaged youth.

FINDINGS FROM THE EMBEDDING CONTEXTUALISATION IN MATHS AND ENGLISH PILOT

The pilot intervention trained math and English teachers to use examples from real life and vocational contexts to emphasize the relevance of the context to careers. The intervention was piloted at six further education providers during the 2017-18 academic year and consisted of four face-to-face training days, in addition to support through remote sessions and an online toolkit.

The evaluation addressed three questions:

- 1. Is there evidence to support the theory of change?** The findings were mixed. Evaluators found some evidence that the intervention increased awareness of contextualisation among teachers, but the increase in the use of contextualised learning following the training was limited.
- 2. Was the approach feasible?** The findings were mixed. Evaluators found that all of the providers completed the training days, yet the number and proportion of teachers participating from each of the six providers varied. Providers supported the idea of contextualised learning to improve student motivation. However, providers also identified barriers, including student ability to apply contextualised knowledge in the non-contextualised GCSE exam and student lack of interest in the vocational area.
- 3. Is the approach ready to be evaluated in a trial?** The findings were that the approach is not ready to be evaluated in a trial. Evaluators found that changes need to be made, including providing additional resources, making changes to the structure of sessions, and providing more clarity about the expectations of participating staff.

Source: Education Endowment Foundation¹⁶

Acting Swiftly to Identify and Scale Effective Strategies to Support Post-16 Providers and Disengaged Students Affected by a Significant Shift in National Policy

EEF launched a timely response to identify, scale and evaluate strategies to support the large number of students now faced with GCSE resits. When the compulsory GCSE resits policy for English and mathematics took effect, little was known about effective strategies for helping students achieve passing rates the second time around. The literature review commissioned by JPMorgan Chase and EEF revealed little in the way of effective interventions to scale, at home or abroad, and not many projects in the field were ready to scale. The post-16 sector was not prepared for the sudden influx of students in need of remediation, nor was it used to being given much attention by stakeholders or funding support to pilot and scale projects. There was not a large supply of promising ideas to scale and evaluate among the applicants in the first call for proposals either.

EEF made significant shifts throughout the span of the initiative to adapt to the landscape of research, practice and evaluation. EEF invested significant time in the call for proposal phase, providing technical assistance to improve the quality of applications being submitted in the subsequent rounds. After four rounds and the submission of more than 400 applications, only five interventions qualified for

scaling and evaluation, even though EEF estimated funding could cover up to seven projects. EEF also extended the timeline and even adapted evaluations to address the challenge of obtaining high-quality, robust data in a timely fashion (an often cited frustration among researchers is the lengthy process the government requires to access the National Pupil Database, which houses student data through age 16, and the Individual Learner Record, which contains student data in the post-16 years).

Bringing Attention to an Overlooked Population of Disadvantaged Youth

“The further education sector in the UK is quite underfunded. There are a lot of basic problems, even down to having enough chairs in the classrooms. Any project like this is ambitious because you feel like there are more basic things that should be taken care of, more basic things that teachers need to be addressing. There are also challenges with time and staff commitment. Teachers have very busy schedules, so committing to something like this is challenging; they have a lot of ground to cover in the lessons.”

—Evaluator

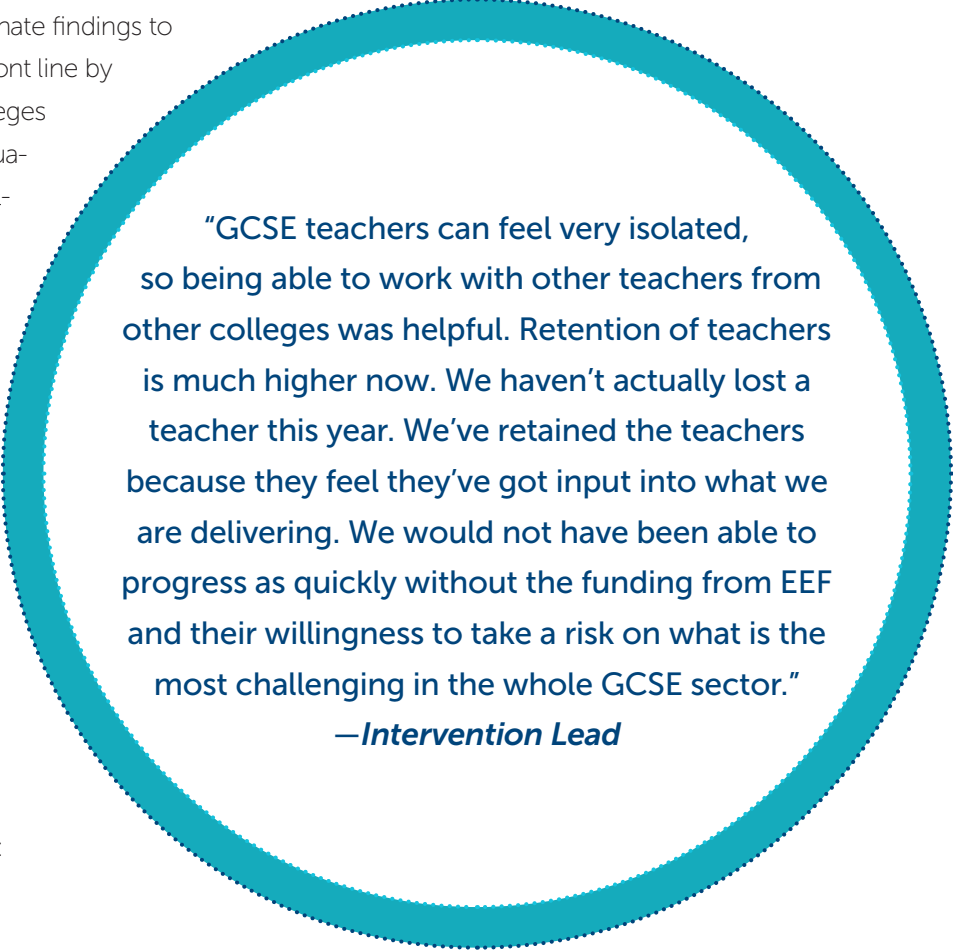
Prior to the launch of the EEF initiative, there was little appetite for investing in interventions or research in the post-16 sector in England. Fast forward, and the scale that EEF is operating at with just five interventions is far reaching: In less than three years, the interventions are being implemented in more than 200 post-16 settings (exceeding the goal of 140 settings), reaching nearly 17,000 students — about 7.5 percent of the 225,000

students estimated to be in need of remediation.¹⁷ As a result of the initiative, post-16 colleges are talking about strategies and evidence in ways they were not even five years ago. And stakeholders are coming to EEF asking to do work with disadvantaged, older learners. EEF is bringing attention to the issue, bringing resources to the sector and forming new partnerships, all while producing high-quality work to scale interventions and conduct evaluations.

LOOKING FORWARD

One final goal of the initiative is to disseminate findings to ensure that learning is put to use on the front line by further education colleges, sixth form colleges and other providers. Results from the evaluation of the pilot for Embedding Contextualisation in Maths and English were published in July 2019. EEF will complete the implementation phase for the 5Rs and move forward with evaluations and review and publication of results for the remaining interventions on the following timeline:

- Texting Students and Study Supporters: summer/autumn 2019 (delayed due to issues accessing GCSE data);
- Maths for Life: summer 2020;
- Assess for Success: winter 2020; and
- The 5Rs Approach to GCSE Maths Resits: spring 2021.



“GCSE teachers can feel very isolated, so being able to work with other teachers from other colleges was helpful. Retention of teachers is much higher now. We haven’t actually lost a teacher this year. We’ve retained the teachers because they feel they’ve got input into what we are delivering. We would not have been able to progress as quickly without the funding from EEF and their willingness to take a risk on what is the most challenging in the whole GCSE sector.”

— *Intervention Lead*

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and challenges to date. Supporting documentation was provided by staff and partners, when available.

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ENDNOTES

- ¹ For more information about EEF, see <https://educationendowmentfoundation.org.uk>.
- ² *Ibid.* The information about the education system in England in this paragraph was provided during an interview with Impetus.
- ³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387160/RR398A_-_Economic_Value_of_Key_Qualifications.pdf
- ⁴ <https://www.gov.uk/government/publications/social-mobility-in-great-britain-state-of-the-nation-2018-to-2019>
- ⁵ https://impetus.org.uk/assets/publications/Report/2017-03-14_Impetus-PEF-Confronting-Crisis.pdf
- ⁶ *Ibid.*
- ⁷ *Ibid.*
- ⁸ For more information about FE Week, see <https://feweek.co.uk>.
- ⁹ <https://feweek.co.uk/2019/05/03/english-and-maths-gcse-resit-policy-helping-tens-of-thousands/>
- ¹⁰ https://impetus.org.uk/assets/publications/Report/2017-03-14_Impetus-PEF-Confronting-Crisis.pdf
- ¹¹ <https://www.bbc.com/news/education-44125336>; <https://educationendowmentfoundation.org.uk/school-themes/post-16/>
- ¹² For more information about New Skills for Youth, see <https://www.jpmorganchase.com/corporate/news/stories/newskillsforyouth.htm>.
- ¹³ For more information about AlphaPlus, see <https://www.alphaplus.co.uk>.
- ¹⁴ <https://www.jpmorganchase.com/corporate/news/pr/jpm-education-endowment-foundation-join-forces.htm>
- ¹⁵ https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation_Reports/AELP.pdf
- ¹⁶ *Ibid.*
- ¹⁷ EEF; <https://feweek.co.uk/2019/05/03/english-and-maths-gcse-resit-policy-helping-tens-of-thousands/>