

Predicting later classroom practice in those new to teaching

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This report provides advice to policymakers and school leaders on the use of assessment centres^{2 3} as part of a teacher selection approach. It discusses the relationship between assessment centre scores prior to joining teaching, and teacher effectiveness over a six-year period. It draws from various stages of a wider research project,⁴ the overall findings of which may be summarised as follows:

Assessment centre approaches may be useful in some forms of teacher selection. However, policymakers and education leaders need to be mindful of what types of activity they use and how they make use of these scores over time.

Classroom simulation in the form of a teaching activity was the best predictor of future classroom practice. Competence-based interviewing was far less successful. However, as the teachers became experienced (on their final year on the programme), beliefs about the power of teaching to drive social change became associated with two particular areas of classroom effectiveness.

Assessment centre scores are more likely to predict classroom effectiveness earlier in a teacher's career. However, this research only looked at teachers who were new to the profession when they attended the assessment centre, so firm conclusions are harder to reach regarding the use of such an approach to recruit serving experienced teachers.

Despite this, **where lesson observation (and classroom simulation) is included in selection processes, using qualified teachers as observers can provide reliable scores with predictive ability.**

Research purpose and background

As we have discussed elsewhere, teacher professional development is complex.⁵ Despite evidence from randomised controlled trials about critical factors influencing this process,⁶ and evidence about teacher professional growth,⁷ there is little research about how abilities prior⁸ to initial teacher training (ITT) influence early classroom practice. Systematic reviews⁹ have shown that, despite increased use of assessment centres in education,¹⁰ no studies of their long-term effectiveness exist. Finding ways to select candidates likely to find the challenges of teaching more aligned to their existing skills could have an important impact.

Delivered by Education Development Trust (EDT), the Department for Education Future Teaching Scholars Programme (2015–2025) has involved a unique approach to teacher recruitment, training and development. Outstanding mathematics and physics students were recruited to the programme while taking their A levels in England (the equivalent of the last two years of high school in the United States and many other countries).

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² The term 'assessment centre' describes a series of exercises used by employers to evaluate skills they cannot assess using traditional interviews. They include behavioural activities and evaluation of interactions between candidates.

³ Anderson et al. (2008)

⁴ Churches and Lawrance (2020); Education Development Trust (2021a; b); Churches and Penfold (2021); Churches, Wastie, Jones and Penfold (2024)

⁵ Churches and Penfold (2021); Churches, Wastie, Jones and Penfold (2023)

⁶ Sims et al. (2021)

⁷ Clarke and Hollingsworth (2002)

⁸ During the programme four cohorts of students were recruited. The scores from the cohorts were amalgamated in this study.

⁹ Churches and Lawrance (2020); Australian Education Index (1977 – current), British Education Index (1975 – current), ERIC (1966 – current), Google Scholar, Web of Science. Search terms: education; assessment centre; recruitment, selection, teacher training.

¹⁰ See, for example, Fast Track Teaching assessment centre (2001 to 2009); Churches, Hutchinson and Jones (2009); Jones (2008); Teach First assessment centre (2002 to present); McConney, Price and Woods-McConney (2012).



A competitive selection approach included the use of an assessment centre,¹¹ designed in collaboration with psychologists and education experts. Assessors evaluated 12 competencies across four activities:

- 01 Competence-based interview** carried out one-to-one with a candidate
- 02 Classroom simulation** in which candidates taught a short lesson to two serving teachers from an Ofsted-rated outstanding Teaching School¹²
- 03 Reflective discussion** about the teaching they had just completed
- 04 Group problem solving** in which observers score interactions with other candidates.

In the classroom simulation, two serving teacher observers roleplayed learners interrupting or finding it hard to understand. This aimed to measure innate 'mental set' prior to teacher training¹³ – specifically, a candidate's 'with-it-ness' (ability to monitor or quickly identify potential problems and act) and 'emotional objectivity' (staying calm and not getting angry or frustrated). Together, these are known to have a large effect on reducing classroom management issues.¹⁴ ¹⁵ If the assessment centre was effective, it was hypothesised that this activity would best predict later classroom performance.

After meeting the expected standards at the assessment centre, and achieving sufficiently high A level grades, students were admitted to the programme. This then provided three years of support and learning for teaching, in parallel with the candidates completing a three- or four-year bachelor's degree at a university in England.

The programme included experiences in the classroom, online learning, and individual support from the Teaching Schools involved. It also helped candidates to identify suitable schools in which they could obtain Qualified Teacher Status (QTS) as employees. There was a mix of School-Centred Initial Teacher (SCITT) training with a smaller proportion of SCITT training embedded within a Post-Graduate Certificate of Education. The network of SCITT training centres commissioned to do this by EDT all had good or outstanding Ofsted ratings for their initial teacher training programmes.

Such a unique approach to initial teacher training raised significant research questions. Bearing in mind how costly assessment centres are to run effectively, one question stood out:



Can assessment centre scores be considered a viable way to select candidates for initial teacher training and beyond?



¹¹ A video explaining the assessment centre process to candidates can be found here: <https://www.youtube.com/watch?v=2519IoSxLB4>.

¹² The Teaching School programme was established in England between 2010 and 2012 and aimed to mirror the use of Teaching Hospitals in medicine and healthcare.

¹³ Marzano, Marzano and Pickering (2003)

¹⁴ $d = -1.29$.

¹⁵ A film of the classroom simulation created to help train assessors using actors is available here: www.youtube.com/watch?v=9HQMZwrZae4.

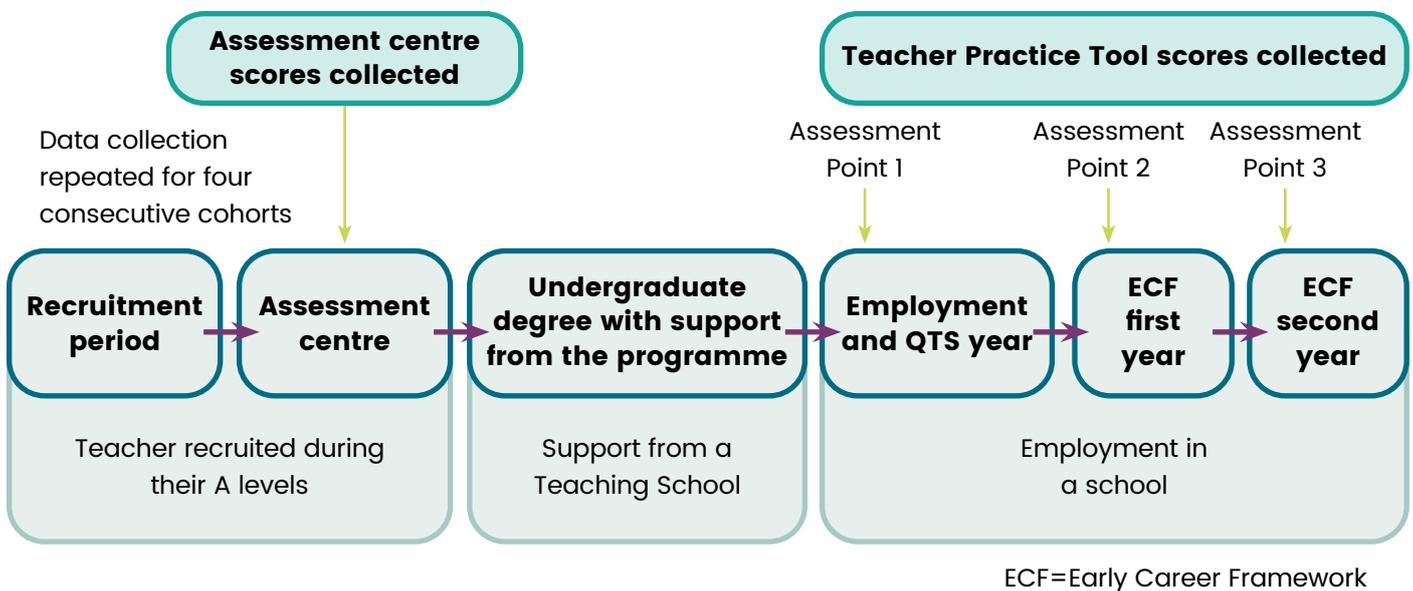


Our approach

The research design is set out in Figure 1. Individual candidate assessment centre scores were stored for three years. These scores were then compared to teachers' classroom performance during their first term as teachers (year four of the programme [Assessment Point 1], during which the participants completed the requirements for Qualified Teacher Status); and again in the fifth [Assessment Point 2] and sixth years of the programme [Assessment Point 3]. Lesson observations using the Teacher Practice Tool all took place in the first academic term of the year.

Participants' sixth year on the programme was their third year employed as a teacher, and marked the end of their completion of the Early Career Framework (the English education system equivalent of a 'probationary period'). Lessons were observed by highly experienced teacher trainers from outstanding Teaching Schools to ensure consistency.¹⁶ Teacher observers also undertook training and had oversight from an experienced assessment centre manager.

Figure 1: Data collection



The observers used EDT's Teacher Practice Tool (TPT).¹⁷ The analyses looked for associations between assessment centre scores and Teacher Practice Tool scores.¹⁸ Full details about the assessment centre competencies and the areas that are assessed by the Teacher Practice Tool can be found in earlier publications.¹⁹



¹⁶ Using Cronbach's Alpha, analysis of assessment centre scores and scores from the Teacher Practice Tool have both shown good or better levels of internal reliability (see Churches and Lawrance (2020)).

¹⁷ For a discussion of this lesson observation tool, see Churches and Penfold (2021); Churches, Wastie, Jones and Penfold (2023).

¹⁸ Spearman's rank order correlation coefficient was used.

¹⁹ Limitations of the study are discussed in Churches, Wastie, Jones and Penfold (2023).



Findings

Predicting classroom practice three years before joining initial teacher training

This analysis of Assessment Point 1 data²⁰ and its comparison to assessment centre scores also appears in our earlier paper.²¹ It is repeated here to support the interpretation of the findings from the most recent analyses.²² Only significant correlations are reported.²³

Classroom simulation was the best predictor of later classroom practice for all the competences assessed. Ability to explain subject-specific concepts in the simulation predicted later teaching performance in relation to high expectations, giving feedback to learners, the maximising of learning time, variety of subject-specific learning tasks, and structuring and designing learning.²⁴

Demonstrating passion for mathematics or physics in the simulation predicted four out of five of the same competences. The exception was giving feedback.²⁵ Perseverance in the face of challenges was associated with providing challenge in the classroom and continuous assessment.²⁶ Initiative and problem-solving ability and the ability to balance competing objectives both predicted high expectations.²⁷ Empathy and cultural awareness predicted recognising special educational needs and disabilities (SEND) and providing relevant support.²⁸

At an early stage in the teachers' careers, the competence-based interview was less successful at predicting later teaching quality. Although the ability to explain a mathematics or physics concept again predicted high expectations,²⁹ no other competences were predictors of later effective classroom practice.

Initiative and problem solving in the group activity predicted asking questions and engagement.³⁰ The ability to reflect after the classroom simulation did not predict any areas of practice.

Predicting classroom practice in later years of teaching

Before going on to discuss the findings from Assessment Points 2 and 3 (see Figure 1), it is worth discussing the methodological and interpretational challenges that were faced in using this data.

Inevitably, as in the national teacher data,³¹ teacher retention declines over time, notably in the first few years of teaching. The reduced sample sizes in the later Assessment Points in this study³² inevitably leads to a reduction in the number of significant correlations, and therefore limits the conclusions that can be drawn from the findings.

Further, the strength of correlations became weaker overall as the cohort progressed into their second year after qualifying as teachers. This is perhaps to be expected, as teachers became more similar in their practice, while those who may have found this was not the career for them began to leave. Indeed, looking at the scores for each Teacher Practice Tool area, it was clear that as the teachers' practice improved, it also became similar. Yet despite these challenges, statistically significant relationships³³ still existed between some assessment centre scores and classroom practice, even though the teachers were now six years on from attending the assessment centre.

²⁰ N = 146.

²¹ Churches, Wastie, Jones and Penfold (2023)

²² Statistical tables, including effect sizes and p-values can be found in all previous papers.

²³ p < .05.

²⁴ rs = 0.567; 0.340; 0.265; 0.200; 0.196, respectively.

²⁵ rs = 0.342; 0.322; 0.276; 0.205, respectively.

²⁶ rs = 0.355; 0.222.

²⁷ rs = 0.208; 0.225.

²⁸ rs = 0.180.

²⁹ rs = 0.403.

³⁰ rs = 0.227.

³¹ Office for National Statistics (2024). School Workforce in England, Reporting Year 2023. <https://explore-education-statistics.service.gov.uk/find-statistics/school-workforce-in-england> (accessed 28th July 2024); Long and Danechi (2022).

³² N = 84 at Assessment Point 3 with the same participants used at Assessment 2 to provide a direct comparison.

³³ p < .05.





One year after achieving QTS, the fifth year on the programme and second year employed as a teacher, all significant associations were related to classroom simulation scores. Competence-based interview, reflection activity and group problem-solving scores did not predict later classroom practice at this career point.

Teachers' ability to explain mathematics or physics concepts predicted classroom effectiveness in relation to treating students fairly, providing relevant support to pupils with SEND, and clarity of explanations and instructions.³⁴ This area of assessment also predicted effectiveness in asking questions that engage students and encourage thinking, and responding to answers to give students feedback and encourage discussion.³⁵

In the teachers' third year of teaching, two years after their QTS year, differences between the participants had smoothed out considerably, and this reduced variation in scores resulted in fewer significant correlations.

At this point, one area which had been assessed at the assessment centre, but had not previously been significant, now stood out against the background of less emphatic variance. **Belief in the power of teaching to drive social change** (only assessed during the competence-based interview) now appeared to predict two areas of classroom practice. This belief was now associated with teachers' effectiveness in responding to student answers, providing feedback, and encouraging discussion.³⁶ This belief was also associated with the ability to provide a variety of learning tasks that enable students to see, understand and master the content they are learning.³⁷ No other relationships were significant at this Assessment Point.



Overall conclusions

It was remarkable that assessment centre scores prior to attending university and three years before an initial teacher training year (and completion of QTS) were able to predict classroom effectiveness once the teachers were employed in a school. For this reason, we feel confident in pointing to the potential of some assessment centre activities to assist in teacher recruitment, with the caveats below.

Assessment centre approaches may be useful in some forms of teacher selection. However, policymakers and education leaders need to be mindful of the types of activities they use and how they make use of these scores over time. The effectiveness of these approaches can vary significantly based on the specific activities included in the assessment. For example, while some activities might accurately predict a teacher's future performance, others may not provide the same level of insight. Therefore, it is essential to select and implement assessment activities carefully, to ensure they serve their intended purpose effectively and contribute to the overall goal of improving teacher quality.

³⁴ $r_s = 0.223; 0.292; 0.216.$

³⁵ $r_s = 0.313; 0.268; 0.242.$

³⁶ $r_s = 0.216.$

³⁷ $r_s = 0.244.$



Classroom simulation, in the form of a teaching activity, was found to be the best predictor of future classroom practice. This method allowed evaluators to observe how candidates interacted with students, managed classroom dynamics, and delivered instructional content. In contrast, competence-based interviewing was far less successful in predicting future effectiveness. However, as teachers gained experience and progressed through the programme, their beliefs about the power of teaching to drive social change (assessed at interview) began to be associated with two areas of classroom effectiveness. This shift suggests that while initial assessment scores are valuable, ongoing professional development and the evolving beliefs of teachers also play a crucial role in their long-term effectiveness in the classroom.

Assessment centre scores were more likely to predict classroom effectiveness earlier in a teacher's career. This finding highlights the potential of such scores to play a useful role as part of a selection process for new teachers. However, it is important to note that this research focused exclusively on teachers who were new to the profession. As a result, it is hard to draw firm conclusions regarding the use of assessment centre approaches with experienced teachers who are already serving in the profession.

Despite these limitations, the inclusion of lesson observation and classroom simulation in selection processes aimed at recruiting experienced teachers may still be beneficial. We found that serving teachers can assess the potential of candidates within an assessment centre with remarkable reliability.

Recommendations for policymakers and school leaders

Assessment centres are costly to set up and run, particularly when they include a full range of activities based around a detailed competency framework. Equal value for money might be achieved by focusing on teaching simulation and role-play activities, rather than extending the assessment into competence-based interviews and group problem-solving activities. Caution should be exercised in assuming that the same relationship exists between assessment centre scores and effectiveness when used with experienced teachers.

In English state schools, it is the schools that appoint candidates to posts and (in many cases) to initial teacher training programmes.

Our research supports the value of schools asking candidates to demonstrate their ability to explain subject content and demonstrate their skill in dealing with learners (or observers roleplaying learners) while doing this.

Activities such as roleplaying and observation can be conducted by teachers in a valid and reliable way without always needing to use a real class of students.

To support international or remote teacher recruitment, the classroom simulation could, with suitable software and planning, potentially be replicated in an online video conference environment.

Irrespective of whether a teaching activity or simulation forms part of the final selection approach, scoring such an activity could be useful in creating a development plan for a beginning teacher, pointing to areas of potential difficulty prior to joining initial teacher training.



References

- Anderson, N., Salgado, J., Schinkel, S., & Cunningham-Snell, N. (2008). Personnel selection. In N. Chmiel (Ed.), *Introduction to work and organisational psychology* (pp. 257–280). Oxford, UK: Blackwell.
- Churches, R., Hutchinson, G., & Jones, J. (2009). Fast Track teaching: Beginning the experiment in accelerated leadership development. *School Leadership and Management, 29*(3), 277–293.
- Churches, R., & Lawrance, J. (2020). *How to assess the potential to teach: New evidence from a STEM teacher assessment centre model in England*. Reading, UK: Education Development Trust.
- Churches, R., & Penfold, C. (2021). Assessing the potential to teach: Lessons from an education assessment centre and later classroom practice. *College of Teaching Journal, Impact, 13*, 72–75.
- Churches, R., Wastie, K., Jones, M., & Penfold, C. (2023). *Assessing the potential to teach*. Reading, UK: Education Development Trust.
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education, 18*, 947–967.
- Education Development Trust. (2016). *Future Teaching Scholars selection process*. Department for Education. <https://www.youtube.com/watch?v=25I9IoSxLB4>
- Education Development Trust. (2021a). *Welcome to Future Teaching Scholars*. Department for Education. www.futureteachingscholars.com
- Education Development Trust. (2021b). *How to assess the potential to teach, year 2 data update*. Reading, UK: Education Development Trust.
- Long, R., & Danechi, S. (2022). *Teacher recruitment and retention in England*. Briefing Paper Number 07222. House of Commons Library. <https://researchbriefings.files.parliament.uk/documents/CBP-7222/CBP-7222.pdf>
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. Virginia, USA: Association for Supervision and Curriculum Development.
- McConney, A., Price, A., & Woods-McConney, A. (2012). *Fast track teacher education: A review of the research literature on Teach For All schemes*. Perth, Australia: Murdoch University, Centre for Learning, Change and Development.
- Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Goodrich, J., Van Herwegen, J., & Anders, J. (2021). *Effective teacher professional development: New theory and a meta-analytic test*. Annenberg Brown University: EdWorkingPaper No. 22-507.



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