

The Learning Skills Curriculum: raising the bar, closing the gap at GCSE written by Dr James Mannion, Director, Rethinking Education and Bespoke Programmes Leader, UCL Institute of Education, UK, Kate McAllister, Director, Rethinking Education and Co-founder, Crisis Classroom, UK, Professor Neil Mercer, Emeritus Professor of Education and Director, Oracy Cambridge, University of Cambridge, UK

The Learning Skills curriculum: Raising the bar, closing the gap at GCSE

In recent years, there has been much debate about whether schools should aim to teach students generic learning skills, or whether they should focus instead on teaching subject-specific knowledge. Indeed, some have argued that ‘teaching generic skills does not work’ (Tricot and Sweller, 2014, p. 265) since, in order to think critically or creatively, the most important thing is to be knowledgeable within that domain. But what if research showed that as well as teaching children *what* to learn, we can also teach them *how* to learn more effectively? In this article, we present the findings of the Learning Skills curriculum, an intervention that was developed and implemented at a secondary comprehensive school in southern England between 2010 and 2014, and evaluated from 2009 to 2017.

The study took place at a UK secondary comprehensive school (referred to here as ‘Sea View’) where the proportion of students eligible for free school meals was described by Ofsted as ‘well above average’. In summer 2010, following a competitive selection process, a team of teachers was appointed and tasked with designing and teaching a Year 7 Learning Skills curriculum for five lessons a week, in mixed ability groups. Over the next three years, the taught course expanded into Years 8 and 9; in total, the first Learning Skills cohort took part in over 400 lessons throughout Key Stage 3. A number of whole-school strategies were also put in place to promote the transfer of knowledge, skills, habits and attitudes that students developed through the taught course into subject areas throughout the school. An interim (three-year) analysis revealed significant gains in subject learning among the Learning Skills cohort, compared with a matched control cohort, with accelerated gains among students from disadvantaged backgrounds (Mannion and Mercer, 2016). In this article, we publish for the first time the five-year GCSE outcomes of the study, which again reveal significant gains in subject learning and a closing of the Pupil Premium (PP) gap by 66.9% from one cohort to the next.

A (very) brief history of learning to learn

Learning to learn is a field of educational theory and practice that aims to help students to become more effective learners by focusing explicitly on the processes of learning (the *how* as well as the *what*) and by encouraging students to take ownership of their own learning through activities such as goal-setting, self-monitoring and structured reflection. The research literature on learning to learn has

grown substantially throughout the last 40 years, building on work into metacognition and self-regulation in the 1970s (e.g. Flavell, 1976, 1979; Brown, 1978). That literature reveals an apparent paradox. On the one hand, metacognition and self-regulation are described as being highly effective strategies, providing ‘high impact for very low cost, based on extensive evidence’ (Education Endowment Foundation, 2017). On the other hand, evaluations of large-scale learning to learn initiatives in the UK have been inconclusive: while researchers have identified specific examples of effective practice, the net finding has been one of no clear impact (either positive or negative) on academic attainment (e.g. see Higgins et al., 2007; Aynsley et al., 2012).

What is Learning Skills, and how is it different to what has gone before?

The Learning Skills curriculum builds upon previous research, but also extends it by reconceptualising learning to learn as a complex, whole-school intervention (CWSI). Complex interventions, defined simply as ‘interventions that contain several interacting components’ (Medical Research Council, 2006, p. 6), feature widely in medical research and other fields such as psychotherapy and social work. Put simply, the rationale is that the marginal gains arising from each individual component stack up and interact to produce a larger effect size overall. The main components and features of the Learning Skills curriculum are summarised in Table 1.

See the online version of the article for the table

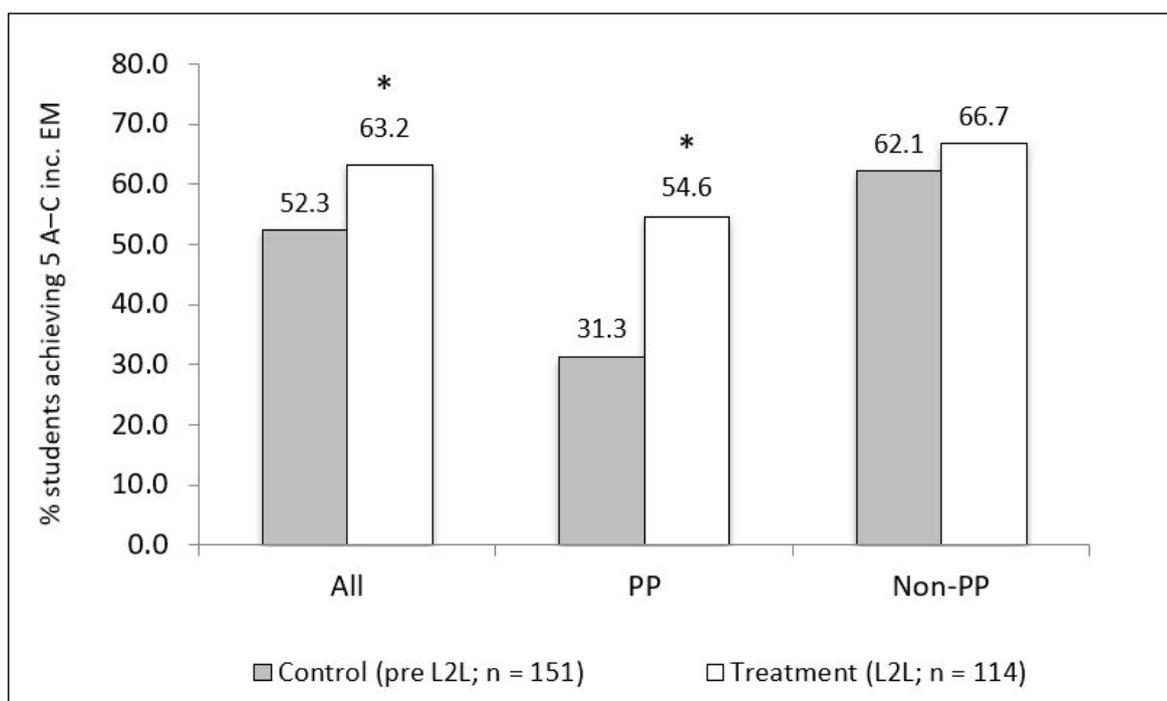
Although there were several elements to the Learning Skills programme at Sea View, the CWSI revolved centrally around three key concepts: metacognition (reflecting on learning), self-regulation (enabling students to take ownership of the learning process) and oracy (developing effective spoken language skills). Through reflecting regularly on how learning happens in different contexts, identifying barriers and strategies for overcoming them, and monitoring and articulating their thinking and learning over time, it was hoped that the students would become more effective at learning in ways that could be detected using existing indicators of learning across the curriculum.

Learning Skills: Raising the bar, closing the gap

The Learning Skills curriculum was evaluated over eight years, incorporating nine strands of data collection and analysis (see Mannion and Mercer, 2016, and Mannion and McAllister, in preparation, for more details). The primary outcome measure was to compare the academic attainment of the first Learning Skills cohort (n=118) with that of a matched control group (the previous cohort at the same school, n=148) after three and five years, across all subjects.

By the end of Year 9, there was a statistically significant (10.1%) increase in the proportion of students in the Learning Skills cohort achieving or exceeding their target grade, compared with the control cohort (Mannion and Mercer, 2016). This interim analysis also revealed accelerated gains among students from disadvantaged backgrounds; at the end of Year 9, the attainment gap between PP and non-PP students was 25% in the control cohort ($p \leq 0.001$), compared with just 2% in the Learning Skills cohort ($p = 0.687$).

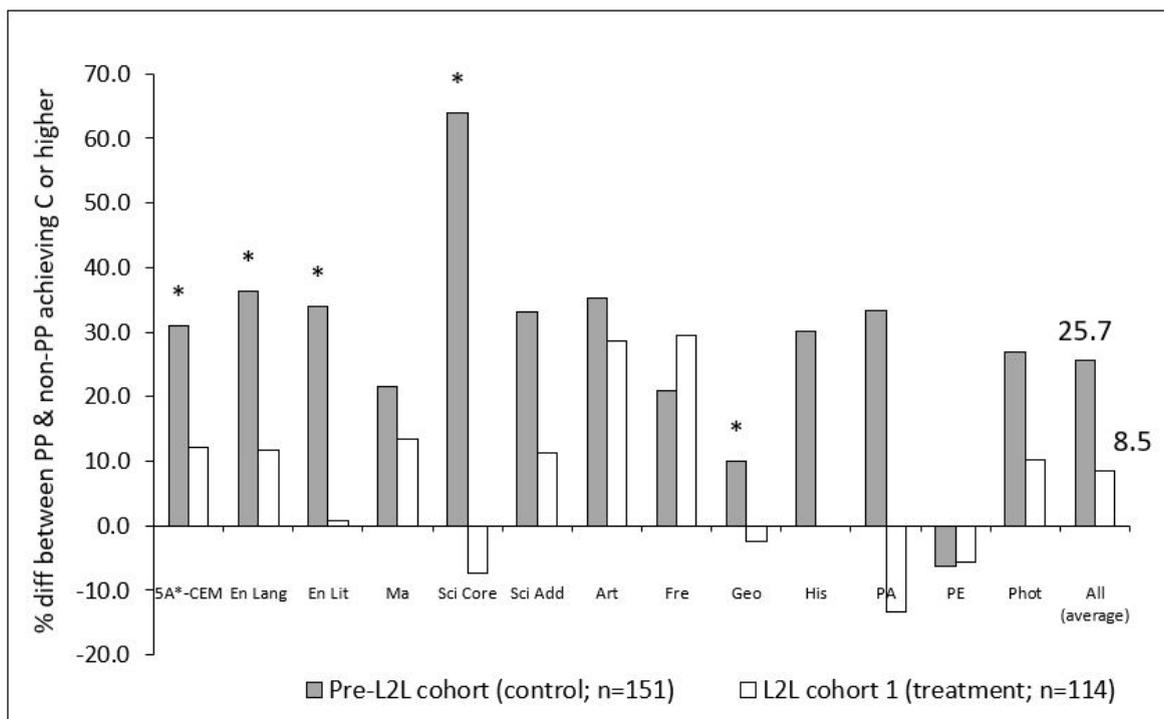
The Year 11 GCSE analysis reveals a similar pattern of findings. Figure 1 shows the proportion of students achieving five A*–C including English and maths (5A*CEM) in the treatment and control cohorts. As can be seen here, the findings from the Year 9 analysis were repeated in Year 11, with statistically significant gains in subject learning among the Learning Skills cohort as a whole, and when comparing the attainment of PP students across the two cohorts.



* Statistically significant difference, vs control group; $P \leq 0.05$

In 2014, 52.3% of students in the control cohort achieved 5A*CEM at GCSE; these were the best results in the school's history. When the Learning Skills cohort sat their GCSEs in 2015, 63.2% of students achieved 5A*CEM, an improvement of 10.9%. As with the three-year analysis, non-PP students in the Learning Skills cohort performed better than their counterparts in the control cohort. However, once again, the gains were most pronounced among students eligible for the PP (54.6% of PP students attaining 5A*CEM in the *Learning Skills* cohort, vs 31.3% control – an increase of 23.3%).

Figure 2 shows the PP gap in each subject at the end of Year 11. Here, the bars on the left correspond with the data in Figure 1, showing the 5A*CEM PP gap for each cohort. As with the Year 9 interim analysis, at the end of Year 11, PP students in the Learning Skills cohort outperformed non-PP students in several subjects – a pattern of results that would be expected if economic disadvantage was not a predictor of educational achievement.



* $p < 0.05$ (PP students achieving C or above, treatment vs control)

The two bars on the right-hand side of Figure 2 show the average PP gap in students achieving a C grade (all subjects combined). In the control cohort, the PP gap at GCSE was 25.7%; in the Learning Skills cohort, the PP gap was 8.5%, representing a 66.9% reduction from one cohort to the next.

Analysis: The case for causality

Adjacent cohorts of students rarely achieve identical results, even when they have similar prior attainment at entry (see Crawford and Benton, 2017). We accept that, ideally, the presentation of results should include an individual, pupil-level analysis. It is possible that the improved results were not due to the Learning Skills curriculum, and that there is another explanation as to why the PP gap closed so significantly in the Learning Skills cohort and not in the control cohort. There is not space here to consider any such alternative interpretations (this will be done in Mannion and McAllister, in preparation). However, we feel that there is reason to be encouraged by the findings as presented. While overall attainment often fluctuates from one cohort to the next, the PP gap at GCSE remains stubbornly persistent (around 20 months, nationally). The biggest known difference between the

control and treatment cohorts is that the latter had 400 lessons of Learning Skills over three years – lessons delivered by a dedicated team of teachers as part of an evidence-informed CWSI designed to help that cohort of students become more effective learners. Conversely, of course, students in the control cohort had 400 more lessons of subject-based learning throughout Key Stage 3, a factor that one might expect would give them an advantage in subsequent comparisons of subject attainment. No other interventions were made in Years 10 and 11 that could be expected to influence the results obtained. In addition, as we will detail in a forthcoming publication (Mannion and McAllister, in preparation), secondary analyses reveal that students and teachers at Sea View consistently said that they thought the Learning Skills curriculum had helped them learn better in other subjects, and were able to articulate a range of ways in which this transfer had happened. We will conclude with two illustrative excerpts from the student interviews:

<Q>*The skills... critical thinking and problem solving... we'd go over those in Learning Skills and it would... I don't know, it just strengthened our ability to use those in class because we'd practised using them so much in Learning Skills and it just became stuck in our heads, like it just became the way of learning... Now, when I'm in a lesson I still do think about those... skills, and if I'm using them, like working in a team, or working on my own, I make sure I don't give up, like I'm resilient... I always make sure I try as hard as I can to achieve my goal.*

<Q>*I was really disappointed when I found out that we aren't going to have Learning Skills this year. But then I thought back to last year, and I thought about everything that I've learned and how I can use that in other lessons. And it kind of sticks with you and then it becomes a part of you.*

Our next step is to find out whether it is possible to replicate these findings in other schools.

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