SMART Spaces

Spaced learning involves teachers delivering the same content across multiple sessions, with breaks in between. The Hallam Teaching School Alliance (HTSA) developed and tested SMART Spaces, a programme that utilises spaced learning, as part of a pilot that was funded through our Education and Neuroscience round with the Wellcome Trust.

The programme includes a day of training, follow-up visits for schools and teaching resources. The training and support will be delivered by the SMART Spaces team at HTSA, all of whom are experienced in delivering SMART Spaces in their own classrooms. The intervention is delivered in the weeks leading up to GCSE examinations as part of revision sessions organised by the schools. The idea is that this helps students to more efficiently revise the content of their examinations. We will be testing this iteration as an efficacy trial as part of this project.

In addition to trialling the existing model this project will also pilot an enhanced version of SMART Spaces that will be delivered throughout the year. The aim of this model is to improve the knowledge of pupils as well as to free up lesson time so that more time can be spent on pedagogies that will embed and extend knowledge, such as practical work and discussion. The Wellcome Trust are co-funding the pilot part of this project.

Why are we funding it?

The principle of spaced learning is supported by evidence from two scientific fields, neuroscience and cognitive psychology. The neuroscience literature supports the use of shorter spaces between learning (of around ten minutes), and the cognitive psychology literature supports longer spaces (of around 24 hours).

The recently published pilot used a small randomised controlled trial to investigate the efficacy of three different versions of the SMART Spaces programme, each of which used a slightly different spacing schedule. The study suggested that the version which combined 24-hour and ten-minute spacing appeared to be the most promising variant, with a suggested effect of three months’ additional progress for all children. It is this version that will be tested through an efficacy trial as part of this project.

The pilot element of the project will test the feasibility of a more intensive model and explore whether this enables teachers to change their classroom practices to include more practical work and class discussions.

How are we evaluating it?

The efficacy trial will be structured as a randomised controlled trial with 100 schools, half will receive the SMART Spaces revision intervention and half will form a business as usual control group, preparing students for their exams according to their normal practices. We will then look at the impact of the intervention on GCSE Chemistry outcomes as this will be the focus of the SMART Spaces sessions, although the approach could be applied to other subjects if found to be effective.

In addition to an efficacy trial of the existing SMART Spaces approach there will also be a pilot of an enhanced version that is embedded throughout the academic year and used to teach content. The pilot will look at feasibility, evidence of promise, and readiness for trial, and include both qualitative and quantitative techniques.
When will the evaluation report be due?

The evaluation report will be published in Spring 2020.