Cost	Evidence strength	Impact (months)	Effect size
£££		*+3*	*0.25*

What is it?

Summer schools are additional lessons or classes organised during the summer holidays. They are often designed as catch-up programmes, although some do not have an academic focus and concentrate on sports or other non-academic activities. Others have a specific aim, such as supporting pupils at the transition from primary to secondary school or preparing high-attaining pupils for university.

Other approaches to increasing learning time are included in other sections of the Toolkit, such as homework and extending school time.

Key Findings

1. Summer schools have a positive impact on average (three months' additional progress), but are expensive to implement. Providing additional support during the school year may be a more cost effective approach to improving outcomes.

2. Summer school provision that aims to improve learning needs to have an academic component. Summer schools that include an intensive teaching component such as using small group or one to one approaches have higher impacts, on average.

3. Maintaining regular attendance at summer schools can be challenging, in particular for disadvantaged pupils. It is crucial to consider how summer schools will attract and engage pupils to prevent attainment gaps widening.

4. Summer schools that use teachers that are known to the pupils have a higher impact, on average, but may be even more expensive to implement.

5. Summer schools can also provide additional experiences and activities, such as arts or sporting activities. This might be valuable in and of themselves or be used to increase engagement alongside academic support.

How effective is the approach?

On average, evidence suggests that pupils who attend a summer school make approximately three additional months' progress compared to similar pupils who do not attend a summer school.

Greater impact can be achieved when summer schools are intensive, well-resourced, and involve small group or one to one teaching by trained and experienced teachers. It does appear to be an advantage to have teachers who are known to the pupils (typically +4 months overall). In contrast, summer schools without a clear academic component are not usually associated with learning gains, though they may have other benefits.

Research in the Arab world about the effect of summer schools on learning outcomes is very limited. Studies in Saudi Arabia, United Arab Emirates, Egypt and Kuwait show some evidence that summer school programs can be effective in developing students' knowledge and enhancing their communication and social skills when the course is well-designed, and teachers are well trained.

Researchers have also highlighted the impact of summer school camps on promoting positive attitudes and beliefs of students towards the computing field. Some summer schools programs offered students a technology-integrated learning environment and aimed to increase their technological knowledge and skills and develop their innovation and creativity.

More research is needed in the region to establish a strong relationship between summer schools participation and learning outcomes. Further research could also look at the factors that could support a successful implementation of these programs on a variety of school subjects.

Behind the average

Although there are fewer studies for secondary school pupils, the impact is similar for both primary and secondary age pupils.

Effects tend to be higher for literacy (three months' additional progress) than mathematics (two months' additional progress). There is very limited evidence for other subjects, such as science, where positive effects have been found.

The evidence indicates that more intensive teaching approaches, such as small group and one to

one, are more effective (+5 months), similar to the typical impact of one to one tuition.

Closing the disadvantage gap

There is some evidence that pupils from disadvantaged backgrounds can benefit from summer schools, where activities are focused on well-resourced, small group or one to one academic approaches. There is less evidence for the effectiveness of light-touch interventions such as summer book sharing programmes.

Studies indicate that attendance and drop out are key challenges for voluntary, out-of-term time provision, particularly for disadvantaged pupils. To overcome these issues, schools should aim to identify any potential barriers (such as food or transport costs, clashes with planned holidays or religious events) early on, such as through communication with parents/ carers to improve engagement. When targeting summer schools at pupils from disadvantaged backgrounds, approaches should seek to minimise any risk of stigmatisation.

Including additional non-academic activities such as sports, arts or cultural enrichment are valuable in their own right and can offer opportunities to pupils from low-income households who may not otherwise be able to afford them. A mix of activities may also help to promote engagement and take up of summer schools.

How could you implement in your setting?

Summer schools impact academic outcomes through providing additional time over the summer that leads to additional learning. This additional learning time may also be targeted to pupils that have struggled in particular areas of the curriculum. Schools implementing the approach should therefore consider:

- Ensuring that there is additional learning time in key subjects.
- Ensuring that target pupils get access to the additional time by attending and successfully participating in the summer school.
- Including appropriately targeted additional support within summer schools.
- Liaising with feeder primary schools for summer schools targeting the transition.

Summer schools may also include other enrichment and engagement activities such as arts and sports activities or educational visits. These can be an important component for maintaining engagement in an academically targeted summer school or an important activity in and of themselves, if the summer school has broader goals.

Summer schools are typically delivered over two or three weeks. Some studies have examined longer summer school programmes of up to six weeks, though these are unusual and some have found particular issues with maintaining attendance. Schools may choose to provide programmes

immediately after the end of the summer term, during the summer break, or immediately prior to the start of the new school year.

When introducing new approaches, schools should consider implementation. For more information see Putting Evidence to Work – A School's Guide to Implementation.

What does it cost?

The average cost of summer schools is moderate. The cost to schools is largely based on staff salary, facilities, resources and activity costs, the majority of which are recurring costs with some variation related to the size, duration and staffing levels of summer schools.

Summer schools will require a large amount of staff time, compared with other approaches. Summer schools may be delivered by a mix of teachers, teaching assistants, pastoral and support staff, external providers (such as literacy charities or sports groups) or volunteers.

Alongside time and cost, school leaders should consider how to maximise the academic component of summer school provision, ensuring it is well-resourced, appropriately staffed and closely targeted at pupil learning needs. School leaders should avoid approaches that increase teacher workload without securing pupil learning gains and should consider whether approaches detract from teachers' capacity to plan high-quality teaching and learning in the next academic year.

How secure is the evidence?

The security of the evidence around summer schools is rated as low. 59 studies were identified that meet the inclusion criteria for the Toolkit.

Overall, the topic lost an additional padlock because a large percentage of the studies are not randomised controlled trials. While other study designs still give important information about effectiveness of approaches, there is a risk that results are influenced by unknown factors that are not part of the intervention.

As with any evidence review, the Toolkit summarises the average impact of approaches when researched in academic studies. It is important to consider your context and apply your professional judgement when implementing an approach in your setting.