

## Active Lessons



**Description:** Introduce **physical activity into classroom lessons**. This involves adapting the lesson plan to combine short bursts of physical activity with academic content (e.g., active maths lessons). This would be introduced at a whole school level to ensure that students have **at least 3 active lessons per week (> 75 minutes), across different subjects**. This would also include more outdoor (active) lessons.

### Reach

- All students could receive regular active lessons if **all teachers are trained to deliver them** within a school.
- Existing outdoor space and facilities (and weather) will determine whether all students can have *outdoor* active lessons on a regular basis.

### Equality

- It may be challenging to include disabled students in all active lessons (depending on what is involved).
- It is unclear if the potential benefits of active lessons are equal for all children:
  - There is some evidence to suggest that **overweight children may benefit more from active lessons**, as would **those who have difficulty concentrating** in class.
  - Evidence from a study conducted in primary schools showed that active lessons beneficially impacted **on-task behaviour** for both socially disadvantaged and non-socially disadvantaged children.

### Acceptability

- Teachers and students have been **very positive** in their ratings of active lessons.
- Feedback from primary school studies suggests that introducing active lessons **can initially create more work for teachers** to re-design lesson plans to include active components.
- The concept of active lessons was well-received in the CASE advisory group by both students and teachers.
- Students in our CASE advisory group reported enjoying and “getting a lot out of” **outdoor lessons**. They reported that outdoor lessons are **more interesting** and can **help with learning** (as these are often the more practical lessons in which students learn “by doing”).
- Our CASE advisory group teachers suggested that teachers within a school could **work together** and **share ideas in order to develop active lesson plans** within the existing curriculum, in order to reduce the potential increased work load.

## Feasibility

- There is evidence to show that introducing active lessons is feasible in **primary schools**. The single study conducted in **secondary schools** also showed feasibility (with adolescents aged 14-15).
- Active lessons may involve **moving classroom furniture**. At **secondary school**, this may be more difficult to implement as students regularly move classrooms. Active lessons may therefore be particularly suitable to **double lessons** so that it does not take away time from lesson time.
- Teachers would receive training on how to implement active lessons (potentially a full day workshop and ongoing professional development). Once lesson plans have been developed, **longer term implementation may require less work**.
- One study (in primary schools) showed that teachers who were trained to deliver active lessons incorporated these on most days and barriers were minimal.
- Our CASE advisory group suggested that some outdoor space would need to be re-designed to allow active **outdoor** lessons; and timetabling would need to ensure that all students get exposed to some outdoor lesson space (i.e., at least once per week).

## Effectiveness

- One study in **secondary schools** used 'stations' around the school (students ran or walked to different stations to complete a subject-specific exercise or worksheet). This showed **no changes in overall physical activity, but did show positive changes in risk factors** for cardiovascular disease (e.g., cholesterol, blood pressure).
- There is consistent evidence from **primary schools** that the introduction of active lessons results in **increases in physical activity** and **less time sitting** during the lesson.
- Teachers report that active lessons help students **learn concepts better, enhance memorization skills, alertness, and focus, and reduce behaviour problems**.
- Evidence suggests that active lessons **do not negatively affect educational outcomes** (e.g. attention, concentration), as studies either show improvements on these outcomes or no effect. However, this evidence mostly comes from **primary schools**.
- In primary schools, **teachers and students** reported **enjoying** active lessons.
- Lessons conducted outdoors offer **opportunities to develop students' knowledge and skills which add value to their classroom experience**. There is no evidence specifically relating to the effects of outdoor learning on physical activity or health related outcomes.

## Cost

- This intervention will rely on **on-going support for staff in the form of training**.
- A full day's training for all staff would cost approx. **£2,000** (to bring in a professional trainer to deliver the active lessons programme to the school).
- It is difficult to estimate how much suitable outdoor space would cost. This could be a few logs, basic seating or purpose designed outdoor classrooms. As an example, a **covered wood gazebo** could cost **£6900** for a 6-metre structure.