

ChatGPT in lesson preparation – A Teacher Choices Trial

School Information Sheet

Can using ChatGPT for lesson and resource preparation in Key Stage 3 science reduce teacher workload?

What is this Teacher Choices Trial?

The Education Endowment Foundation (EEF) has commissioned the National Foundation for Educational Research (NFER) to undertake a randomised controlled trial (RCT) as part of their 'Teacher Choices' programme. The aim of Teacher Choices research is to investigate the impact of different day-to-day pedagogical practices on pupil learning and to generate evidence that can be readily applied by teachers in the classroom. This is a new and developing strand of EEF projects.

This project is being co-funded by the Hg Foundation, who help under-represented groups to access high quality jobs in tech by supporting education- and employment- based programmes. Supporting achievement in STEM is an important part of their mission.

This 'Teacher Choices' project is exploring different approaches to lesson and resource preparation in Years 7 and 8 science classes. The project aims to help understand the impact of the use of Generative AI (GenAI) (specifically ChatGPT) on teaching practice via two distinct routes: (i) by improving the variety of lessons and maintaining the quality/standard of lessons and (ii) by freeing teacher time which can be utilised elsewhere to improve pupil outcomes.

Schools will be randomly allocated to two groups: ChatGPT group and Non-GenAI group.

- 1) ChatGPT group: science teachers in this group will be asked to use ChatGPT to prepare lessons and resources for upcoming Year 7 and/or 8 science lessons. They will also receive access to the online ChatGPT guide for lesson planning guidance.
- 2) Non-GenAI group: science teachers in this group will be asked not to use ChatGPT or any other GenAI tool in any lesson and resource preparation.

The trial will recruit schools from February 2024, and the approaches will be implemented in school during the summer term of 2024.

Who is conducting the study?

The EEF has commissioned NFER to conduct this project. The online ChatGPT guide which will be used by the teachers as part of this study was developed by Bain & Company's Social Impact team and Hg Foundation, in collaboration with teachers and tutors from several schools and academies.

What will the project involve for teachers and schools?

Schools who sign up for this trial will be allocated to one of the two randomised groups by NFER – ChatGPT group or Non-GenAI group.

Please refer to the timeline below for detailed activities by dates.

Teachers in schools that have been allocated to the **ChatGPT group** will be asked to do the following:

- Using the online ChatGPT guide, prepare upcoming lessons using ChatGPT for all Year 7 and 8 science lessons in the summer term 2024
- When relevant, use ChatGPT for all 6 teaching and learning use cases as outlined in the guide
- Complete a brief weekly online diary during the 10-week trial to provide data on the number of hours spent and the sources used in lesson planning and resource preparation
- Complete a short online quiz related to the online ChatGPT guide after week 5 of the trial
- Complete an online survey prior to the trial (February/March and end of the trial (July) to provide background information about participating teachers and to respond to questions about time spent preparing lessons, attitudes to technology and their pedagogical beliefs.
- We may reach out to a selection of teachers during the trial to share example lesson plans, including lesson resources, alongside Chat GPT transcripts.

Additionally, a small sample of schools will be asked to take part in case studies. These schools would be visited by a DBS checked researcher. A case study visit will involve a focus group with science teachers, a focus group with pupils, a senior leader interview and a lesson preparation walk through with one science teacher.

Teachers in schools that have been allocated to the **Non-GenAI group** will be asked to do the following:

- Not use any GenAI in lesson and resource preparation for any upcoming lessons or resource preparation in the summer term 2024
- Complete a brief weekly diary during the 10-week trial to provide data on the number of hours spent and the sources used in lesson planning and resource preparation
- Complete an online survey prior to the trial (February/March and end of the trial (July) to provide background information about participating teachers and to respond to questions about time spent preparing lessons, attitudes to technology and their pedagogical beliefs.
- We may reach out to a selection of teachers during the trial to share example lesson plans, including lesson resources.

Additionally, a small sample of schools will be asked to take part in case studies. These schools would be visited by a DBS checked researcher. A case study visit will involve a focus group with science teachers, a focus group with pupils, a senior leader interview and a lesson preparation walk through with one science teacher.

How will my school and teachers benefit from taking part?

Schools will be playing an active and important role in contributing to a new evidence base; an eventual evaluation report and lessons learnt will be published at the end of the trial. All schools and teachers participating in the trial will have access to the guide after the trial. GenAI for education has the potential to reduce workload and better understand time management. There is no financial costs to participate in the trial.

Schools that complete all the weekly diaries will receive a payment of £100 per participating teacher at the end of the 10-week trial. An additional £30 per teacher will be payable to schools where teachers submit lesson plans.

Which schools and teachers can take part?

School eligibility:

- Any state-funded secondary school in England
- At least one Year 7 and/or 8 science teacher with willingness to prepare summer term lessons

Teacher eligibility:

- Any science teacher who teaches Year 7 and/or 8 science (including ECTs) who is willing to be part of the trial although we encourage all Year 7 and 8 science teachers within a school to take part.

Joining the trial

The headteacher will sign an online Memorandum of Understanding (MoU) to confirm their school's participation in the trial. They will also nominate a Key Contact for the trial who will liaise with the NFER.

NFER will then contact each school to confirm participation and to answer any questions.

NFER will then provide a template via the NFER secure school portal for teachers to provide the data required for the trial. This will include:

- Teacher name, contact email telephone number and role of all participating teachers
- Classes and subject taught by each teacher

When will my school need to get involved?

Timeline	Activities
February 2024	Recruitment to trial begins
February – March 2024	Headteacher or Senior Leader to sign-up to the trial via the MoU. Headteacher or Senior Leader provides name and contact details of Key Contact in the school for the trial.
	NFER to provide schools with a template to complete required teacher data.
	Schools to share teacher data with NFER.
	NFER will send an online survey link directly to participating teachers.
	Participating teachers complete baseline survey
March 2024	NFER to randomly allocate schools into two groups. NFER to notify schools of group allocation and to provide access to the guidance to the ChatGPT group.
	Teachers in the ChatGPT group schools to access the guidance.
April 2024	NFER will send a diary template to all participating teachers with instructions on how to complete the diary each week.
April – July 2024	Teachers adopt the allocated group requirements to two blocks of 5 weeks and complete a diary every week
May 2024	Teachers in the ChatGPT group complete a short Quiz relating the ChatGPT guidance provided (during week 5)
June – July 2024	Teachers continue with allocated group requirements for the remaining 5 weeks. NFER carry out case study visits
July 2024	NFER sends online survey link directly to participating teachers – to be shared at the same time as week 10 diary would be completed.
	Teachers share lesson plans
September 2024	Schools receive incentive payments once the trial requirements are fulfilled.
December 2024	NFER analyses the data collected and writes an evaluation report Schools will receive the summary report from the trial

How will the findings be used?

All teachers involved will receive a summary of the trial findings and this will also be freely available on the EEF websites.

Who needs to give agreement for participation in the trial?

Schools will join the trial once their headteacher has signed the MoU. This information sheet can be passed on to your Year 7 and 8 science teachers.

What happens if a school, teacher or pupil wants to withdraw from the trial?

Schools and school staff can withdraw from the project and/or from their data being used in the project at any time. However, the NFER appreciates schools' and participants' support in collecting the data since it is very important for the validity of the results. If your school/you withdraw from the research, unless otherwise instructed, we will use any data we have collected up to that point in our analysis.

How will the NFER use and protect the data collected?

All data gathered during the trial will be held in accordance with the Data Protection Act 2018, and GDPR and will be treated in the strictest confidence by the NFER.

No school, teacher or pupil will be named in any report arising from this work.

A School Privacy Notice for this trial can be found [here](#)

Who can I contact for more information?

If you require any further information, please contact the NFER Team at GenAI@nfer.ac.uk