



Health Research Board
TMRN
Trials Methodology Research Network

2022



START Competition 2022

STEP BY STEP GUIDE FOR TEACHERS AND STUDENTS



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Schools Teaching Awareness of Randomised Trials



FOR TEACHERS

Project Structure and Overview

Please read over the recommended step by step guide below. We have outlined a difficulty rating and also an estimated time frame for each step, however you can spend as much or a little time on each step, some trials will be straight forward compared to others, so it is really up to you how much time you spend on each step.

Step 1

Decide on your trial question

1-2 hours



DIFFICULTY

1

All good trials start with a good relevant question, that you should be able to answer within the project timeframe. Think about all of the ways we could improve how we live in the current pandemic. For example, are there ways we can improve hand hygiene and physical distancing at school or in our communities? Are there exams coming up? Have you ever wanted to know more about something, but wanted real proof about it?

See below some suggestions for your research question. You can use any of these examples or, even better, come up with your own question.

Top tip: Answering a question that can improve your own way of living is a good idea, but remember to have fun doing it!

Does 10 minutes of dancing every morning before classes improve student's attention?

Can using coloured paper for written spelling tests increase students' scores?

Can having classes outside help students attention during class?

Can playing scrabble at school or at home help improve spelling scores?

Do meditation sessions at lunchtime help children's become more relaxed?

Can listening to music at lunch time help reduce stress?

Can juggling for 5 minutes a day for two weeks increase teachers hand eye co-ordination compared to teachers who do not juggle?

Do markings in school hallways encourage or improve physical distancing between teachers and students?

Do colourful face coverings help people feel happier, compared to single coloured / plainer face coverings?

Does singing the 'happy birthday' song compared to another song, result in longer hand washing?



Does watching cartoons animations of handwashing, compared to looking at plain posters, encourage people to wash their hands more?



Step 2

Register your trial

30 minutes



DIFFICULTY

1

Before they can start, all clinical trials are registered on a public website. This is so that everyone knows that the trial is going to take place. This prevents the same trials being repeated unnecessarily, and also ensures we are honest and clear about what we are about to do from the start. Good research should be clear in what it wants to achieve from the start.

Top tip: Submit your trial registration early so you can move onto the fun parts.



To register your trial please complete the [Trial Registration Form](#) and email this to hrb-tmrrn@nuigalway.ie. This allows us to know who is taking part so we can provide assistance if needed.

Step 3

Select your outcomes

1 hour



DIFFICULTY

2

You now have a great and interesting question to answer in your trial, but how will you answer this question, and how will you measure its effect?

To do this you must collect information from people who took part in your trial and compare the results.

Top tip: Select outcomes that are easy to measure. Why not ask family members how they think you could measure your outcomes?

Example 1

Can using coloured paper for written spelling tests increase students' scores?

Compare the average test scores of students that used coloured paper to do their tests with the average test score of those that used regular paper.

Example 2

Can healthy eating posters improve the quality of school lunches?

Count the number of "healthy items" in school lunch boxes each day, pieces of fruit, bottles of water, healthy sandwiches for example.

Example 3

Can having classes outside help students attention during class?

You could also ask participants to answer some written questions (this is called a 'survey'); You could ask questions of those who are taking part in your trial every afternoon about how much attention they paid in class that day. Remember try to use general open questions and try to avoid influencing the answers you get. For example, you may really like having classes outside, but to fairly test this, you should keep your own opinions secret.



Step 4

Identify who is taking part in your study

1 hour



DIFFICULTY

1

Who is going to take part in your trial? Another class? Your own class or maybe your own family? Maybe your teachers in your school would participate? Once you select your group, you need to explain the trial to them and ask them to take part. You need to tell them **every detail** about the trial and leave nothing out. This is a very important step. Explaining it properly can result in a lot of people taking part to the very end of your trial, and not dropping out before you finish it. Plan how you will “sell” the idea of taking part in this trial to participants. Think about what is in it for them. The people taking part are now called **Participants**. You need to get each participant to sign a “consent sheet”. This means that they have given you written permission to take part and that they fully understand what they have to do. See the Consent Sheet Example.

Top tip: This is an opportunity to get the whole school involved in your trial, or even your communities or neighbourhood.

Step 5

Divide up your participants into groups

1-2 hours



DIFFICULTY

1

So now you need to divide up your trial participants into **groups**. One group will need to be the **control group**, any other groups can be **test groups**.

The test groups will do what you are investigating (e.g. use coloured paper instead of plain paper when doing their homework).

The control group will not do anything differently. You will still collect information from them, however they will not be involved in taking part in the test you are interested in. You will compare the results of this group with the test groups.

To randomly assign your trial participants to the different groups, ask **someone not involved** with the project to pull participant names out of a hat or to toss a coin. You could ask a parent, another student from a different class or the school Principal to do this.

Top tip: Be creative and come up with other unique ways of randomly assigning participants to the groups.

Step 6

Make it a secret (If you can!)

DIFFICULTY

3

Is it possible to prevent the control group from knowing what the test is? Can you keep your test a secret? If so, this means your results will be **extra reliable**. Because you will have stopped people in the **Control group** from becoming part of the test. In some tests this is very hard to do, in others it is easier. See if you can do this for your trial.





Step 7

Conduct your study

1-2 weeks



DIFFICULTY

2

So now you are good to start your trial! Work with your trial participants and show them what they need to do. There are various ways you can do this; you could have a class meeting or you could give them written instructions. Decide the best way of talking to them e.g. at lunchtime or before classes. Start collecting any information you need to see if your test is having any difference. Communicate with those involved of any changes or updates on the trial, and get feedback for how trial participants are getting on. Ask them how they are getting on. Is there anything you can do to make things easy for those doing the test? Think about how will you record your results? In a notebook or laptop?

Top tip: Remember to make notes of other things happening in the school that might impact your trial. Did the school win the county final that week? Is it exam time or is Halloween just around the corner? Include these details in your trial report.

Step 8

Report your findings

1 week



DIFFICULTY

1

It's time to share your hard work with the world. What information did you collect? Does it suggest that your intervention had a positive (or a negative) impact? Remember if you found no difference it is still an important result. Will you write this as a report, or record a video? Will you create a poster or piece of art to show what you learned? Tell us all about your trial, not just the results. Did you have fun doing this project? What was difficult? What was easy? Share all of your findings just like a real life trial would. Don't forget to share your findings with those that participated, as well as your friends and families.





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Support

Remember you can contact the Trial Ambassadors at any time to discuss your ideas or ask for help!



Trial Ambassadors

The START competition has the help and support of trial ambassadors, who are PhD students involved in conducting clinical trials. You can contact the HRB-TMRN at hrb-tmrn@nuigalway.ie to discuss further.

