



all forms are available for download from:

www.STARTcompetition.com



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Re: Schools Teaching Awareness of Randomised Trials (START)

Dear School Teacher / Principal

You can help your students become the   **scientists of tomorrow** and the  **critical thinkers of today**

The pandemic of 2020 / 2021 has brought with it a lot of new information for everyone to understand. Our children have been asked to make significant changes to the way they live and interact with their communities.

Everyday children are faced with **health claims**, some reliable and some not so reliable. But how do we help children see the **fake news** from the credible information. How do we teach our children to develop a critical eye when it comes to all of the information they encounter every day, in particular when it comes to their health? We think we have the answer... and it's a lot of fun!

"The Need For Critical Thinking Among Children Is Now"

On May 20th every year, the world celebrates International Clinical Trials Day. This event marks the anniversary of the first well-documented clinical trial, which was conducted with sailors in the navy in 1747. Researchers in University of Galway wish to celebrate this important occasion with the help of the younger members of our community. We invite your 4th, 5th & 6th classes to lead on an exciting project and create their very own trial. Teachers and students are asked to identify a suitable research question they can answer scientifically using the resources provided on the website - **www.STARTcompetition.com**. The purpose of this competition is to help students become aware of the trial process, and gain insights into the best way to conduct a fair comparison.

Pick a simple, easy to answer question, but use the proper steps of a trial to answer it and make sure to have fun!

This project addresses several key aspects of the school curriculum, as outlined below. The best part is that you can report the findings in any way you like, podcast, video, collage



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Health Research Board

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Trials Methodology Research Network

or poster, report, it's up to you to be as creative as you like! And the best bit.... the top three shortlisted schools will be invited to take part in an awards ceremony in University of Galway. This event will showcase the excellent work done by all schools for this competition and give an opportunity for children to meet scientists and trialists from University of Galway. At this event, the overall winner will be announced and presented with a START trophy and children will be interviewed on their work, which can be shared with friends and family.

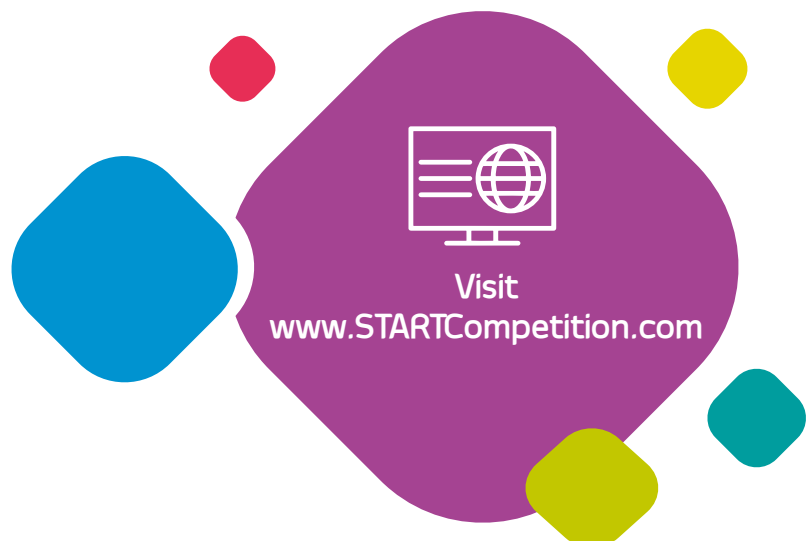
The START competition does not cost anything to enter. Please visit our website www.STARTcompetition.com for further details and to see previous winning entries.

We look forward to receiving your entry.

Dr Sandra Galvin

Programme Manager HRB-TMRN

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Trial Ambassadors

The START competition has the help and support of trial ambassadors, who are PhD students involved in conducting clinical trials. Feel free to contact them by phone or email to discuss any issues you encounter. You can also contact the HRB-TMRN at hrb-tmrn@universityofgalway.ie to discuss further.

How this competition can help meet key aspects of the current school's curriculum:

Maths

Students will need to collect and analyse data in order to see the effects of their intervention. This will mean comparing the results of two groups of participants that are involved to see differences in their effects.

Science

A clinical trial, like any scientific experiment, requires participants to stick to a defined set of rules and procedures in order to get the best results. The project also teaches children the foundation processes around where evidence for healthcare decisions are made.

Social, Personal & Health Education (SPHE)

The START competition will help students question the choices they make around their own health and wellbeing and create a sense of personal responsibility for the everyday decisions they make. By working in a team, as a class or as a school, the students will be able to see each other's strengths in delivering such a project.

English / Irish

The students will be challenged to explain the project to those involved; this may mean younger pupils or family members or the wider community. The final presentation of the project findings will require students to compile the findings in a clear and concise way.

Visual arts

There are no restrictions in the format for which the findings can be presented. Students are encouraged to be creative and use any format they wish.

Information & communication technology (ICT)

The project will require research by the students to understand the processes involved. A wide range of online resources will be made available to students. Students can also use technology to present their work.



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STEP BY STEP GUIDE FOR TEACHERS AND STUDENTS



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START COMPETITION
STEP BY STEP GUIDE
FOR TEACHERS AND STUDENTS

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@universityofgalway.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.





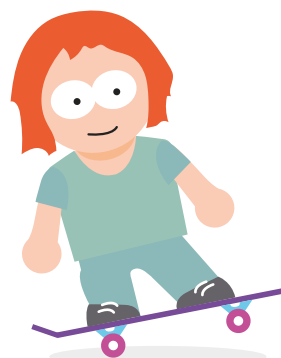
Support

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



Trial Ambassadors

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START COMPETITION
TRIAL REGISTRATION FORM

Trial Registration Form

Name of school

Roll number

(5 letters and a number e.g. 12345a)

Name of principal

Name of lead teacher

Participating class(es)

Number of students

School contact

Phone number

Mobile phone number
(teacher)

Email

Name of trial

Tell us your START research question:

We would like to find out if: [example eating cheese]

Makes a difference to: [example: having nightmares]

In comparison to: [example: not eating cheese]



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Trial Planning Worksheet

Teachers – give this worksheet to students to plan their trial in small groups



Problem

(e.g. people lose concentration in class)

Question

(e.g. does 5 minutes of jumping jacks before class make people pay more attention?)

Materials Needed

(e.g. stopwatch)





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Schools Teaching Awareness of Randomised Trials

START COMPETITION
SAMPLE CONSENT FORM

Consent Sheet

Students Teaching Awareness of Randomised Trials (START)

Welcome to the

[Insert Trial Name]

Trial

Please read the next paragraph which will explain what we want you to do.

This project is about

[Explain your trial in a short paragraph]

Tick the box if you understand the points below. If you do not understand, ask for more information.

I understand what this project is trying to do

☐

I understand that I can stop taking part in this project at any time

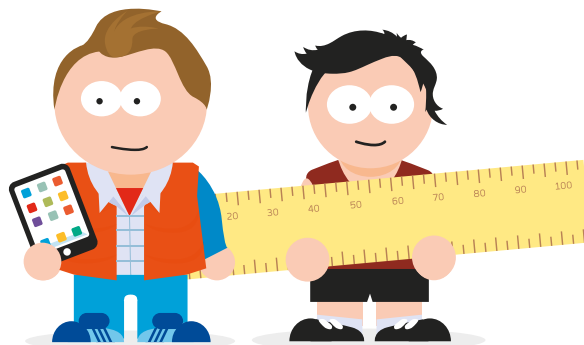
☐

I am happy to take part in this project

☐

Please sign your name here:

Date:



Some Rules...

But not too many and none too serious.

Rule 1

Get Involved!

We welcome all students to get involved, although carrying out a trial can be a tough task so we recommend that senior primary school classes (4th, 5th & 6th class) take the lead. Older students can show younger students the way should younger classes wish to get involved. Entries will also be accepted from a small group of students who wish to do this as an extracurricular activity (provided their teachers are supporting them).

Rule 2

Be clear and simple

The trial does not need to be too hard or difficult, this competition is about understanding the process, rather than becoming the new Einstein! So judges are looking for a trial which sticks to the recommended steps, rather than how complex the question is. Think of a very simple and clear question you would like to test out and stick with it.

Rule 3

Have fun!

Anything goes with this project, learning about a serious issue such as a trial need not be boring. Think of funny and creative ways to tell everyone about your trial, give your trial a fun name or make the teachers your trial participants!

Rule 4

Get “real” consent

Make sure you get parental consent for all students appearing or participating in any video recordings or photos associated with the final project submission. Please ensure that all students’ parents or guardians are fully aware of the nature of the competition and subsequent use and display (including online) of any entries, specifically those that include video or photos by HRB - Trials Methodology Research Network (HRB-TMRN) or the Health Research Board, which will include publicly sharing the entries on You Tube.



Rule 5

Stick to the trial steps

Use the resource Step by Step guide provided to help with the overall process. A trial should consist of these 8 steps. The judges will be looking for a trial which sticks closely to a real trial format.

Rule 6

Be Creative!

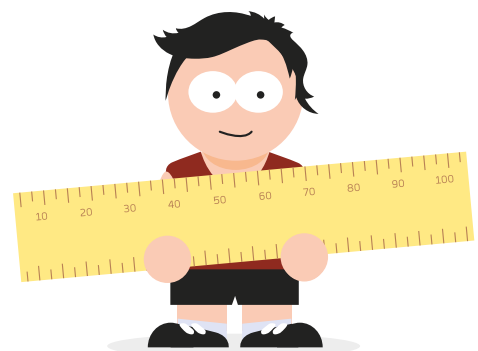
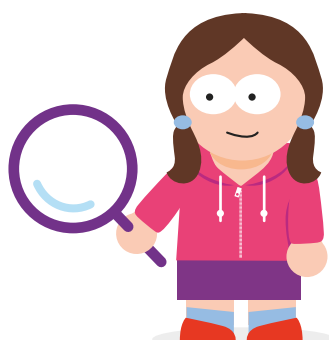
This is the only rule about how you should present your findings for the competition. See below some guidelines of the various formats your submission can be, however we welcome weird and wonderful ideas for your submission.

Submission Guidelines:

- If making a video, please don't use any copyrighted material without permission, such as video clips (TV, movies and online videos), music, sound recordings, etc. You can find royalty free material online.
- If making an outdoor recording (video or podcast), please be mindful that sound quality may not be the best.
- We recommend any video or audio recordings be limited to approx. 3 – 4 minutes.
- As per Rule #4 please make sure you obtain parental or guardian consent for any photos or recordings of students which are to be used for the submission process.
- If you have any external technical help with making a video or podcast, please let us know so we can fairly judge entries.
- If writing a written report please ensure the word count is < 2,000 words.
- If preparing an artwork or collage, please consider how this will be submitted for judging and, if shortlisted, transported to Galway.

Rule 7

Enjoy the competition and give it your best shot!



Contact Us

e. hrb-tmrn@universityofgalway.ie
t. 091 494492

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Network (HRB-TMRN)
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