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Citizens' Think-Ins

Guidelines for running public dialogue
and discussion events

HOST INSTITUTION



Trinity College Dublin
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HOST INSTITUTION



PARTNER INSTITUTIONS



Maynooth
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ADAPT Guidelines for hosting a Citizens' Think-In

These guidelines were prepared for the ADAPT SFI Research Centre for Digital Content Technology's **Citizen's Think-In series** led by ADAPT's Education and Public Engagement team: Laura Grehan, Cara Greene and Emma Clarke.



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Introduction

The ADAPT Centre

The ADAPT Centre, funded by Science Foundation Ireland, is a world-leading academia-industry research centre producing ground-breaking digital content innovations. ADAPT focuses on developing next-generation digital technologies that transform how people communicate by helping to **analyse**, **personalise** and **deliver** digital content more effectively for businesses and individuals.

The Centre draws on the expertise of more than 150 researchers based at Trinity College Dublin, Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Athlone Institute of Technology, and Cork Institute of Technology.

The anticipated innovations arising from the ADAPT research programme have potentially profound and transformative implications for people's lifestyles. ADAPT's Education and Public Engagement programme therefore has at its core opportunities for the Irish public to learn about emerging technologies that enhance engagement in the digital world and to have a voice on this vital area of research.

ADAPT's Citizens' Think-Ins

ADAPT's Technology in My Life citizens' Think-In series engages the Irish public in in-depth discussion, dialogue and deliberation around societal implications of emergent digital technology innovations.

The Think-In format facilitates two-way community dialogue to create awareness among citizens and researchers about responsible technology development and use.

Independent evaluation of the inaugural Think-In on Artificial Intelligence, Privacy and Civil Liberties in November 2018¹ revealed:

- Enhancement of the public participants' understanding of emerging digital technology innovations and their potential impact on their lives and society.
- Strengthening of citizens' and scientists' familiarity with, and acceptance of, diverse points of view related to emergent technology.
- Growth in participants' confidence in participating in public discourse about STEM and feeling more engaged with STEM research.

¹ https://bit.ly/Think-Ins_Nov2018

What is a 'Citizens' Think-In'?

A Citizens' Think-In is a public discussion forum which offers participants the opportunity to interact with those at the cutting-edge of research and development to discuss the societal and ethical issues facing humanity.

A Citizens' Think-In differs from the more traditional panel discussion or public lecture event as it encourages direct participation from the attendees. Through small group discussions, a Think-In provides an opportunity for people from diverse walks of life to deliberate and discuss topical societal issues arising from STEM innovation.

Think-In Format

Public participation activities can take a wide variety of formats, from events that repeatedly engage participants (such as The Citizens' Assembly²) to those which follow a one- to two-hour programme (such as the ADAPT Centre's Citizens' Think-Ins).

Each two-hour ADAPT Centre Citizens' Think-In comprises:

- A short introductory presentation relating to Artificial Intelligence (AI) in society
- Small-group discussion of technology application scenarios, focusing on possible opportunities, impacts, risks and benefits of the emerging technology
- Report-out from each group with thoughts and recommendations
- Whole group reflection and deliberation



Through small group conversations, a Think-In provides an opportunity for people with diverse views and backgrounds to deliberate and discuss topical societal issues. Participants in a Think-In are encouraged to explore their own views, and those of others, about how we as a society should address sometimes controversial issues arising from emerging STEM research and development. Public Think-Ins are generally aimed at adult audiences but may be adapted to fit a particular need. For example, ADAPT researchers and public engagement experts have developed and run Think-Ins with secondary school students and teachers, as well as for Third Level students and staff.

At ADAPT Think-Ins, participants do not require previous knowledge of Artificial Intelligence as they are given an overview of the subject area to prepare them for the event.

² <https://www.citizensassembly.ie>

Citizens' Think-In Goals

Main aim: To facilitate informed multi-directional conversations about issues and challenges where science and societal and ethical issues play a key role.

Key objectives:

- To enable the public to learn about emerging technology and its potential societal impacts
- To provide an opportunity for citizens to share their perspectives and expertise with researchers who are interested in getting public input to inform their work
- To strengthen the public's and the researchers' understanding of diverse points of view related to applications of current and emerging STEM technologies
- To empower participants to participate in public discourse about technologies that raise complex societal issues, by giving them the opportunity to consider different perspectives and sources of information in a deliberative problem-solving environment

Key objectives for participating organisations:

- To attract and engage adult audiences in in-depth STEM learning experiences
- To increase STEM researchers' and informal science educators' knowledge, skills, and interest in developing and conducting programmes that engage the public in conversation about societal issues raised by new and emerging technologies
- To provide a public Think-In in which to hold conversations on controversial or unresolved societal issues related to science and technology



Planning a Citizens' Think-In

These guidelines draw upon the ADAPT Centre's experience hosting public Citizens' Think-Ins to generalise a set of guidelines which may be applied to a wide variety of situations which require a considered deliberation of important issues.

Advance Preparation

Participant Selection

Think-Ins are designed for an adult audience, although they can be adapted for use with secondary school / high school audiences (Junior Cycle upwards). Public audiences do not require any background in the subject matter, and participating scientists do not need to be experts on the specific topic, though it's useful if some are familiar with or working in the relevant field. Scientists are valuable because they can contribute content knowledge and also take the public opinions they hear into consideration when they return to their work.

How you market your Think-In will determine the audience you get. For example, if you market the event with a partner organisation, you will get a lot of participants who are connected with that organisation. If you market the programme to specific groups, you will attract those who belong to those groups (e.g. secondary school teachers). See more guidance on promoting your event on page 12.

ADAPT Think-ins typically aim to attract 20-40 public participants. Any fewer than 20 limits the range of perspectives brought to the discussion; any more than 40 limits the amount of time available for each participant to contribute to the discussion and dialogue.

Discussion Topics and Conversational Scenarios

ADAPT Think-Ins to date have focused on the often-controversial ethics, privacy and civil liberties implications of emerging Artificial Intelligence. In the appendix of these guidelines, we have included sample scenarios from the ADAPT Think-In series (page 28-29).

Think-In Personnel

Running a successful Think-In requires a number of people in various roles.

Host: The Think-In host introduces the Think-In and the expert speaker. During the Think-In, the host should give instructions for the small group discussions and facilitate the report-out section and the question and answer segment after the speakers have presented. The host will draw the participants' attention to the ground rules, and guide the general flow of the

event. Before the event, the host should familiarise him/herself with the running order and format of the event. He/she should obtain biographies to use when introducing the expert speaker. The host should also provide some housekeeping information such as pointing out emergency exits, mentioning toilet locations, etc.

Speaker: The speaker will give a general overview of the topics to be discussed during the Think-In and introduce the topic. It is important to choose speakers who are comfortable communicating complex research topics to public audiences who may not have any prior knowledge of the subject. We recommend one expert speaker, but depending on your event format, you may choose to have more than one speaker.



Facilitators: Think-In facilitators help to encourage the flow of conversation and the contribution of each participant at their small-group discussion table. They provide a brief summary of the guidelines for the discussion and introduce the discussion scenario to the group. As effective facilitation requires some skill, ADAPT typically provides 3-hour training to facilitators in advance of their participation in a think-in.

Scribes: Think-In scribes function as note-takers during the small group discussions. These notes are used to report back to the whole group at the end of the Think-In. The notes should be archived as they may provide valuable information which may help inform future research and relevant public policy in the discussion area.

Observers: As part of the evaluation of your Think-In event, you may wish to have a number of observers circulating the room documenting what they see and hear. Observation can be a useful tool in evaluation as it can provide insight and understanding of how people behave within the context of the situation.

Additional staff: Additional staff may be needed to market the Think-In in the run up to the event, help set up the room with the tables and chairs, print forum documents and place them at each table, register participants as they arrive, and facilitate and take notes at breakout groups. Students or volunteers can be a great help with some of these roles.

Speaker Selection

A Think-In assumes no prior knowledge of the subject from the attendees. However, it is possible that the event will draw participants who have some expertise in the areas. The expert speaker at the event will need to deliver a short introductory presentation on the topic. In general, expert speakers can be found in local research organisations, universities, colleges, or expert groups.

When inviting a speaker to participate, introduce the Think-In format and discussion topics and ensure that they are comfortable with them. Let them know that this is not a traditional lecture with Q&A, and that Think-In participants really enjoy when the speakers engage them in dialogue on societal and ethical implication issues.

Ideally, the speaker will engage with the design process of discussion scenarios and Think-In topics. Where the speaker is not engaged directly at the design stage, ensure that all Think-In materials are shared in advance.



Venue Choice

Secure the venue for your Think-In well in advance to ensure it is available. In the past, ADAPT has partnered with institutions, such as local libraries and Science Gallery Dublin³, which have hosted Think-In events. Bringing the Think-ins to the heart of communities is preferable in order to maximise participation and to help emphasise that STEM is a key part of our everyday lives.

Furniture layout

Round tables are preferable for the small group conversation part of the Think-In. Place chairs around each table and then place any necessary documents (evaluation forms, scenarios, background information sheets, etc.) at each table for the participants. See example table layout on page 14.

Refreshments

Providing refreshments for the participants is optional, but highly recommended. As Think-In audiences tend to be adults, it is expected that they will attend the event after work or possibly during their lunch break. We recommend, however, that you consult with a small number of people from your intended audience in order to ensure appropriate timing. Providing refreshments before the event will ensure that participants are comfortable during the Think-In.

Allowing 30 minutes at the beginning for refreshments also provides an opportunity for participants to mingle and break the ice. Consider having some posters or technology demonstrations relating to the Think-In discussion topics in the refreshments area so participants can familiarise themselves before the event.

You may wish to place water at each seat or table or locate it near the back of the room for those who want it. At sign-up, ensure that participants who have dietary requirements

³ Science Gallery Dublin: <https://dublin.sciencegallery.com/>

(vegetarian, vegan, coeliac, etc.) note them. When ordering refreshments, make any arrangements possible to accommodate dietary requirements.

Supporting Materials

All of the necessary documents (evaluations, scenarios, background information, etc.) for the Think-In should be provided to the participants at the event. You might also wish to consider making the materials available online before the event.

Prior to the Think-In, print all the materials required. It can be useful to organise the materials in folders so they can be distributed to each participant as a pack.

The discussion scenarios are topic-specific for each Think-In. ADAPT scenarios are included in the appendix of these guidelines (page). These can be modified or revised to suit your particular event and/or audience.

Additional materials to prepare for the event include:

- ☐ Name tags for participants
- ☐ Pens and paper for note-taking
- ☐ Pre-registered participant list
- ☐ Facilitator guidelines
- ☐ Scribe template
- ☐ Observation template
- ☐ Ground rules
- ☐ Tent cards
- ☐ Table numbers
- ☐ Table plans (if using)
- ☐ Signs (examples)
- ☐ Flip chart/wall space for magic whiteboard sheets

Facilitators & Scribes

One of the unique qualities of a Citizens' Think-In is that it brings together people with diverse opinions on a particular topic. This means that new perspectives may arise for consideration. As the topics being discussed can be controversial by their nature, differences of opinions may lead to heated debate rather than constructive dialogue.

Small group conversations in Think-In programs, therefore, require some type of facilitation strategy. One way to ensure that everyone gets an opportunity to have their say is to put a facilitator at each table.

Think-In facilitators are placed at each small group. The facilitator's role is to keep the discussion on track and to help the group understand their common objectives, and plan how to achieve these objectives, during meetings or discussions. In doing so, the facilitator remains "neutral", meaning he/she does not take a particular position in the discussion.

It can be useful to provide **Ground Rules** on tent cards on each table. The host can refer to the ground rules in their introduction to draw attention to them. Some general ground rules to follow are:

- Be respectful of others' opinions
- No interruptions
- Give everyone a chance to speak
- All ideas are OK
- Collaborate and focus on solving shared problems
- Assume that many people have pieces of the answer
- Listen to understand, find meaning, hear new options, and find agreement
- Consider a variety of solutions and approaches and develop common ground around those approaches together

Placing these on each table ensures that everyone is on the same page during the discussion and deliberation.

Training facilitators and scribes

Training opportunities should be provided in advance to Think-In facilitators and scribes. Training should equip the participants with the skills needed to guide discussions to a successful outcome or to become efficient note-takers. Key skills required in these areas include: active listening skills, effective rapport building with a group, and maintaining participation and engagement.



Running a Think-In public event

Structuring the Think-In

The following example is a generic model of a Think-In agenda. Each Think-In will have its own particular agenda.

Welcome/Introduction

The host of the Think-In provides a welcome to the Think-In as well as introducing the format and the topic of the event. They also introduce the speaker.

Present Topics

An expert speaker should provide an introduction to the science, technology, or engineering topic and discuss societal and/or ethical implications (15 minutes max). Select a speaker who is skilled in communicating with non-scientific audiences. The speaker should keep their presentation snappy, and use engaging, topical examples to show everyday relevance and frame the challenge.

In certain cases, finding a speaker can be difficult or undesirable. In cases where a suitable speaker is unavailable, video can be a great alternative.

Q&A

Allow approximately 5 minutes after the speaker(s) in which the participants can ask any clarifying questions.

Group Deliberation

The host should run through the ground rules for group conversation. These rules can also be placed on tent cards on each table. You can find a list of suggested Ground Rules on page 10.

Participants talk about the questions and scenarios as described in the agenda. Conversation time will vary depending on the number of scenarios and the number of questions for each scenario.

During the discussion, the speaker and/or host can circulate throughout the room and go from table to table to answer questions that the participants might have.

Individual or Group Reflection/Report-Out

There are several ways to have the groups report-out on what they talked about. You may wish to have each table create a statement based on their conversation and report to the whole group, or ask volunteers to stand up and share with everyone what they discussed. Encourage the participants to keep their table's report-out brief. We have found it preferable for the trained facilitator/scribe to take notes of key discussion topics and thoughts, and read them back to the group to check it's an accurate reflection of the discussion before reporting out to the whole group.



Post-Think-In Evaluation

Evaluating your Think-In event can help you learn how to make improvements for future events. Advice and sample materials are contained in the **Evaluation** section beginning on page 16.

Publicising the Think-In

Marketing the event

Partnering with a community group, sports club or other special interest group in the local area will help ensure a strong turnout. Including these groups in the co-creation of Think-In materials will also help - ask them how they'd recommend marketing/promoting the event? What time of day/day of week is best? What incentives could be offered to attend? This will help to ensure that your marketing resonates with your target participants and maximises participation numbers.

Leverage existing networks and social media. Facebook advertising can be targeted specifically at particular age groups and geographic areas.

Be imaginative - think about posters in local libraries or shops, a guest contribution to a local radio station or guest blog posts about the Think-In topics. A large marketing and communications budget is not necessary to get the word out.

Pre-registration and communication with participants

There are some useful websites (such as [Eventbrite](#) and [Google Forms](#)) that allow you to manage an event registration list. Inviting participants to pre-register for the event will allow you the opportunity to obtain information such as email addresses; participants' relationship to the Think-In; their institutional, business or community affiliation; how they heard about the Think-In; and any requirements for people with disabilities or special dietary needs. Having a pre-registered list will enable you to keep track of who comes to the Think-In; this can be useful information when evaluating or reporting on the event.

It is highly recommended that you set up a waiting list for when the event books up. Send out an event reminder a few days prior to the Think-In and fill any cancellations from the waiting list.

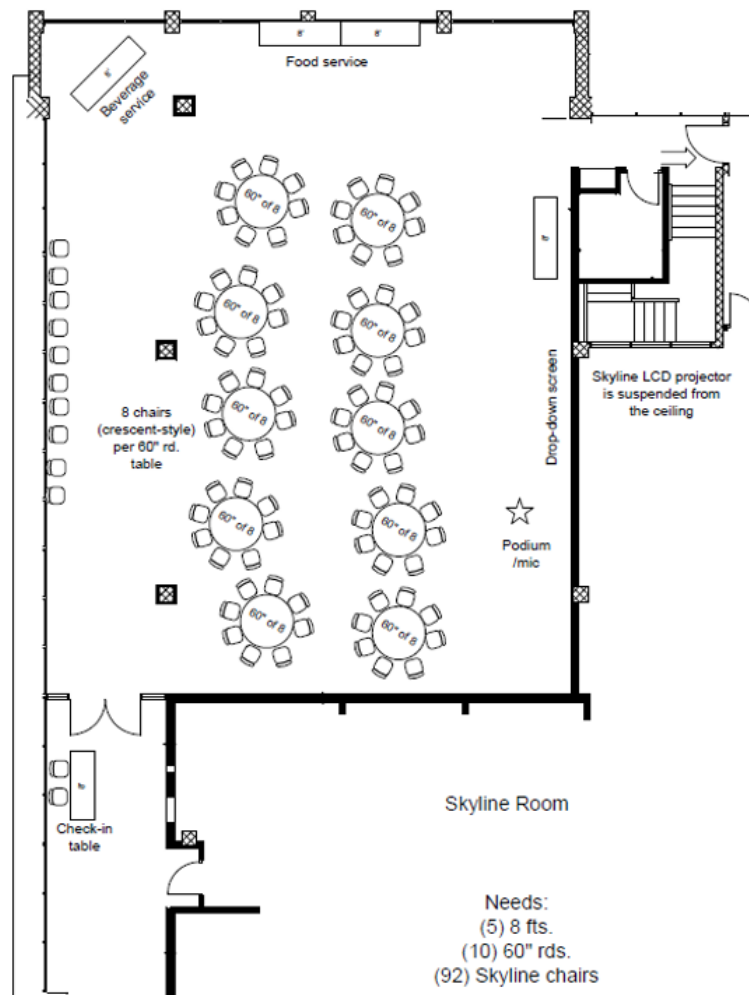
Setting up the Think-In

On the day of the Think-In, arrange to be at the venue about 60-90 minutes before the event to allow time to set up. The following checklist can be used to set up your Think-In:

- ☐ Set up the registration/check-in table
- ☐ Place photo and/or video release forms on the check in table
- ☐ Ensure the pre-registered participant list is ready to register attendees
- ☐ Put up signs and pull-up banners
- ☐ Set up and check the AV equipment to make sure it is functioning properly
- ☐ Have speaker presentations ready to go
- ☐ Set up the tables and chairs and place any necessary Think-In materials at each seat
- ☐ Place a ground rules tent card on each table



The following room layout can be used as a guide:



*Example floorplan for a
Citizens' Think-In*
© NISE Network
Think-In's Manual

Evaluation

It is important to evaluate your Think-In in order to ensure it will have the desired impact on participants. Think carefully about what “success” means to your event: what are the intended outputs, outcomes and impacts? How will you measure them?

We utilise a range of tools for formative evaluation, so that information can be gathered to make informed changes to subsequent Think-Ins. These data collection instruments are provided in the Appendix (page 19) so that you have the instruments necessary to be able to conduct your own basic formative evaluation of any Think-Ins that you present at your institution.

The guide includes instruments that allow you to understand the perceptions of various event stakeholders including the public participants, researchers, research centre staff, the speakers, and the facilitators through collection of information from all of these groups. By understanding the perceptions of each of these groups, you can modify future Think-Ins to better serve these stakeholders.

While adopting a mixed-methods evaluation approach is preferable as it provides a rounded view of the experience of all participants, it is not always necessary to collect information through all these data collection instruments in order to make informed changes. You might, for example, choose which audience(s) you want to pay attention to— whether it be the participants, speakers, programme staff, or facilitators— and use just the instruments that give you information about that group. In addition, you might choose to modify some of the data collection instruments by adding or removing questions in order to fit the needs of your individual institution.

Key questions that can be answered through this formative evaluation include the following:

- What aspects of the programme appear to contribute to the Think-In’s ability to achieve its goals and/or are valued by the stakeholders and should therefore be included in future presentations of the Think-In?
- How can the Think-In model be refined so that it better achieves the goals and objectives?

Particular elements of the Think-In model that can be examined include:

- a. The content of the expert presentations
 - b. The discussion scenarios
 - c. The overall agenda and flow of the event
 - d. The question and answer period
 - e. The participant report-out
- How can the programme be improved so that it better meets the needs of the key Think-In stakeholders (including adult learners, researchers, and presenters)?

Data Collection Methods

Multiple data collection methods can be employed to create a detailed account of the Think-In. The most common source of information about an event is often the participants, but the data collection instruments described below allow you to gather information from the institution staff, speakers, and small group facilitators as well.

Forms of possible data collection include registration surveys, participant surveys, discussion debriefs, observation notes, event debriefs, and speaker follow-ups. Any or all of these data collection instruments can be used based on the needs of your institution. However, in most cases, at least a public participant survey is collected in order to have some indication of the participants' perspectives. The data collection instruments are split here to indicate whether they provide information about the participants, speakers, or Think-In staff.



Participant Instruments

Registration Survey: The registration survey will primarily serve as a registration tool for the Think-In staff so that they know who is coming to the Think-In. However, this tool can also be used to learn more about the participants. Questions can be added in order to learn how participants are hearing about the Think-In (through what marketing methods) and whether the participants have any specific dietary or other needs.

Participant Survey: This method will focus on capturing information about public participants in the Think-In. Survey questions address participants' demographics, interests, and backgrounds. In addition, the participants can be asked for recommendations about how to improve the Think-In, what they learned, and what they valued about the event. This will help you to learn what participants thought about their experience, what they valued, and what changes they recommend. It is useful to conduct a pre- and post-event survey in order to track the effect of the Think-In on the participants, including any change in knowledge, opinions or intended behaviours.

Participant and Think-In Staff Instruments

Observation Notes: Notes can be taken on the dialogue that takes place between the participants and speakers/facilitators. This information will help you learn more about the perspectives of the participants, speakers, and facilitator. This will help you to understand the interests, confusion, and/or concerns of these stakeholders so that these things can be taken into consideration during future presentations of the Think-In.

Discussion Debrief: Observers - either small group discussion facilitators or scribes - can complete a debrief form at the end of the small group discussion to summarise the content of the discussion for one of the small groups. This instrument will help you learn about the participants' views of the small group discussion as seen through the eyes of staff. It will help you to understand the content of the participants' discussions as well as any concerns or confusion they had about the scenarios.

Think-In Staff Instrument

Event Debrief: In the days following the Think-In, event staff can be asked to provide information in order to create a record of the Think-In event. Staff can be asked about their thoughts on the success of the Think-In, how they felt about their preparation for the event, their thoughts on the structure and format of the Think-In, what (if anything) they learned from their participation, and what changes they would recommend for future implementations of the Think-In. This can help you to understand the effective components of the event, as well as the parts that need to be changed.

Following ADAPT Think-Ins, we send an online survey to participants immediately after the event. In the days after the event, we carry out follow-up interviews with a sample of researchers who participated in the event for more in-depth insights.

Speaker Instrument

Speaker Follow-up: In the days or weeks following the Think-In, speakers can be contacted and asked to fill out a survey. The survey will ask the speakers what value they found in participating, how the institution helped them prepare for the Think-In, and how the institution could have better helped him or her prepare for the event. This can help you to understand what about your speaker preparations worked well and what changes can be made to improve the process.

Resources and Full Evaluation Report

The appendix of this guide contains examples of evaluation instruments used for ADAPT Think-Ins. The full external evaluation report from the inaugural ADAPT Think-In is available at: <http://adaptcentre.ie/thinkins/resources/>



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[#BelieveInScience](#)



Appendix

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‘Technology in My Life’ Citizens’ Think-In Evaluation Plan

Event Aims

Provide participants with informal learning experiences so that they:

- Can judge between competing STEM arguments
 - Can engage in informed debate on STEM topics
 - Has a better understanding of their own views and those of others relating to emerging technologies
- Understand the role of STEM in our lives
 - Has greater understanding of importance of STEM to everyday life
 - Can see clearly how AI impacts or has the potential to impact many aspects of their lives
- Feels engaged with STEM research
 - Gained a better understanding of what a scientist is
 - Has greater insights into how research shapes the future of STEM innovations that surround us
 - Feels they have opportunities to have their say on future directions of research in this area

Event Outcomes

- Enhancement of participants’ understanding of AI and its potential to impact their lives and society
- Strengthening of the public’s and scientists’ acceptance of, and familiarity with, diverse points of view related to AI.
- Increasing participants’ confidence in participating in public discourse about STEM.

Evaluation Metrics

- % of participants reporting enhanced confidence in their ability to engage in informed debate on STEM issues and to judge between competing STEM arguments
- % of participants reporting they have a better understanding of the role of STEM in their lives
- % of participants reporting they feel more engaged with STEM research
- No. of ADAPT researchers who have a greater acceptance of, and familiarity with, diverse points of view related to AI
- No. of media mentions of the think-in

Evaluation Methodology Matrix

Evaluation Questions	Data Collection Instruments						
	Registrat- ion Survey	Pre/Post Exit Survey	Observat -ions	Observer Discussion Debrief	Organiser Debriefs	Speaker Follow Up Email	Vox Pops
What marketing methods were effective, and not so effective, at attracting participants?	X	X			X		
What aspects of the think-in are valued by stakeholders?		X	X	X	X	X	X
What aspects of the think-in appear to contribute to the think-in's ability to achieve its stated goals?		X	X	X	X	X	X
What changes should be made to the think-in so that it becomes easier to implement?			X		X	X	
What changes should be made to the think-in so that researchers can learn and use that learning to inform their research?				X	X		
How can the think-in model be refined so that it better meets its aims and better meets the needs of stakeholders?	X	X	X	X	X	X	X

Registration Survey

- Help understand the participants' relationship to the topic.

Pre Survey

- Who attended
- Knowledge of topic
- Appreciation of relevance of AI to their lives
- Confidence in debating STEM topics

Exit Survey

- Change in:
 - Knowledge of topic
 - Appreciation of relevance of AI to their lives
 - Confidence in debating STEM topics
- What participants learned and valued about the experience
- Clarity of information presented
- Recommendations for improving the programme

Observations: General Observer

Observational data (notes) taken by observer on:

- Topics participants were most interested in discussing
- Content discussed by the speaker during the presentation
- Content discussed during Q&A
- What groups said were major summary points from their group discussion at the report-out

Observations: Evaluator (i.e. Scribe):

Observational data (notes) taken by scribes on:

- Content discussed during small-group discussion

Evaluator (i.e. Scribe) Discussion Debrief:

Debrief form for evaluators (scribes)

- Summary of content discussed by participants in small-group discussion
- How the small group used the discussion scenarios
- Whether the small group incorporated the expert presentation into their discussions

Educator Debrief (All ADAPT team):

Complete SurveyMonkey debrief on:

- Thoughts on the success of the forum
- How they felt about their preparation for the event
- Their thoughts on the structure and format of the event
- What changes they would recommend for future implementations of the programme
- What they learned – Greater acceptance of, and familiarity with, diverse points of view related to AI?

Speaker Follow-up Email:

- What value they found in participating
- How the Centre asked helped them to prepare
- How the Centre could have better helped them to prepare for the event

Vox Pops

- What participants learned about the experience
- What participants valued most about the experience
- If think-in gave participants better insight into AI research

Pre-Event Survey

Please complete this survey BEFORE the event commences

Please note that we require the following information in order to understand the profile of participants in this event. We will not be able to identify you from the information you provide.

Age: 25-34 ☐ 35-44 ☐ 45-54 ☐

Gender: Male ☐ Female ☐

Which county do you live in? _____

Gross (pre-tax) annual income:

<€24k ☐ €25-€34k ☐ €35-€49k ☐ €50-€69k ☐ >€70k+ ☐

How did you hear about this “Technology in My Life” Citizens’ Think-In?

Science Week website ☐ ADAPT Centre website ☐ Facebook ☐ Eventbrite ☐ From DCU in the Community ☐

From Friends/Family ☐ Through a Club/Organisation ☐ At Work ☐ In the Media ☐ Other: _____

Have you previously attended an ADAPT Centre event? Yes ☐ No ☐

Have you previously attended a Science Week event? Yes ☐ No ☐

Why are you attending this event?

What are you expecting from this event?

Please indicate the extent to which you agree with the following statements:

Statement:	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
I have a strong understanding of Artificial Intelligence				
I feel comfortable expressing my opinions on Artificial Intelligence				
I have a strong understanding of ethics and privacy issues				
I feel comfortable expressing my opinions about privacy issues				
I understand how Artificial Intelligence can impact my life				
I feel engaged with Science and Technology research				

Exit Survey

Please complete this survey at the END of the event

1. Your Learnings

What did you learn from today's think-in?

What aspects of the think-in did you value most?

Please indicate the extent to which you agree with the following statements:

Statement:	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
I feel more informed about Artificial Intelligence				
I feel more informed about ethics and privacy issues				
I feel more informed about the risks and benefits of Artificial Intelligence				
I understand better the role of Artificial Intelligence in my life				
I feel more engaged with Science and Technology research				
I feel more comfortable expressing my views about Artificial Intelligence issues				
I enjoyed the experience				
I would recommend the think-in to others				

Observations

1. Topics participants were most interested in discussing

2. Content discussed by the speaker during the presentation

3. Content discussed during the Q&A after the presentation

4. What groups said were the major summary points from their group discussion during the report out

5. Content discussed during the whole-group discussion

6. Do the lead moderator and sub-moderators build up an effective rapport with the group? If yes, what techniques are used?

7. Is the language and tone pitched appropriately for the audience? (Does the audience understand the concepts portrayed? Is jargon used?)

8. Is the content of the think-in related back to participants' everyday lives?

9. Are participants encouraged to engage in conversation/dialogue/give opinions? Are they giving feedback or staying quiet?

10. Is the content engaging for the participants? Are they having fun?

11. From observing the think-in, what aspect generated the most interest for the participants?

12. Describe the overall atmosphere:

13. Additional comments:

Discussion Scenario 1: Artificial Agents



BACKGROUND



Artificial agents (including virtual assistants such as Amazon's Alexa & Google Home) can make life easier for their users in many ways. For example, by organising your schedule, suggesting places to visit, and providing you with information in a very fast and convenient way.

SCENARIO

You've purchased a new virtual assistant (Alexa) and notice that it asks you if you'd like to "enable customisation". This means that the assistant will customise itself to be like you in terms of personality traits, gender, and accent. Would you prefer the assistant to be customised to you or to keep the standard characteristics it came with?

For the customised version, this would mean allowing the company that built the agent to have access to personal information (such as voice recordings and location data). The agent will customise itself to be just as YOU want it, so your interactions with it will be more enjoyable and easier, since the agent will speak in your accent and mirror your personality. For the standard version, your privacy is guaranteed, but perhaps your interactions with the agent will be less meaningful and enjoyable to you.

DISCUSS

Which would you choose: standard or customised interactions?
What factors would influence your decision?

Would you like the virtual assistant to become personalised to you?
Would you connect it to your music app, your diary and your Netflix on your TV?

What if you had purchased the virtual assistant not for your own use but for your elderly mother?
Would that affect your decision?

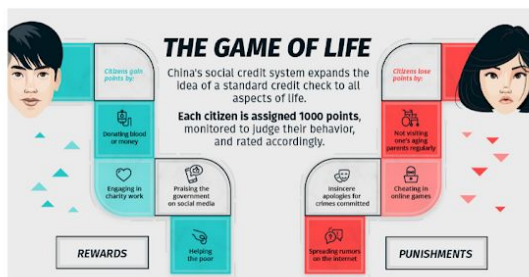


Would the nature of the AI make it more "acceptable" for you to agree to provide all that data? For example, would you be more willing to share your weekly schedule with your home heating AI so that it knows when to turn on the heat automatically for you, or a navigator system that lets you know how long your commute home will be?

Discussion Scenario 2: China's Social Credit System



INTRODUCTION

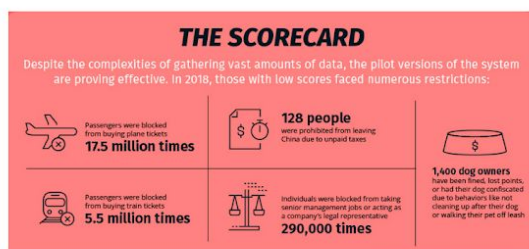


This video introduces the Social Credit System scenario in place in China:

<https://www.youtube.com/watch?v=Onm6Sb3Pb2Y>

BALANCE

For a balanced discussion, a key thing is to think about is the positives of such a system (such as the advanced AI technology that underpins it & its implementation to keep disease outbreaks such as COVID-19 under control).



DISCUSS

Can you see any potential benefits of such a system in terms of reducing crime? Would it make you feel safer if you knew that potential criminals were being monitored using the highly-advanced surveillance technology that underpins the system?

The system proposes to reward "citizenly behaviour" such as voluntary work and making blood donations. Isn't it good to recognise publicly good behaviour such as this?

Dating apps in China are starting to include a person's social credit score in their profiles. Maybe this would help you identify a potential partner who's a decent, upstanding citizen?

Should there be regulation of such powerful technologies that are enabled by AI. If so, who should regulate their development and use?

Would you be open to a tracing system which could help keep disease outbreaks under control?

Case Studies

ADAPT Inaugural Citizens' Think-In, November 2018

ADAPT Responsible Research and Innovation Teacher Workshops

Technology in my Life: ADAPT Inaugural Citizens' Think-In

Vision and Objectives

The 'Technology in My Life' Citizens' Think-In series engages Irish-based adults in in-depth discussion, dialogue and deliberation around societal implications of Artificial Intelligence (AI). Each think-in comprises: an introductory presentation on key AI concepts; small-group discussion of several technology application scenarios focusing on possible opportunities, impacts, risks and benefits of AI; and report-out by each group on its thoughts and recommendations, followed by whole-group discussion. The ADAPT Citizens' Think-In series addresses calls in European policy discourse for two-way dialogue between Sciences and publics that empowers publics as scientific citizens. More specifically, they aim to:

- Enhance participants' understanding of AI and its potential impact on their lives and society,
- Strengthen citizens' and scientists' familiarity with, and acceptance of, diverse points of view related to AI,
- Grow participants' confidence in participating in public discourse about STEM and their feelings of being engaged with STEM research.



It is anticipated that this will contribute in the medium term to a greater sense among the Irish public of having a voice on emerging technological innovation (and having that voice heard), and to an embedded culture and practice of engaged research within ADAPT. Longer-term, the intended impact is for a scientifically informed and engaged public, greater democratisation of research and innovation, and research that is responsive to societal interests and needs.

The Citizens' Think-Ins primarily target Irish-based adults aged 18-55 who are an under-represented group when it comes to STEM engagement.



The key target population is 'emerging adults' and adults aged 30 to 55 years. Emerging adulthood is defined as the life stage between ages 18-29, but before marriage and children. By engaging emerging adults, the project aims to develop new knowledge, skills, interests, attitudes and lifelong science learning and citizenship patterns, thereby giving a fresh opportunity to young people who may have become disenchanted with science during school years to gain a new perspective and pathway to participation in scientific citizenship. 30-55 year-olds attending without children are targeted as they are a priority demographic for SFI, given they are less inclined to engage with STEM projects.

Inputs

A total of sixteen ADAPT members who participated in a pilot think-in in November 2018 contributed to the event evaluation report produced by an external consultant at the Celsius Group. This report was published in February 2019. Competitive funding secured from the SFI Science Week Call 2018 covered the cost of this report. A total of eight ADAPT researchers, supported by the EPE team, contributed to the delivery of the May 2019 think-in; two as presenters and six as discussion facilitators. Science Gallery Dublin hosted the event, free of charge, and handled bookings so there were no direct costs for ADAPT.

Outputs

The outputs of this initiative in 2019 include:

- Professionally produced content (i.e., lay presentations and application scenarios) designed to stimulate public debate on the topic Artificial Intelligence, Privacy and Civil Liberties,
- Production and publication of an external evaluation report on the pilot think-in (which was held in November 2018) in February 2019,
- Hosting a second iteration of the think-in at the Science Gallery Dublin as part of the 'Open Labs' exhibition in May 2019. A total of 17 members of the public participated in this event,
- Presentation of a paper titled "Having our say": Strategies for public engagement in responsible AI research and policy development" at the Conference of the International Association for Media and Communication Research in July in Madrid. The paper, authored by ADAPT collaborators Prof Aphra Kerr of Maynooth University and Prof Marguerite Barry of UCD with ADAPT EPE Manager, Ms Laura Grehan, contributes to understanding of the potential of the think-in model to raise public awareness of and engagement with potentially controversial innovations such as AI.

Outcomes and Evaluation

Evaluation of the think-ins reveals that they have successfully enhanced participants' understanding of AI and its potential impact on their lives and society; strengthened citizens' and scientists' familiarity with, and acceptance of, diverse points of view related to AI; and increased participants' confidence in participating in public discourse about STEM and their feelings of being engaged with STEM research.

ADAPT adopted a mixed-methods approach (based on best practice in the US) to the evaluation of its pilot Citizens' Think-In on 'AI, Privacy & Civil Liberties' and to the



subsequent think-in in May 2019. A logic model outlined the anticipated outputs, outcomes and impacts of the events.

A survey in the online registration helped to understand participants' relationship to the topic and guide development of content and materials. Pre- and post-exit surveys captured data on the change in participants' knowledge of the topic, in their appreciation of its relevance to their lives, and in their confidence debating STEM topics. The exit surveys also asked what participants valued most about the experience, and the clarity of information presented. Observational data provided insights into issues such as whether the content was engaging and the atmosphere conducive to open debate.

The evaluation of the pilot think-in – conducted by an external evaluation consultant – found that, as a result of the think-in, 94% of public participants felt more informed about AI and 88% felt more comfortable expressing their views about AI. A debrief with ADAPT speakers, moderators and scribes revealed that 81% had greater familiarity with diverse points of view related to AI. Importantly, 70% said that the think-in will help inform current or future research. The outcomes on these measures were slightly lower for the May 2019 think-in (possibly because most public participants had pre-existing knowledge of AI) but the evaluation revealed that 85% felt more informed about ethics and privacy issues relating to AI. While public participants praised the content and format of the event, a slightly lower percentage (75%) said they felt more engaged with STEM research post-pilot event (and 67% from the May 2019 event), so there is a little room for improvement on this element. Action will be taken to address this before the next think-in.

ADAPT Responsible Research and Innovation Teacher Workshops

A Case Study

In 2019/2020, the SFI ADAPT Research Centre for Digital Content Technology partnered with Junior Cycle for Teachers (JCT) to develop and deliver a series of interdisciplinary workshops focused on responsible research and innovation (RRI). The STE(A)M in Junior Cycle initiative is a partnership between JCT and education partners (such as ADAPT) from fields of STEM and The Arts. The ADAPT Centre collaborated with JCT to develop an elective workshop series entitled “Technology, Research and Innovation - The Future!” These workshops give teachers and researchers a forum to discuss, debate and explore ethical and societal challenges around one of the most significant emerging technologies worldwide: Artificial Intelligence (AI).

Background

Junior Cycle for Teachers (JCT) is a Professional Learning Experience (PLE) support service of Ireland's Department of Education and Skills. The service aims to support schools in their implementation of the new Framework for Junior Cycle (2015) by providing appropriate high-quality CPD for school teachers and leaders, and by creating effective teaching and learning resources.

ADAPT's “Technology, Research and Innovation - The Future!” workshop adopts an inquiry-based approach and is open to all teachers, not just those with an interest in STEM and STE(A)M education. ADAPT researchers use their tried and tested “Citizens’ Think-In” format to engage teachers in an in-depth discussion, dialogue and deliberation around societal implications of Artificial Intelligence (AI). The workshop content is closely aligned with specific learning outcomes of relevant Junior Cycle subjects, making it clear to teachers how the training will benefit themselves and their students.

The aims of the ADAPT STE(A)M in Junior Cycle workshops are:

- to equip participants with the skills required to uncover the emerging risks and opportunities of AI
- to gain insights into RRI and consider its role in scientific research
- to explore how research can ensure the age of AI is inclusive of everyone

The workshops provide teachers with a practical toolkit of resources which they can use to engage their students in cross-curricular discussions on how emerging technologies such as AI affect individuals and society more generally.

Approach

STE(A)M in Junior Cycle runs annual PLE workshops with teachers in the months of February and March. Workshops are held in Department of Education and Skills centres nationally.



Each education partner runs 4 workshops for 30 participants, spread geographically around Ireland. The workshop content is developed and trialled in advance of the national rollout.



The workshop content, which was developed and delivered by ADAPT researchers, comprises an introductory presentation on key AI concepts and an overview of responsible research and innovation with examples of societal implications for emerging AI technologies in areas such as security, privacy and civil liberties. This is followed by interactive small-group discussion scenarios which empower participants to talk about possible opportunities, impacts, risks and benefits of AI. The teachers who participate gain insights into RRI and are given a forum to consider its role in scientific research. The workshop culminates in a whole-group reflection exercise which encourages participants to think about what surprised them or made them understand a different perspective.

The discussion scenarios and activities can easily be replicated and adapted for use in teachers' own classrooms. Examples of sample learning from relevant subjects, anticipated learning outcomes for teachers and subject-specific learning outcomes were integrated within the workshop material. This meant the workshop content was relevant to teachers of a wide variety of subjects.

Outputs

1. A 90 minute inquiry-based workshop which engages teachers (and ultimately their students) in in-depth discussion, dialogue and deliberation around societal implications of Artificial Intelligence.
2. A toolkit of resources for teachers and students which includes an introductory presentation on key AI concepts, an overview of responsible research and innovation, and some examples of societal implications for emerging AI technologies. The toolkit also includes scenarios for several small-group discussion topics which focus on the opportunities, impacts, risks and benefits associated with AI. The resources are mapped to subject-specific learning outcomes which are in focus in the workshop.

Evaluation

Formative evaluation: In advance of the first workshop, JCT organised a 'critical friends' event to do a dry run of the workshop before roll-out to teachers nationwide. The critical friends experience was beneficial in terms of implementing guidance from JCT advisors which improved the workshop content in advance of roll-out.

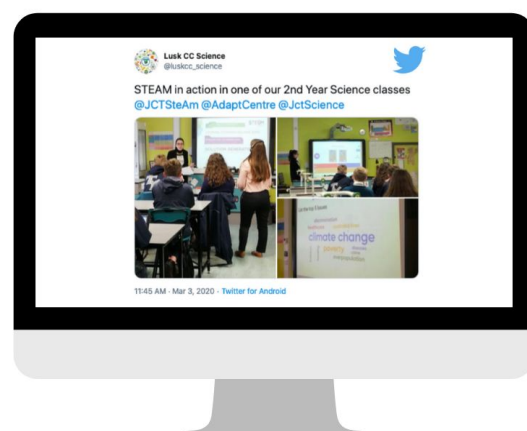
Evaluation of the STE(A)M in Junior Cycle workshops was carried out by JCT. At the end of each workshop, teachers completed a questionnaire based on their experience of the PLE workshop in general and more specific questions which focused on whether the workshops

had a clear STE(A)M agenda and if they help connect societal challenges to the classroom. The feedback from teachers was overwhelmingly positive. All of the teachers who participated in the workshop agreed that not only did it provide practical ideas for the classroom, but it inspired ideas for teaching and learning across subject disciplines and helped to connect societal challenges to the classroom. They all enjoyed the workshop content and found it very engaging.

Feedback from the workshops revealed the significant extent of teachers' interest in AI, ethics and responsible research and innovation. The workshop material was relevant to a wide variety of teachers and subject areas. Part of the success of the workshop is that it did not just attract participants from traditional STEM subjects. An interdisciplinary spread of attendees from different subject areas (e.g. Religious Education and Home Economics) approach discussion topics from different perspectives depending on their subject areas. Such interdisciplinary representation reflects the diversity of subject expertise in ADAPT, and across society as a whole, where we observe that research and interest in AI ethics and privacy is wide-ranging. That teachers from diverse subject areas are considering AI and its societal challenges and implications is very promising for the future pipeline of AI students and researchers.

Impact

Feedback from the workshops revealed the significant extent of teachers' interest in AI, ethics and responsible research and innovation. The workshop material was relevant to a wide variety of teachers and subject areas. Part of the success of the workshop is that it did not just attract participants from traditional STEM subjects. An interdisciplinary spread of attendees from different subject areas (e.g. Religious Education and Home Economics) approach discussion topics from different perspectives depending on their subject areas. Such interdisciplinary representation reflects the diversity of subject expertise in ADAPT, and across society as a whole, where we observe that research and interest in AI ethics and privacy is wide-ranging. That teachers from diverse subject areas are considering AI and its societal challenges and implications is very promising for the future pipeline of AI students and researchers.



Tweet demonstrating how one of the teachers who participated in the workshop integrated the material in their Junior Cycle Science lessons, March 2020

Comments from teachers indicated that there is a huge appetite among teachers of varied subjects for material on AI and ethics that they can bring to the classroom in order to encourage discussion, debate and deliberation among their students on the impact of emerging technology. On the whole, teachers found the workshops “engaging”, “thought-provoking” and felt their understanding of the role of digital engagement technologies in their lives improved.



Feedback from teachers who attended ADAPT's "Technology, Research and Innovation - The Future!" workshops in 2020.

Participants appreciated the interactive and hands-on nature of the workshop and felt they could replicate some of the discussion scenarios quite easily in their own classrooms, thus empowering them, and as a result their students, to participate in conversations about STEM and ultimately leading to a more scientifically-informed and engaged public. There were several suggestions that the workshop should have a wider roll-out to all teachers.

Lessons Learned

The key lessons learned from ADAPT's collaboration with JCT were that the majority of teachers who attended the workshops were inspired by the activities. The workshop content is hugely relevant across the Junior Cycle curriculum (we identified and articulated links between at least eight Junior Cycle subjects at the planning stages of the workshop). Feedback from participants indicates that the learning experience is engaging, both for teachers and students, and has potential for expansion.

The PLE runs on Saturday mornings in February and March. We observed a reduction in attendees at each workshop compared to those who had signed up. Attendance drop off is a recognised challenge when organising weekend elective training for teachers. Nonetheless, teachers who attended and participated in the workshop found it a worthwhile experience and recommended it should be part of standard JCT training.

The COVID-19 pandemic, and subsequent nationwide lockdown, meant the 2020 JCT STE(A)M workshop series was cut short. This unfortunate turn of events meant that only two out of four of the scheduled workshops could be delivered. However, this afforded an opportunity to redevelop the JCT workshop content in order to engage teachers online and the ADAPT Centre is now collaborating with the Department of Education to develop and deliver an online version of the workshop series in order to address the demand for professional development in this area.



Engaging Content
Engaging People



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