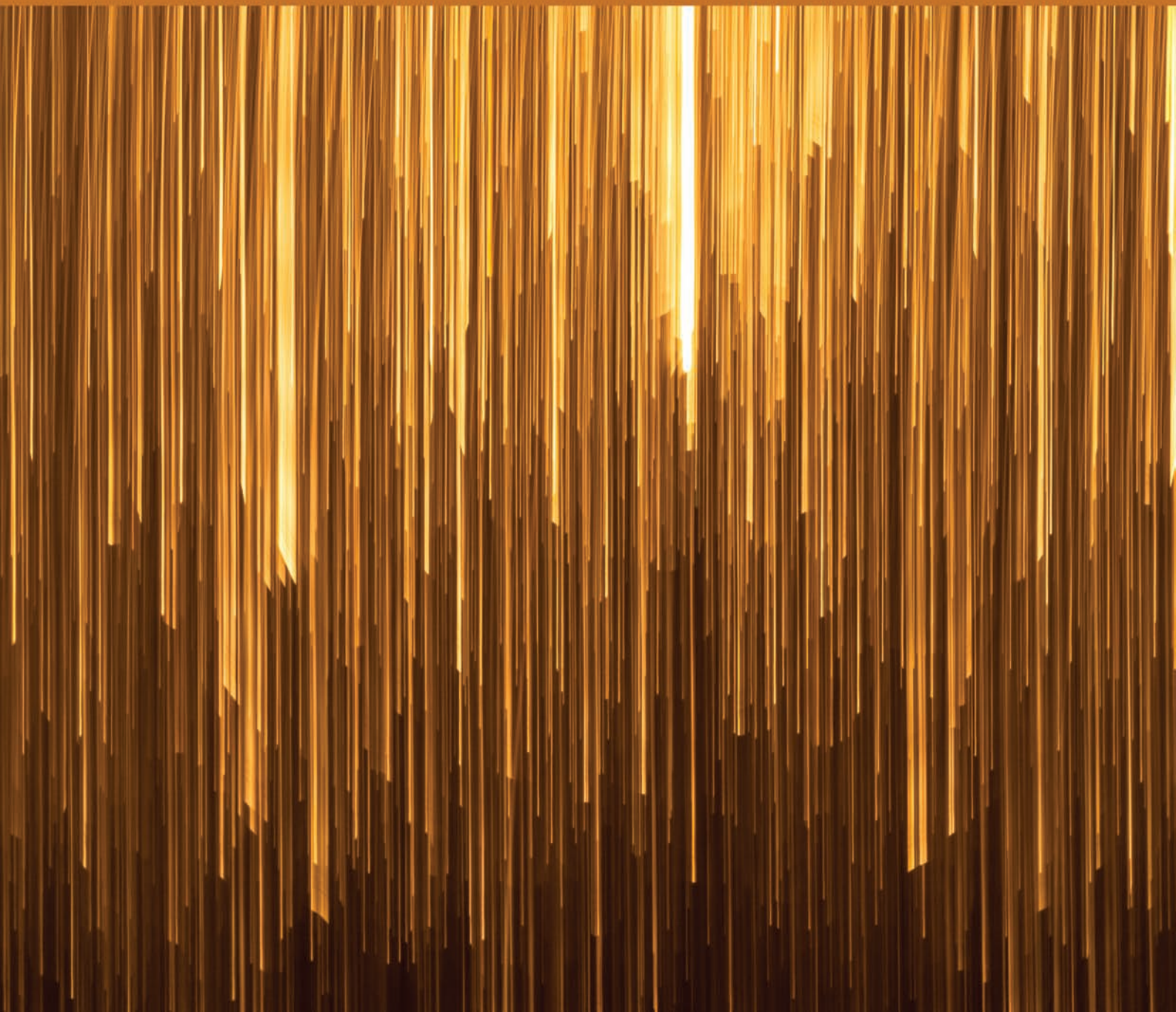


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# Digital Tools for Citizens' Assemblies

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# Introduction

Digital tools can be used to improve the flow of information into and out of Citizens' Assemblies, as well as facilitating the organisation and proceedings of assembly meetings. Taking components of Citizens Assemblies individually, there are many good examples of usage of digital tools, even if there is no definitive 'Citizen Assembly' package. For instance, lessons can be learned from how recent public inquiries in the UK have approached dissemination of information, and audience response/feedback systems designed for conferences and training can be adapted to the purpose of assemblies.

This document uses as key examples the reports of the Irish [Citizens' Assembly on the Eighth Amendment](#) — a state-facilitated exercise meant explicitly to feed back into political discussion — and the report on a [Citizens' Assembly on Brexit](#), which was run as a research exercise by a coalition led by UCL's [Constitution Unit](#).

Some of the examples explored were projects with extensive administrative resources, which both allows for time spent on digitisation and the creation of raw materials (such as transcripts) to be digitised. Digital tools allow more use to be made of these materials when they already exist, but can also allow some equivalent activities to be done more cheaply. For instance, where it is impractical to produce transcripts of evidence, live-streaming and recording evidence is becoming progressively easier and cheaper. Where operating a substantial paper ballot exercise isn't administrative or financially feasible, digital tools can make voting components viable.

While digital tools can be cheaper than the alternatives and open up new possibilities for engagement, they need to be integrated into the process in a considered manner that reflects the purpose of the overall participative exercise.

They also create new practical requirements that need to be considered in advance. At the most basic level, the wifi capacity of the venue should be a consideration in selecting a location (as was the case in the Irish Constitutional Convention and the Citizens' Assembly on Brexit) as it will be a large factor on how useful/effective some of the digital tools described below can be.

This is version 1 of the document. Comments can be made on an online version of this document at: <http://mysociety.org/colab/citizens-assemblies>

# Potential uses of digital tools

Potential uses are divided into three broad areas covering the use of digital tools before, during and after a Citizen's Assembly.

## Preparation: bringing the public in

- Question forming
- Public submissions
- Finding experts and stakeholders to give evidence

## Internal: facilitating assemblies

- Attendance management
- Tools for coming to decisions in the assembly (voting)
- Sharing assembly materials to members
- Including a wider range of experts
- Enabling online deliberation for assembly members outside the face-to-face sessions

## External: sharing products

- Sharing the conclusions of the assembly
- Streaming of evidence/plenary sessions
- Sharing evidence submitted to inquiry
- Tracking implementation of recommendations
- Communicating participants' experiences
- Allowing feedback from non-participants on the outcome

# Bringing the public in

## Question forming

While a Citizens' Assembly is a powerful tool for answering a question through deliberation, the precise wording of that question can limit potential outputs of the process from the start. Where the mandate is potentially broad, an online process of crowdsourcing can be used to set [parameters for the assembly](#).

Asking the public a set of questions on a theme, [cluster analysis](#) can be used to understand what the different groups of opinion among the public are. This helps identify the kind of question where deliberation can resolve differences, rather than rubber-stamp an uncontroversial question (although there is also value in an assembly validating that a position is uncontroversial among the public if it is also contentious politically). [Wikisurveys](#) (see [allourideas.org](#)) can help change the questions posed to identify more interesting areas of disagreement.

## Public submissions

The core difficulty of incorporating submissions from the public into a Citizens' Assembly is that, while the assembly is carefully selected to be representative, submissions may not be — and could skew towards those better engaged with the process, or mobilised by a campaign. Digital tools can be used to speed up certain kinds of analysis to help present an assembly with a more balanced picture of the public input.

For the Irish Citizen Assembly process, digital tools were used to bring testimony from the public, provide information to members outside of sessions and share evidence openly. The website for the assembly also [accepted submissions from the general public](#):

*The Assembly welcomes submissions from Irish citizens and non-citizens living in Ireland or living abroad.*

*All submissions received will be published on the website and displayed with a full name (first name, surname)/name of organisation, if appropriate.*

At an initial meeting of the Citizens' Assembly on the Eighth Amendment, the assembly wanted to prioritise submissions from advocacy groups, political parties and other interest/representative organisations. Separately they also wanted to prioritise personal stories. The secretariat prepared a list of the former groups and curated a list of personal stories (using a broad definition). How to use the site to access these stories was demonstrated to the assembly ([see video](#)).

In advance of the February meeting, the secretariat distributed a random sample of 300 submissions in advance to discuss how to incorporate them into the process. Many members read

submissions online as they were being published: “a little over half of the Members had read at least 40 of the 120 submissions received from advocacy and other representative groups; a quarter had read more 80 or more of them. The trends are pretty similar regarding website usage more generally: a little over half of the Members had logged on to the website five or more times to read from the total submissions received by the Assembly”([p. 78](#)).

As the above suggests, for this process to be useful requires a large amount of public engagement - and greater engagement requires more work by the organisers to make submissions useful to the assembly. The sampling approach was required because the assembly received 13,000 submissions.

Parsing the unstructured text of submissions is a manual challenge, which can be assisted digitally in two possible ways:

- Changing the structure of input: for instance, asking demographic questions that better facilitate a representative sampling.
- Automated categorisation of output: natural language processing could help identify clusters in the responses that can inform how the total of the submissions — or at a simpler level, text similarity can help identify where responses contain copy-and-paste responses. Open source NLP tools [are available](#), but currently require specialist skills that may make it harder for an assembly to make use of.

Using structured questions (for instance, a series of yes/no questions related to the area of the assembly), software such as pol.is can be used to identify [different clusters of opinions](#) . This means the assembly can be presented with the different kinds of views that are present, without a large number of people who have been mobilised for one category artificially dominating the agenda.

## Finding experts and stakeholders

Either as a direct result of the evidence process, or via a separate mechanism, the pool of potential experts can be built through a public form on the website. This could allow self or peer nomination to make sure the pool of potential experts available to the facilitators or advisory group is comprehensive.

The Irish Citizens Assembly on the Eighth Amendment used the following criteria in expert selection:

- Demonstrated expertise in the field, e.g. university academics, members of the legal or medical profession or other subject specialists
- Good communicators, capable of expressing themselves clearly to a diverse audience;

- People who are not seen primarily as advocates on one side or another of the issue at hand;
- In the case of issues where expert views are contested (i.e. where experts can make credible arguments that directly conflict with one another,) the Expert Advisory Group will ensure that both sides of the argument will be represented. (p. 52)

An online form could gather nominations with information relating to the above to understand who is regarded as neutral, and where balancing is required.

Experts may be professionals in the field, or alternatively people whose life experiences give them expertise on the issue - who might otherwise be missed. This may be especially important on local issues, where the scope of relevant expertise might be less well mapped.

## Facilitating assemblies

### Attendance management

Once the pool of attendees is confirmed, the suite of digital tools and techniques used by the events industry to maintain retention of potential members becomes useful.

The Citizens' Assembly on Brexit used email with members to increase commitment — for instance, emailing to ask how they intended to get to the venue ([p. 24](#)). This information wasn't needed (and so didn't require additional administration to process), but was meant to encourage members to make a plan for travel, and so increase the chances they would do so.

This can be managed back and forth over email, but the poll feature of a free/cheap email marketing product like Mailchimp also allows for emails that ask people the method of intended transport. People who don't reply can then be re-targeted easily inside the software for follow-up communication.

Online tools can also make details of attendance (venue, schedules) more accessible. Again, using commercial (but effectively free for the volume required) mailing software allows the open rates of important emails to be seen and identify who may not have received important information — and follow up via more expensive means of communication such as phone calls or mail.

### Voting

Procedurally a citizens' assembly may be asked to make recommendations and so requires mechanisms to come to conclusions.

In Citizens' Assemblies in Ireland, voting was conducted [via paper ballot](#). Voting was secret, used the same voting booths as those used in elections/referendums and was administered by a returning officer.

[The Estonian Assembly on Aging Population](#) uses [Citizen OS](#) for voting. This is an open source (and free to use) tool that allows online voting and decision making.

The [Constitution Unit report](#) into their Citizens' Assembly on Brexit only mentioned that private votes were sometimes conducted electronically and sometimes on paper (p. 41):

*As the paragraphs above make clear, the great bulk of the work of a Citizens' Assembly takes place through discussion. But the purpose of this discussion – at least in the Citizens' Assembly on Brexit – was not that Members should come to a shared collective judgement. Rather, the purpose was that, through such discussion, Members would be able to engage with a wide variety of views and arguments, consider a great deal of information, and thereby come to their own informed and considered judgements on the matters in hand.*

*To allow Members to express these judgements, all of the votes that are reported in Chapter 4 below were taken by secret ballot. Some of these – on values and guidelines – were taken using an online voting tool called Mentimeter. Others – all of the votes on options for the form that Brexit might take – were taken using paper ballots.*

In this case, paper ballots were used because Mentimeter didn't allow for a preferential ballot (some iPads were provided for those without electronic devices). An Excel sheet was used to calculate the results of preferential vote using several different voting systems, allowing fast reporting of results and ease of explanation of the implications of preferential voting.

Paper has an advantage in being well understood, but then requires additional time both to vote and to count the result. Where the outcome of an assembly is especially important or controversial, it will also be desirable to demonstrate the validity/security of the vote by hiring/providing an independent returning officer or scrutineer.

At a cheaper level, online polls can be created that can be accessed over attendees' phones (examples include Mentimeter, VoxVote, Sli.do). While it can generally be assumed that most attendees will have a phone that can access a voting website, this option may run into difficulties with a lack of signal/data allowance or connecting to the venue wifi. The solution may be a set of cheap hired tablets for use by people without reliable devices. While the counting/security costs have been reduced, this potentially increases requirements for the venue and technical support — any representative group of people is likely to include a subset who will struggle with digital tools and this need should be anticipated.

Beyond that, conference audience interaction systems reduce some of the self-management problems of the above systems by providing both the equipment (a voting keypad) and an



engineer — while still enabling quick electronic voting. Examples of this include Ubievent Live, Clicapad, QuizTime, Group Dynamics.

Depending on the importance of the voting requirement, a mixture of these may be appropriate, with cheaper e-voting to decide on procedural matters, while votes on outcomes are validated via more official paper based processes.

## Argument representation

Argument maps can be structured as text but can also be produced as a specialised form of mind map — they help establish relationships between claims, evidence and counterarguments. These can avoid the problem discussed in the public submissions section above, in that mapping arguments without giving weight to levels of support can be a useful guide to the debate without moving it in a particular direction. This approach benefits from collaboration to ensure that the arguments presented cover the full range of the debate.

Argument mapping could be the output of a public participation section prior to the assembly, or constructed by the participants/facilitators as the assembly progresses. The role of this document would be to serve as a reference point for participants of how arguments and evidence have related to each other — and may form part of the output from the assembly.

This is an area that has interested academics, leading to the creation of [Aracaria](#) and [Delibatorium](#) as a way of [studying argument mapping](#).<sup>1</sup> Looking at software that might be useful for this purpose, and checking for ease of use, suggested options are:

- [Coggle](#) - simple mind mapping; allows collaboration. The free version should be sufficient for most purposes of the assembly.
- [Argdown](#) - Open source method for structuring argument information as text that can then be expressed in formatted text or graphs. As text, can be collaborated on using any number of platforms.
- [bCisive](#) - Alternate paid mapping software.

While easier to use than some alternatives, if used during the sessions Coggle and Argdown both require a computer and to understand the syntax of the program. A hybrid model, where paper or post-it mind maps are converted into a mindmap by a facilitator, might better balance demands on participants' skills and time.

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<sup>1</sup> <http://www.arg.dundee.ac.uk/people/chris/publications/2004/ijait.pdf>  
<https://cci.mit.edu/klein/research/>

## Group selection

As with the use of an Excel sheet mentioned in the Voting section, there are organisational tasks that can be run via Excel or formalised into more useful tools. An example of one would be if small groups of participants are being rotated: their order and assignment could be managed by a tool that ensures that people are in groups with a wider range of other participants than pure chance would create (just as music software shuffle order is [decided by a process](#) to seem more random than pure chance).

## Including a wider range of experts

Digital tools can be used to bring a wider range of experts to give evidence to the gathered assembly. This approach allows one to bring in experts from other countries, or those who are unable to travel. Presentations and Q&As can be conducted over video chat, with questions either managed indirectly via a chair or directly through a Q&A tool such <https://www.sli.do/>.

This poses similar technical issues to those addressed in the last section: video calls can be unreliable, and so a good external internet speed is essential. If used, these sessions should be mixed with in-person sessions to reduce the risk of technical failure disrupting too much of schedule (and a test call should be staged in advance to minimise disruption).

## Making materials available

A website that makes materials available online allows participants to refer to them between sessions. These can also be distributed through email. A website that prominently contains important information is also useful for people to refer to while travelling to the venue. In a following section, we also explore frameworks for releasing evidence that is also useful to the public.

At the assembly itself, providing tools digitally requires more investment in technology or higher expectations on what members will bring. For the Irish Citizen Assembly process, digital tools were used to collect testimony from the public, provide information to members outside of sessions and share evidence with the public, but physical copies of documents rather than screens were used during the sessions themselves.

## Online deliberation

Tools such as CitizenOS or online bulletin boards (such as phpBB) can be used to continue deliberations beyond the structure of the assembly. This may be inappropriate where structured deliberation is an important aspect of the assembly, or where uneven amounts of time to dedicate outside the assembly may lead to some being more able to participate online. This would either

lead to those individuals having more impact if online activity is formally included, or feeling that they wasted time (and become more disengaged) if it is not.

While the digital tools exist, they should be balanced against the needs and purpose of the assembly in question. For the Citizens' Assembly of Brexit a decision was made not to have online discussion outside assembly time because of "the likelihood of uneven participation and the difficulty of moderating content adequately."

## Sharing products

### Live streaming

For Irish Citizens' Assemblies, public proceedings were livestreamed and are [available on YouTube](#). This includes expert evidence and [Q&As](#) of experts from the assembly members, though the discussions of the assembly itself were not broadcast.

While livestreaming may raise privacy concerns in some instances, in this example names (and general area of origin) of assembly members were already available on the website. Decisions made on the general privacy of members and what it is and isn't appropriate will guide what can be livestreamed, but building an archive of the assembly's evidence is a useful demonstration of transparency.

Live streaming and digital filming is a service offered by many event videographers: the cost of this scales with the length of the assembly.

### Sharing evidence

The Citizens' Assembly for Northern Ireland uses a Wordpress site (open source) to distribute [PDFs of recommendations](#) and evidence presented to the assembly. The Irish Citizens' Assembly released evidence sessions as videos on YouTube after they were live streamed, but they are not integrated into the main site except as a link. The Citizens' Assembly on Brexit publishes [all the slides](#) used by presenters.

A similar model for dissemination of evidence can be seen in recent public inquiries. The Iraq Inquiry, the Leveson Inquiry and the [Grenfell Fire](#) inquiries all have websites where witness testimony was available as video, transcripts, and with key documents presented alongside.

The Grenfell Tower Inquiry website uses [Drupal](#) (open source) to publish and manage evidence. Evidence is available as video, with the transcript available as PDF and ODT files. mySociety has previously experimented with creating transcripts that are easier to read online using their own SayIt platform to publish [the Leveson inquiry transcripts](#).

More complex material raises long term problems for archiving and accessing (for instance, videos on the Iraq Inquiry have been removed as [part of the preservation process](#) by the National Archive) - which highlights the importance of low tech compiling of information for ease of archiving. The Irish Citizens' Assembly released "[Appendix E](#)" covering all evidence presented to the members as two additional PDFs covering 460 pages. While not the most useful format in terms of presenting information, it is an excellent long term storage medium that is more likely to be accessible or stored for longer.

Depending on the complexity of the evidence to be presented, different options may be more viable. Drupal might be more suitable for complex evidence with many different sets of documents and testimony, but where evidence is primarily recorded as a video, YouTube's organisation system may well be sufficient rather than making large adaptations to a website to incorporate the video material.

Evidence produced for an Assembly might have other uses, for example straightforward and balanced explanations of an issue can have uses in schools. By considering this potential use early, the work done to create evidence for an Assembly can have a longer life afterwards and contribute to improving knowledge of the wider public on an issue.

## Sharing conclusions and tracking implementation

Generally, the sharing of conclusions is not an especially digital process, with the main output of an assembly being a written report in a single document, released on the website as a PDF. The final report of the Irish Citizens' Assembly was released as a 141 page PDF: the website does separately include the key results of the assembly as [a press release](#). The Citizens' Assembly on Brexit released a report and an additional eight page summary report as PDFs.

Whether this is a problem or not is an open question. While in principle publishing material as a PDF alone is not good for issues of accessibility, social sharing and reading on mobile devices, often the output of a citizens' assembly is not aimed at a widespread readership. The assembly is commissioned to feed back into a political process. Once that report is delivered and the assembly effectively dissolved, what is the proper role of the organisers of the assembly in promoting the findings? Similarly, who is the interested audience in tracking whether the recommendations are delivered?

In Ireland, the Citizens' Assembly process led to a referendum that brought about a repeal of the Eighth Amendment: both of these are big results, but the website does not reference either of those outcomes at all. A Constitution Unit study found that the assembly itself was only mentioned in around 4% of media articles that also mentioned the referendum ([p. 194](#)).

When the outcomes and purpose of an assembly are being determined, this should also result in a dissemination plan. If it is important that the outcomes of the assembly are easily available,

budgeting should be built in to release conclusions and reports in multiple formats (for instance, mySociety releases research reports as PDFs, but also [as mobile-responsive webpages and e-book formats](#)).

Where a summary report is a good idea, a short page on the website itself covering the summary will make the results easier to access via search engines and more accessible on mobile devices.

The importance of dissemination will affect the amount of resources given to this stage, but a no-cost option to make a PDF output more accessible is to release explicitly with a [Creative Commons licence](#) rather than not specifying a licence or marking the report as copyrighted. This makes clear that material may be shared and converted into other formats by third parties.

## Communicating participants' experiences

Because they are a new institution, recruitment for Citizens' Assemblies involves a lot of explanation of the concept with few reference points. Online surveys of participants after the event, and a significant time after (when recommendations may or may not have been followed) will help build a picture of how participants viewed the assemblies. These may be useful for adjustment to process, or as useful information to be shared as part of the recruitment process for future assemblies. Videos of the assembly, or of past participants describing the experience, can also help better communicate the process.

## Allowing feedback from non-participants

Software exists that allows comments and discussions on complex documents. For instance, Google Docs can allow public comments on locked documents and [hypothes.is](#) can be used to annotate any website with discussions.

The broader issue is that some forms of engagement from the public could undermine the deliberative element of the process. Assemblies are designed to be representative of the population, which online comment sections are not. Part of the purpose of the assembly is that, even if a participant's opinions do not change (there were some very slight shifts vs the control group in the Citizens' Assembly on Brexit - [p.73-74](#)), they should develop deeper opinions on the issue than non-participants. Public comments on draft or final outcomes could re-introduce biases that were excluded earlier in the process - and pairing the results of the deliberation with online comments might create a false parity in the effort required to reach them.

Any inclusion of comments from the wider public during and after the assembly needs to be a carefully planned part of the process rather than an afterthought and filtered through methods that avoid weighting the debate. For instance, allowing the public to feedback on argument maps or agendas could be acceptable as a way to highlight areas not yet discussed - which might lead to

a choice by the assembly to make changes to the agenda. Any such mechanisms should be designed to empower the assembly in its task.

## Conclusion

This document has described a number of possible users for digital tools as part of Citizens' Assemblies. Not all will be appropriate for all cases, but it will hopefully serve as a guide to what is possible — and that many tools that are useful for Citizens' Assemblies are generic and well-tested aids rather than bespoke products.

Above all when approaching the use of digital tools, it's important that the final choice is appropriate to the aims of the project — and will typically be complementary rather than taking a center-stage role. Digital tools can reduce costs and enhance the process by creating resources that add greater depth and knowledge to the process, but shouldn't detract focus from the importance of the core deliberative activity of the assembly.

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