Digital Engagement Plan for Mini-Publics in Scotland's Higher Education Sector: An Eduba Pilot

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1 Introduction

In this paper I aim to explore how minipublics or small, diverse, and deliberative groups made up of educators can enhance not only engagement within Scotland's higher education sector but the incentive they have within future tech companies. While this is an academic study, I am integrating Eduba, an educational technology startup I founded, into the process. I believe that to critique and analyze democratic governance in digital tools effectively, I must apply these principles within a real-world context. This allows me to "put my money where my mouth is," testing the practical application of democratic innovations through Eduba.

The broader context for this research lies in the global shift towards digital democratic practices. Estonia's *Rahvaalgatus.ee* platform allows citizens to develop policy proposals for parliamentary consideration [2], while France's *Parlement et Citoyens* looks to create a transparent, collaborative policy-making between citizens and lawmakers using the more modern versions of virtual governance [3]. These examples highlight the potential of structured, digital engagement to shape meaningful governance processes. In Scotland, similar opportunities exist, particularly within higher education, where educators increasingly rely on digital tools but often lack a voice in how these technologies evolve and even more importantly how they are placed in the classroom.

The intention is to create a replicable, scalable model of democratic engagement that aligns with both my academic work and Eduba's mission.

2 The Chosen Organisation, Issue, and Context

The organization at the heart of this research is Eduba, an AI-integrated educational technology group designed to enhance collaborative learning and research. Eduba facilitates document creation, code development, and content production through AI-assisted tools. Its mission is to empower educators and researchers to harness technology without being constrained by it. Eduba's software is not merely a product but a dynamic

ecosystem where technology and pedagogy intersect, guided by the voices of educators themselves allowing for an exploration of future implementations of technology within the educational envisionments.

The main issue I am wanting to focus on is the lack of participatory governance in the development of educational technologies. The reason is, when oyu look at the main pain points of AI, or technology in general within the classroom, too often solutions are designed without meaningful input from educators, resulting in tools that may not align with pedagogical needs or ethical standards. This disconnect can lead to frustration, underutilization of technology, and, in some cases, exacerbation of educational inequalities. By introducing mini-publics as a mechanism for democratic engagement within the tech company its self, this research seeks to bridge that gap by skipping the "middle man", ensuring that educators are not passive recipients of technology but active co-creators.

The context for this study is Scotland's higher education sector, including colleges, private institutions, and universities. Scotland's *Digital Learning and Teaching Strategy* [5] emphasizes the importance of integrating digital tools into education while ensuring equitable access and ethical use. However, digital exclusion and under-representation remain challenges, particularly for educators in rural areas or those lacking digital literacy and this is only exacerbated by the continued influence of various Ai platforms and models [6]. This research positions itself within this landscape, aiming to contribute to ongoing efforts to democratize digital education in Scotland.

3 Strategic Considerations

3.1 Why Mini-Publics?

I have developed a much larger framework in which to solve these problems, however to focus on all the individual stake holders and implementations to make the over arching goal possible would be out of the scope of this paper, rather here I focus on one thing. Mini-publics offer a structured way to involve educators in the development and governance of educational technologies within Eduba. By selecting diverse participants who reflect the broader educational community, mini-publics ensure that multiple perspectives inform decision-making while also creating "product market fit" in the same motion. This approach creates a win-win combination of capitalist interest with communal needs and goals. While I would love to go how Capitalistic means can lead to Communistic goals, I wrote thoroughly on this in my Treatise on Post Digital Governance "Rise of the Virtual Vanguard" published in Saints Academic Review.

For Eduba, mini-publics are not just a feedback mechanism; they are integral to how the platform evolves. The insights gathered from these groups will directly influence the design of AI tools, data privacy policies, and pedagogical frameworks within the platform. This creates legitimacy within the system it-self while also creating a feedback loop for developers and policy makers within (or outside) the company to generate better and more robust solutions directly for the users.

This approach echoes the participatory budgeting model in Paris or in Spain, where citizens influence public spending decisions directly [4], and mirrors the collaborative policy-making seen in Estonia. [2, 3].

All of this, would likely create a sense of ownership among participants, fostering a deeper engagement with the technologies they help shape again feeding into this positive feedback loop allowing for a commons controlled private workflow. This participatory model ensures that Eduba's tools are not only technically robust but also pedagogically relevant and ethically sound without the barrier of going outside the company for those ideas to be brought in. The conceptualization of what it means to even be a company begins to shift in this context.

3.2 Who Will Participate?

The mini-publics will consist of 50–70 participants from various roles within Scotland's higher education sector. They will meet every 2-3 months (virtually and physically) and will host a physical one in different regions with each iteration. The time line would hopefully be indefinite, as in the active control and development of the company will always be held within control of the educators, however the first pilots of this would need to be much shorter and more contained over a 6 month period with a 2 month buffer for planning and initial engagement.

This includes:

- **Educators:** Lecturers, part-time instructors, and teaching assistants who engage directly with digital tools in the classroom.
- **Support Staff:** IT professionals, administrative staff, and instructional designers who facilitate the integration of technology in education.
- **Students:** Undergraduate and postgraduate students who experience the outcomes of EdTech policies firsthand.
- **External Stakeholders:** Representatives from educational policy bodies, AI ethics researchers, and government agencies who provide broader governance perspectives.

Participants will be selected through a combination of targeted outreach and open applications based on a random pooling from each region within Scotland to ensure diversity in terms of teaching levels, institutional types (public/private), and geographic locations (urban/rural). Special attention will be given to under-represented groups, including rural educators and those from marginalized communities, to ensure that the mini-publics reflect the full spectrum of voices in higher education.

3.3 How Will the Mini-Publics Operate?

The engagement process will be structured in four phases, with each phase designed to build upon the previous one, creating a coherent and iterative decision-making process.

Phase 1: Recruitment and Onboarding
Participants will be recruited through institutional networks, professional organizations, and open calls. An onboarding session will introduce the goals of the mini-public, the use of digital platforms like Decidim and Pol.is, and the expected outcomes. Technical support and preparation workshops will be provided to ensure that all participants can engage fully.

Phase 2: Deliberation and Proposal Development
Participants will engage in small group discussions to identify key issues related to digital course delivery(Eduba Labs), AI integration, and data privacy. Using Decidim, they will draft proposals and share feedback. Pol.is will be used to gauge sentiment and identify areas of consensus or contention. This phase emphasizes discursive diversity, encouraging participants to share their unique experiences and perspectives.

Phase 3: Hackathon and Policy Drafting
A focused "hackathon" will bring participants together to refine software proposals and draft policy recommendations. This intensive session will leverage expert input and collaborative tools to produce actionable outcomes. In previous decades non-technical individuals being involved in shaping software would have been a great challenge, but this is where the tools already developed within Eduba will show great use. They have been designed not as products but as ways to explore and actively create new ways to interact with ai, and more importantly information, without needing any knowledge on software or artificial intelligence. The hackathon format encourages creativity and rapid problem-solving, ensuring that the mini-publics generate practical solutions that can be implemented within Eduba and the broader educational context.

Phase 4: Review and Finalization
The final phase will involve reviewing and ranking proposals using Pol.is, followed by a formal vote on Decidim. The voting structure will go beyond simple majority votes, employing a ranking system that allows participants to evaluate proposals based on multiple criteria such as feasibility, impact, and alignment with ethical standards. The results will be compiled into a comprehensive report, pushed directly into Eduba's work pipeline and shared with participating institutions.

3.4 Leveraging Decidim and CitizenOS for Enhanced Engagement

Decidim or CitizenOS will play pivotal roles in facilitating digital engagement, ensuring that participation is accessible, transparent, and impactful.

Decidim will serve as the primary platform for proposal creation, discussions, and voting. Its user-friendly interface allows participants to draft, comment on, and refine proposals collaboratively. Decidim's transparency features, such as version histories and public access to deliberation records, build trust and accountability within the mini-publics but more importantly with external institutions not yet participating within the framework.

CitizenOS, inspired by Estonia's *Rahvaalgatus.ee*, could be used to facilitate collabo-

rative decision-making on specific issues. Its design supports structured discussions and helps participants navigate complex policy topics that will certinaly exist within these debated areas of Ai and education. CitizenOS's ability to crowdsource ideas and aggregate feedback will complement Decidim's deliberative functions, creating a comprehensive digital engagement ecosystem.

Both platforms could be easily integrated into the engagement process, providing multiple entry points for participants and ensuring that digital participation is as robust and meaningful as in-person interactions.

3.5 What Are the Expected Outcomes?

The primary outcome of this research is a set of policy recommendations and direct recommendation of feature sets for the development and use of educational technologies within Eduba and Tech Companies at large. These recommendations will be integrated into Eduba's *EdTech Constitution*, a living document that guides product development and ethical tech use in classrooms acting as the "operating agreement" of the company.

In addition to influencing Eduba's internal governance, the mini-publics will provide a model for participatory decision-making that can be replicated in other educational contexts. By documenting the process and outcomes, this research also contributes to the broader field of digital democratic innovation, offering insights into how mini-publics can enhance governance in technology development in the private sector.

4 Incentives and Barriers to Participation

4.1 Incentives

This is one of the most challenging parts of this process. Initially I believe the most simple way to encourage participation, is to partner with institutions and offer Professional Development credits or fill in slots for careerer development training that was already set aside and allocated from both a funding and time perspective. Participants will also receive certificates of recognition and the opportunity to shape technologies that directly impact their teaching environments. Additionally, the collaborative nature of the mini-publics provides a platform for professional networking and knowledge exchange.

Monetary and Resource-Based Incentives:
To further incentivize participation, I will explore the possibility of stipends or grants for educators who contribute significant time and expertise to the mini-publics. Access to exclusive resources, such as early access to new Eduba features or specialized training modules, will also be offered as part of the incentive structure.

Recognition and Career Development:
Participants will have opportunities to present their work at conferences or publish in

academic journals, providing professional recognition and enhancing their career development prospects. This aligns with the broader goal of integrating democratic engagement into professional growth pathways for educators.

4.2 Barriers

However, barriers to participation remain. Digital poverty, lack of technical skills, and time constraints can prevent educators from engaging fully. To address these challenges:

- **Technical Support:** Preparation workshops and ongoing technical support will ensure all participants can use digital platforms like Decidim and CitizenOS.
- **Flexible Participation:** Hybrid participation options, combining online and face-to-face sessions, will accommodate diverse needs and reduce logistical barriers.
- **Resource Allocation:** Providing childcare support, travel stipends, and flexible timelines will help mitigate time constraints and encourage broader participation.

These measures align with Nesta's recommendations for inclusive digital engagement [6], ensuring that participation is equitable and accessible.

5 Evaluation and Monitoring

The success of the pilot will be evaluated through:

- **Participation Metrics:** Tracking engagement levels, diversity of participants, and the quality of contributions.
- **Outcome Assessment:** Evaluating the impact of mini-public recommendations on Eduba's product development and governance.
- **Feedback Loops:** Collecting participant feedback to refine the engagement process and address any challenges.
- **Iterative Adjustments:** Implementing changes based on evaluation outcomes, ensuring that the engagement process evolves in response to participant needs and feedback.

These evaluation methods will ensure that the pilot not only meets its immediate goals but also provides a scalable model for future digital democratic innovations within private sector companies and the education sector as a whole.

6 Conclusion and Next Steps

By using Eduba as a real-world application, I aim to demonstrate the practical value of mini-publics in shaping ethical, effective, and inclusive EdTech solutions and more importantly show the feasibility for these systems to work internally to tech companies them selves, not just externally.

The outcomes of this pilot will inform both Eduba's internal policies and broader educational governance structures in Scotland. If successful, this model can be scaled to other regions and sectors, showcasing the potential of mini-publics to drive meaningful, participatory innovation in not only education but technology as a whole.

Ultimately, this research seeks to contribute to the field of digital democratic innovation by providing a concrete, replicable model for participatory governance in EdTech. By documenting the process and outcomes, I aim to offer valuable insights for both academic and practical applications, demonstrating that educators can and should play a central role in shaping the technologies that define their classrooms.

References

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