



Toward inclusive justice: Applying the Diverse Voices design method to improve the Washington State Access to Justice Technology Principles

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Just court systems are enabled by inclusive justice practices. Toward creating conditions for more inclusive justice—specifically engaging with and enabling experiential experts—we applied the Diverse Voices method to improve the Access to Justice Technology Principles (ATJ-TPrinc) which guide court administration in Washington State, USA. We situate our work in literature on inclusive justice, public interest technology in the courts, value sensitive design, and experiential experts. Then we present our research context, the Washington State ATJ-TPrinc, and our method, the Diverse Voices. We provide details on our methods, including our project genesis and implementation of the Diverse Voices process. We conducted experiential expert panels with four stakeholder groups: legal professionals, currently/formerly incarcerated people, immigrant communities, and rural communities. We then report key concerns and insights which surfaced during the panels as well as the review process and adoption of the revised Principles by the Washington State Supreme Court. We document changes to the ATJ-Princ informed by feedback from the expert panelists, including two new principles – P11 Human Touch and P12 Language Access. The discussion focuses on evidence for success, skillful implementation of the Diverse Voices method, the need for complementary regulation, and benefits to inclusive justice efforts and public interest technology projects. Our contributions entail: (1) a case study demonstrating the use of the Diverse Voices method to improve a tech policy document for the Washington State court system; (2) for public interest technology, a model for public engagement around tech policy that foregrounds participation of experiential experts, as well as the conditions necessary to ensure concerns raised are both heard and acted upon; (3) facilitation techniques and skills for enabling diverse stakeholder groups to express their concerns around responsible computing systems; and (4) revised and expanded access to justice technology principles to support more inclusive justice.

CCS CONCEPTS • Social and professional topics -- Computing / technology policy

Additional Keywords and Phrases: Court system, diverse Voices method, experiential expert, inclusive justice, inclusive tech policy, justice system, policymaking, public interest technology, value sensitive design

1 INTRODUCTION

Just court systems are enabled by inclusive justice practices. The courts have numerous functions, most notably, ensuring that people accused of committing criminal offenses receive fair trials [3]. In doing this work, modern courts increasingly rely on computing technology in a myriad of ways, be it holding virtual hearings, translating between languages, viewing evidence, making sentencing decisions, and more [9, 32, 82, 84]. It is within this dynamic sociotechnical context that inclusive justice mandates serving all people affected by the courts and, as a matter of practice, engaging with communities and their representatives in working toward access to and responsible use of computing technology by legal professionals and court users.

Inclusive justice efforts are important for several reasons. Foremost, when stakeholders see themselves represented, they are more likely to perceive the resulting system as fair, impartial, and reliable [3, 56]. Further, including stakeholders who have experienced or are knowledgeable through relationships increases the likelihood of identifying, understanding, and resolving obstacles, leading to a more just and equitable society [3]. Different perspectives and experiences give rise to new ideas, approaches, and practices being considered, empowering the justice system to respond appropriately to evolving social needs. Additionally,

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inclusive justice recognizes the importance of hearing diverse voices and respecting the lived experiences of those who have been historically marginalized or excluded from decision-making processes.

To promote inclusive justice, courts should provide tools that the community deems important for a fair and inclusive justice system. For example, to ensure a fair playing field for all stakeholders, courts must ensure that technology does not introduce unreasonable barriers for court users. Often court users with limited resources or from underrepresented groups, lack the skills to effectively use digital technology, cannot access reliable internet, and rely on outdated digital technology [38, 39, 40]. Whatever the reason or circumstance, diminished access to technology and digital skills translates into diminished access to justice. If we are to have inclusive courts, then we must have inclusive technology policies. Although inclusive justice practices are making a difference [17, 47], gaps in implementation and representation within the court system do exist. One significant gap is the involvement of experiential experts, leading to court policies and practices that ignore the needs and concerns of the diverse stakeholders served by the courts [1, 15]. This research demonstrates how the Diverse Voices method, a method that gathers feedback from experiential experts on technology policy documents, can be used to advance inclusive justice goals.

Our research context concerns the Washington State Access to Justice Technology Principles (ATJ-TPrinc) which guide the responsible use of computing technology in the Washington State court system. First adopted by the Washington State Supreme Court in 2004, the original set of principles addressed issues of access and participation [91]. In turn, the ATJ-TPrinc has inspired the development and adoption of similar principles in court systems across the United States [33]. Over a decade later and with significant improvements to computing technology, in 2015 the Washington State Supreme Court requested the principles be updated. The Access to Justice Technology Committee (ATJ-TComm) took on this task and produced a set of draft Principles. Yet the committee felt the process and perspectives brought to the principles' revision could be more inclusive. To address this gap, the ATJ-TComm approached the Tech Policy Lab at the University of Washington with a straightforward request: Apply the Diverse Voices process [49] which assembles panels composed of key experiential experts (see Section 2.3 for a definition) to review the draft Principles. In this way, the voices and perspectives of at least some of those who, by virtue of circumstance or actions, become entangled with the courts would be consulted and integrated prior to adopting the new ATJ-TPrinc. We did so, engaging with experiential experts from four stakeholder groups: legal professionals, current/formerly incarcerated, immigrant communities, and rural communities.

In this article, we report on our use of the Diverse Voices method to improve the draft Principles. In Section 2, we provide background on inclusive justice, public interest technology in the court systems, value sensitive design, and experiential experts. Then we provide background information on our research context, the Washington State ATJ-TPrinc, and on our method, the Diverse Voices. In Section 3 we provide details on our methods, including ethics review and best practices, our project genesis, and our implementation of the Diverse Voices process. We then report on key concerns and insights which surfaced in the panels in Section 4, on the review process and adoption of the revised Principles by the Washington State Supreme Court in Section 5, and summarize the outcomes including two new principles in Section 6. We then reflect in Section 7 on the evidence for success, on what we have learned about skillful implementation of the Diverse Voices method, on the need for complementary regulation, and on benefits to inclusive justice efforts and public interest technology projects.

Our work makes four contributions: (1) a case study demonstrating the use of the Diverse Voices method to improve a tech policy document for the Washington State court system; (2) for public interest technology, a model for public engagement around tech policy that foregrounds participation of experiential experts, as well as the conditions necessary to ensure concerns raised are both heard and acted upon; (3) facilitation techniques and skills for enabling diverse stakeholder groups to express their concerns around responsible computing systems; and (4) revised and expanded access to justice technology principles to support more inclusive justice.

2 BACKGROUND

2.1 Inclusive Justice

Inclusive justice establishes the need and an agenda for a more equitable and accessible legal system [32, 36, 47, 52, 62, 88]. The term has gained prominence nationally and internationally. Khotynska-Nor [41, pg. 184] defines inclusive justice as the “accessibility of justice from the position of non-discrimination and equal opportunities for all, without excluding people in the means ... of judicial protection of their rights.” Definitions such as Khotynska-Nor’s focus on accessibility to justice and protection of individual rights; in contrast, other definitions emphasize community collaboration and empowerment to prevent injustice. For example, the Center on International Cooperation in New York defines inclusive justice as, “strengthened cooperation between frontline justice actors and communities, with the aim of giving communities themselves the tools to prevent injustice.” These and other definitions are similar in that they advocate for working with a wider group of stakeholders, especially those from marginalized and disadvantaged communities, to shape the justice system [47]. The overarching goal is to identify and advocate for the removal of systemic barriers within the legal system [21]. Importantly, representations of the concept of inclusive justice vary across the globe, according to cultural, historical, and socio-political circumstances.

While internationally inclusive justice efforts take many forms and make a variety of ethical commitments, in the United States these efforts tend to focus on criminal justice reform [5, 47, 61, 74]. The first wave of inclusive justice initiatives in the United States emphasized reducing mass incarceration, addressing racial disparities in sentencing, and improving reentry programs for formerly incarcerated individuals. That work is continuing. More recent efforts have sought to develop practical guidance (and corresponding guides) that are more inclusive, for example, pertaining to court and legal documents [33], community justice programs [88], and policy documents [49]. Further work identifies issues and gaps in access to justice approaches [79], difficulties faced by public defenders when trying to access surveillance data [87], and use of algorithms in justice related decision-making [37]. In addressing these issues and gaps, what sets apart an inclusive justice approach is the engagement of communities and their representatives in working toward more just solutions. Our work falls within this charter, bringing the perspectives of experiential experts from underrepresented groups to the tech policy table governing court use of technology.

2.2 Public Interest Technology in the Court System

From our perspective, Public Interest Technology (PIT) and the policies governing their use can make inroads toward achieving inclusive justice. PIT emerged in the early 2000s with the aim to leverage technology to help underserved communities, promote social justice, and improve the transparency and accountability of public institutions [53]. New America Foundation [65] defines PIT as “the study and application of technology expertise to advance the public interest in a way that generates public benefits and promotes the public good.” PIT involves using current and emerging technologies, data analysis, and human-centered design principles to identify problems [72] and create computing solutions that prioritize the needs and well-being of individuals and communities [65]. Despite on-going debates about who is a public interest technologist and who determines what counts as PIT [19, 22, 78], there is reasonable consensus that PIT advocates for involving diverse stakeholders—including technologists, social scientists, and affected communities—in the development and implementation of computing initiatives [65].

The relevance of PIT to the court system cannot be understated. Digital technology has been an integral part of modern court systems since the 1980’s [60]. Courts use an array of computing technologies for the administration of justice, including electronic monitoring [82, 85], electronic sentencing determination algorithms [8, 31, 44], online court forms [30], and video conferencing [54, 55, 66]. Much is at stake. Done well, technology reduces the amount of time it takes to resolve disputes and satisfy requirements by judges [67] and does not burden or cause harm to court users [7, 9]. Done haphazardly, technology can lead to significant harm, as when algorithmic sentencing and bail systems embed biases based on race [8]. Toward

positive ends, PIT practitioners and researchers are exploring the use of technology to improve access to legal information [40], improve the efficiency of the courts [53], promote transparency and accountability of court decision-making processes [8, 9, 58, 82] and implement criminal justice reform [11]. Sample public interest technologies in the broader court system include algorithmic fairness and bias detection, legal aid chatbots, online dispute resolution (ODR), prisoner rehabilitation technologies, and sentencing decision support systems.

To illustrate, consider a virtual court system, one in which the judge sits in the physical courtroom while the accused, claimant, witnesses, and legal counsel join remotely. Historically, the design of such court technology gave little consideration to the circumstances of the accused, claimant, or witnesses including digital literacy skills, physical disabilities, technology (e.g., laptop, mobile phone), connectivity (e.g., 4G, broadband), or location (e.g., quiet space in a residence, homeless shelter, public library). Limitations with any of these may negatively impact the accused's, claimant's, or witnesses' ability to participate in the virtual hearing. Bringing a PIT lens to the design of a virtual court system would ensure that the experience of these, along with other stakeholders, would be considered and addressed. For example, for an accused person with limited income to be able to participate in a virtual court hearing at a local library, the court date and time would need to be coordinated with the library's open hours and the availability of a private booth void of distractions. By taking considerations such as these into account, the PIT lens results in human-centered technology solutions that increase access to and quality of all parties' experiences with the courts.

2.3 Value Sensitive Design with Tech Policy

Although common models in the policy development arena rarely engage with design [2], design methods and practices bring perspectives and techniques to the policymaking process that can yield practical insights, helping to shape robust tech policy [80]. Among established design approaches, we draw on value sensitive design (VSD) [14, 23, 24] for three primary reasons. First, VSD views tech policy as a tool and, as such, a first class object and outcome of a technical design process. Seen as a tool, all of VSD's machinery applies including that around the tripartite methodology, foregrounding human values, and emphasis on direct and indirect stakeholders. With this work, we lean into VSD's tripartite methodology, with conceptual commitments to inclusive justice, technical work involving the iterative redesign of the ATJ-TPrinc, and empirical work involving panels with relevant experiential experts.

Second, our commitment to inclusive justice and public interest technology point to the values of inclusion, equity, and voice, as well as diverse stakeholder representation. Yet how to bring these into tech policy remains elusive. VSD offers the construct of direct and indirect stakeholders – those who are directly impacted by a technology and those who are affected even if they do not work with the technology directly – as well as practical ways to identify and prioritize such stakeholders and methods such as the Diverse Voices to engage with experiential experts.

Third, this work offers a unique opportunity for VSD to explore a distributed implementation of the tripartite methodology. Typically in VSD projects, a single team, group, or organization conducts all three types of investigations in an integrated manner. In this case, to better meet the goal of inclusive justice, an independent third party was employed to conduct the empirical investigation with experiential experts. Specifically, the conceptual commitment to inclusive justice was identified by the ATJ-TComm who also conducted the iterative technical re-design of the ATJ-TPrinc; however, the empirical work with experiential experts which fed into the redesign work was carried out by our team. This division of labor among two organizations then required the invention of a synthesis and report format as a way to share outcomes between the two.

2.4 Centering Experiential Experts

While inclusive justice, PIT, and VSD all use their own language to refer to key populations—of disadvantaged communities, underrepresented and stakeholder-focused communities, and direct and indirect stakeholders,

respectively—they all point to the need to engage with affected communities [10, 23, 46, 47, 50]. While policymakers, technologists, public advocates, and community members agree that public engagement can lead to more robust technology policies, there are many concerns about current engagement practices [6, 15, 69]. Some approaches have been characterized as overly symbolic [1, 6], others as one-way communication from technical and policy experts to people without technical expertise [1, 43], and still others as occurring too late in the policymaking process to measurably change outcomes [42].

One way to respond to the current concerns would be to engage with *experiential experts*. Following Young et al. [90], we define experiential experts as people either who have lived experience or those closely associated with someone who has lived experience or serves the community (e.g., family members, institutional advocates). When conceptualizing experiential experts we include both direct and indirect stakeholders [23]. They have experience which allows them to provide practical insights and knowledge, different from that of traditional experts. They have experienced situations that taught them valuable lessons. Their understanding of the nuances and complexities related to living as a member of a community is instrumental in decision-making and problem-solving. When experiential experts participate in the policy development process, their voices enhance discussions, lead to a more comprehensive understanding of challenges, help identify and consider implicit biases and stereotypes, increase confidence in policymakers and the public trust [81], and result in more responsive tech policy [45, 46, 56, 57].

Despite the strong benefits of engaging with experiential experts who represent underrepresented communities affected by changes in the courts, these experts are often not included in the decision-making process. Some common reasons for exclusion include criminal record [3, 63], racial bias [13], ability [27], and limited representation in leadership positions. Moreover, even when included, experiential experts may choose not to participate for a host of reasons including a lack of trust [77], fear of retaliation [76], and tokenism [19, 26]. The work reported here mitigates both types of these challenges in the following ways. We intentionally identified critical stakeholder groups from which to recruit experiential experts and then held ourselves accountable to that recruitment. We provided support by compensating experiential experts for their time as well as reimbursed their travel expenses. We created trust by being open about the purpose of the panels, using a minimal moderation approach, verbally recognizing the importance of panelists' participation, and keeping panelists' identities hidden. To combat tokenism we met with the ATJ T-Princ document authors to explain our process and gauge their commitment to improving the document should panelists identify places where the draft Principles fell short.

2.5 Washington State Access to Justice Technology Principles: Our Research Context

We carried out our research in the context of the Washington State court system and specifically their Access to Justice Technology Principles. In the early 1990's, motivated by the growth of digital technology in society, anticipating a similar growth in digital technology use in the courts, and fearing that without thoughtful intervention such technology use would pose barriers to marginalized groups, the Washington State Courts started work on the first ever ATJ-TPrinc [33]. The principles were envisioned not only to ensure that barriers to accessing the justice system would be eliminated, minimized, or avoided, but also that pathways to achieving justice itself would be created or maximized.

Since their adoption by the Washington State Supreme Court in 2004 [91], the ATJ-TPrinc have had a far-reaching impact across the Washington State justice system. For example, the ATJ-TPrinc have been referenced in state court decisions and opinions [33]. They have also been used by the Washington courts and related agencies to evaluate private sector contracts for technology [33]. Other states, including California, Michigan, and Texas have turned to the ATJ -TPrinc for inspiration and guidance creating their own policies and principles.

The decade following the approval of the ATJ-TPrinc has seen an explosion in technology development and uptake within the courts [70]. In 2015, the Washington State Supreme Court, concerned that after a decade of technological advances, the 2004 ATJ-TPrinc would no longer be sufficient to mitigate barriers and ensure

access to justice requested that the ATJ-TComm update the ATJ-TPrinc. The ATJ-TComm spent nine months seeking guidance and feedback from the general public, technologists, and the legal community. During that time, feedback was solicited online and offline from hundreds of people across Washington State. This effort resulted in a set of draft Principles which included: Scope, Definition of Technology, P1 Access to Justice for All, P2 Openness, Privacy, and Safety, P3 Maximizing Public Awareness and Use, P4 Best Practices Workgroup, P5 Accountability and Fairness, P6 Usability, P7 Accessible Formats, P8 Plain Language, P9 Accessibility, and P10 Cultural Competence. Hereafter, we refer to this document as the “draft Principles.”

While this process resulted in numerous changes, at its conclusion the committee felt they were still missing input from underrepresented groups—particularly those who might not have an immediate interest in the overlap between technology and legal services delivery, but would have an interest in ensuring the courts remain accessible to people regardless of their status in society. This led the committee to approach the University of Washington’s Tech Policy Lab to apply the Diverse Voices process to the draft Principles. This research begins at this juncture.

2.6 Diverse Voices toward Inclusive Tech Policy: Our Method

The Diverse Voices method was developed to empower underrepresented stakeholders to imagine and articulate how a tech policy artifact may have a disproportionately negative impact on their life experiences with an eye toward shaping the design of that artifact [49]. Examples of these tech policy artifacts include action plans, briefs, legislation, regulations, and white papers. Building on insights from design thinking [12], value sensitive design [23], and related methods that seek feedback from individuals [18], the method centers experiential experts, their views, and the design of a tech policy artifact. It was first developed in 2015 to be used with late-stage pre-publication technology policy documents taking the form of white papers which typically are written for policymakers, synthesize previous research, focus on a specific technology, and focus on specific contexts of use [49].

The Diverse Voices method has been used in a variety of contexts and projects [16, 30, 37, 44, 71, 72, 89]. In one case [90], for a white paper on Augmented Reality (AR) in the United States panels were convened with people with disabilities, women, and currently and formerly incarcerated people. One outcome from the disabilities panel entailed the redefinition of AR from “augmenting an existing sense” to “replacing a sense” (e.g., an AR headset with spatial recognition can help blind or low-vision users navigate physical space by providing audio cues). As a result of this change in definition, AR technologies would fall under the purview of the American Civil Disabilities Act, a huge benefit for people living with disabilities. In a second case, with a white paper about autonomous vehicle technology, the Diverse Voices method was less impactful, in large part due to the document author’s reluctance to make changes based on feedback from the experiential expert panels. In a third case, the Diverse Voices method was used in the German context to explore gender-fair machine translation. One outcome from this work was “a catalog of criteria to guide the selection process of gender-fair language strategies for (machine) translation from the multiplicity of dynamically growing proposals, including practicability, ease of access, and universality” [30, pg. 10].

In this research, we applied the Diverse Voices method with open eyes, attentive to the fact that we would be working with technology principles rather than a white paper and that the “goodwill” of the document authors to make changes in response to panel feedback would be essential if the method were to result in positive outcomes. Thus, our case study extends the Diverse Voices Method to another type of tech policy document and a new context, the Washington State courts. This study is important because unlike the previous cases reported on above, our case involves a context with explicit built-in power imbalances (between court users and the courts), where stakes are typically high, and the policy draft in question is based on a pre-existing set of principles that had been adopted over a decade earlier and was actively being used.

3 METHODS

3.1 Ethics Review and Best Practices

We met with a representative from our organization’s Human Subjects Division (HSD) to determine the status of our work with respect to human subjects research. Based on an explanation of the work’s purpose and how it would be carried out, the HSD representative concluded that our work did not meet the criteria for human subjects research and, hence, did not require IRB review. Nonetheless, we followed IRB best practices including instituting an informed consent process; protecting the privacy and confidentiality of participants; and confirming that the probability and magnitude of harm or discomfort anticipated in the research were not greater than those ordinarily encountered in daily life.

3.2 Project Genesis

As described in Section 2.5, the ATJ-TComm felt their initial work did not adequately engage with a broad enough set of stakeholders. To address this gap, they sought an independent third-party not associated with the courts to solicit feedback from additional communities. The ATJ-TComm contacted approach the University of Washington’s Tech Policy Lab to explore the possibility for us to do this work.

Our first step was to evaluate the draft Principles for fit with the Diverse Voices method. While the document was a late-stage draft intended to inform policy and focused on technology use in a specific context, it did not focus on a specific technology or synthesize previous research. We were also concerned about whether the document was written too abstractly and the language too technical. Ultimately, we decided to apply the Diverse Voices process to the draft Principles because of the immediate tangible impact of the ATJ-TPrinc and because we believed that the process could yield meaningful and actionable feedback for the ATJ-TComm.

3.3 Diverse Voices Process

We followed the Diverse Voices process as articulated in the *How-to Guide* [49]. Moreover, because the ultimate success of the Diverse Voices process relies on the goodwill of the document author(s) to act on recommendations from the panel feedback, we paid special attention to document authors’ commitment to change. Details on our process follow.

3.3.1 Document Author Buy-In

The success of the Diverse Voices process relies on the goodwill of the document author(s) to act on recommendations from the synthesized panel feedback. In our case, the draft Principles were the work of a 10-person committee. Prior to initiating the Diverse Voices process, we sought buy-in from all committee members. Specifically, at the invitation of the committee chair, we met remotely with the ATJ-TComm to provide an overview of the Diverse Voices process and respond to queries. We confirmed that the committee was sincere about making changes to the draft Principles. At that time, we also gathered information about the committee’s definition of technology and use cases within the justice system covered by the draft Principles. These use cases informed the selection of visual aids to be presented to panelists at the onset of the panel (see Section 3.3.4.2).

3.3.2 Identifying and Selecting Stakeholder Groups

Identifying Potential Stakeholder Groups. The ATJ-TComm provided a list of stakeholder groups they would be interested in hearing from, including groups the committee felt it had struggled to connect with during the public engagement process. In addition, our team independently generated a list of potential stakeholder groups with associated rationale that we felt were important to consider. Table 1 shows the complete list of 20 potential stakeholder groups by source.

Table 1: Complete list of stakeholder groups considered for panels by source.

Stakeholder Groups Considered	Source	
	ATJ Technology Committee	Diverse Voices Team
Actors within the judicial system	X	
Senior / elderly	X	
Children / youth / teens	X	
Youth in the juvenile justice system	X	X
Extreme low-income	X	X
Formerly incarcerated, including on parole	X	X
Gender (e.g. male, female, trans)		X
Rural	X	
Urban	X	X
High-income		X
Immigrants (including undocumented persons)		X
Legal representatives / advocates	X	
Native Americans		X
Non-English speakers	X	X
People engaged in extended legal processes such as adoption		X
People engaged in routine court processes (e.g. marriage, death, and name change)		X
People involved in the Law Enforcement Assisted Diversion (LEAD)	X	X
People with disabilities	X	
Technology developers / users (i.e., within the justice system, employees, administration)	X	X
Victims of domestic violence		X

Selecting Stakeholder Groups for Panels. The Diverse Voices team made the final selection of stakeholder groups for which to hold panels. While ideally we would have convened panels for all 20 groups, we could convene up to 4 groups with the resources we had. To select these groups, each Diverse Voices team member informed by the literature identified four stakeholder groups they thought would be (a) least likely to have been well represented and (b) important to include. We discussed each stakeholder group in this set in order to reach a consensus, ultimately settling on four groups as described below. We describe each of the stakeholder groups and the selection rationale in the order in which the panels were conducted. The Legal Professionals panel was conducted first because we expected these panelists to have a good understanding of the courts and the context in which the ATJ Principles would be applied. This understanding would be helpful to the Diverse Voices team when conducting the additional panels.

Panel 1: Legal Professionals. Selected because those who have legal expertise or have worked within the courts (e.g., IT professionals, bailiffs, court clerks) have knowledge about how the ATJ-TPrinc might apply within *the* justice system and may have direct experience with the technologies, including backend socio-technical processes.

Panel 2: Currently/Formerly Incarcerated People. Selected because those who have an experience of incarceration know firsthand about judicial processes from the perspective of those accused and, in some cases *convicted*, including the impact of technology on those processes [17, 20].

Panel 3: Immigrant Communities. Selected because of the increasingly aggressive stance toward immigrants, refugees, and non-citizens [28, 64]; and immigrants' regular interactions with the justice system, especially law enforcement [28].

Panel 4: Rural Communities. Selected to balance the historical leaning for urban communities to be at the center of discussions about technology in the courts [35, 68]; the needs of people in rural areas, their distance from judicial *bodies*, their digital capabilities, and other factors are likely to differ from those who live in urban areas in Washington State.

3.3.3 Panel Recruitment, Location, Duration, and Composition

Panelists from the four stakeholder groups were recruited through flyers, by email, telephone, and in-person visits. In the recruitment materials we informed participants that the panels would last two hours, be conducted in English, and did not require prior technical knowledge; in addition there would be one hour of pre-panel preparation and one hour of post-panel review. We asked relevant community organizations to share information about the panels with their peer organizations and community members. In addition, we posted flyers at supermarkets, parks, community centers, and apartment buildings to reach potential panelists who might have missed by going through community organizations. The time and effort to recruit and schedule panelists varied by community, with some being more challenging than others: Legal Professionals (10 hr), Currently/Formerly Incarcerated (15 hr), Immigrant Communities (20 hr); and Rural Communities (30 hr).

Table 2 shows the location, duration, and panelist composition for each panel. Panels were held in physical locations convenient for panelists, either at an urban university or at a rural library. For each stakeholder group, panelists included experiential experts, either with lived experience or who served the community (and in some cases, both). Data was not collected on panelists' age, gender or race. Panelists were offered a \$150 honorarium.

Table 2: Panels by panel location, panel duration, and number of panelists by expertise type.

Panel Expertise	Panel Location	Panel Duration (in min)	Number of Panelists with Lived the Experience	Number of Panelists Serving the Community	Number of Panelists Total
Legal Professionals	University	114	5	0	5
Currently/Formerly Incarcerated	University	106	4*	1	5
Immigrant Communities	University	140	2*	2	4
Rural Communities	Rural Library	100	3*	0	3

Note: * indicates panelists who are both types of experiential expert, with lived experience and also serving the community (e.g., an immigrant who also serves the immigrant community).

3.3.4 Pre-panel Preparation

3.3.4.1 Document Preparation

Research indicates that documents and designs which appear less polished and more like drafts are more likely to elicit feedback than those that appear to be polished and complete [73]. Thus, we reformatted the draft Principles document to reflect its status as a draft, including writing "for review" and "draft" in large letters on the document's title page; adding a table of contents; and increasing the left and right margins to allow for marginal comments.

3.3.4.2 Selecting Visual Aids

Visual aids in the form of short videos and cartoons can be a powerful way to communicate about how new technology works and how it might be integrated into and downstream impact on work, social, and institutional settings [25]. Given the wide range of technical and legal background among panelists, visual aids were used at the beginning of each panel to help create some common understanding and language among the panelists about the kind of technology which might be used in the courts and for what purposes. Toward that end, we identified three short video clips (1-3 minutes) and two cartoons relevant to the context of the ATJ-TPrinc as follows:

Intro Video / LawHelp Interactive (2010). (<https://youtu.be/68vVyT1PwK0>) [90 second excerpt]. Introduces an online service that uses AI to assist with filling out legal forms. The excerpt provides a brief overview of the service, shows the types of forms available, and walks through the process of applying for guardianship of a minor to enroll a child in school.

Can An Algorithm Save America's Justice System? | NBC News (2017). (<https://www.youtube.com/watch?v=eWdpOpnONL4>) [2-minute excerpt]. Discusses a new risk assessment algorithm designed to help with pre-trial detention decisions in New Jersey. The excerpt provides a critical look at money bail, an upbeat explanation of the risk assessment algorithm along with the drawbacks of personnel, technology costs, and emphasizes the judge's role in final decisions.

King County's eCourt | KingCounty TV (2013). (<https://www.youtube.com/watch?v=Aozad0Qunhg>). [2-minute excerpt] Describes the new technology available in King County's first eCourt. The excerpt highlights positive aspects of the technology and includes interviews with court personnel discussing the changes the technology will bring to the courtroom.

Cartoon by T. Rall | L.A. Times (2014). (<https://www.latimes.com/opinion/opinion-la/la-ol-rall-early-release-inmates-algorithm-20140312-story.html>). Drawn in response to the L.A. County Sheriff's Department decision to consider using predictive algorithmic analysis to decide which jail inmates should qualify for early release. Highlights what could go wrong, including the system being hacked by the Russians.

Cartoon by T. McCracken | Print on demand (n.d.). (<https://thekomic.com/cartoon/2640-jury-cartoon/>). Shows a 7-person jury in court. The caption reads, "The jury and our computers find the defendant guilty."

3.3.4.3 *Selecting Facilitators*

Facilitators were selected based on fluency with group facilitation techniques (e.g., attention to verbal and non-verbal panelist communication, use of open questions, refrain from sharing personal opinions) and demographic diversity. Each panel session had two facilitators with different gender and racial identities.

3.3.4.4 *Prepping Panelists*

Prior to the panel meeting, panelists were contacted to make sure they understood the activities and time commitments. We explained the purpose of the panels and that panelists would be asked to share feedback about how draft Principles could be improved, based on their experiential expertise. We also answered questions panelists had and asked about any accommodations they needed to participate.

3.4 **Running Panels**

The two facilitators arrived early for each panel to prepare the room, set up the A/V equipment, put out snacks, discuss how to lead the panel together, and receive the panelists when they arrived. Panels followed these steps:

1. *Welcome and introductions* (15 min). Facilitators opened the panel by welcoming panelists and asking each panelist to introduce themselves and explain their relationship with the experiential expert group they were representing. Then, facilitators provided a high level overview of how the time together would be spent and answered questions.
2. *Creating shared language around technology in the courts* (20 min). To create a shared starting point and common language around court and justice system technologies, facilitators showed three short illustrative videos and two cartoons (see Section 3.3.4.2) to technologies. Based on these materials, facilitators guided a conversation about current uses of technology in the justice system.
3. *Soliciting experiential expert feedback on the draft Principles* (45-60 min). The remainder of the panel was devoted to going carefully through the ATJ-TPrinc with panelists, seeking feedback from their perspectives as experiential experts. Specifically, facilitators prompted panelists to provide direct feedback on each section of the draft Principles that would make the principles more responsive to the needs of the underrepresented group that was the panel's focus. While doing this work, facilitators practiced a minimal moderation approach—primarily directing panelist attention to a specific place in

the document, listening, taking notes, and asking followup questions. Facilitators often invited input from the entire panel to avoid creating an impression of being the authority in the room.

4. *Closing the panel* (10 min). After concluding the discussion about the draft Principles, the facilitators thank the panelists for their time and participation, acknowledging the value of their insights. The facilitator also summarized the next steps: meeting with other experiential expert panels, synthesizing themes and insights from each panel, forwarding feedback to the ATJ-TComm, and sharing updated principles with the panelists' to see if there are any obvious ideas or changes that might have been overlooked. Finally, the facilitators asked panelists to assess the panel format, duration, size, and facilitation style.

3.5 Analysis, Synthesis and Feedback

3.5.1 *Analysis and Synthesis of Themes*

In total, over 300 minutes of panel discussions (Table 2 shows the duration for each panel) were audio recorded and then transcribed for analysis and synthesis of themes. We use the term “analysis” to refer to the first step of reviewing each transcript to surface and characterize themes; we use the term “synthesis” to refer to the second step of linking each theme identified in the analysis with specific wording in the draft Principles document. This strategy follows the process described in the *How-to Guide* [49]. Two further points on process and scope: To preserve the voice and concerns of each panel on their own terms, each panel transcript was analyzed and synthesized independently. That is, we did not conduct analyses across panels. Rather we left that work to the ATJ TComm. Second, we included all the themes (and associated issues) that panelists raised, even those that on the surface may have seemed out of scope (i.e., did not directly speak to issues within the purview of the courts). We did so for two reasons. First, the ATJ-TComm was better positioned than ourselves to determine what was and what was not within scope, as they determined what the new Principles would need to address. And, second, even for issues determined to be out of scope, by including those issues in our feedback about panel discussion we were following through on our commitment to panelists that their concerns be heard. We did not feel it was our place to do otherwise.

Specifically, for each panel the two facilitators who were present during the panel conducted that panel's analysis and synthesis and wrote the memo that summarized the panel analysis. The analysis process entailed: (1) a general oral debriefing by the facilitators shortly after the panel to capture panelists' key concerns, insights, and notable comments; (2) as noted above, transcribing the audio file of the panel discussion; (3) individually analyzing the panel transcript for key concerns and insights and then reconciling any differences (where facilitators characterized a particular passage differently, each presented their rationale, and together they decided whether to unite the characterizations or to leave the passage with multiple different characterizations), and then (4) individually clustering these into themes and then reconciling any differences through discussion. Once the analysis was completed, the synthesis process entailed: (5) individually connecting key insights identified in the thematic analysis to specific text in the draft Principles document and reconciling any differences through discussion. In steps 3 and 4, the facilitators considered questions like, “What issues did panelists raise that the tech policy document did not consider?” [49, p. 27].

3.5.2 *Form of Panel Feedback for the ATJ Technology Committee*

After completing a thematic analysis and synthesis of the four expert panels, our next step entailed constructing a report summarizing the key concerns and issues in a format that would be useful and actionable for the ATJ-TComm. To facilitate the ATJ-TComm's review and potential revision based on the feedback, we linked pieces of feedback to specific language in the draft Principles.

Our report included (a) a cover letter explaining the Diverse Voices method; (b) a list of the expert panels convened; (c) a description of the visual aids; and (d) four memos, one for each expert panel. Each memo was divided into two parts: issues related to the panel population (e.g., immigrants, formerly incarcerated) and

general issues. Within each part, each issue identified (1) a title; (2) pointers to the text and draft Principles that were relevant to the specific issue; (3) a summary of the panel commentary (written by the facilitators); and (4) a characterization of issues with supporting quotes from panelists. To illustrate how this information appeared in the report to the ATJ-TComm, Figure 1 shows an excerpt of insights from a memo, in this case from the Immigrant Communities Expert Panel (the specific insights shown here around acknowledging the importance of human touch are discussed in Sec. 4 and the associated outcomes in Sec. 6).

Immigrant Communities Expert Panel Insights

- **Acknowledging the importance of human touch and legal advice in the justice system**
ATI ref: in the Technology Principles, see "Scope" and "Access to Justice for All"

Panel commentary: In Scope and Access to Justice for All, the principles discuss technology's impact on humans and the justice system. Panelists emphasized that for immigrant communities, accessing the justice system mainly via technology can be a barrier – human touch and legal advice are critical to immigrants' access to the justice system. The principle of Access to Justice for All should be amended to encourage those procuring new technology to consider the importance of maintaining human touch and access to legal advice in the justice system.

Panelist quotes:

- [Person 1:] "...in the detention center, they're doing telephonic, or not telephonic, they're doing the video judging. Which, is quite interesting." [Person 2:] "Yeah, so the person who's detained, and potentially if they have an attorney, the attorney is there, but the immigration judge and the ICE attorney are somewhere else. So there's that disconnect and when someone is testifying or telling their story, you don't necessarily feel that connection. So when decision are made, how does the location, being in a different room impact the judge's ultimate decision."
- "...Where is the legal advice part that's needed? Because if there is a [legal] process that's happening, how is that going to impact the other issue potentially that the person is going through? As it relates to immigration, when a minor is no longer considered a child, how that impacts potential petition by the parent. So stuff like that, and there's no room for that legal background, and more in depth intake of "is this something you want to do?"
- "...In most cases an immigrant would need an attorney to work through any legal process, as many are illiterate like I mentioned. Even if the process is localized to the language, sometimes they don't- ... When the words are too hard to understand."

Figure 1. Example excerpt showing insights from an expert panel memo (Immigrant Communities Expert Panel)

4 PANELS: KEY CONCERNS AND INSIGHTS

Each panel was unique in composition, in conversational style, and in the constellation of concerns and insights generated. Many of the topics discussed by experts speak to sensibilities of the inclusive justice and public interest technology communities, foregrounding values such as access (e.g., financial, informational, linguistic, technology), bias (both human and embedded in technology), equity, and human relationships. Here, we provide a flavor for each panel and report key concerns and insights as articulated by the panelists. These, in turn, form the basis of the feedback to the ATJ-TComm (Section 5) and outcomes from the Diverse Voices process (Section 6).

4.1 Legal Professionals Panel

4.1.1 Experiential Experts

We recruited five experiential experts from the local bar association, the Administrative Office of the Courts, and legal aid organizations. Panelists included: (1) an attorney with 15 years of experience working at a public interest law group whose principal clients were immigrants and people who qualify for free legal aid; (2) a technology manager for the Washington State Courts who, among other duties, oversaw the deployment of new technical systems; (3) a county clerk with over 33 years of experience; (4) a county superior court clerk with 20 years of experience; and (5) a trial judge (15 years) who was previously a trial attorney for civil rights (20 years).

4.1.2 Key Concerns and Insights

Legal professional panelists expressed serious confusion about the classification of the ATJ-TPrinc, and whether they would be understood to be rules, principles, or standards.¹ Depending on the label attached to the ATJ-TPrinc, there are different implications for court practices.

“It strikes me that these, to my way of thinking, are not rules. These are principles. And I think there’s a significant difference there because if it’s a rule, then it ought to be something specific, and it’s going to be enforced in the following ways, or your filings will not be allowed or whatever.” – *Legal professional panelist*

Regardless of classification, there was agreement among all panelists that further consideration was needed about how adherence to the ATJ-Princ would be monitored and how accountability would be encouraged and facilitated.

“I had a couple of questions when I looked over the principles, and just it's an overall observation... my initial note was, "It sounds good, but by what authority are these ... rules that have been compounded. What do they mean? How are they enforced?" – *Legal professional panelist*

Panelists also recognized that introducing technology does not inherently eliminate the financial burden associated with accessing the judicial system and can sometimes increase those costs.

“One of the big issues is the payments area ... I did not see anything around here which basically reflects that side of it like managing financial obligations or term payments, things like that, which actually are important...” – *Legal professional panelist*

4.2 Currently/Formerly Incarcerated Panel

4.2.1 Experiential Experts

We recruited five experiential experts from the ACLU Washington, the Black Prisoners’ Caucus, the Public Defender Association, Seattle Goodwill, Pioneer Human Services, and South Seattle College. Panelists

¹ In legal terminology, *rules* refer to explicit guidelines that set boundaries for permissible and prohibited behavior within a legal framework, ensuring predictability and consistent standards; *principles* refer to broad ethical or moral guidelines that underpin legal rules, embody societal values, and provide flexibility in interpretation and application; and *standards* refer to measurable criteria or benchmarks that guide decision-making, enabling assessment of compliance, efficiency, and effectiveness in technological practices. In practical terms, rules prescribe certain allowable or required behaviors while principles leave room for interpretation, pointing in general directions.

included: (1) a full-time college student who had been previously incarcerated for four years; (2) a job search assistant at a community college who had been previously incarcerated in two states; (3) a person newly released from prison who had been previously incarcerated for 14 years; (4) a non-profit employee providing classes and resources to individuals returning from incarceration who had been previously incarcerated; this panelist's spouse was incarcerated; and (5) a community advocate who worked at a non-profit to change the legal system from one focused on punishment to one focused on supporting individuals and building healthy communities.

4.2.2 Key Concerns and Insights

Panelists underscored the difficulties detained and incarcerated people face in communicating with others during incarceration. Specifically, prisons and jails create barriers that sometimes make it impossible for accused or incarcerated people to get the information they need to realize justice, often resulting in prolonged incarceration and unfair outcomes.

“Bail can be really, really low, but as soon as you're incarcerated, and your phone and all your information is taken from you, and you don't have that information memorized. You can't even call a family member, and they won't allow you to take phone numbers out of your phone, or can I see my phone book? ... I know that one time I sat in county jail for ten months because I couldn't remember a phone number of a family member, and they had no idea where I was. They had no idea, until I served my time and then got released...” – *Currently/formerly incarcerated panelist*

Panelists recognized that the ability to communicate, access and use information rests on a host of complex abilities, capabilities, and resources. While acknowledging that some of the draft Principles, such as *Accessible Formats*, *Plain Language*, and *Usability*, were helpful in this regard, panelists lamented that the draft Principles document did not go far enough. For example, the draft Principles did not recognize or address the fact that while incarcerated, individuals often have limited access to digital devices and the capacity to use them.

Panelists also *suggested* that equality was not always the way to ensure technology facilitates access to the justice system. They observed that the terms “equity,” “equality” and “equal access” all appeared within the *Access to Justice for All* principle, but the concepts were not fully developed.

“One of the things that come to mind is that equity and equality are not the same things and that what often happens is that to achieve equity you actually have to give up equality...” – *Currently/formerly incarcerated panelist*

Later in the discussion, panelists specifically suggested that perhaps “equal access” could be replaced with “*equitable* access towards achieving fair outcomes.”

Panelists believed the draft Principles in the *Access to Justice for All* principle present an opportunity to articulate the important role human beings should play in court processes. The panelists described two *situations* that make this recommendation compelling. In the first, panelists asserted that people must be informed of their choices during decisive moments (such as a plea bargain) in order to represent themselves meaningfully.

“So you've been spending all this time in jail... You got a court date, so you go in there. ...you're sitting in the box, waiting your turn. Everybody's going back to jail. ...You have these few minutes with the public defender talking to you. The judge is trying to talk to you, and the public defender says, ‘You know, you can get out today. All you have to do is plead guilty.’ ‘I didn't do it.’ ‘Well, do you want to stay here? Now the prosecutor's talking about two years, so which do you want to do? Do you want to get out today, or do you want to wait, go to court and see if you get two years?’” – *Currently/formerly incarcerated panelist*

In a second example, panelists were deeply concerned about the impact of algorithmic decision-making. They *felt* algorithms could not capture all critical facets of consideration for a decision.

The panelists emphasized that decisions, particularly those dealing with incarcerating an individual, should be determined by humans.

“When someone’s in court, and you’re fighting literally for their life, that decision needs to be made by a person. Not a computer, but by the judge, whoever’s going to make the decision, because that person’s life will be hanging on the line.” – *Currently/formerly incarcerated panelist*

4.3 Immigrant Communities Panel

4.3.1 *Experiential Experts*

We recruited five experiential experts from over 30 groups and institutions serving the immigrant community in the Seattle-Tacoma region, including Casa Latina, Jewish Family Services, Lutheran Community Services, Northwest Immigrant Rights Project, and Refugee Women’s Alliance. Panelists included: (1) a program director for a refugee resettlement program with a Pacific Northwest non-profit; (2) a program manager at an asylum assistance program with a Seattle-based non-profit; (3) the deputy director for an immigrant rights organization; this panelist identified as an immigrant; (4) a staff member for a non-profit providing the Latino, Asian, and Pacific Islander communities with access to medical and dental care, and general educational resources; this panelist identified as an immigrant.

4.3.2 *Key Concerns and Insights*

Panelists, while recognizing the benefits of integrating technology into the court system, felt strongly that reliance on technology should not jeopardize immigrants’ access to the justice system. Panelists stressed that no matter what technologies are employed to reduce barriers in the judicial system, there should always be back-ups in place for when the technology fails or is insufficient.

“I’ve also seen where they tried to get an interpreter and because the phone in that courtroom wasn’t working, the judge didn’t want to reconvene at a later time, so then they just tried to push through. The technology was there, but then when it falls through, there is no backup.” – *Immigrant communities panelist*

Moreover, panelists cautioned against technology use solely for logistical convenience such as video conferencing, and emphasized that there are times when in-person sessions are warranted.

“Yeah, so the person who’s detained, and potentially if they have an attorney, the attorney is there, but the immigration judge and the ICE attorney are somewhere else [via video conference]. So there’s that disconnect, and you don’t necessarily feel that connection when someone is testifying or telling their story.” – *Immigrant communities panelist*

This comment illustrates that panelists understood the importance of co-location for establishing human connections among immigrants facing deportation, their attorneys, interpreters, immigration judges, ICE and others participating in the courtroom. Not doing so, panelists believed, would at times negatively impact the final outcome.

Panelists also had much to offer regarding the draft Principles on *Plain Language* and *Usability*. For the *Plain Language* principle, they advocated for a clear mention of multiple languages and for *Usability*, for clarification about whether plain language refers to comprehension level or treatment of legal terms. Panelists also thought some translation technology even when producing poor results was used by the courts to fulfill a requirement.

“One of the things that I see in legal documents, in translations, sometimes they don’t make sense. They just don’t make sense. Some of the words. So having a good translation in place, people don’t want to invest in translators, they do it on Google Translate.” – *Immigrant communities panelist*

4.4 Rural Communities Panel

4.4.1 Experiential Experts

We recruited three experiential experts from rural Western Washington state with the help of public librarians and held the panel in a local public library. Panelists included: (1) an attorney who practiced family law, counseling, and mediation; (2) the city attorney in a town with a population less than 5,000; and (3) a legal assistant who worked as a parenting coach.

4.4.2 Key Concerns and Insights

Panelists were concerned about bias in the justice system – both bias introduced by technology and bias introduced by human actors. The *Scope* and *Access to Justice for All* principles state that technology should not create unfairness or bias. Panelists concurred but also felt that it was important to acknowledge that technology could keep human bias in check.

“Human beings are massively biased too, so it’s really balancing ... maybe using the two [humans and technology] to help balance out.” – *Rural communities panelist*

Panelists insisted that having the technology available is useless if the judicial system’s actors are not sure how or when the technology can or should be used.

“Oh, one thing before I forget, on phones ... I don’t know if they still do, but I did a trial down there two years ago, and they have a hard and fast rule that you cannot use a phone in the courtroom. I did a trial, and my assistant was doing research on her phone. The judge said, put that phone away. I said, wait a minute, that’s impairing my ability to represent my client. The judge said, f**k you, you put that phone away.” – *Rural communities panelist*

The panelists went on to say that when they used a laptop for the same purpose, the judge had no objections. To this end, panelists proposed that the *Maximizing Public Awareness and Use* principle should advocate for training for those who interact with or are a part of the justice system.

Panelists also questioned the ATJ-TPrinc focus on “high-tech”. They countered with the term “high-touch” to bring the focus back to the people who carry out activities in the judicial system.

“High-tech is great, but this is human beings we’re dealing with and relationships. People need to be heard to feel justice. When I see people talking about tech stuff, that rarely comes in.” – *Rural communities panelist*

The panelists expressed disappointment with the focus on technology over people. While acknowledging that the ATJ-TPrinc went some distance to affirm the justice system’s users are people with human problems, nonetheless, panelists believed that if justice is to be experienced and felt, more could be done.

5 REVIEW PROCESS AND ADOPTION BY THE WASHINGTON STATE SUPREME COURT

Our report was submitted to the ATJ-TComm on June 19, 2018. This initiated a robust two-stage review and revision process over two years which eventually resulted in adoption of finalized ATJ-Princ by the Washington State Supreme Court on June 5, 2020.

In the first stage, the ATJ-TComm reviewed the draft Principles in light of the *Diverse Voices* report. According to the committee chair, the ATJ-TComm acted to “incorporate many ideas from the focus groups [experiential panel experts],” including adding two new principles and a preamble. We refer to this version as the “updated Principles.” The ATJ-TComm then submitted the updated Principles to the Access to Justice Board (ATJ-Board) for consideration.

The ATJ-Board accepted the updated Principles as written and initiated the second stage of the review process: soliciting feedback via email from a wide range of stakeholders, including court personnel, the Washington State Bar Association, lawyers in Washington state, and other institutions that intersect with the law. The updated Principles were endorsed by the Judicial Information System Committee, the Board for Judicial Administration, the Board of Trustees of the Superior Court Judges' Association, the Board of Trustees of the District and Municipal Court Judges' Association, the Board of Governors of the Washington State Bar Association, the Minority and Justice Commission, the Gender and Justice Commission, the Attorney General, and the Council on Public Legal Education. Some feedback was received from the Administrative Office of the Courts, which triggered a similar review and revision process leading to a small number of wording changes. For this version of the Principles, no additional feedback was received. We refer to this version as the "final Principles" or "final ATJ-TPrinc".

On June 5, 2020 the Washington State Supreme Court signed an order adopting the final ATJ-TPrinc [86].

6 OUTCOMES: NEW PRINCIPLES AND OTHER AMENDMENTS

To determine the changes to the ATJ-TPrinc resulting directly from the Diverse Voices process and report, we systematically compared the draft Principles, the updated Principles (after the Diverse Voices process) and the final Principles (after feedback from the Administrative Office of the Courts) taking careful note of when changes were introduced. Table 3 provides a summary of changes by source.

6.1 Summary of Changes

In total, the ATJ-TComm addressed roughly 80% of the recommendations from the Diverse Voices report. These changes included adding an 84-word *Preamble* which describes the purpose and regulatory implications of the principles, adding two entirely new principles (see Section 8.2), and making over a dozen significant wording changes. Panel recommendations frequently led to stronger, more comprehensive language (e.g., in the *Accountability and Fairness* principle added the sentence, "Users should have a voice in the acquisition and implementation of technology, including as testers." to help ensure meaningful input from those who would be directly impacted). Other wording changes, primarily in response to feedback from the Administrative Office of the Courts, weakened commitments (e.g., in the *Cultural Responsiveness* principle, the word "must" was replaced with the word "should" resulting in "Technology in the justice system should incorporate the principles of cultural practices which address and respond to cultural variables and diversity of people and communities."). The *Definition of Technology* and *P6 Usability* were the only elements that were not changed in any way.

6.2 Two New Principles

Perhaps the most significant changes resulting from the Diverse Voices method were the inclusion of two new principles to the ATJ-TPrinc: *P11 Human Touch* and *P12 Language Access*.

Human Touch. Panelists, in different ways, called attention to the need for human beings to remain present in meaningful ways throughout the justice process. Legal Professional experts supported the integration of technology within the justice system, but stressed the importance of well-developed backup processes that could be employed if the technology failed. Currently/Formerly Incarcerated experts asserted that decisions in which an individual's freedom is at risk should always include humans who understand the technologies being used. Immigrant Communities experts advocated for human involvement because they had seen instances in which court-selected technology failed and court personnel were not prepared with alternative processes. Individuals and their families experienced injustice as a result. Rural Communities experts maintained that humans are an essential part of the rural justice system and were concerned that as more technologies are introduced, the rural courts might consider humans less important, in turn having a negative impact on rural court users.

Table 3: Summary of changes to the ATJ-TPrinc attributed to the Diverse Voices (DV) process and Administrative Office of the Courts (AOC) feedback.

Draft Principles (Before DV)	Updated Principles (After DV)	Final Principles (After AOC)	Description and Source (DV or AOC) of Finalized Change
—	Preamble	Preamble	Added new material (DV)
Scope	Scope	Scope	Removed “contractors with the courts, clerks, and court administrators” from the list of stakeholders (AOC)
Definition of Technology	Definition of Technology	Definition of Technology	No change
P1 Access to Justice for All	P1 Access to Justice for All	P1 Access to Justice for All	Replaced criterion of equity with equitable (DV); added criterion of efficiency (DV)
P2 Openness, Privacy, and Safety	P2 Openness, Privacy, and Safety	P2 Openness, Privacy, and Safety	Added a short introduction and two bullets on access to information (DV)
P3 Maximizing Public Awareness and Use	P3 Maximizing Public Awareness and Use	P3 Maximizing Public Awareness and Use	Reworded seek to regularly seek input from and listen to the public (DV)
P4 Best Practices Workgroup	P4 Best Practices Workgroup	P4 Best Practices Workgroup	Reworded continuously to periodically make updates (DV)
P5 Accountability and Fairness	P5 Accountability and Fairness	P5 Accountability and Fairness	Added sentence advocating for end user participation (DV)
P6 Usability	P6 Usability	P6 Usability	No change
P7 Accessible Formats	P7 Accessible Formats	P7 Accessible Formats	Added wording that the format should (1) enable use, and (2) not place a financial burden on users (DV)
P8 Plain Language	P8 Plain Language	P8 Plain Language	Added must create or provide all resources (DV); reworded must create to must strive (AOC)
P9 Accessibility	P9 Accessibility	P9 Accessibility	Added criteria of affordable and efficient (DV)
P10 Cultural Competence	P10 Cultural Responsiveness	P10 Cultural Responsiveness	Retitled Cultural Competence to Cultural Responsiveness (DV); reworded must to should (AOC)
—	P11 Human Touch	P11 Human Touch	Added new principle (DV); refined text to foreground quality of human interaction (in person or digital) and as appropriate to minimize in person interaction (AOC)
—	P112 Language Access	P12 Language Access	Added new principle (DV)

Note: Black cells indicate an entirely new addition; gray cells indicate a meaningful modification; and white cells indicate no change.

In our report to the ATJ-TComm, we represented the panelists’ comments as calling for humans to remain a part of court-related processes and procedures. The ATJ-TComm responded by adding a new principle, *P11 Human Touch*, writing: “Technology should be used to increase the level of quality of human interaction, and to preserve or increase the humanity of our justice system.”

Language Access. All four expert panels called attention to the impact language has on people's ability to access the courts and seek justice, particularly how not having resources available in the language spoken by

the court user could have a negative impact. Legal Professional experts were sensitive to the cost of providing content in multiple languages and to the process courts employed to prioritize providing content in languages other than English. Currently/Formerly Incarcerated experts highlighted how not having information available in multiple languages impacted incarcerated people's ability to understand their circumstances and choices, with life changing consequences. Immigrant Communities experts underscored that all communication formats—synchronous, asynchronous, audio, video, and text—need to be made available in multiple languages, especially in high stakes contexts (e.g. deportation and detention). They also noted that multilingual includes access for people who are blind or low-vision. Rural Communities experts were concerned that lack of access to adequate translation services could result in people having no or inaccurate representation.

In our report to the ATJ-TComm, we represented the panelists' comments calling for the ATJ-TPrinc to clarify and expand the definition of P8 Plain Language. The ATJ-TComm took this recommendation one step further and responded by adding a stand alone new principle, *P12 Language Access*², writing: "Courts should communicate in the preferred languages of people. Technology must be used in ways which enhance communication."

6.3 Other Amendments

Strengthening Some Commitments. Recommendations from the panels frequently led to stronger, more comprehensive language. Here are two examples. First, in the P5 Accountability and Fairness, the ATJ-TComm added the sentence, "Users should have a voice in the acquisition and implementation of technology, including as testers." The wording change both acknowledges that users have the ability to make meaningful contributions in a variety of roles and advocates for them being enabled to do so. As a second example, in P3 Maximizing Public Awareness and Use, the ATJ-TComm added the word 'regularly' at the beginning of the phrase, "seek input from and listen to the public." The addition of the word "regularly" acknowledges that technology's capabilities, limitations, and affordances are in constant flux and signals to court staff and contractors that feedback from the community must be obtained at regular intervals.

Weakening Other Commitments. Some changes made by the ATJ-TComm weakened commitments. For example, in P10 Cultural Responsiveness, the word "*must*" was replaced with the word "*should*" resulting in "Technology in the justice system should incorporate the principles of cultural practices which address and respond to cultural variables and diversity of people and communities." This change leaves room for courts to forego changes that are aligned with cultural uses of technology and makes it seem optional. Similarly, in P8 Plain Language, the phrase "when possible" was added to the end of the sentence, resulting in "The justice system must strive to create legal information resources for the public in plain language, *when possible*." There is a tension between the instruction "must strive" and the qualification "when possible." Notably, the qualification "when possible" is at odds with panelists' concerns that creating information resources in plain language must always happen.

7 DISCUSSION AND REFLECTION

The case study of the ATJ-TPrinc contributes to the literature on the Diverse Voices process in three ways: first by providing a clear demonstration that the process can be effective in moving toward more inclusive tech policy; second, by providing critical insights into the method's skillful implementation, and third by pointing to the need for complementary regulation to help ensure impact. To gain a sense for how panelists and the document authors experienced the Diverse Voices process: we counted number of utterances by panelists in the transcripts as a way to assess open communication; at the end of each panel, we asked

² We are not privy to reasons why the ATJ-TComm chose to create an entirely new principle, P12 Language Access, rather than expanding the existing principle P8 Plain Language.

panelists to share about their what they thought went well and could be improved about the panel session as a way to evaluate effectiveness of the panel discussion and panelist experience; and we solicited comments and reflections from representatives from each panels and the Chair of the ATJ-TComm during a forum as a form of longer-term follow up. We draw on this material throughout our discussion and reflection.

7.1 Evidence of Success: Assessing the Diverse Voices Process

The Diverse Voices method draws on the technical and empirical investigations central to value sensitive design [23]—with the tech policy document the technical artifact under investigation, and the panels of experiential experts and the experience of the document authors the empirical investigations. Each type of investigation has its own indicators of success, with the technical investigation focused on changes to the technical artifact and the empirical investigations focused on the experiences and perspectives of the respective stakeholders [56, 57, 59, 83].

7.1.1 Impact on the Tech Policy Document

An essential measure of success for the Diverse Voices method entails positive impacts on the content and substance of the technology policy document itself [90]. With the ATJ-TPrinc, panels identified important ways in which the initial draft Principles could lead to injustice. In turn, as documented above, changes to the ATJ-TPrinc resulting from the Diverse Voices process were significant, including two new principles—that of *Human Touch* and of *Language Access*. Taken together, the improvements help create conditions for a justice system that is not devoid of human touch and one more likely to be understood by those who are enmeshed within it.

Within this overarching picture of impact, we also note that at times panelist comments resulted in weaker language or policy decisions that weakened the effect of earlier revisions. There are three reasons for this: First, the Diverse Voices process produced information that drew the ATJ-Comm’s attention to risks they had not previously considered. Second, in some cases, taking on experts’ feedback may conflict with design choices, bring questions to business practices, or raise legal issues (e.g., requesting the principles be viewed as regulation rather than guidance). Third, the ATJ-TPrinc was reviewed by additional stakeholders before receiving final approval.

7.1.2 Panelists’ Experience

In addition to concrete positive outcomes with the tech policy document, public engagement processes must consider the experience of the stakeholders asked to provide feedback [1, 34, 75]. In our case, we hold the Diverse Voices process accountable for the experience of expert panelists. Did panelists experience their participation as one of dignity? Did they feel listened to and heard on their own terms during the panel? Did they feel their ideas were represented accurately and with respect in the written report? Did they believe the changes to the tech policy document to be worth the time they had invested in the panel process?

By and large, panelists’ experience was positive. They thought the process worked well. To begin, they believed that having a third-party (i.e., the Diverse Voices team) invite them to critique the ATJ-TPrinc would increase the likelihood their contributions would lead to the type of change that they aspire toward.

“I left positive, thinking that, OK, yeah, ... some jargon is going to be changed and voices are going to be heard.”
– *Immigrant communities panelist*

Other experts expressed surprise (and satisfaction) that their ideas were taken up.

“My biggest surprise would be that it was actually real and that people were doing something with the feedback, that—because like she was saying, or someone, that you feel small, and you don’t know if your voice or anything you’re saying is actually being heard, or if it’s going to be applied.” – *Currently/formerly incarcerated panelist*

Reflecting on their experience at the end of the panel sessions, panelists pointed to two ways in which the Diverse Voices process could be improved. Specifically, increasing the time for the panel discussions and providing assurance that the policy document authors would respond to the issues that were raised.

As a further check on panelists' satisfaction with the Diverse Voices process, we offered panelists an opportunity to comment on the updated Principles via email prior to their finalization. Specifically, we asked panelists to let us know if they felt some aspect of the feedback they had provided had not been adequately addressed or if new material had been introduced into the updated Principles which they felt strongly negative about—that is, anything they felt which if not addressed would lead to significant injustices. In response to this opportunity, none of the 17 experts provided further feedback.

7.1.3 Document Authors' Experience

The success of the Diverse Voices process depends on the commitment to change and ultimate satisfaction of the document author(s). They “hold the pen”, and are the only ones capable of changing the tech policy document. With the case reported here, the ATJ-TComm found the process and report to be helpful in enabling the committee to fill a perceived gap. Although in a small number of instances the committee did not act on panel recommendations, they accepted most of the recommendations and, in one instance, went beyond the report's recommendations to develop and add the new principle of *Language Access*. In summing up the committee's perspective, the ATJ-TComm Chair commented in 2018:

“Having that third-party do it, especially when they focus on individuals that could be the most harmed, it has a great benefit. We got more unfiltered feedback in this one or two month process than we did in the nine month public process where we went out to a lot of people.” – *ATJ-TComm Chair*

7.2 Reflections on Skillful Implementation

7.2.1 Visual Aids: Expanding Panelists' Vision

Visual aids help grab attention, focus viewers' concentration, generate interest, create a sense of anticipation, and decrease anxiety [4]. They make information available to high- and low-literate people, promoting understanding and improving decision making. In this research, visual aids helped non-technical experts understand how a given technology could exist in the world and served as a shared launching point for panel discussion [4, 25, 48].

We employed three short videos followed by two cartoon strips (see Section 3.3.4.2: Selecting Visual Aids). Panelists found the visual aids helpful for imagining how the ATJ-TPrinc could influence the acquisition and use of technology in the justice system. For example, a formerly incarcerated expert expressed the usefulness of the visual aids for improved understanding about the technology, context of use, and role of the ATJ-TPrinc.

“I liked the videos. Those were good, and also, just to help bring context to some of this. It got me, after I watched the videos. I was like really then think about this document, versus where I was like I don't even know what this ... I think I know what this is relating to, but it made more sense once I watched the videos.” – *Currently/formerly incarcerated panelist*

Reflecting on our experience as facilitators, we identified three critical elements for successful visual aids in the Diverse Voices method.

Accessible Language. When evaluating videos for inclusion, we considered the language, information presentation, and narration from the perspective of accessibility. Ideal videos use simple English words, are moderately paced (neither too fast or slow), and narrated by one or two voices with clear enunciation.

Presentation Order and Format. In terms of content, begin with a video that presents the context of use (in our case, the courts), followed by a video that focuses on technology use within that context (in our case digital technology for court administration). In terms of media format, first present videos, followed by

cartoon strips. Placing cartoon strips last reduces the amount of stimuli immediately prior to launching the tech policy document conversation. Adaptations might be needed for panelists with impairments (e.g., select audio recordings instead of videos).

Balanced Perspective. Ideally, a single video would provide a comprehensive overview of both the promise and the peril of the technology in the context of use. Using two or more videos together can also work well. In our case, we identified one video that presented a balanced view of the courts use of digital technology and supplemented this with two other videos that filled out different aspects. The two cartoons we used were one-sided in that they encouraged viewers to be cautious of the use of digital technologies for court processes. We decided to use them because we could not identify any cartoons that provided a balanced representation.

7.2.2 *Creating an Open Listening Environment*

To be impactful, there must be an environment where underrepresented groups can speak openly about the proposed implications of a policy [90]. Panelists need to feel welcome to speak their minds; that they will be listened to; and that their concerns will be heard, respected, and shared with the tech policy document authors. It is a safe space, where panelists can express critiques and insights, but also emotions like anger and frustration. This can be achieved by warmly welcoming each panelist as they arrive, referring to panelists by name, opening the session by thanking panelists for making time to provide feedback, and emphasizing that their experiences make them uniquely positioned to provide information that could lead to meaningful changes. During panel discussions, facilitators practiced open-conversation techniques such as posing a question and waiting for a response; not rushing to fill in the silence with additional comments or questions; asking panelists if they had any final comments before moving on to another topic; providing panelists with positive affirmations; and complimenting panelists for providing critiques.

Expert panelists across the four panels appeared comfortable sharing their sincere feedback. Within the 90-minute panels, every panelist contributed at least 18 comments (one or more consecutive sentences), with some contributing over 70 remarks.

“As I got in and I started listening, I was surprised at what some of the concepts were. And then, just because it was a really healthy listening environment that was really open and accepting and really incorporates so many of the really traditional concepts of facilitating open thinking or my language, I would say, helping to integrate my brain-- both sides-- I could think freely. I found myself starting to make a bunch of connections and starting to contribute what turned out to be some meaningful things.” – *Rural communities panelist*

The use of open conversation techniques by facilitators enabled expert panelists to comfortably critique the ATJ-TPrinc which resulted in novel and meaningful feedback for the ATJ-TComm.

7.2.3 *Facilitators as Agents of Empowerment*

Facilitators play an essential role in empowering panelists to contribute their ideas openly and effectively and in empowering document authors to take action on feedback from panels.

For panelists, facilitators help to create an environment that promotes sharing thoughts, insights, and critiques. To be effective, each pair of facilitators must work together, deftly shifting between leading panel activities, observing panelists for opportunities to contribute, asking both focused and open-ended questions, and taking notes. Good facilitators leave room for participants to develop their thoughts, allowing the conversation to move in unexpected directions. During panels, facilitators' strategies included celebrating critique and insights, managing time, and ensuring that all aspects of the tech policy document were examined and discussed. In turning expert panelists' attention to the document, facilitators stayed alert for critique and sought ways to solicit feedback that resulted in meaningful insights. For example, during the Legal Professional panel, after a lengthy discussion about the classification of the document, one facilitator refocused the panel:

“So something I really appreciate about what you guys just did is to identify something that’s not working. We’re here in the spirit of criticizing the document and in the instantiation and texts. So finding problems where possible and suggesting solutions is really perfect.” – *Legal professional panelist*

For document authors, facilitators synthesize panelist comments and craft a memo conveying that feedback in a tone and format designed to empower and encourage action. The tone is respectful, directive, and informative. The format includes higher order characterizations of the issues panelists raised that are tied to specific wording in the tech policy document. The facilitators’ goal is to help position document authors to know where and how to make changes. To bring forward panelist voices, facilitators include one or more compelling quotes—where panelists shared a story, asked thoughtful questions, or expressed concern. To convey panelists’ ideas in a firm and respectful manner to the document authors, facilitators use phrases such as “panelists encouraged,” “panelists suggested,” and “panelists noted.” Together, these practices position facilitators to convey the substance of panelists’ comments with supporting evidence in a manner in which document authors can listen and act.

7.3 Leverage: The Need for Complementary Regulation

The Diverse Voices method succeeds when the document author(s) act on at least some of the insights generated by the panels. Taken together with the two case studies described by Young et al. [90], the findings here demonstrate how powerful the Diverse Voices method can be if the authors are open to change. However, there is no legal requirement for authors to amend their documents after receiving substantive feedback. This inability to ensure change has been a critique of the Diverse Voices method, pointing to important limitations and missed opportunities.

We have deliberated about how the over-reliance on the tech policy document authors’ goodwill could be balanced to help ensure reasonable accountability for panel feedback. In our view, there is a need for legislation that complements the Diverse Voices method, otherwise, in the absence of such regulation we can know how to improve but not that improvements will happen. Such regulation might ask authors to document and make public what feedback was received and how it was incorporated, including reasons for deciding not to address a concern raised by a panel.

7.4 The Benefit of Diverse Voices in Inclusive Justice Efforts and PIT Projects

The Diverse Voices method can aid policymakers, think tanks, advocates, community-based organizations, government, and others working on inclusive justice and public interest technology projects in seeking more robust and just solutions. The inclusive justice and public interest technology communities would benefit from considering the Diverse Voices method with its emphasis on “experiential experts.” This framing expands who is considered an expert, elevates them, and recognizes their importance in ways that other commonplace methods used to gather feedback do not. For example, while both the Diverse Voices and focus groups have the goal to understand the perspectives of people who participate, the two methods differ on how they conceptualize and refer to participants. For Diverse Voices the panelists are experiential experts who bring expertise from lived life; for focus groups the participants are rarely referred to as experts and most often are viewed as representative consumers.

The Diverse Voices method intentionally and systematically creates welcoming and effective conditions for experiential experts who often have limited technical proficiency to make meaningful contributions. For example, the visual aids introduce panelists to the technology in question without requiring strong literacy skills and with humor. In doing so, they create a shared starting point that gives all panelists a low-risk opportunity to contribute ideas, questions, and concerns early on in the panel discussion. In terms of facilitation style, the Diverse Voices method uses targeted questions that focus panelists’ attention on surfacing where a document falls short. Liberal use of positive affirmations that encourage panelists to share their opinions and validates all panelist contributions.

Moreover, the Diverse Voices method does not stop with soliciting the perspectives, insights, and concerns of experiential experts. It goes further to do the hard work of linking those perspectives into actionable passages in the policy document where explicit change and improvement could be incorporated. That is, the method makes the task of being responsive to the insights of experiential experts more doable for the document author. This step is critical to the method's effectiveness. Importantly, the method asks for document authors to agree to acting upon the feedback received.

In these and other ways, the commitments and practices of the Diverse Voices method can further strengthen the effectiveness and impact of inclusive justice efforts and public interest technology projects.

8 CONCLUSION

If we are to have inclusive justice, then we must have inclusive courts and inclusive technology policies that facilitate the use of public interest technology. Toward that end, by invitation of the ATJ-TComm, we applied the Diverse Voices method to the draft Washington State Washington State ATJ T-Princ with four experiential expert panels: legal professionals, currently/formerly incarcerated people, immigrant communities, and rural communities. Our work makes four contributions: (1) a case study demonstrating the use of the Diverse Voices method to improve a tech policy document for the Washington State court system; (2) for public interest technology, a model for public engagement around tech policy that foregrounds participation of experiential experts, as well as the conditions necessary to ensure concerns raised are both heard and acted upon; (3) facilitation techniques and skills for enabling diverse stakeholder groups to express their concerns around responsible computing systems; and (4) revised and expanded access to justice technology principles to support more inclusive justice. To our knowledge, this is the first time the Diverse Voices method has been used with tech policy principles. As with past applications, we measured the efficacy of the method by examining the extent to which substantive insights emerged and tracking how the ATJ-TComm acted on those insights and evaluating how experiential experts felt enabled to share their perspectives, listened to, and treated with dignity.

Responsible computing will only be realized if technologists, designers, policymakers and others can have confidence that the processes they employ will lead to more just outcomes. Yet it is rare in real-world design research to be able to attribute specific impacts clearly to the design process itself. In most situations we do not know what the results would have been if the design process had not been carried out. In our case with this implementation from value sensitive design, however, there is greater certainty. Prior to the introduction of the Diverse Voices process, the ATJ-Comm had already spent nearly 9 months conducting its own public engagement process to update the ATJ-Princ. Without the Diverse Voices (or a similar) process, the work would have stopped, and the draft Principles would have been presented "as is" for adoption. The changes which followed—from the draft to the updated final Principles as described in Section 8—can be traced directly to the Diverse Voices process and the subsequent review process. The evidence for the efficacy of this value sensitive design process stands on solid ground.

The successful application of the Diverse Voices method depends on a number of factors: well-chosen visual aids that make the technology comprehensible to experiential experts; skilled facilitators who empower both experiential experts and document authors; and document authors who approach the process with the goodwill to make changes in response to panel feedback. When these and other factors are in place, the Diverse Voices method provides one viable approach for structured and substantive engagement of underrepresented stakeholders that results in actionable feedback for policymakers. In this way, we demonstrate the method's effectiveness in promoting responsible computing practices and ensuring that underrepresented stakeholders are not disproportionately affected by technological innovations and the policies governing their use.

Finally, just as technology can be utilized worldwide so, too, we believe that the Diverse Voices method can be implemented effectively globally. We encourage others to explore how the Diverse Voices method could be

adapted to their own communities, regions, and countries while considering their unique perspectives on and ethical commitments to inclusive justice.

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