

# STRATEGIES TO ENSURE YOUNG PERSONS WITH DISABILITIES ARE INCLUDED IN THE FUTURE OF WORK

PRACTICAL SOLUTIONS PROPOSED IN THE FIRST ROUND OF A DELPHI SURVEY



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*Strategies to ensure young persons with disabilities are included in the future of work:  
Practical solutions proposed in the first round of a Delphi survey*  
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# EXECUTIVE SUMMARY

Researchers at the Institute for Work & Health are looking for concrete ways to ensure youth and young adults with disabilities are included in the future of work. In the summer of 2021, a research team conducted an online survey with a wide range of people across Canada. The survey asked about the potential effects of trends on the working lives of young people with disabilities and ways to ensure these young people can find and keep employment in the decades ahead.

You may have been one of the 125 people who completed this first survey. Those taking part included young people with a lived experience of disability, policy-makers, disability employment counselors, labour market experts and futurists. Results from the first survey identified specific ideas that can be implemented by governments, educational institutions and community groups to address the future of work for young people with disabilities.

This report summarizes six key areas in the future of work that you and other survey participants indicated could both pose difficulties and offer opportunities to young people with disabilities. The report also presents the solutions that you and others suggested to address the barriers and take advantage of the opportunities.

Building on the findings from the first survey included in this report, you are now being asked to complete a second online survey. The aim is to help build a consensus on the best ways to support young people with disabilities in the future of work.



# INTRODUCTION

The world of work is rapidly changing, driven by social, technological, economic, environmental and political forces. These changes are expected to contribute to new and long-term challenges and opportunities for youth and young adults with disabilities. Future-oriented strategies are needed to ensure young people with disabilities can get and keep suitable work in the future.

To identify these future-oriented strategies, researchers at the Institute for Work & Health are using what is called the “the Delphi technique.” This technique helps experts in a certain subject area reach agreement on a research question through a series of surveys. The surveys allow participants to think about their own opinions and adjust them as they also consider the opinions of others.

In the first survey online survey in 2021, you and other participants were asked to rate the impact of key trends shaping the future of work on the employment of young people with disabilities over the next 15 years. You were also asked to recommend strategies that would help support the future careers of young people with disabilities.

What we heard from you and the other participants were specific strategies that related to six key challenges in the future of work. They include:

Challenge 1: **Impact of advanced digital technologies**

Challenge 2: **Artificial intelligence in human-resource decision-making**

Challenge 3: **Digital globalization**

Challenge 4: **Cultural tensions around workplace inclusivity**

Challenge 5: **Climate change**

Challenge 6: **External shocks speeding up the pace of change**

Strategies were proposed within each of these six areas to promote the inclusion of young people with disabilities in the future of work. For example, some of the proposed strategies include strengthening employer accessibility practices; enhancing workplace approaches to diversity, equity and inclusion; providing disability-specific job skills training; and demanding greater transparency about how workplaces are using technology.

In this report, for each challenge, we indicate how participants rated the impact of each challenge on the employment of young people with disabilities and the reasons—both positive and negative—for the rating. We also present the strategies and supports participants proposed to address the positive and negative effects associated with each challenge.

We also heard a number of themes that cut across these six challenges, which are outlined in the next section.

The information in this report will help you as you complete the second and final survey in this study. In the second survey, you are being asked to indicate which of the strategies identified in the first survey you think are most important for ensuring the successful employment of young people with disabilities over the next 15 years.

Note: The strategies recommended in this report were developed by taking a broader definition of disability. However, we acknowledge that programs and policy supports should be tailored to individual needs and experiences to be successful.

# CROSS-CUTTING THEMES RELATED TO IMPLEMENTATION

From the findings in the first survey, the research team saw some key themes that cut across the recommendations. These cross-cutting themes included:

- **Promoting collaboration** among businesses, policy-makers, disability service providers and educational institutions to prepare young people with disabilities for a changing labour market.
- **Making the participation of people with disabilities the top priority** in the design and development of solutions
- **Building employer confidence** in supporting the needs of people living with disabilities in a changing labour market.
- **Improving accessible transportation.** Although work-from-home arrangements are becoming more common, people with disabilities should also have equal access to jobs that require them to be at a physical workspace outside their home.
- **Strengthening social safety nets**, such as government income supports, benefits and retraining, to support people with disabilities whose participation in the labour market is disrupted by changes in the future of work.

# CHALLENGE 1:

## IMPACT OF ADVANCED DIGITAL TECHNOLOGIES

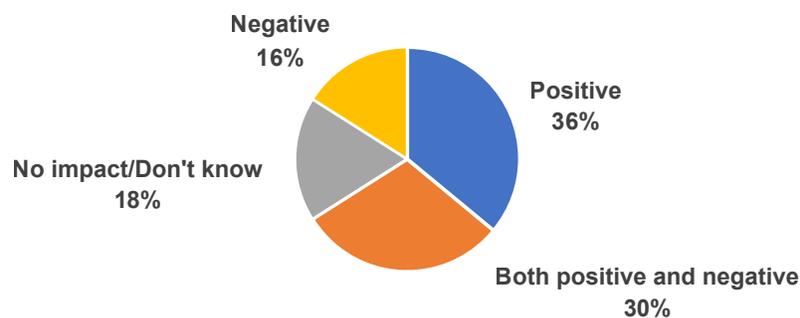
Advanced digital technologies such as artificial intelligence, or AI—computerized systems that do tasks typically requiring human intelligence—have penetrated all aspects of our working lives and will increasingly do so in the years ahead. These technologies are changing how we work in far-reaching ways, and very few industries will be untouched.

Examples are already all around us. Think of smart robots that assemble cars on a factory line. Or chatbots answering customers' questions on websites. As this technology progresses in leaps and bounds, more and more jobs will be “automated”—done by machines—in the future.

Digital technologies also allow for more connection than ever before. That means work can be completed from home, or from different parts of the world. It also means work can be monitored, including tracking workers' productivity and how they work.

These are just a few of the many ways in which advanced digital technologies will impact work in the future.

### How participants rated the impacts of advanced digital technologies on young people with disabilities



### Description of positive impacts

1. New jobs created in applying digital technologies and AI in different jobs and sectors
2. Reduced barriers to work, including less need to commute or be present in physical workspaces
3. More opportunities to incorporate accessibility into workplace processes and physical spaces

### Description of negative impacts

1. Fewer jobs for those without access to digital spaces and tools, or without the technical skills to use digital tools or work with intelligent machines
2. More precarious work due to the automation of some or all tasks in entry-level and some white-collar jobs
3. New challenges in accommodating workers within digital work environments and an AI-enabled economy
4. More social isolation and barriers to accessing workplace social support in work environments that have less face-to-face contact
5. Increased privacy concerns related to employers having more opportunities to track employees
6. Increased workloads and employee burnout due to hyperconnectivity to work

## Your recommendations

1. **Help youth and young adults with disabilities learn new job skills by providing greater access to ongoing, life-long training.** As more employers seek to automate jobs, they need workers with advanced technological skills. With increased access to education and training, young people with disabilities can develop these skills and gain opportunities to find and keep jobs in the digital economy. To ensure broad access to training, programs should be offered through educational institutions, workplaces and community programs.
2. **Strengthen social safety nets and offer more support to people with disabilities who lose their jobs due to technology.** When people with disabilities lose their jobs because of AI and other digital advances innovations, they are at greater risk of remaining unemployed and facing income insecurity. Innovations in the type and delivery of social support programs, such as financial aid and disability grants, will help ensure they remain financially stable.
3. **Make sure access to technology is affordable for all.** Some young people with disabilities may need financial supports to access digital tools and platforms. These supports can include subsidies or grants, offered through educational institutions. They can also include access to digital platforms, equipment and software, provided by employers.
4. **Raise employer awareness about new accessibility and accommodation challenges created by digital technologies for at-risk groups, especially people living with disabilities.** Greater employer awareness of the accommodation needs of young people with disabilities due to the increased use of digital technologies in the workplace will help ensure their success in the future of work. Workplaces should help workers with disabilities adapt to the implementation of new technologies and take steps to anticipate potential impacts of different technologies to workplace accessibility.
5. **Increase opportunities for face-to-face interactions and social connections among workers.** Young people with disabilities who work remotely may feel social isolation. Employers should help promote social connections. They can encourage more in-person interactions and offer opportunities to find social support.
6. **Strengthen laws to protect worker privacy in the face of routine and mass collection of personal data.** Digital technologies make it easy to collect workers' personal data on the job. Stronger laws should be enacted to make sure workplaces are transparent about what data they are collecting and how. For example, regulations should require employers to indicate when they are using AI to actively monitor employee productivity.
7. **Emphasize the need for work-life balance and the need to disconnect from digital devices.** As workplaces come to rely more on digital platforms to stay connected, they should make sure that employees do not feel pressured to work overtime and, as a result, experience burnout.

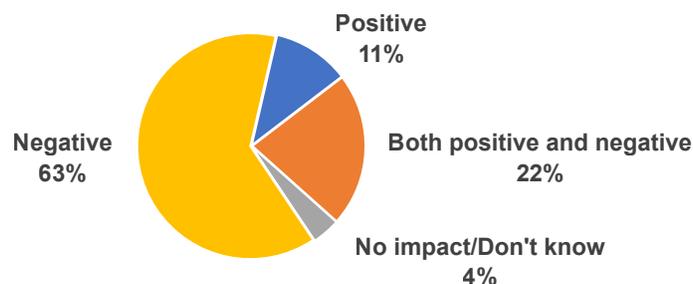
## CHALLENGE 2:

# ARTIFICIAL INTELLIGENCE IN HUMAN-RESOURCE DECISION-MAKING

Workplaces are increasingly relying on artificial intelligence (AI) to support decision-making in their human resource (HR) practices. Decisions that were once made by humans, such as whether an employee is hired or receives a promotion, can now be made by computerized systems.

For example, using AI, some HR platforms can screen out candidates for a job based on a scan of résumés for keywords or work timelines. Others find ideal candidates based on a computer analysis of their facial expressions, gestures or voice characteristics during video interviews. AI can also be used to monitor employees' work performance more closely.

### How participants rated the impacts of artificial intelligence in human-resource decision-making on young people with disabilities



#### Description of positive impacts

1. More objective hiring decisions, based on applicants' job skills rather than their visible characteristics
2. Easier access for job seekers, especially those who prefer to deal with HR computerized systems than meet with human resource (HR) staff in person

#### Description of negative impacts

1. Increased inequities in hiring, and less diversity in the workplace if programmers do not acknowledge and integrate diverse lived experiences into the design and implementation of AI-related HR systems
2. Higher likelihood of people with diverse lived experiences who have strong soft skills being excluded from job opportunities if recruiters rely solely on AI to make HR decisions
3. Potential misuse of AI tools in HR if those using them are unaware of their potential effects on employees

## Your recommendations

1. **Use a diversity, equity and inclusion (DEI) lens in the design and application of AI in human resource programs.** Designers of AI-based human resource programs and platforms should make sure their algorithms and programming do not disadvantage people living with disabilities. Similarly, employers should buy AI-based programs that have been designed with DEI in mind. They should also use them in a way that does not discriminate against people with disabilities and other equity-deserving groups.
2. **Balance the use of AI with human input in human resource decisions to ensure job-seekers with diverse experiences are considered.** Human resources decisions should not rely on technology alone. Human input should be incorporated into recruitment, hiring, promotion and other people management decisions to ensure that lived experiences, work experiences, soft skills and more are considered.
3. **Be transparent in how workplaces use AI in their HR practices.** Workplaces should make it clear to job applicants and employees about how their hiring and people-management decisions are made. That includes how AI and other technologies are used in making these decisions. This will allow applicants and workers with disabilities to adjust the way they structure their cover letters and resumés and participate in performance reviews, for example.

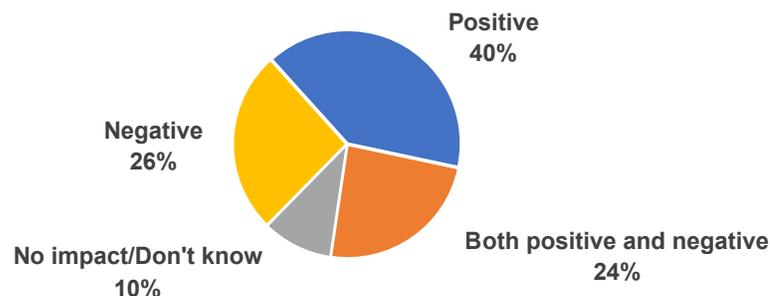
## CHALLENGE 3:

# DIGITAL GLOBALIZATION

We are heading into a new form of globalization that is driven by greater adoption of advanced in digital technologies world-wide. This may affect future workers, including young people with disabilities, in various ways. More white-collar jobs will be able to be done virtually from almost anywhere in the world. Freelance and contract work will also be open to bids from people around the world, in a trend called “tele-migration.”

To meet the demands of a global economy that relies more on digital technologies, young people with disabilities, like all workers in the future, will need to learn new skills. They will need to get higher levels of education, receive on-the-job training and spend time outside of work developing their know-how. They may also need to master soft skills that cannot be replaced by computers and other automated technologies. That’s so they can stay in demand by employers.

### How participants rated the impacts of digital globalization on young people with disabilities



#### Description of positive impacts

1. Fewer geographic constraints on job seekers and greater access to job opportunities in a wide range of occupations
2. Greater motivation for employers to adopt digital work arrangements and provide flexible working conditions to attract a broader pool of workers
3. More opportunities for upskilling and training to meet the labour demands of a global economy
4. Greater diversity in the skills valued by employers, including soft skills that cannot be replaced by computers

#### Description of negative impacts

1. Greater competition for available jobs from candidates across the globe
2. Greater likelihood that people with disabilities without the needed job skills, training or education will be less competitive in finding and keeping jobs
3. Potential for skills training programs to put short-term labour market needs of employers ahead of the long-term career goals of workers
4. More job loss and job insecurity for workers in Canada if employers choose to move jobs to countries where the costs of business are lower
5. Potential discrimination or exploitation of people with disabilities if they work for employers in countries with weaker labour laws and fewer supports

## Your recommendations

1. **Update educational curriculums to help young people meet the demands of a global economy.** High schools, colleges, universities and other educational institutions should teach a wide range of skills that will prepare young people for work in a global labour market. These include learning other languages, using digital technologies and doing long-term career planning. They also include improving soft skills such as communicating, working in teams, thinking critically, solving problems and more.
2. **Provide financial support to young people with disabilities to help them compete for jobs.** Funding should be provided to young people with disabilities to help them compete for in-demand, higher-paid jobs in a global economy. Such funding can help pay for internet access, training programs and work placement opportunities.
3. **Promote the hiring of local workers.** Federal and provincial governments should invest in local economies and encourage Canadian companies to hire and keep local workers, with the aim of protecting local jobs in the face of globalization. Potential government supports can include grants and tax subsidies for local businesses that encourage the hiring and retention of local workers, including people with disabilities.
4. **Regulate the outsourcing of jobs.** Governments should adopt laws and policies that limit the number of jobs that Canadian companies can open to global workers. For example, regulations could require Canadian employers to hire qualified domestic workers before opening jobs to the global workforce.
5. **Enforce minimum accessibility standards and employment rights internationally.** Canada should promote and enforce a system of international laws and standards that set minimum worker rights and accessibility standards. These standards would require companies hiring workers with disabilities anywhere in the world to consistently support, accommodate and protect workers against discrimination and exploitation.

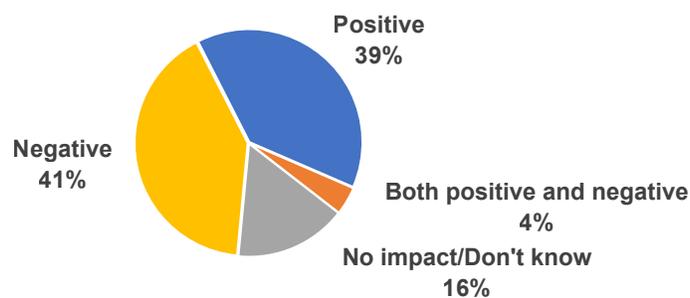
## CHALLENGE 4:

# CULTURAL TENSIONS AROUND WORKPLACE INCLUSIVITY

Workplaces are becoming more inclusive, diverse, accessible and socially responsible as social movements and new generational perspectives shift expectations of workplace cultures. Young workers in Canada today are more diverse, and they are expecting that governments and workplaces will adopt practices and policies to make work environments more welcoming to people with different backgrounds and abilities.

However, certain forces are counteracting this trend toward greater workplace inclusion. One example is the growth of populist movements. Populism tends to reject politics and policies that promote more inclusive communities and workplaces. Instead, it tends to embrace a rhetoric that promotes fear of others and a rejection of authority. This tension will have implications for marginalized workers.

### How participants rated the impacts of cultural tensions around workplace inclusivity on young people with disabilities



#### Description of positive impacts

1. More job opportunities for people with disabilities as new generations of workers influence workplaces to embrace diversity and social justice in their workplace practices
2. Easier access to job accommodations and flexible work arrangement as these practices become more commonplace

#### Description of negative impacts

1. Fewer job opportunities for people with disabilities if negative populist attitudes dissuade employers from hiring them
2. More workplace discrimination against people with disabilities, such as increased harassment and fewer opportunities for promotion
3. More resentment of people who need additional supports at work, which can influence employers to limit accessibility and workplace accommodations
4. Less government funding for social supports and safety nets for people living with disabilities as politicians court the support of those with populist sentiments

## Your recommendations

1. **Update existing anti-discrimination laws and policies.** Current human rights and employment laws should be strengthened to reinforce fairness for people with disabilities in the world of work. Employers should be required to adopt inclusive hiring and accessibility practices. For example, large employers should be required to meet minimum targets for hiring people with disabilities. Likewise, small businesses should be given stronger guidelines on how to provide reasonable workplace accommodations.
2. **Build employer and worker capacity to create inclusive workplace cultures.** Offer more workshops and training courses to employers and workers to increase their awareness of the effects of discriminatory practices, and to teach them how to make measurable changes to create more inclusive workplace cultures.
3. **Strengthen government oversight of social media platforms.** Government bodies should reduce the spread of misleading information that negatively affects people with disabilities and other vulnerable groups. They should pass and enforce stronger laws that require social media platforms to take steps to prevent users from spreading misleading or false information. They should also educate social media users how to identify misleading and false information so they don't spread it further.
4. **Counteract negative attitudes spread by populist movements.** Governments and community organizations should take steps to address the negative perceptions of people with disabilities. For example, populism may lead to a backlash against greater participation of people with disabilities in the workforce. In response, governments should support programs like internships or apprenticeships to connect businesses and people with disabilities, raise employer awareness of the benefits of hiring workers with disabilities and increase employer confidence and capacity to do so.

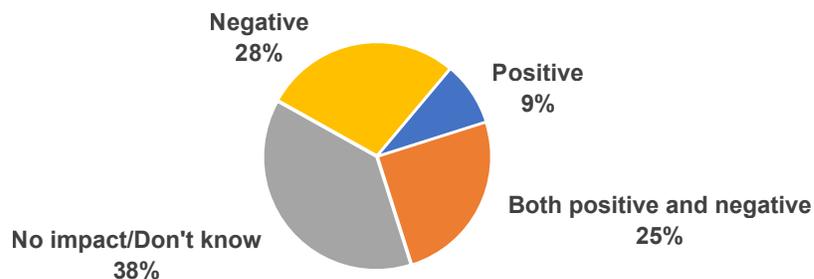
## CHALLENGE 5:

# CLIMATE CHANGE

Climate change will increasingly affect job opportunities and job conditions in the future of work. Natural disasters caused by climate change, such as wildfires, floods and droughts, can damage roads, buildings and other types of infrastructure, creating difficult working conditions or interrupting employment. Outdoor workers such as farmers, construction workers, tour guides and more are particularly affected by extreme weather.

Addressing climate change will affect the future of work. It will likely result in declines in certain sectors (e.g., oil and gas) as dependence on carbon-based energy is reduced. However, it will also result in growth in other sectors as the shift is made towards a green economy. Sectors involved in renewable energy, waste reduction, sustainable design, conservation, ocean management and more are likely to expand.

### How participants rated the impacts of climate change on young people with disabilities



#### Description of positive impacts

1. More remote work as employers respond to climate change by reducing the need to commute to, or travel for, work
2. New job opportunities in the green economy

#### Description of negative impacts

1. More job loss among people with disabilities working in regions or industries affected by climate events
2. More unsafe and stressful working conditions (e.g., for those whose outdoor jobs, commutes to work or physical workplaces are disrupted by extreme weather)
3. Fewer resources spent on creating accessible workspaces as public and corporate resources are diverted to climate emergencies

## Your recommendations

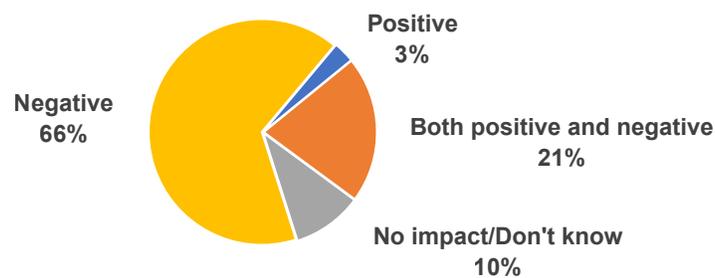
1. **Support workers with disabilities in industries at greater risk of being affected by climate change.** Workers at risk of losing jobs because they work in sectors affected by climate change may need retraining to find new work.
2. **Make public transit more accessible for people living with disabilities.** As policy-makers promote public transit as a way to reduce carbon emissions, they need to make sure that public transit is fully accessible so people with disabilities can participate in the solution and not be left behind.
3. **Increase options for remote work and flexible work arrangements.** Reducing the need for employees to regularly commute to work makes them less vulnerable during climate emergencies and lowers their carbon footprints.
4. **Use incentives to encourage workplaces to develop climate change preparedness plans that are fully inclusive of people living with disabilities.** Organizations can prepare for extreme weather events by developing plans on how they will respond. Such preparedness plans should be developed with a disability lens, so that the needs of workers with disabilities are taken into consideration well in advance.

## CHALLENGE 6:

# MAJOR SHOCKS SPEEDING UP THE PACE OF CHANGE

Major shocks such as economic recessions, natural disasters and global pandemics can significantly affect the speed at which the world of work changes—often in unpredictable ways. For example, the COVID-19 pandemic sped up the adoption of remote work and changed some industries in profound ways. Likewise, natural disasters and geopolitical tensions can hasten the rollout of green technology. Recessions can drastically shift public attitudes on inequality and social safety nets.

### How participants rated the impacts of major shocks speeding up the pace of change on young people with disabilities



#### Description of positive impacts

1. More accessible work if shocks motivate employers to shift work to virtual environments

#### Description of negative impacts

1. Job loss that hits some workers harder than others, especially those already facing barriers and lacking resources
2. Fewer job accommodations and more job demands as employers face greater financial pressure

## Your recommendations

1. **Offer financial aid to people with disabilities who lose their jobs due to external shocks.** Governments should develop financial aid programs that are ready to roll out in the event of an external shock. People with disabilities and other worker need access to income support to cope with sudden job loss and the other unexpected crises in the labour market.
2. **Make it easier for people with disabilities to work in stable jobs that may be less affected by shock events.** Governments, community organizations and employers should create pathways to stable, long-term work for people with disabilities because these jobs are likely more resistant to external shocks. These include permanent, non-entry level jobs, with secure employment contracts and in occupations and industries that are more resilient to economic changes.
3. **Increase workplace preparedness for accommodating the needs of workers with disabilities during external shocks.** Companies should have clear and comprehensive policies and procedures in place for responding to crises and other upheavals before external shocks occur. These plans should address the accommodation and accessibility needs of employees with disabilities, such as the availability of assistive technologies, remote work arrangements and flexible work.
4. **Offer training and funding to support small and medium-sized employers.** Small and mid-sized employers may need help creating emergency plans that include accommodation of employees with disabilities during an external shock.

# FINAL REMARKS

This report summarizes the support, program and policy recommendations proposed by participants in the first survey on addressing the challenges and opportunities in the future of work for young people with disabilities. As such, the report acts as an important resource and reference when completing the second survey.

The second survey is taking place in Spring 2022. It asks you to rank the recommendations based on how important you believe they will be to make sure young people with disabilities find and keep meaningful work in the decades ahead. This report provides information on the recommendations you are being asked to rank. In the survey, you will also find links to short videos that sum up the choices you are being asked to make.

After the second survey is completed, the research team will use the findings to establish a consensus or agreement on the strategies most needed to foster the inclusion of young people with disabilities in the future of work, as identified by the people with lived experience and labour market experts who took part in the study.

We thank you very much for your participation in this important work.

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- Kay Nasir, Research coordinator

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