### Understanding and Countering Gendered Disinformation

Annex E1 Tackling Online Gendered Disinformation: Educator Guide





DEVELOPED IN APRIL 2025

## Tackling Online Gendered Disinformation

6

 $\bigcirc$ 

se

**Educator Guide** 



¢

## Table of Contents

04	About Actua
05	Background Information: What and Why
06	What is Gendered Disinformation?
06	Disinformation vs. Misinformation
06	Impacts of Spreading Disinformation
08	Why is This Happening?
09	Types of Technology-Facilitated Abuse Used as Part of Gendered Disinformation
10	Taking Action in Education
10	Approaches in the School
10	Approaches in the Classroom
11	1. Teach People How to Recognize and Resist Disinformation
11	2. Use Empowering Language over Fear-Based Language
11	3. Support Those Who Are Targeted
12	4. Promote Inclusion, Critical Thinking, and Wellbeing
12	5. Build Digital Literacy into Everyday Learning

## Table of Contents

13	Opportunities in the Classroom
14	Entry Points and Subject Connections
16	Key Considerations
16	Age Appropriateness
17	Navigating Challenging Conversations
18	Fostering Empathy and Compassion
19	Be Prepared
21	What's Next?
22	Glossary

23 Acknowledgements

## About Actua

Actua is creating a Canada where every child has the skills and confidence they need to achieve their full potential. As a leading science, technology, engineering and mathematics (STEM) outreach organization, Actua includes over 40 universities and colleges, engaging 500,000 youth in 600 communities each year. For 25 years, Actua has focused on identifying and removing the barriers for entry into STEM and now have national programs dedicated to engaging Indigenous youth, girls and young women, Black youth, those facing economic barriers and youth in Northern and remote communities.

This work is the product of collaboration between **Actua** and the **Community Safety Knowledge Alliance**, with **Sapper Labs Group**, and was supported, in part, through funding from Heritage Canada.

The Community Safety Knowledge Alliance (CSKA) is a non-profit applied research organization that supports governments, police, public health and human service leaders in developing, implementing and assessing new approaches to enhancing community safety and well-being service delivery and outcomes. Over the past decade, CSKA has conducted interdisciplinary research and engaged with change-makers on some of Canada's most pressing social issues, including intimate partner violence, youth radicalization to violence, cybersecurity, food security, drug policy, human rights-based policing, and community reintegration initiatives. CSKA maintains an active posture on issues such as disinformation and artificial intelligence to support adaptive responses to these emerging challenges.

**Sapper Labs Group (SLG)** conducts research to understand the methods and impacts of disinformation and influence campaigns and networks and as input to the development of processes to support effective countermeasures. SLG is supported by global partners and a comprehensive intelligence sharing network. The goal of SLG is make the world a better safer place in line with objectives around: countering foreign interference and influence, countering radicalization and extremism, supporting human rights and other activities involving capacity building related to information integrity.



## Background Information: What and why

The fast-changing nature of our digital environment presents complex challenges, one of the most serious being gendered disinformation. Defined as the use of digital tools to inflict harm (physical, sexual, psychological, social, political, or economic) or violate the rights, freedoms and credibility of women and gender-diverse individuals, gendered disinformation is more than just online negativity. These are often coordinated campaigns with severe repercussions for women and other individuals marginalized due to gender, as well as to the health of our society and democracy in general.

To help address these challenges, we have created new resources to support educators, families and young people. These tools are designed to build awareness, encourage critical thinking and offer strategies for navigating and responding to disinformation they encounter online.

For educators to effectively teach these concepts, it's essential to grasp the complexities of the topic. **The following section defines gendered disinformation, provides examples, and explores the underlying factors driving its spread.** While much of the focus is on women and girls, it's important to recognize that gendered disinformation also impacts non-binary, trans, and gender non-conforming individuals. The dynamics of disinformation targeting these groups may be shaped by similar gender-based attitudes and ideologies or be used deliberately to deepen social divisions and undermine the ability of people in Canada to connect and collaborate.

Following this overview, we provide concrete steps educators can take to address gendered disinformation in their classrooms and communities.

#### What is gendered disinformation?

A politician faces a wave of faked images and videos designed to damage her credibility as a leader along with online threats to intimidate her into silence.

A teenage girl dreams of becoming a journalist. She shares her opinions online, only to be bombarded with hateful messages and false accusations that she's spreading lies. A student is targeted for abuse by an angry ex-boyfriend who spreads non-consensual explicit images of her on social media.

A non-binary student asks their teacher about pronouns, but their classmates have already been misled by online posts claiming that there is no science behind non-binary identities, and that they are "made up."

These are all examples of gendered disinformation — false or misleading information designed to harm people based on their gender. It can take many forms, from online harassment, controlling behaviours, and manipulated images to false narratives that undermine the credibility of women and gender-diverse individuals. And while false information spreads quickly for many reasons, when it targets gender, it becomes a powerful tool for reinforcing discrimination and silencing voices.

#### **DISINFORMATION VS. MISINFORMATION**

- **Misinformation** is untrue content that is spread by people who believe that it is true. Misinformation could be spread innocently, or to cause harm.
- **Disinformation** is untrue content that is spread by people who know that it is untrue. Disinformation is always spread knowingly and deliberately to cause harm.

#### IMPACTS OF SPREADING DISINFORMATION

When these fake messages spread – usually through social media – they can make people question their abilities, limit their opportunities, or even fear speaking out online.

Seeing negative stereotypes over and over can cause self-doubt, anxiety, and low self esteem. You might start to question your abilities or feel pressured to fit into certain expectations. For example, if you constantly hear that "women aren't good leaders," you might be less likely to put yourself forward for leadership roles at school or in your community. Recognizing gendered disinformation is the first step in countering its impact. Below are examples of how it appears in different contexts:

- **Fake stories** Fake news articles or social media posts that attack women, especially those in leadership roles.
- **Manipulated images and videos** Edited pictures or deepfake videos that make it look like someone said or did something they never did.
- **Misinformation about gender roles** Posts or comments claiming that women are naturally bad at specific tasks or in certain sectors like leadership, science, or sports.
- **Harassment and cyberbullying** Online attacks that try to intimidate, humiliate, or silence women and girls.
- **Memes and satire** Jokes or cartoons that disguise harmful messages about women as "just humor."
- **Classrooms** Comments or posts with the narrative that "girls are naturally less capable in math and science," discouraging female students from pursuing STEM careers.
- **Sports** Women athletes often face public scrutiny amplified through social media, including shaming, objectification, sexist language, and debates over who is deemed eligible to compete in women's sports.

Can you think about other examples that you may have experienced or heard about?

#### Why is this happening?

The digital world is full of opportunities but also risks. Social media platforms reward outrage and engagement, meaning that harmful and false content often spreads faster than the truth.

Certain groups — including women in public life and non-binary people — are especially vulnerable. Disinformation can be used to attack individuals or entire communities, making them feel unsafe or unwelcome in online spaces. Many individuals, especially young people, struggle to tell fact from fiction in the digital age. Algorithms push them toward content that reinforces their existing beliefs, creating "echo chambers" where misinformation flourishes. Some believe and share harmful content not because they want to hurt others, but because they don't realize they're being manipulated.

A FEW STATISTICS	SOURCE
<ul> <li>1 in 5 Canadian women experience some form of online harassment.</li> <li>30% of Indigenous women encounter unwelcome behaviour online.</li> </ul>	<u>Canadian Women's</u> <u>Foundation</u> (2024)
<ul> <li>Online abuse of women is a widespread problem across all continents.</li> </ul>	<u>Global Politics and the Vital</u> <u>Voices Global Partnership</u> <u>on TF-GBV</u> (2024)
<ul> <li>Between 2019 and 2020, 85% of women had witnessed or experienced online gender-based violence and 38% had been personally impacted by it</li> <li>These figures likely under-report how widespread the issue is</li> </ul>	Institute of Global Politics and the Vital Voices Global Partnership/Economist Intelligence Unit (2024)
	A

## TYPES OF TECHNOLOGY-FACILITATED ABUSE USED AS PART OF GENDERED DISINFORMATION

- **Doxxing** When someone shares private information (like a home address or phone number) online to intimidate or harm a person.
- **Deepfake videos** Fake videos created with artificial intelligence (AI) to make it look like someone is doing or saying something they never did. These are often used to spread false, damaging information about women.
- **Non-consensual image sharing** When someone shares or threatens to share private photos without permission.
- **Fake accounts and impersonation** Creating fake profiles to spread lies, harass someone, or damage their reputation.
- Hate speech and threats Sending harmful messages or posting threats to silence women and girls online.

These forms of abuse can be intimidating, but identifying them is the first step in protecting yourself and supporting students in navigating online spaces safely.

# Taking Action in Education

The good news is that we are not powerless against gendered disinformation. Tackling it requires a mix of education, community support, and technology — all working together.

#### Approaches in the school

Creating a school-wide culture that recognizes and addresses gendered disinformation requires collective action, strategic planning, and ongoing learning. Administrators play a key role in leading this shift by fostering an inclusive, supportive, socially and technologically aware environment that includes digital literacy and critical thinking:

- Provide opportunities for professional learning on digital citizenship and cyber safety, as well as digital literacy training for educators, including how to recognize and respond to gendered disinformation. Consider offering this training to all teachers across subject areas, as well as other school staff (e.g., coaches, educational assistants, administration), to support a shared foundation of awareness. Framing this as part of broader efforts to build capacity and strengthen organizational culture can help embed it as a key element of school-wide practice.
- Develop policies to address gendered disinformation and harassment within the school community, including reporting mechanisms and digital safety protocols.
- Encourage district-wide initiatives that promote inclusive digital citizenship.

#### Approaches in the classroom

Teachers are a key resource in equipping students with the skills to critically evaluate online content and challenge disinformation. Integrating these lessons into everyday classroom activities can build critical thinking, media literacy, and digital resilience.

Here are some ways we can take action:

#### 1. TEACH PEOPLE HOW TO RECOGNIZE AND RESIST DISINFORMATION

We should be equipping students with the knowledge and tools to spot and explain fake news, Algenerated images, and other manipulative content. This means:

- Teaching how social media platforms (algorithms and other design features) work so they understand why they keep seeing the same kinds of posts and how posts can spread quickly.
- Showing how to check sources and modelling ways to think critically before sharing information.
- Encouraging students to share what they've learned with their friends and family members who are also vulnerable to disinformation and may not realize.

#### Check out the **"Entry Points and Subject Connections"** on *page 13* on how to integrate these conversations into the classroom.

#### 2. USE EMPOWERING LANGUAGE OVER FEAR-BASED LANGUAGE

It is crucial to approach this discussion with empowering language so that youth are not afraid to be online. Yes, we want to make them aware of the risks, but by teaching them key skills we help them to build confidence to navigate online spaces in a smart and safe way.

- "The internet can be a good resource" vs. "The internet is scary"
- "It is important to ask the right questions" vs. "You need to be on guard and ready to protect yourself"

Follow up on this by empowering them to share what they've learned with their friends and family members so that they can extend their knowledge to others.

#### 3. SUPPORT THOSE WHO ARE TARGETED

It's crucial to create safe, supportive spaces where students can talk about their online experiences and seek help when needed:

- Create safe spaces where people can talk about their experiences without fear.
- Talk about trusted networks (like teachers, youth workers, or family members) that can step in when someone is being harassed online.

Check out the "Navigating Challenging Conversations Section" on page 17.

#### 4. PROMOTE INCLUSION, CRITICAL THINKING, AND WELLBEING

One way gendered disinformation spreads is when it is linked to conspiracy theories or movements that help people who have felt left out of society feel more powerful, at the expense of others. Supporting students to be resilient, flexible and critical thinkers can help. It is also important that students feel like school is somewhere they belong and where they can have a voice. Encouraging open, informed conversations, and helping people get the resources they need, may reduce susceptibility to polarization or radicalization.

#### This means:

- Encouraging young people to explore multiple identities as learners, community members, and future leaders.
- Teaching empathy and critical thinking so people learn to question divisive narratives instead of falling for them.
- Creating inclusive spaces where gender diversity is understood and respected.
- Helping youth to build skills in communication and conflict resolution, especially with those that may have different lived experiences, perspectives or knowledge than them.

#### 5. BUILD DIGITAL LITERACY INTO EVERYDAY LEARNING

Instead of waiting until problems arise, we should proactively teach digital literacy and ways to develop psychological immunity in schools and community programs. This means learning how to recognize and how to resist to mis- and disinformation:

- Introducing media literacy lessons as early as possible so young people grow up questioning what they encounter online. These lessons can include conversations to:
  - Advocate for better policies from tech companies to stop gendered disinformation from spreading, such as stronger protections and more transparent content moderation.
  - Help them become aware of how their data and engagement are used to fuel these systems so they can make informed choices about their online activity.
- Seeking training to feel comfortable discussing mis- and disinformation, bias, and online safety.
- Using age-appropriate examples (such as AI deepfake videos or gendered memes) to show how disinformation works in real life.
- Talking about the features of mis- and disinformation (including conspiracy theories) and the social and information environments that make them attractive, "sticky" and hard to resist.

Below are some examples of **how** to bring these topics into your educational setting.

#### **Opportunities in the Classroom**

#### ENTRY POINTS AND SUBJECT CONNECTIONS

Here are some ideas for integrating this topic into your classrooms. Taking a cross-curricular approach helps reinforce key messages across different subjects, platforms, and school activities.

While we're sharing some STEM connections and entry points, these conversations don't have to be tied strictly to curriculum goals. Real-world connections (like a viral meme, news story, or events like <u>Media Literacy Week</u>) can provide natural opportunities to engage students in meaningful discussions. These forms of abuse can be intimidating, but identifying them is the first step in protecting yourself and supporting students in navigating online spaces safely.

As you explore these connections, think of what others you can make in your classroom.

SUBJECT	ENTRY POINTS AND SUBJECT CONNECTIONS	CROSS-CURRICULAR INTEGRATION EXAMPLES
	Scientific literacy and fact-checking: Teach students how to assess scientific claims for credibility, including evaluating sources. Highlight how scientific mis- or disinformation spreads by misusing or misrepresenting scientific studies.	<b>Language connection:</b> Write research- based essays or opinion pieces evaluating misleading scientific claims (e.g., climate change).
STEM (Science, Technology, Engineering, Math)	<b>Al and scientific ethics:</b> Examine how Al is used in scientific research and the ethical challenges of Al-generated mis- or disinformation.	<b>Ethics/philosophy connection:</b> Hold debates on AI ethics in scientific research, focusing on potential misuse of data.
Mathy	<b>Data literacy:</b> Teach students how to evaluate sources, analyze statistics, and recognize manipulated data.	Math and language connection: Write explanatory articles using real-world statistical data to debunk common mis- or disinformation.
	<b>Math and statistics:</b> Analyze how misleading statistics and manipulated data influence public perception.	<b>History connection:</b> Study how manipulated data has been used in historical propaganda (e.g., economic data during wars).
	<b>Propaganda in history:</b> Study the role of propaganda in shaping public opinion during key historical events (e.g., WWII, Cold War).	<b>STEM connection:</b> Explore how technology (e.g., early radio, Al-driven bots) has evolved to spread propaganda and mis- or disinformation.
HISTORY AND SOCIAL STUDIES	<b>Civic engagement and</b> <b>misinformation:</b> Analyze the impact of disinformation on democracy, elections, and trust.	<b>Language connection:</b> Have students write persuasive essays on how mis- or disinformation affects civic engagement today.
	<b>Case studies:</b> Compare historical and modern gendered mis- or disinformation.	<b>Media studies connection:</b> Analyze historical propaganda posters alongside modern digital memes spreading disinformation.

SUBJECT	ENTRY POINTS AND SUBJECT CONNECTIONS	CROSS-CURRICULAR INTEGRATION EXAMPLES
	<b>Analyzing news and social media:</b> Compare media coverage of male and female politicians or athletes to uncover bias.	<b>STEM connection:</b> Investigate how Al algorithms amplify biased content in social media feeds.
LANGUAGE AND MEDIA STUDIES	Fake news and deepfakes: Teach how Al- generated content, including images and videos, can spread disinformation.	<b>Computer science connection:</b> Code simple AI programs or simulations that mimic deepfake technology.
	<b>Persuasive writing:</b> Write fact-checked opinion pieces on the impact of disinformation.	<b>Psychology connection:</b> Incorporate cognitive bias studies to help students understand why people fall for fake news.
	<b>Cognitive biases:</b> Teach how biases (e.g., confirmation bias) make people more vulnerable to believing disinformation.	<b>Language connection:</b> Analyze characters in literature who exhibit biases and how this influences their decisions.
PSYCHOLOGY	<b>Language connection:</b> Analyze characters in literature who exhibit biases and how this influences their decisions.	<b>Media studies connection:</b> Explore how news outlets use algorithms to decide headlines and content placement.
AND SOCIOLOGY	<b>Impact on identity:</b> Discuss how gender stereotypes in digital spaces shape self- perception and confidence. Examine the ways that certain vulnerabilities may lead people to seek affiliations with groups that demand and reinforce strong "us/ them" perspectives.	<b>Physical education connection:</b> Analyze how online stereotypes affect participation and leadership in sports. Examine the ways that seeing people as "other" can lead to them being excluded from teams or vilified as supporters of different teams.
	<b>Media representation in sports:</b> Compare how male and female athletes are portrayed in sports media.	<b>Language connection:</b> Write media critiques or sports columns analyzing gender bias in coverage.
PHYSICAL EDUCATION AND SPORTS	<b>Gender bias in coaching and athletics:</b> Discuss how stereotypes influence coaching and athletic opportunities.	<b>Psychology connection:</b> Explore how stereotype threat impacts athletic performance.
	<b>Online harassment in sports:</b> Examine cases of gendered disinformation targeting female athletes.	<b>Civics connection:</b> Discuss how online harassment reflects larger societal issues of gender equity and digital citizenship.

#### **KEY CONSIDERATIONS**

When teaching about gendered disinformation, it's important to tailor your approach based on students' age, developmental stage, and emotional readiness. Equally critical is being prepared to navigate difficult conversations, as these topics can sometimes provoke discomfort, resistance, or misunderstanding.

#### AGE APPROPRIATENESS

Understanding how to introduce complex topics at different ages helps foster engagement and comprehension. As students grow, the same topic can be explored in greater depth, strengthening their critical thinking, digital literacy, and awareness of gendered disinformation. <u>Check out Actua's suite of Cyber Smart activities for age appropriate activities on this topic from</u> <u>Gr. 2-12</u>.

Below are examples of how topics related to gendered disinformation can be adapted and expanded across grade levels:

ТОРІС	ELEMENTARY (GRADES 3-6)	MIDDLE SCHOOL (GRADES 7-9)	HIGH SCHOOL (GRADES 10-12)
SPOTTING FAKE CONTENT	Basic recognition: Show clearly edited images (e.g., unicorn in real life) and ask, "Does this look real? Why or why not?" Discuss why people might edit images or create fake stories.	Analyzing misinformation: Compare subtle examples, like misleading headlines or slightly altered images, and discuss their potential impact.	Deep analysis: Explore deepfake videos, AI-generated content, and viral mis- or disinformation. Discuss real-world consequences and how to fact-check effectively.
MEDIA BIAS	<b>Fact vs. opinion:</b> Teach students to differentiate between facts and opinions in simple news stories or social media posts.	<b>Bias in news sources:</b> Compare how different media outlets report the same event. Discuss how word choices or images might reveal bias.	<b>Bias, framing and</b> <b>algorithms:</b> Discuss how social media algorithms reinforce bias and shape the content users see. Explore ways to diversify their media consumption.

ТОРІС	ELEMENTARY (GRADES 3-6)	MIDDLE SCHOOL (GRADES 7-9)	HIGH SCHOOL (GRADES 10-12)
IMPACT OF DISINFORMATION	<b>Story-based learning:</b> Read a story where a character spreads a false rumor and discuss the emotional impact on those involved.	<b>Emotional impact</b> <b>and online behaviour:</b> Discuss how false information and online harassment can affect people emotionally and socially.	Social, ethical, and global impact: Analyze real cases where gendered disinformation harmed individuals or communities and brainstorm ways to counter it.
CRITICAL THINKING AND DIGITAL RESILIENCE	Basic critical thinking: Encourage questions like, "Who made this? Why did they make it?" when evaluating digital content. Invite discussion of how a message might make us feel about a topic and how these feelings might be manipulated for negative purposes.	Critical thinking and digital skills: Teach students to fact-check, question sources, and recognize manipulative content. Conduct activities that develop self-awareness and the ability to notice how they react to the content of different messages.	Advocacy and ethical responsibility: Engage students in debates about digital ethics, free speech, and the responsibility of social media platforms in tackling disinformation. Explore the implications of these issues when considering powerful technologies for manipulating human thoughts and feelings.

#### NAVIGATING CHALLENGING CONVERSATIONS

Conversations about gendered disinformation can sometimes be uncomfortable for students and may even lead to resistance or pushback. These challenges can arise due to differing values, misunderstandings, or discomfort with discussing gender and online harm. By being proactive and prepared, educators can create a safe, supportive learning environment where students feel respected, heard, and empowered to engage.

Below are strategies for both preventing resistance and managing challenging moments when they occur:

#### FOSTERING EMPATHY AND COMPASSION

When engaging students in discussions about gendered disinformation, it's important to cultivate both empathy and compassion. While empathy helps students understand how others may feel when targeted by disinformation, compassion takes it a step further by encouraging them to take meaningful action. This dual approach helps build critical thinking, emotional intelligence, and a sense of responsibility in combating online harm.

Here are ways to differentiate and build on empathy and compassion in the classroom:

#### **EMPATHY: UNDERSTANDING THE IMPACT**

Empathy involves encouraging students to imagine what it's like to experience harm or harassment. This helps them emotionally connect to the issue and see the real-world consequences of gendered disinformation. Strategies for building empathy include:

- **Storytelling:** Share real or hypothetical stories of individuals targeted by gendered disinformation. Ask students, "How do you think this person might be feeling?"
- **Real-life examples:** Show age-appropriate case studies, such as instances of mis- or disinformation targeting female public figures, and discuss how this might affect their confidence, safety, and reputation.

#### COMPASSION AND SELF-AWARENESS: FOUNDATIONS FOR EFFECTIVE ACTION

Empathy means feeling what someone else is feeling, which can sometimes be overwhelming if their pain is intense. This could lead to feelings of paralysis - not being able to think through what you can do to help. Compassion is different — it involves caring about someone's struggle but staying calm and clear-headed, which makes it easier to think clearly and take helpful action. Compassion builds on empathy by motivating students to act against online harm. This can foster a critical and proactive mindset, where students feel empowered to create positive change. Compassion and self-awareness can work well together to enable skillful responses to provocative or difficult situations.

Strategies for encouraging compassion include:

• **Perspective taking and brainstorming solutions:** After discussing real examples of gendered disinformation, ask students: "What would I feel like if this happened to me/my friend?"; "What could you do to help stop this from spreading?" Encourage them to think about small actions, like correcting misinformation or reporting harmful content.

Strategies for encouraging self-awareness include:

• **Noticing exercises:** Taking time to pause, breathe and reflect on their thoughts, feelings, and actions. This can be helped by journaling, talking with someone they trust about reactions to provocative situations, or simply noticing how they feel in different situations.

#### **BE PREPARED**

Think in advance about what conversations could happen if gendered disinformation comes up in the classroom, and how to respond.

Before moving onto the next section, try to think about how you would approach these challenges. What other examples can you think of?

CHALLENGE	APPROACH
"Isn't this just free speech?	
"Aren't men targeted too?"	
Your example:	

#### STRATEGIES FOR HANDLING THESE CONVOS

As you read through these strategies, think about how they might change your approach from the examples above.

#### 1. STOP, NOTICE, THINK, AND CAREFULLY REDIRECT

- Acknowledge their feelings and thank them for sharing.
- Avoid judgments and use empowering language.
  - Remember that your participants are members of families and communities that may have different values and beliefs than you. It's important not to make statements or suggestions that conflict significantly with family or cultural values that may come across as judgmental.
- Do not minimize or ignore the situation.

#### **2.** BE A GOOD LISTENER REDIRECT

- Maintain privacy (for example, taking students to the side rather than addressing in front of a group).
- Let youth lead and ask questions, ensuring you're avoiding judgement.
  - Helpful phrases like "What are your thoughts?", or "Why are you asking?" can help a participant express their feelings.

CHALLENGE	SUGGESTED APPROACH
"lsn't this just	Use empowering language and data: "While free speech is important, we also need to think about the difference between free speech and harmful disinformation that spreads hate or silences others."
free speech?	Provide examples and comparisons: Discuss the concept of harmful speech using relatable analogies, like comparing disinformation to shouting "fire" in a crowded theater.
	Recognize that disinformation affects everyone but emphasize unique patterns in gendered disinformation. Acknowledge and validate: "You're right. Disinformation can affect everyone. Let's talk about the different ways it targets various groups."
"Aren't men targeted too?"	Avoid minimizing or ignoring the question: Instead of dismissing the concern, steer the conversation toward exploring patterns of targeted disinformation. "All people experience disinformation, but research shows that women, especially in politics or science, face unique types of attacks that focus on credibility or appearance. Why do you think that might be?"
	Be a good listener: If a student feels strongly about this, listen actively and ask follow-up questions to better understand their perspective before redirecting.

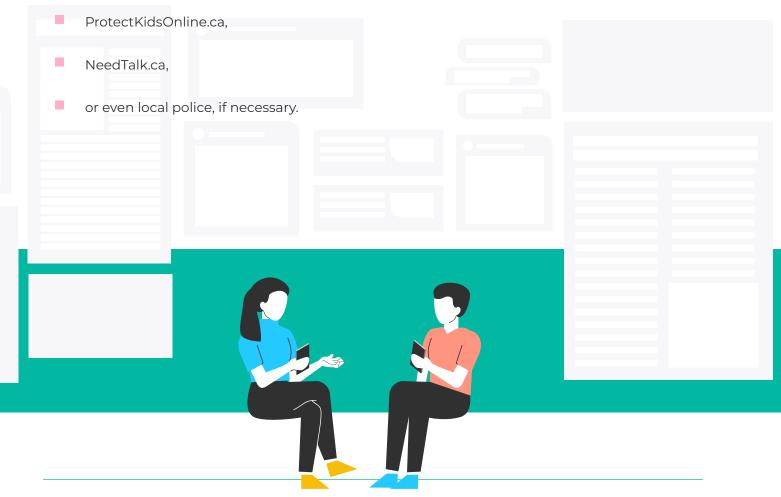
#### What's next?

The fight against gendered disinformation isn't just about stopping fake news—it's about creating a digital world where everyone can participate safely. By teaching media literacy, supporting those in-need, holding platforms accountable, integrating digital education into everyday learning, and fostering inclusive spaces, we can make a real difference. If we work together — across schools, families, and communities — we can build resilience against disinformation and create a more just and informed society.

#### It's okay to ask for help. Cyberbullying and gendered disinformation can feel overwhelming, but there are people and organizations ready to support you. By speaking up, we help make the internet a safer place for ourselves and others.

If the situation is serious, such as threats or ongoing harassment, you can also report it to:

- NeedHelpNow.ca,
- Cybertip.ca,
- the Canadian Centre for Child Protection (Protectchildren.ca),



## Glossary

The digital world is constantly evolving. Use the space below to add new terms and concepts you encounter as you deepen your understanding of this topic.

Word	Definition
Echo chamber	A space, often online or on social media, where people only hear ideas and opinions that match their own. Because everyone shares similar views, different perspectives are rarely seen or considered. This can make someone's beliefs feel more true or more popular than they really are.
Confirmation bias	The tendency to pay more attention to information that supports what we already believe – and to ignore or dismiss anything that challenges it. It can affect how we search for, interpret, and remember information.
Misinformation	Untrue content that is spread by people who believe that it is true. Misinformation could be spread innocently, or to cause harm.
Disinformation	Untrue content that is spread by people who know that it is untrue. Disinformation is always spread knowingly and deliberately to cause harm.
Doxxing	When someone shares private information (like a home address or phone number) online to intimidate or harm a person.
Deepfake videos	Fake videos created with artificial intelligence (AI) to make it look like someone is doing or saying something they never did. These are often used to spread false, damaging information about women.
Gendered disinformation	False or misleading information designed to harm people based on their gender. It can take many forms, from online harassment, controlling behaviours, and manipulated images to false narratives that undermine the credibility of women and gender-diverse individuals.

# Acknowledgements

With gratitude to our advisors, reviewers, and collaborators on this work:

- Abbey Ramdeo, Actua
- Janos Botschner, Community Safety Knowledge Alliance Canada
- Janelle Fournier, Actua
- Mikayla Ellis, Actua

We also extend our sincere thanks to the members of our national community-based groups who attended special sessions related to this research and shared valuable insights to guide the development of these resources:

- National STEM Educator Community of Practice
- National Black Youth in STEM Program Youth Delegation
- National Indigenous Youth in STEM Program Youth Delegation
- Actua Network Members