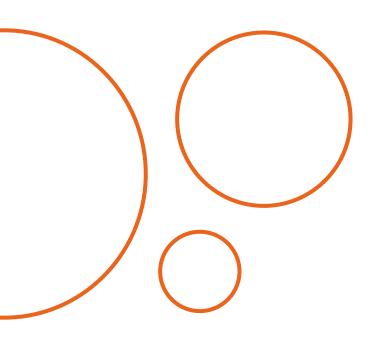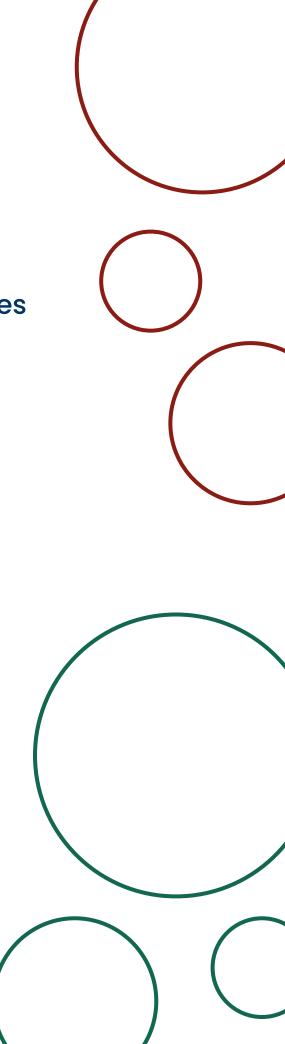# Digital Divide Practitioner Tool

Wise strategies and guiding principles to support effective online delivery of adult foundational programming

CALGARY LEARNS

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Digital Divide Practitioner Tool
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Introduction

The Digital Divide Practitioner Tool addresses a new need, one that did not previously exist in Alberta's Community Adult Learning Program (CALP) system: How can we offer effective adult foundational learning through online delivery?

While there is no simple answer to this question, this resource contains principles and wise strategies, grounded in the experience of practitioners in the field. It is meant to guide your thinking and practice as you transition into an online space with adult foundational learners.

All the strategies and quotations in this tool have been captured from surveys and workshops conducted with practitioners in Alberta's adult foundational learning community.

"Facilitating online learning for adult foundational learners requires not only a set of digital skills from practitioners, but also different pedagogical skills. This has meant that I had to find ways of dealing with new issues, such as how to react to and solve technical problems, organize interaction online, or ensure learners' participation and engagement while acknowledging feelings of anxiety."

Defining our terms

When we use the terms "practitioners" and "volunteer tutors", here is what we mean:

- Practitioners are facilitators, instructors, staff, and teachers who are responsible for facilitating learning in the non-formal adult learning space.
- Volunteer tutors are people who work directly with learners, with the guidance of practitioners, to augment the non-formal learning space.

When we use the terms learners or adult foundational learners, we are referring to the adults who choose to return to non-formal foundational learning in community-based programs. You will see that most often we use the term learners but at times we have used the term participants.

What is the digital divide?

The term "digital divide"

We use the term "digital divide" to refer to the inequalities that exist between those who have access to digital technology and the skills and confidence to use it, and those who do not.

During the COVID-19 global pandemic, the issue of the digital divide highlighted and exacerbated already existing issues of gross, systemic inequalities in economic, social, and educational opportunity for marginalized populations.

Barriers

When the pandemic suddenly shifted adult foundational learning away from in-person learning to online learning, three main barriers were revealed:

- Lack of access to affordable, reliable, broadband internet services
- Lack of reliable access to a digital device suitable for learning (e.g., tablets, laptops, desktop computers)
- Lack of digital skills and confidence to engage in online, remote, or blended learning

In our Digital Divide Project, we heard overwhelming evidence from practitioners that these three main barriers greatly impacted learners – and practitioners and volunteer tutors – in the adult foundational learning community.

Practitioners identified other barriers for learners, including financial instability, lack of childcare, increased responsibilities at home due to homeschooling, and other pandemic stresses. As well, practitioners identified their own lack of prior experience with online programming as a barrier.

These results reinforce what we found across the literature from other researchers in different jurisdictions. These barriers negatively impact adults' ability to access online learning. Significantly, they also impact adults' capacity to access other essential resources and support, and their ability to participate fully in the economic recovery that will follow the pandemic. This compounding effect illustrates how digital inequity impacts multiple aspects of life, learning, and work.

Learning in a changing landscape

The adult foundational learning community made great efforts to adjust programming in order to continue offering relevant learning opportunities throughout the pandemic, as in-person gathering was restricted. We responded to learner needs as the ground shifted beneath our feet.

When circumstances resolve, does the digital divide still matter?

Yes! It still matters and we need to address it. Digital skills, digital access, and digital learning are all essential in our post-pandemic world.

So, a new learning landscape has emerged, and practitioners have a wealth of information and insight to share about:

- how to address adult foundational learners' needs in online program delivery
- how to make teaching and learning sustainable in the new environment
- and how to continue to offer the responsive, learner-centred programming that CALPs are known for.

This Digital Divide Practitioner Tool shares this collected wisdom to advance effective online program delivery in the adult foundational learning field in Alberta.

The Digital Divide Project

The Digital Divide Project by Calgary Learns is a research-in-practice study of the impact of the digital divide on the adult foundational learning community in the CALP system across Alberta. The project engaged extensively with practitioners in the field, collecting and collating their feedback and suggestions into a report to the province and a practitioner resource.

The shift to emergency online learning during a pandemic

In March 2020, the Covid-19 global pandemic abruptly forced major changes in North American society. All kinds of programs and services, across all sectors of society, shifted to online delivery. Virtually overnight, digital access and digital skills became essential for all Albertans, including adult learners and practitioners in CALPs. The global pandemic highlighted and exacerbated pre-existing, systemic inequalities in digital access and digital skill development, particularly among marginalized Albertans.

Adult foundational learning programs had to respond quickly. With health restrictions prohibiting in-person learning opportunities, CALPs had to shift how they engaged with learners and delivered programming. This shift was unplanned, had no precedent in Alberta's adult foundational learning community, and brought about monumental changes to CALP programs and services.

A Community of Practice emerges

In response to the shift to emergency online learning, Calgary Learns brought together a small group of adult foundational learning practitioners in the *Pivot to Remote Learning Community of Practice.*

Over the course of a year, this Community of Practice uncovered many insights about delivering adult foundational learning programs through online, remote, and blended learning.

It was clear the shift away from in-person learning involved far more than simply "moving online." In fact, there was nothing simple about it. Practitioners and CALP-funded programs needed to rethink their practices and reimagine how to connect with learners and meet their changing needs in this new reality.

The Digital Divide Project is born

Based on the work of the Community of Practice, the province approached Calgary Learns to conduct the Digital Divide Project. Its goals are:

- To research and understand the barriers adult foundational learners face in accessing online, remote, and blended learning in Alberta; to identify the gaps and challenges learners experience; and to offer recommendations of the supports needed to address the barriers.
- To capture and share in a user-friendly resource the wise practices and strategies, collected from CALP practitioners, that support the successful delivery of online, remote, and blended learning programs.

Hearing from practitioners and learners

The Digital Divide Project engaged with adult foundational learning practitioners in the field across Alberta's CALP system. We gathered their experiences, reflections, and suggestions through surveys, an advisory committee, and other ongoing conversations and activities.

While we did not engage directly with learners, the learner voice is represented here because many of the practitioners' responses came from their own consultations with learners.

There were 71 respondents to the surveys: these included practitioners, volunteer tutors, coordinators, as well as managers such as program administrators, and executive directors. Of significance, the surveys garnered strong participation from both rural and urban respondents in an almost even split.

The Digital Divide Practitioner Tool is grounded in the experience and voice of practitioners in the field, and indirectly, the adult learners they work with. It gathers the wise practices that emerged from the real experience of dozens of adult foundational learning practitioners, and it shares those practices back to the wider CALP practitioner community. As such, it recognizes and celebrates the expertise of practitioners in Alberta's adult foundational learning community.

A Message to Practitioners

Welcome!

This tool is a practical resource full of strategies that have emerged from the adult foundational learning community. These strategies are meant to support you in facilitating effective online programming. They reflect the same principles that guide what you already do in-person.

If you are experienced in online program delivery, we hope this tool offers you some good ideas and new strategies as well as reminders of what already works well.

If you are new to online program delivery, we hope this tool helps you approach your work with increased confidence and with the same spirit and intention you approach in-person learning.

Take what you can use. Adapt what you find here to fit your context, your situation, and the adults you work with.

We hope this Digital Divide Practitioner Tool can be added to your practitioner toolbox to support and strengthen the work you are doing online with adult foundational learners.

A Message to Managers

Welcome!

We all learned there are new challenges and opportunities in online program delivery. Practitioners who facilitate online learning may need different supports (training, technology, etc.) than practitioners who facilitate in-person learning.

As you explore this tool, notice how and where you can offer the support practitioners and volunteer tutors will need to integrate new skills and strategies and successfully implement effective online programming.

For consideration:

Resources

- How can you ensure practitioners and volunteer tutors have the time and flexibility they require to meet learners' needs in the online environment?
- How can your organization support practitioners and volunteer tutors to have the digital and physical resources (phones, printers, paper, etc.) they need to facilitate online learning when they are working from home?
- Does your organization have people with the knowledge and skills with technology needed to support practitioners and help them support learners?

Protocols

- What new protocols are needed to support the online learning space?
- Will practitioners and volunteer tutors use their own personal devices, and if so, how will they balance privacy concerns with their need to connect with learners?
- How might home environments be exposed by being online, and what are practitioners and volunteer tutors expected to do if they witness safety issues (violence, abuse) in learners' homes?

Staffing

- How will online program delivery affect your organization's practices around practitioner and volunteer tutor recruitment and training?
- What different skills and strengths are needed to work in online environments?

We hope this Digital Divide Practitioner Tool can be used as both a training tool for staff and as a reflective tool for managers to identify ways your organization can support staff and help strengthen what they are already doing in the online environment.

Guiding Principles

Throughout our engagement with practitioners in the Digital Divide Project, these four concepts emerged as the guiding principles behind all the strategies. They reflect underlying values that guide practitioners in ways of thinking, planning, and being in the online learning environment.

Keep learners at the centre

CALP practitioners strive to offer learner-centred programming, driven by learners' goals and responsive to learners' needs. The online learning environment requires the same focus on learner-centred practices.

> "I approached the shift with a strong background in being learner-centred as the most important part of program delivery, regardless of mode. This meant that our program connected directly with learners through a variety of means, not just online, to figure out what their capacity for remote learning was, what their access to technology and digital skills looked like."

Focus on learning, not on technology

It is easy to get caught up in the excitement and the trendy gadgets the online world can offer, or get bogged down in technical challenges or glitches. But practitioners must not be distracted by – or expect themselves to know everything about – all the digital tools and the technology available for online program delivery. Technology is not the focus. It is the tool for connection. The learning is the focus.

Embrace digital skills as foundational learning

More than ever, the digital skills needed to communicate and to do things at home, at work, and in the community are essential for everyone. They are foundational learning skills. All of the challenges and hiccups we encounter as we onboard learners or try new things online, and all the skills needed to get past those challenges, are not detracting from foundational learning – they ARE foundational learning.

Be flexible

To be flexible means to be ready and able to adapt to different circumstances. Practitioners in the adult foundational learning community know the value of being flexible because it is a crucial part of responding to learners' needs. Flexibility is also essential in the online learning space, not just to respond to learners' needs and the technical challenges that come with online learning but also in being willing to take advantage of the new opportunities the online environment offers that never existed before in CALP programming.

Wise Strategies

Practitioners suggested many wise strategies for effective online delivery of CALP programming. We have organized the strategies into three main groups, each with three subgroups.

Caring and Sharing

Focus on taking care of people and relationships in online learning environments

- Cultivate Wellness and a Positive Growth Mindset
- Build Connections
- Respect Privacy and Encourage Healthy Boundaries

Teaching and Learning

Focus on engaging in the process of online learning

- Facilitate Effectively Online
- Teach Digital Skills
- Create and Manage Materials

Supporting and Accessing Technology

Focus on offering the resources and support needed for delivering effective online learning

- Offer Technical Support
- Offer Professional Development
- Increase Access to Technology

Caring and Sharing

Focus on taking care of people and relationships in online learning environments

Cultivate Wellness and a Positive, Growth Mindset

Be kind to yourself and let learners see that you are also learning.

- Everyone is learning digital skills, no one knows everything, and technology will inevitably have problems. When something does not go according to plan, view it as an opportunity to learn and try again with more information – not a failure but a graceful stumble. Model how to learn from mistakes. Notice the positive growth and learning that comes from persisting through challenges and issues.

  > "So using humor, and just being human, and just saying, …it's okay,…we're all human, … we're all learning. And just using examples of what that might look like… maybe you forgot to share your sound before you started your YouTube video…things like that… letting [learners] know it's okay to interrupt and let you know [when] things aren't working."

Explicitly encourage and model a growth mindset.

- As in any learning, there are obstacles to overcome in learning and using new technology. Use technical challenges and hiccups as teachable moments to embrace and model a reflective, growth mindset. Be explicit, intentional, and transparent about the challenges. Demonstrate problem-solving skills. Talk, read, and write about positive thinking, perseverance, and self-regulation with learners, and model it yourself.

Check-in with learners frequently.

- Have frequent, intentional check-ins with individual learners through whatever communication tools work best for them (phone calls, in-person sessions, text messaging, etc.) to touch base, build connections, troubleshoot issues, and support learners as they navigate online program delivery.

  > "Weekly meetings with learners have also been helpful to ensure participants are getting all they can out of the weekly teachings."

- Do a wellness check-in at the start of an online session to see how everyone is feeling that day and to ease into the learning space. Continue to do check-ins regularly to gauge emotions and readiness to learn.

  > "Learners all shared that they appreciate having a check-in in the morning as well as a daily check-out, this has helped them feel the group connection was intact and give them an opportunity to offer feedback and ask for support if required."

Beware of digital fatigue.

- Digital fatigue (or Zoom fatigue) is tiredness or burnout that can occur when you spend long stretches of time on video calls. Excessive close-up eye contact (or at least the sensation of having eye contact) is intense. Constantly seeing yourself is tiring and not part of regular in-person interactions. And video calls mean less body movement (stuck sitting at the computer) than we would experience normally. All of this leads to fatigue and burnout. Here are some tips to reduce digital fatigue:

  - Use the "hide self-view" button and encourage learners to do the same.

  - Include movement breaks, and try standing during calls.

  - Move your camera further away from you, if possible.

  - Have "audio only" breaks: turn off your camera and turn away from the screen. (If you are speaking during this break, check that people can still hear you, particularly if you are using a fixed microphone.)

> "Looking at the monitor, clients can get burnout. But so can facilitators. And when we're putting pressure on facilitators to constantly be looking into that monitor, it can also lead to quicker burnout."

Beware of cognitive overload.

- In online programming, learners are learning content and digital skills at the same time. Cognitive overload is a risk to learners due to the task-switching or multitasking required to do this. When you also include other challenges such as trying to read a document on a small cell-phone screen or dealing with technical difficulties, the risk of overload is even greater. This overload can affect learners' memory and their ability to learn. Design programs intentionally to avoid placing too many demands on learners. Build confidence, take small steps, offer support, and ask for feedback from learners.

> "Use a slower pace of instruction."

Adjust design and delivery model as needed.

- Schedule shorter online classes, with longer and more frequent breaks.

  - Break course content into smaller chunks over shorter sessions.

  - Take stretch breaks, body breaks, movement breaks, or fresh air breaks to help sustain learners. Encourage learners to pay attention to their posture and eye strain, etc.

  - Adjust the schedule to include time for whole class work and independent practice sessions.

  - Consider including assignments to be completed outside of class time.

- **Allow more flexibility in class times for learners.** Many learners need to juggle their learning with their responsibilities at home. They may be sharing their devices with others at home, limiting when they might be able to be online. Be ready to adapt and be flexible to support learners in these situations.

- **Understand that facilitating online learning requires more time and flexibility.** It takes more time to connect with individual learners in online learning. Practitioners may need to use a combination of phone calls, Facetime or WhatsApp chats, instant messaging, or emails. This takes more time than in-person learning but it is essential. Managers need to understand the increased time demands on practitioners and adjust their schedule to accommodate that.

"Supporting learners to remain engaged online often means lots of additional communication like texts, phone calls, etc. Lots of encouragement and support required, both from a digital skills perspective, but also from a relationship/ social connection perspective."

Build Connections

Take time to build relationships.

- It takes time in online environments to become comfortable and to stay connected. Provide a supportive environment with time set aside to build and maintain connections. Take it slow, don't include too much content, and be prepared to spend more time building the connections needed for learning to flourish.

> "Giving the learners more time to build connection and share with each other was key to ensuring they felt connected and safe with the other learners. Building trust remotely takes more time than in-person connection."

> "More time is dedicated to holding space for each online learner."

Use routines to develop connections and encourage engagement.

- Open the virtual room early, keep it open longer than the class time, and schedule longer breaks so everybody can chat.

- Start each session with conversation or ice breakers to build connections between learners.

- Try using music and song: Start class (and the few minutes before) with a song on YouTube – this helps everyone check their audio settings, plus it brings an upbeat vibe to the session. When it becomes a routine, you can start intentionally sharing songs that are thematically connected to your topic for the session. Or, if you use the same song each time as a warm-up, you can turn it into an engagement activity by having the group develop hand symbols to go with the music/words. Use the song as a routine to engage, relax, and connect.

Support social interaction between learners.

- Lessons can intentionally include times for learners to socialize. Consider opening breakout rooms to allow for social time in smaller groups during breaks or just before or after class time. Learners can use them to meet up and have conversations if they wish. Consider keeping it for learners only, not facilitators. Consider how having an open room might work in different platforms: Can learners self-select a breakout room in the platform you use? Or would you need to manually put them in the room? It may be easier in Zoom, for example, than in Microsoft Teams.

- Show learners how to message each other privately if they wish to during class time and breaks. Keep in mind that some platforms allow private chat messaging (like Zoom) while others do not (like Microsoft Teams).

- Offer additional fun activities like a book club or singalong group, or do outdoor in-person gatherings (e.g., a group walk and talk) to allow time for learners to connect with each other outside of class.

> "Usually with in-person learning there are opportunities for learners to chat on smoke breaks or during lunch and the bonds that form make for a safe and comfortable space built on trust. This was a huge piece missing from online learning but we made efforts to bridge the gap… each day."

Respect Privacy and Encourage Healthy Boundaries

Encourage peer-to-peer sharing of skills.

- Online learning offers new opportunities for peer-to-peer interaction where learners can practice their digital skills and increase their confidence. In small or large groups, have learners show other learners (and the facilitator!) how to do something. For example, a learner could show others how to use the annotation function, or how to share their screen.

- Take advantage of the opportunity for learners to demonstrate non-digital skills and accomplishments they would not be able to show as easily in an in-person environment. For example, learners could show something they created at home like a painting or craft, or they could demonstrate their skills in cooking or baking. This values life-wide learning and can also highlight emergent themes and topics for authentic lesson planning.

Understand unique privacy concerns of online learning.

- Online learning brings practitioners and learners together, virtually, into each others' private homes. This means both practitioners and learners may be exposed to sights and sounds that they would not usually experience in a classroom or other public, in-person environments. This situation creates unique privacy concerns that must be recognized, understood, and adequately addressed for the safety and comfort of learners and practitioners.

Allow learners to choose their level of engagement online.

- **Sharing is always optional.** There are many ways to participate and engage in online environments beyond speaking aloud: showing hand gestures or simple homemade signs to the camera, using the chatbox, answering polls, annotating, and other ways of responding non-verbally. Use a method of sharing that matches the learners' skills and that does not create new barriers or stress. Learners should always have the right to say "PASS", and facilitators should be intentional about frequently making that explicit to learners. When a learner passes, the facilitator moves on to the next person without delay.

- **Allow learners to turn their cameras off, while gently encouraging them to be on.** Video conferencing platforms such as Zoom and Microsoft Teams allow users to turn off their cameras. Allowing learners the choice to have their cameras on or off is critically important for them to feel agency and control over their situation. There are many reasons why they may want their camera to be off – learners (and practitioners!) may have Zoom fatigue and need a break from looking at the screen, or their internet may be unstable and they need to save bandwidth, or they may not want to show their living space or the people and activities happening in the room with them.

"I would love it if more of my learners turned on their cameras ... though I will always place their freedom to choose over my preference to see them! Honestly, the lack of obvious response or feedback has been the biggest challenge. I think in its place, there could be some reflection around the impact of our work when we don't see the immediacy of the impact on learners. How do we get that rush of connection when we feel disconnected?"

Rethink how to "read the room", especially when learners have their cameras off.

- In an online environment where you can only see people from the shoulders up, you cannot feel the energy of the room the same way you can in an in-person class. A screen full of learners' faces appearing to look at the practitioner does not actually indicate much about their engagement levels. They may be totally engrossed in what is happening in the class, but they may be doing something else on their computers or they may be texting their friends. It is even harder to read the online room when learners have their cameras off; a screen full of black boxes does not give any information about engagement levels.

- Consider various ways to get feedback from learners in an online environment such as asking individuals for feedback after lessons, or using the poll feature or annotation feature during the online session. Recognizing, and acknowledging, that there are many reasons learners may have their cameras off can reduce the impact on practitioners.

> "Sometimes, as a facilitator, when screens are all dark, you're not really getting any feedback and you can be hard on yourself. So potentially asking for feedback after lessons, or putting up a poll [so] we know we're hitting the mark...because just because the camera's off, [it] doesn't mean somebody [is not] engaged. But then it also helps our hearts a little bit. And we're not so hard on ourselves after that facilitation."

Encourage learners to change what it looks like when their cameras are ON.

- Video conferencing platforms offer options to change screen names and alter the look of users' backgrounds .

- **Change screen names.** Show learners (or have one learner show the rest) how to change their screen name.

- **Use virtual backgrounds or blurred backgrounds.** This allows the person on camera to be seen clearly while the actual background behind them is covered with a virtual image or blurring effect. It is important to know this option may not be available to everyone as it is dependent on hardware capacity (i.e., it doesn't work on older computers or laptops).

Encourage learners to change what it looks like when their cameras are OFF.

- When a camera is turned off, the default visual is usually a black box or initials. It can be difficult for practitioners (and other learners) to only see blank screens instead of faces. Depending on the video conferencing platform, it may be possible to change what shows. As was mentioned earlier, discuss the impact blank screens can have on others in the online room and be transparent about how changing their visual representation can have positive effects.

- **Add a profile image.** Adding an image gives learners agency to choose what they want to share about themselves with the class. They can use photos or BitMojis of themselves, or maybe an image of something they like, such as an animal, object, or cartoon image they choose for themselves. Invite a learner to teach their classmates how to add a profile image. Encourage learners to change their profile pictures whenever they want. Discuss what a profile picture says about a person, and how that transfers to other online contexts such as online interviews, workplace training, or meetings with your children's teachers.

Reduce distractions from home environments.

- Encourage learners to keep themselves muted and to unmute only when they need to speak so the sounds of their environment do not enter the learning space. This can be particularly helpful when learners' home environments are loud, busy, or distracting to others in the online room.

- Encourage learners to use headphones, if possible. Using headphones can help block out some distractions and surrounding noise in the environment. But remember to be flexible and understand that inevitably there will be times when learners are distracted by their home environments.

Have the group develop guidelines for online class.

- Groups can focus on what matters to them most, including possible guidelines around participation, etiquette, and how to show respect for privacy in their online class.

> "As a group, we also come up with guidelines during the program orientation, with learners leading the way and many groups identifying participating and being present as one of their values – this is helpful to refer back to when there is little or no participation, especially because it is something the group came up with and not a rule set out by program staff."

Have healthy boundaries that respect private lives for practitioners and learners.

- **Consider keeping personal and work phones (or phone numbers) separate.** There are privacy concerns when practitioners and volunteer tutors use their personal phone numbers with learners. If you need to use a personal phone because a work phone is not available or feasible to use, you may want to explore options that keep your personal phone number private, such as using a virtual secondary number, sometimes called "call forwarding" or "call redirection" phone numbers. Services like the free Google phone number and "2ndLine" allow you to get a new phone number that you can have text/ring on your personal mobile device. You can share this number with learners, allowing them to contact you but keeping your personal phone number private. Other options might also work such as hiding numbers or changing the caller ID settings on your phone.

- **Have virtual office hours.** These are predetermined times when learners are encouraged to contact you through text, email, or calling. This allows you to set boundaries around when it is appropriate to be contacted and when learners can expect to receive a reply. It avoids the "always on" mentality that can creep into the online lives of both practitioners and learners.

Teaching and Learning

Focus on engaging in the process of online learning

Facilitate Effectively Online

Be transparent.

- To compensate for the distance and disconnection that can occur in online environments, be transparent and "over-communicate" or intentionally and explicitly describe what is happening and why. Being transparent can alleviate doubts or misunderstandings that may arise from the distance created in online environments. For example, if you are facilitating a video conference session and writing something down, the piece of paper is likely out of the frame of your camera and your learners will not see what is happening. They may question what is going on, and doubts may arise in their minds: Is the facilitator even listening to me? Is she texting someone? Maybe she is bored by what I just said. You can reduce those doubts and fears by being transparent and over-communicating like this, "I'm just going to write some notes now while we are talking."

Encourage learners to communicate with you in whatever ways are most comfortable for them.

- Be open to communicating using a variety of tools and be prepared for learners to change which tools they use to communicate with you along the way. Intake or orientation is a good time to find out what ways are most comfortable for each learner.

- Once learners are more confident and connected to you, you may want to consider stretching them by introducing and using a communication tool of your choice. If you decide to do this, use your judgment to select a tool learners can easily access, and that serves an authentic purpose and works toward their goals.

- If texting or calling is a comfortable communication method for learners, then practitioners and volunteer tutors need to consider what they will give as their contact number. If you use your personal phone, not a work phone number, consider the resulting privacy concerns.

Give learners multiple ways to engage in learning.

- There are many kinds of activities you can use in online learning. For example, during group sessions, try using group discussion, small groups/breakout rooms, the chat feature, annotation tools, reaction buttons, and polls as ways for learners to interact and engage with the content and each other. Outside the group session, provide learners with opportunities to engage in other ways, such as feedback forms, email, or phone calls.

- Try different strategies and ask your learners which ones work best for them. And remember, the ones that resonate best with your learners might change over time and in different contexts. Try a variety of options to keep it fresh while also allowing learners to develop confidence with the ones they know and respond to.

Send reminder messages to learners with links and sign-in times.

- Reminders are helpful! Have you ever missed a meeting or tried to log on to a video call but couldn't find the link? A simple message by text or email makes it easier for learners to join online, and offers another opportunity to create a positive, welcoming atmosphere.

- Consider using a "schedule send" function to send reminder emails or WhatsApp messages. "Schedule send" allows you to craft messages and send them out on future dates, so you could set up a recurring reminder message to get sent automatically. And you can edit the message anytime up until it gets sent, so you can insert something new and relevant that you hadn't originally included, for example, "Remember that last time we talked about...".

Teach online etiquette for the classroom.

- In any environment, it is comforting and empowering to know what is appropriate to the context. The rules of video-conferencing etiquette are not self-evident, they are learned. Be transparent and explicit. Discuss etiquette rules and invite learners to make suggestions based on their experiences online.

- Explicitly teach learners how to mute themselves when they are not talking, how to share comments or ideas in the chatbox, and how to use the functions such as "Raise Hand".

- Frequently remind learners of these rules of etiquette. You might discuss how they are socially-constructed but not written in stone. Point out the relevance of these unwritten rules, and how they transfer to other platforms and potentially high stakes online environments, such as an online interview or workplace meeting, an online community event, or an online parent-teacher meeting.

Know how to use the tools at hand.

- Just like having the keys to the door and knowing how to turn on the lights in an in-person classroom, practitioners need a good working knowledge of the basics of the tools and platforms they are using online. Know your platform well enough that you can admit people into the 'room', mute/unmute yourself and other participants, turn videos on/off, and remove people if necessary. You don't need to know everything about the platform, but you should have a good understanding of the basics.

> "You don't have to be a master before you introduce a new piece of technology but make sure you have a basic understanding so you can guide learners in how to use this tool in this way in this learning environment."

Remember you might not be seeing the same things that learners see.

- The way something appears in an online space can look different depending on what device you are using and what view you have selected. For example, the Zoom navigation controls may appear at the top of your screen but for someone else in the same Zoom room at the same time, the controls may appear at the bottom of their screen. Or, for example, you may be able to see the faces of several participants because you are using gallery view on your desktop screen, but someone else has speaker view selected on their laptop, and someone else has to swipe on their phone to see other faces.

- Be explicit with learners about how they might be seeing things differently than others and explain why and explore the possibilities for changing things. For example, you can discuss how to change the view on their screen, from gallery view to speaker view.

- Using a mobile device changes how things appear and even what kind of functions are available. To understand what different kinds of activities look like on a mobile device, refer to this Digital Substitution Chart from Jayme Adelson-Goldstein at Lighthearted Learning (https://docs.google.com/document/d/1VsEmL28bf528rzEjVybZpLNPtg4r-LIAU4HRJlDllPp4/edit).

Use breakout rooms.

- Breakout rooms are great ways to create small group sessions, or even a one-on-one session with an individual learner, while the rest of the learners are in the large online room. This can facilitate private conversations with individuals who need additional help or allow learners to partner up and work together.

> "Being able to utilize break out rooms has been key as I can assist groups one on one still or have private conversations for participants who have needed additional help."

Look into the camera, rather than at your screen.

- It is easy to let your gaze go to the faces on your screen. But remember, when you look at the faces, you are not looking at your camera and it is through the camera that you make "eye contact" online. To the learners, then, it will appear like you are not looking at them or talking to them. It takes a conscious effort to look at the camera instead of the screen.

- Here are some tips to remind yourself to work with the camera:

  - Attach a sticky note (with a smiley face!) or some other prop on your computer screen or on the wall behind your screen in line with your camera. Let this prop remind you to look at the camera so learners feel you are looking at them.

  - If you are using digital notes, put the window displaying them near the camera. For most people, that will be at the top of your screen, so keep your notes high on your screen.

- If you are meeting one-on-one with someone, rearrange and/or resize the view on your screen so the window with the person's image sits near your camera (again, most likely at the top of your screen).

- Move back from your camera a bit so you are not being a "close talker".

Stop talking and stop sharing your screen when you ask a question.

- When you ask a question in an online environment, stop talking and give time and space for learners to answer. Be transparent about this practice so learners know what to expect and why you are doing it.

- Stop sharing your screen, if possible, so participants notice that something has changed and so they can see that you are interested in listening.

- Be prepared to embrace the uncomfortable silence that may exist as you give learners the time to gather their thoughts. Some practitioners remind themselves to stop talking and allow a longer silence by doing things like counting to seven or taking a deep breath or a long drink of water.

Give clear directions.

- Of course, giving clear directions is important in any learning environment, but may be even more important in online environments where there are so many variables. Learners may already feel anxiety, worry, or shame about returning to learning, so adding the use of technology on top can be one more layer of challenge. Slow down, be concise, repeat directions. If you are using a slide presentation, create a slide with the directions written out so learners can both see and hear them.

Take advantage of the opportunity to observe learners' work online.

- Some practitioners find it easier to observe and take notes about learners' work because the learners do not "see" it happening the way they would during in-person sessions. This means there may be less anxiety around being tested or assessed. But you need to find the right balance between using this opportunity and being transparent with learners about what you are doing.

Encourage learners, practitioners, and volunteer tutors to take time to transition.

- Online teaching and learning from home makes it possible to jump from one thing to the next with almost no transition time. Encourage people to take the time to transition from work or education back into home life, and vice versa. Talk with learners about how the warm-ups at the beginning of class act as a transition time, and how taking some time to transition after a learning session allows the opportunity to consolidate and digest information before jumping into the next activity at home.

[In online learning] we don't drive to a class where we take off our jacket and settle in, ...and even afterwards, when we might be digesting information, we just go boom, boom, boom, to other things...I don't get that transition as a facilitator [either]... We don't have that luxury as much when we're on Zoom... So having a discussion with our learners and helping them [develop] that routine for themselves of giving them time as a learner to digest that information."

Be the last person to leave the room.

- With in-person classes, the practitioner is often the last person out of the room. It is a form of hospitality to allow time after the session is over for people to wrap up and chat as they pack up their bags, grab their coats, and make their way out the door. In online sessions, the same principle applies. Be the last person to leave the online room. If there are still learners present and you shut down the online meeting too quickly, it can feel like a door is being slammed in your face. If you need to move on to another session, do the same thing you would do in person. Be transparent, thank folks for their engagement, and gently invite them to leave the room. Then be the last one out.

"Different skills (are) required for online facilitation, like the relationship looks different, and cultivating or maintaining energy is very different... for virtual facilitation, (you) have to focus on those things (that) maximize the time for the learner to be able to engage in a meaningful way...it's absolutely drastically different (than the in-person environment)."

Teach Digital Skills

Meet learners where they are at.

- Find out what learners already know and have access to and start there. Build on the digital skills they already have. During intake and orientation, use a digital audit or self-assessment tool to find out about:

    - Learners' access to the internet. Can they access the internet at home, or do they go to a library or other public Wi-Fi location? How available/reliable/affordable is their internet access?

    - The digital devices they have access to, such as a smartphone, tablet, laptop, or computer.

    - The digital tools, apps, and platforms they already use, such as email, WhatsApp, YouTube, Zoom, etc.

    - The digital skills they have and what they feel confident doing online, such as texting, using a cell phone to take pictures and videos, uploading pictures, and answering video calls.

> "I think sometimes when we're going top down, because we're trying to solve problems, we [say] everyone should be using this platform or something. But if someone doesn't know how to do that, they're just not going to stay in the class... so I think that's super important... we say 'meet learners where they're at', but what that actually means is that sometimes you are not using the recommended platform."

- Choose tools based on what learners already know. When possible, let learners decide what they want to use for a platform: Zoom, Google Classroom, WhatsApp, Microsoft Teams, etc.

Expect fragmented skills.

- Avoid making assumptions about learners' digital skill levels. Digital literacy skills are on a continuum. Learners (and practitioners!) may have fragmented digital skills (e.g., might be able to record and share a TikTok video but not yet able to download an app to use at work). Assessing digital skills at intake and across the learning means than unidentified gaps will not become insurmountable barriers.

Introduce new digital tools and platforms gently.

- When learners are ready to experience a new tool, be sensitive to the demands it brings. New tools can stretch learners in a positive way, but avoid overwhelming them with too much, too fast. Go slow, be intentional about when to introduce the tool, and be transparent about why you are introducing it. Be sure to highlight elements they already know, such as symbols, signs, and vocabulary, that are transferable across different tools and platforms.

Make it relevant.

- People are motivated by things they care about. Focus on transferable digital skills that learners can and will use in other contexts – at home, work, or in the community. The digital skills become more immediately relevant and purposeful.

> "Highlight in the beginning of the session...the transferable skills that they'll be learning apart from what they're actually in the class for. So it's like you're going to be learning how to work Zoom, you're also going to [learn] to work MS Teams. So actually highlighting that they are going to be getting a lot of those digital skills."

Teach digital skills explicitly.

- Learners may need explicit instruction on the functions available in digital tools. Do not assume they know and understand how to use the chatbox, annotation, muting and unmuting, etc. Break the information into small chunks, and use lots of repetition to help them practice and become confident with these new digital skills.

Embed digital skills across content areas.

- Your learners need to develop their digital skills, even if that is not the main content of your program. Keep the focus on learning while using digital tools and practices that develop and strengthen skills. Look for ways to embed digital skills as part of the actual lessons.

Build routines that use technology tools the same way across many topics.

- Routines that use digital tools are regularly repeated activities that get learners using a tool in predictable ways across different content and contexts. Routines create sustainable, authentic uses for the tools and allow learners to develop confidence with the underlying digital skills needed to complete the routine.

For example, consistently using a **KWL** chart ("What I **K**now about this topic, what I **W**ant to know, what I **L**earned") as a basic spreadsheet each time you introduce a new topic starts to build more skill and comfort with using spreadsheets for other purposes. With explicit teaching of the skills, support, and repetition, learners can get real world practice using tools to complete an authentic task.

- For more information on integrating routines to develop digital skills, visit Digital Skill-building by Design: The EdTech Integration Strategy Toolkit from EdTech Center @ World Education (edtech.worlded.org/digital-skill-building-by-design-the-edtech-integration-strategy-toolkit/).

Be open to trying new strategies to find what works best for learners.

- Listen to learners and invite their feedback on what is working for them and what is not working. Use discussion, self-assessments, polls, or exit tickets, for example, to gather and reflect on their insights. Then be flexible, adjust, and try something new.

> "I supported people with whatever strategies they were willing to try to overcome these barriers."

> "My agency was very supportive and helpful to my transition to online/ blended learning. They were willing to work with me to try new strategies to see what would be the most successful for our learners."

Create and Manage Materials

Create materials for low bandwidth users.

- Think small for file sizes of digital resources. Keep videos very short. Opt for smaller, lower-resolution photos rather than larger, high-resolution photos. Avoid unnecessary graphics, images, and colours in your documents (this is in keeping with plain language principles). Use PDFs when possible, as it can be easier to reduce the file size of this format and thereby minimize how much bandwidth it takes to view and download.

Design for mobile.

- Many learners will use their mobile devices to access online learning environments. When planning instruction and materials, consider how slides and other materials look on a mobile phone or tablet. Try it out first with your mobile device; maybe even test it out using a free Wi-Fi location to see if it makes a difference. Is the text too small? Is there too much on each screen?

- Again, to think through how mobile users view and experience different kinds of tasks, materials, and activities, refer to Digital Substitution Chart from Jayme Adelson-Goldstein at Light-hearted Learning (https://docs.google.com/document/d/1VsEmL28bf528rzEjVybZpLNPt-g4rLIAU4HRJlDllPp4/edit).

Organize all resources and documents in one location.

- Make it easy for learners to find and access the necessary resources and documents . Consider developing a digital library, for example in Google Drive. Support learners to access those digital resources – create and print out "how-to" documents with screenshots to show learners the steps to find and get them. But also have the option for learners to access the resources in print, and inform them how to get them this way.

Ensure learners have the resources and supplies they need to participate fully.

- Don't expect learners to have basic school supplies at home. Put together packages for learners to pick up if needed. Include paper, pencils, markers, and small white boards. White boards and markers give learners an easy, low-tech way to show their work through the camera. They can draw or write their ideas on the white board and then hold it up to the camera to share.

> "[Using whiteboards and markers] lessens the amount of paper we have to send back and forth, plus it's easier to see through the screen."

- Don't expect learners to have access to printers. Offer packages of printed course materials for learners. Be sure to prepare printed materials well enough in advance that they can be ready for learners to pick up before the class or be delivered to them in time through the mail.

> "We delivered paper copies of workbooks and resources, and created [PowerPoints] that mirror some of our learning resources, so that learners see something on the screen that they can relate to paper copies in front of them during program delivery. Even when the programs do not draw heavily on the print materials, and are more driven by the group and facilitator, we have heard that participants like having a tangible resource for 'class' time."

Offer short, simple recorded videos for learners.

- Create short, informal videos to share with learners. There are many free web-based tools you can choose to use such as Loom or Screencast-O-Matic, or simply use your video conferencing platform (e.g., Zoom) to record yourself.
- Prepare supportive messages to build community and confidence, or to reinforce previously learned content, Consider using screen captures to show learners how to do something.
- Keep videos very short, 2 or 3 minutes at most.

> "If you find the same things are coming up again and again, do a little video and use YouTube…where you can just show it. So you're not having to [explain] it every time. It takes a bit of pressure off the facilitator."

Create and share presentation slides.

- If possible, make your PowerPoint slides available for learners before and after the session for review and reinforcement. Invite learners to engage and interact with your slides by embedding questions into the slides and enabling annotation tools so learners can answer by drawing or typing directly on the slide.

Create simple, low-tech visuals to support learning.

- Use paper, markers, popsicle sticks, etc. to create simple signs to "show" rather than "tell". Try drawing the symbols and buttons that are in the platform you are using that learners will need to know about. Hold the signs up to the camera to show learners what to search for. For example, hold up signs with the "mute" and "unmute" symbols on them so learners can see what the buttons look like. Learners can also create and use their own handmade signs.

Complement live virtual sessions with asynchronous learning activities.

- Asynchronous learning activities are resources for learners to work on outside of the virtual sessons. These can either be required or supplementary. They can be brought into the live sessions or left totally separate. However you choose to use them, be sure learners can easily access the digital materials.

Use digital drawing tools.

- It can be helpful to draw something rather than use words to explain or describe it. There are many tools available that allow you to draw and have it show up on the screen. Using tools like graphic drawing tablets, digital whiteboards, or annotation tools help both practitioners and learners to "show" rather than "tell".

> "I love using the whiteboard feature of zoom, as a way of just drawing what I'm doing or making pictures."

Take advantage of the opportunities that cameras offer.

- Use the "flip" feature of a camera on a mobile device (change from camera facing the user to camera facing away) or direct moveable webcams to show an object, like a notebook or paper. This, for example, would be a way for learners to show and share their written work with you (and others).
- Have learners take photos of their work and send them to you as an alternate way of submitting their work.
- Use document cameras to show learners a close-up look at what you are doing. Document cameras are typically mounted over a surface and allow learners to watch as you write on a paper or use three-dimensional objects in your hands.

> "I purchased a document camera which allows me to work with math manipulatives or write equations/examples on a white board and the student can follow along in real time."

Supporting and Accessing Technology

Focus on offering the resources and support needed for delivering effective online learning

Offer Technical Support

Be flexible and be prepared for technology issues and internet disruptions.

- **Have a back-up communication plan.** Ensure learners know what to do when all else fails, for example if you or they lose connection, or if something else goes wrong with the technology.

- **Make sure learners have an alternate means of contacting the practitioner** (e.g., a phone number to call or text) to reach out if they lose connection or need assistance.

> "Let everyone know if you lose the link or they do, just sign back in. Make sure you are fully prepped. Be prepared to change on a dime or as needed by learners."

> "If the sound failed we taught the tutors and the learners to just call and continue the class using their phones."

Use a facilitator for group sessions online.

- Having a facilitator or support person, in addition to the practitioner, who can monitor the chatbox and support learners who are having technical challenges allows the practitioner to focus on the learning.

> "It is definitely helpful to have more than one facilitator present with the group, so that even if one is screen-sharing and not able to see the chat/participants, the other staff member can keep an eye on things."

Offer one-on-one orientation sessions before the first group session.

- Orientation sessions offer individualized support and a chance for learners and practitioners to get to know each other, get to know the tools they will be using, and have a chance to practice and get comfortable prior to the session start.

> "[1-on-1 orientations offer] time for specific practice with tech, but more importantly having time to talk about what it feels like to be engaging in online learning."

- Provide first language interpretation at the orientation, if applicable.

- Be prepared for some learners to need more time to get comfortable than other learners.

> "Depending on the ability of the learner to engage in online learning, we would designate time for the learner to engage with staff in practice sessions. These could continue until the learner was comfortable."

> "Often it is easier to set up Zoom on a phone, so I send the learner a link to the app store first. Once they have it set up on their phone I have them turn the [phone] camera onto their computer [so I can assist with computer] set up [of] Zoom if necessary."

Schedule a buffer time.

- Consider blocking off time before each learning session so learners can join early and work out any technical issues.

> "It was difficult at times to orient folks to the online environment and walk them through the steps to access the video chat. We implemented a 30 minute 'buffer' each day before the program started which helped allow time to work out technical difficulties and ensure all learners could access the video chat."

Offer ongoing one-on-one support to build confidence and skills.

- Offer tutoring sessions that are specific to the digital tools and platforms you use within your program (e.g., Zoom for beginners).

- Try offering ongoing, informal, drop-in sessions online that respond to the digital learning gaps and needs of the adult learners in your programs.

- Offer an ongoing club, like a skill booster club, to encourage learners to continue building their skills and confidence outside of formal learning sessions.

Offer technical support services for learners.

- When possible, provide a back-up staff member or support person who can be contacted to troubleshoot technical problems with learners, allowing the practitioner to continue facilitating with the group.

- Consider hosting a volunteer-run service dedicated to offering technical support for learners.

Provide step-by-step instructions.

- If a specific issue comes up frequently, such as learners asking about how to log on to the course management system or online classroom, provide step-by-step instructions in print and digital formats. It is helpful to use screenshots whenever possible to show the steps in the process. You may want to look online to see if there are documents already available to address common issues, but be sure to adapt these for your specific learners, with clear, concise instructions using the words you say in your class rather than technical jargon.

Use screen sharing and remote assistance.

- Sometimes when technical issues arise, it helps to see what the other person is seeing on their screen. To accomplish this, try using the share screen function in the video conferencing platform, or have the learner turn their camera onto their screen (if that can be done). It may also be possible to use remote assistance technology, such as Windows Remote Assist, to see learner's screen.

- Consider the privacy concerns that may arise when learners share their screens or allow remote assistance, such as unintentionally showing private information or something embarrassing or inappropriate. Discuss those concerns with learners before inviting them to share their screen. If you are in a larger group, try entering a breakout room with the learner for more private assistance.

Offer Professional Development

Offer a choice of online, in-person, and blended professional development opportunities for practitioners and for volunteer tutors.

- Both practitioners and volunteer tutors have professional development needs around online program delivery.

- Some potential topics:
  - how to teach online effectively
  - how to deal with privacy concerns including what to do if practitioners or volunteer tutors witness violence or other safety issues in learners' home environments while online.

> "As a learner myself I sure hope CALP continues to offer online training as it is easier to attend than taking a day off work, disrupting our teaching for training."

Offer short, focused technical training.

- Possibilities include platform-specific training (e.g., Zoom, Microsoft Teams, Google Classroom) or topic-specific training (e.g., how to use the chat function, sharing digital resources, building effective PowerPoint presentations, interacting with learners via video).

- Highlight transferable skills regarding functions common between different platforms (e.g., video conferencing platforms all have mute functions, but they may look a little different depending on the platform).

Offer digital drop-in sessions.

- Regularly scheduled, digital drop-in sessions can allow practitioners and volunteers tutors to ask for specific help or instructions in a short, informal learning environment.

Offer asynchronous professional development.

- Asynchronous sessions are learning opportunities that do not require meeting at a certain time; instead they are pre-recorded and available at a time convenient for the viewer. They may be one-time events or longer, ongoing offerings. They may include a cohort of practitioners and volunteer tutors journeying together and sharing reflections with each other, or they may be more independently oriented.

Increase Access to Technology

Support access to Wi-Fi.

- Support learners to apply for low-cost internet subsidy programs (such as Telus for Good, and possibly CALP-based subsidy programs if available).

- Find out where learners currently go to access publicly available free Wi-Fi. Share that information with other learners.

- Consider how your organization, or a partner organization, could offer free WI-FI for learners, such as offering a Wi-Fi hotspot.

Lend devices to learners.

- Use a device lending/rental agreement and adapt it to your context. Include a process for learners to sign out laptops or other devices that your CALP has available.

- Consider how to determine legitimate need for the loaned device.

- Co-develop with learners a method for them to "pay back" the loan responsibly, either with money or their time (e.g., tutoring someone else).

Remember the digital divide.

- Just because something is accessible online does not make it accessible to everyone. Large files, high-resolution photos, and videos are not easily accessible for people who do not have access to affordable, reliable, high speed broadband internet connections. Many people may rely on places like public libraries for computers, printers, and scanners. They may use only free WI-FI or have very limited data. Keep this in mind when designing materials and how to make them available to learners.

Final Note

As we said at the beginning, the goals of the Digital Divide Project were:

- To research and understand the barriers adult foundational learners face in accessing online, remote, and blended learning in Alberta; to identify the gaps and challenges learners experience; and to offer recommendations of the supports needed to address the barriers.

- To capture and share in a user-friendly resource the wise practices and strategies, collected from CALP practitioners, that support the successful delivery of online, remote, and blended learning programs.

This Digital Divide Practitioner Tool recognizes and celebrates the knowledge, expertise, and experience of the community-based adult foundational learning practitioners who pivoted to support, design, and deliver online, remote, and blended learning in Alberta.

It is our hope that this tool shares that combined wisdom such that it contributes to practitioners feeling supported, inspired, and encouraged in their work in this new landscape of online learning.

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