GOING VIRTUAL WITH ADULT PROFESSIONAL LEARNING.
LESSONS LEARNED AND FUTURE IMPLICATIONS.
The COVID-19 pandemic continues to upend the K-12 education system in a way that challenges every educator and student. Empowered by our organization’s mission to partner with districts and communities to transform schools into equitable and innovative learning environments and grounded in more than 20 years of experience delivering highly effective professional development, we felt well-positioned to pivot swiftly from our hallmark in-person adult learning to rely exclusively on virtual learning. We quickly realized that we needed to shift the delivery method while also attending to the emotional well-being of the thousands of educators we serve across our network of more than 200 schools.

**We began by asking ourselves, “How can we also acknowledge and address our network members’ social, emotional, and academic needs?”**

In response, we re-evaluated New Tech Network’s coaching support, professional development services, and digital resources, with an urgency to create virtual adult learning experiences that were consistent in quality, aligned to learning objectives, and implemented and experienced as intended. In many ways we were well positioned for urgent changes as virtual coaching and workshops have long been a fundamental part of our school support portfolio.

Assessing impact and effectiveness is a core value for NTN as this drives our improvement efforts. We were curious and compelled to measure pivotal changes to better understand the ways virtual learning would endure going forward. Through rapid cycles of innovation and improvement, we learned about limitations, strengths, and areas of newly discovered flexibility for both facilitators of learning and the learners themselves. By keeping our focus on both humanity and pedagogy we affirmed that NTN, and the NTN school model, is much more than great project-based learning. Today we believe even more strongly in the capacity to create equitable learning and improved outcomes for all students.

We offer our reflections on virtual professional learning, elaborate on the ways we adapted our services, and suggest implications for more robust ways to create and sustain equitable and innovative learning environments as we “return to normal” in schools across the country.

Lydia Dobyns, President and CEO  
Megan Pacheco, Chief Learning Officer
1. BACKGROUND

NTN provides coaching and PD to over 5,000 educators annually

New Tech Network (NTN), is a national school design non-profit that supports K-12 public schools and provides coaching and professional learning for over 5,000 educators annually. New Tech Network’s mission is to partner with districts and communities to transform schools into innovative learning environments for students and adults enabling equitable access to deeper learning (Zeiser, Taylor, Rickles, Garet, & Segeritz, 2014). Through significant growth in recent years, the Network now consists of nearly 200 schools in 28 states. Prior research has documented that the New Tech Network (NTN) successfully replicates an equity-oriented learning model across schools and districts to meet each and all student needs (Hernández, Darling-Hammond, Adams, and Bradley, 2019).

Our workshop and events model delivers timely, ongoing, and relevant deeper learning support to New Tech Network educators.

Workshops

School Team Workshops are multi-session opportunities designed around key instructional and cultural practices.

Events

Events are full-day and multi-day opportunities for educators to continually sharpen skills, share best practices, and network.

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2. VIRTUAL LEARNING PRACTICES

The extant literature and relevant standards for online learning informed New Tech Network’s effective virtual learning practices

Effective virtual learning designs for and implements processes for:
• Feedback
• Interaction (learner-content, learner-learner, learner-instructor, and learner-interface)
• Individual supports
• Group supports
• Learner agency
• Co-developing with other learners/collaboration
• Active learning
• Learner choice
• Safe digital learning spaces (e.g., data ownership and privacy expectations, digital identity curation)
• Digital pedagogical tools that support communication, productivity, collaboration, analysis, presentation, research, content delivery, and interaction

The virtual professional development experience is designed to:
• Build connections to practice
• Model effective strategies
• Be productive
• Be purposeful in processes and pacing

3. GUIDELINES FOR EFFECTIVE VIRTUAL PROFESSIONAL DEVELOPMENT

OVERVIEW

Strong professional development is at the core of NTN’s work with schools. Whether in-person or virtual, NTN strives to create a learning experience that models what we hope to see in schools: a focus on authentic, complex thinking and problem-solving and a safe, inclusive, emotionally supportive culture. The following resources and strategies are aligned to the research on best practices for virtual professional development and are intended to address the unique needs of a digital learning space.

"The time to process the information through using the reflection journals was very beneficial. I thought about things I might not have if I had not been writing about them."

"I really appreciated all the adult learning strategies that were modeled. I took away strategies that I can use in my own work and had a better learning experience because of the strategies used in the training."
## Learner-Centered Criteria and Strategies

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<thead>
<tr>
<th>Criteria</th>
<th>Strategies</th>
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| **Active Learning & Collaboration** | 1. Use small group breakout rooms with a structured process / protocol (list instructions on a shared agenda; check for understanding before moving to breakouts)  
2. Integrate and model tools that allow for interaction and collaboration (i.e. Jamboard, Padlet, Dotstorming, Google Docs)  
3. Balance use of screen sharing with more interactive tools and group discussion opportunities |
| **Connection to Practice** | 1. Build in time for participants to pause and reflect on their learning  
2. Build in time to apply learning; allow for some asynchronous work time with clear expectations  
3. Use structured debriefs that allow for sense-making and identification of implications for practice |
| **Modeling of Effective Strategies** | 1. Use and model learner-centered practices that support collaboration and discourse. |
# INDIVIDUAL SUPPORT

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<tr>
<th>CRITERIA</th>
<th>STRATEGIES</th>
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<td><strong>LEARNER CHOICE &amp; AGENCY</strong></td>
<td><strong>LEARNER CHOICE AND AGENCY</strong></td>
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<td>1. Provide a variety of options during work time (i.e. variety of media, options for capturing learning)</td>
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<td>2. Use of polls to inform prioritization of activities or next steps</td>
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<td>3. Critique protocols or other assessment practices focused on feedback</td>
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<td>4. Clear instructions on where to find resources, how to ask questions, etc.</td>
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<td>5. Provide open office hours or optional Q &amp; A time</td>
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<td><strong>FEEDBACK</strong></td>
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<td>1. Provide opportunities for peer feedback (in small group breakouts)</td>
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<td>2. Use of comments feature on shared Google Docs</td>
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<td>3. Use and model the critique practice or other NTN assessment practices focused on feedback</td>
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<td>4. Use of journal submissions</td>
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<td>5. Use of audio or video feedback</td>
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<td><strong>SOCIAL-EMOTIONAL SUPPORT</strong></td>
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<td>1. Encourage “camera on” as default (while respectfully acknowledging there are some circumstances that may prevent this)</td>
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<td>2. Use of culture practices that support building relationships, empathy, and mindfulness</td>
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<td>3. Use of metacognitive prompts</td>
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<td>4. Quick pulse checks (i.e. polls, use of reactions features, thumbs up / down)</td>
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<td>5. Entry and Exits Tickets</td>
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# DIGITAL LEARNING ENVIRONMENT

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<th>CRITERIA</th>
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<td>SAFE DIGITAL SPACE</td>
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<td>1. Establish virtual learning agreements, including digital etiquette and creating equitable learning opportunities</td>
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<td>2. Ensure proper Zoom Host settings</td>
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<td>3. Ask for participant permission before recording</td>
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<td>4. Make sure you have a professional background and all resources used are professional</td>
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<td>5. Ensure surveys are anonymous</td>
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<td>EFFECTIVE USE OF DIGITAL TOOLS</td>
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<td>1. Integrate interactive digital tools (Jamboard, shared Google Docs, Padlet, etc); be mindful of the number of new tools you introduce in a given PD</td>
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<td>2. Provide explicit modeling and instruction on use of digital tools</td>
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<td>3. Frequently check for understanding and comfort level with using digital tools</td>
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<td>4. Consider a pre-assessment of participants comfort level / confidence with technology</td>
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<td>5. When possible, provide tutorials on any digital tools prior to the PD session</td>
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<td>6. When possible, have participants log-in to any digital tools prior to the PD</td>
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<td>PURPOSEFUL PROCESS AND PACING</td>
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<td></td>
<td>1. Chunking into 60 - 90 min sessions</td>
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<td>2. Regular breaks; opportunities to go off video</td>
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<td>3. Clear learning objectives stated up-front and revisited throughout</td>
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<td>4. Encourage and or incorporate opportunities for movement and / or mindfulness</td>
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4. QUALITY ASSURANCE FINDINGS

The New Tech Network Quality Assurance Infrastructure (NTN QAI) provides a framework to understand the school team workshop experiences of NTN educators and evaluate conditions for lasting change. The NTN QAI was designed in collaboration with evaluation expert Tom Guskey and is informed by the Joint Committee on Standards for Educational Evaluation (JCSEE)'s Program Evaluation Standards, Learning Forward’s (formerly National Staff Development Council) Standards for Professional Learning, and Guskey's 5 Critical Levels of Professional Development Evaluation (Guskey, 2000). The NTN model provides support over a sustained duration (see Darling-Hammond, Hyler, and Gardner, 2017) and because professional learning is not an isolated process, neither is evaluation of professional learning.

Findings from online post-event workshop surveys document consistent positive experiences for participants across the constructs measured and qualitative data provides insights into what works well and opportunities for improvements.

Elements (“constructs”) measured by the surveys:

- **Logistics** - Preparing for the event, communication, and access to materials enable and enhance the experience.

- **Learning Resources and Materials** - The learning experience is enhanced by access to, and the quality and relevance of the tangible guides, templates, rubrics, videos, project exemplars, checklists, etc. used to support the learning objectives.

- **Facilitation** - The experienced curriculum, including how the materials/resources were used, adult learning approaches with attention to learner needs, and pacing/structure support learning.

- **Learning Technologies** - Digital tools support the learner experience and are aligned to the learning objectives.

- **Learning Objectives** - The expected knowledge and skills to be gained through the training and event.

- **Virtual Learning Experiences** - Digital learning experiences that support the learner, including communication, productivity, collaboration, analysis, presentation, research, content delivery, safety, active learning, and interaction are key to effective virtual learning.

5. RECOMMENDATIONS

TECHNOLOGY RECOMMENDATIONS
1. Technology support needs to be anticipated and provided ahead of and during the learning
2. Access to resources should be seamless with attention to minimizing clicks and open tabs

STRUCTURE/PACING
1. Provide the agenda ahead of time and stick to the schedule
2. Keep conversations on topic – utilize a virtual parking lot or other format for noting questions and comments to return to asynchronously or time permitting at the conclusion
3. Plan for time after the virtual event for participants to continue to apply the learning and/or work on products
4. Virtual professional development just like in-person is ongoing, plan for the entire learning arc and backwards design the objectives over the arc

PRACTICES
1. Learner centered: active learning, collaboration, connections to practice, and modeling effective strategies
2. Individual support: feedback, learner choice and voice, social-emotional support
3. Focus on intentional aspects of the digital learning environment: safe digital space, effective use of tools, provide breaks, chunk into 60- or 90-minute sessions, and incorporate movement
4. Incorporate aligned resources
5. Utilize exemplars
6. Include teacher panels/experts practicing the strategies from the field
The COVID-19 pandemic has positioned K-12 virtual and hybrid education at the forefront of policy and practice considerations.

Fully remote learning ushered in new vocabulary, tools, and instructional practices necessitated by school closures and educators were asked to deliver new learning methods with few resources available to support their own learning. Determined and steadfast, school leaders and district leaders continue to look for effective ways to support teachers in reshaping their classrooms in ways that were unimaginable a year ago.

We will continue to offer virtual supports and services even as we resume on-site services in the 2021-2022 academic year. As we look ahead to the next academic year, we recognize the demands to respond to rapidly changing situations and students’ emotional and academic needs will dominate our collective reality. As a school network, we also know teachers and school leaders want to connect with their peers, often outside their building or district. The value of adult community engagement-- to share best practices, problem solve, and collaborate around project-based learning-- was known pre-pandemic. COVID-19 created an even stronger sense of urgency to create better virtual access to a vibrant fellow educator community. In addition to virtual professional development opportunities, we are committed to leverage robust platform tools to facilitate both synchronous and asynchronous connections. One specific platform we are expanding is the New Tech Network Slack community, making this powerful engagement tool available to thousands of teachers across our network. Our previous success with utilizing Slack during network convenings starting in 2019 convinced us to make this permanent component for network members.
Here are actionable considerations for district and school leaders in designing virtual adult learning:

1. Create settings conducive to asking questions, seeking alternative points of view, and promoting experimentation as these are valuable aspects of support teachers and leaders need more than ever.
   - Consider holding open office hours virtually on a weekly basis to hear ideas and share learnings.

2. Provide explicit technology support and digital tools that clearly lead to more seamless learning.
   - Consider offering technology learning opportunities focused on the mechanics of the video platform, collaborative documents, and other online tools prior to any professional development experience.
   - Consider including a technology support person in your professional development session to troubleshoot technology issues and pull participants into break-out rooms as needed.

3. Design effective virtual professional development clearly anchored in a solid foundation of instructional design best practices. View technology (software and platforms) as a way to connect and interact when used to support learner-centered virtual instruction.
   - Consider virtual break-out rooms to facilitate active learning approaches such as think-pair-shares or jigsaw protocols.
   - Consider internet-based collaborative virtual workspace tools (e.g. wikis, Jamboards, Google Docs) to democratize knowledge and generate idea diversity.

4. Anticipate and allocate additional time beyond designated professional development sessions to help participants better apply their learning, both individually and in teams.
   - Consider blocking time the next day or same day for teams to meet virtually and for individuals to process the learnings on their own.

Dr. Liz Bergeron is the Senior Director of Research at New Tech Network. Liz’s extensive experience in teacher professional development as a former university professor and K-12 classroom educator enables her to position the research-to-practice pipeline at the forefront of the NTN research agenda. Liz has worked with ministries of education internationally and in the U.S. with public schools and districts to evaluate impact and inform implementation. Liz has served as a reviewer for industry conferences, such as American Educational Research Association (AERA) and American Evaluation Association, and journals, such as Journal of Research in International Education and Journal of Research in Education, and as a guest editor for the Interdisciplinary Journal of Problem-Based Learning. She has held several advisory positions for organizations including American Association for the Advancement of Science (AAAS), KQED, and the Smithsonian Institute. Liz is currently the AERA Problem-Based Education Special Interest Group (SIG) secretary/treasurer.
We coach teachers and school leaders to inspire and engage all students through authentic and challenging work. The New Tech model combines pervasive project-based learning, an engaging school-wide culture and the real-world use of technology tools and resources. We support the whole school through three key structures: professional development events, coaching, and Echo, the NTN project-based platform. New Tech Network students consistently outperform national high school graduation and college persistence rates. The network consists of more than 200 schools in 27 states and Australia.