June 30, 2021

Thank you for attending NABTU's recent virtual training conference, *Distance Learning in Apprenticeship and Apprenticeship Readiness Programs: What Have We Learned Over the Past Year,* which was held on May 19th. As promised, I have enclosed the link to the "Best Practices" document that was compiled from the suggestions of the presenters and conference attendees. We hope these documents are helpful as you address many of the educational challenges that were discussed during the conference.

When NABTU had to make the shift to distance learning because of COVID-19, our network of the construction industry's best training instructors jumped into action and made the needed adjustments to our training infrastructure. I hope you will benefit from the lessons they – and you – learned, which we reviewed during this important conference.

Thank you for participating.

Sincerely,

Brent Booker
Secretary-Treasurer

Best Practices for Excellence in Distance Learning

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Distance learning expanded rapidly in response to the COVID-19 pandemic. The effectiveness of a distance format is ultimately determined by the engagement and interest of the target audience as well as the skill with which information is delivered. It is important to have input from the many different types of participants in distance learning on everything from course development to classroom delivery to evaluation.

The following are principles for designing and delivering occupational health and safety training in a distance learning environment. They are recommendations for trainers and training organizations to consider prior to, during, and after the training and are consistent with best practices in adult learning and instructional excellence in occupational health and safety training. Read more at www.cpwr.com/distance-learning-report.

1 Preparing to Deliver Distance Learning Courses

One of the overarching principles for training excellence in the distance learning format is being prepared prior to the training session. Below are points to consider.

Understand the Trainees' Needs

Gather information during the registration process by surveying the audience about what they would like to learn. Encouraging participation at the beginning through personal inquiry will more than likely lead to training that is more meaningful, relevant and useful to the audience, leading to enhanced safety at their workplace.

Post All Course-Related Information

Before the course begins, trainers should post all course information online, including training objectives, course outlines, associated materials, and training agendas. Making this material available ahead of time improves trainee readiness.

Practice, Practice, Practice!

As with in-person presentations, trainers are encouraged to conduct a practice session on the distance learning platform and, if possible, to demonstrate the presentation for an experienced trainer who can provide feedback. On top of this, familiarity with the virtual classroom application is crucial. Knowing how to use the features and tools of each platform will allow for a better experience for both the trainers and trainees.

Conduct Trainer Coordination Meetings

The lead trainer should coordinate meetings (pre-training and following each training session) to manage the activities of the training team (lead trainer, co-trainer, technology assistant). These meetings clarify expectationsand roles to assist trainers in honing the requisite skills to meet the needs of the learners in the distance learning environment.

Presenting the Training Course

Instructor knowledge and skill is a key driver of effective training in a distance learning format. The following tips can support the use of interactive training techniques that encourage active participation, knowledge sharing, and integration of relevant content that can be directly applied to the workplace.

Encourage Participation

Instructors are encouraged to solicit regular interaction from the learners. The distance learning format allows for trainee participation. Several virtual classroom applications offer tools for interaction within their platform (polls, breakout sessions), while other education applications offer a more interactive user experience (Kahoot!, Quizlet). Although this may be unfamiliar technology for some, these tools allow the trainer to "read the room" and receive feedback from the audience in real time.

Have a Co-Instructor Join

Having another instructor can be helpful with content delivery, answering any secondary questions in the chat dialogue box, or dealing with technical difficulties.

Be Flexible and Open

Distance learning is still a relatively new format, so it is important to be adaptable. Trainers should create an open and flexible learning environment to accommodate the trainees' needs and make them feel respected and supported. Trainers should monitor the pace and content according to the trainees' level of understanding—using the participation tools is a great way to measure the group's understanding.

Following the Distance Learning Course

As with face-to-face instruction, evaluation and post-course interaction with trainers and trainees is a crucial part of conducting a successful course. In addition, the distance learning format provides additional opportunities for sharing up-to-date information and resources following training.

Evaluation Allows for Improvement

Evaluate training to ensure quality improvement. Once completed, courses should be measured to assess effectiveness and learning outcomes. Evaluations should be completed by both trainers and trainees to better understand where improvements can be made.

Share Resources and Information

It is important to continue sharing information and access to resources after the course has been completed. The online format of distance learning allows for efficient follow-up and resource distribution. Trainees can be given access to recordings of the online training, training-related information, and other relevant online resources. Helpful information can also be shared with trainers, such as the most current information on best practices and recommended new learning technologies and platforms.

Best Practices for Using Breakout Rooms

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Breakout rooms add another dimension to the distance learning experience by increasing interaction between trainees during a session. Just like polling, Kahoot!, and Quizlet, breakout rooms keep the learners engaged throughout the training by simulating in-person small-group exercises. Breakout rooms also offer another way for the trainer to measure the level of understanding among trainees. The following are some helpful practices to consider when going into breakout rooms. Read more at www.cpwr.com/distance-learning-report.

Set expectations at the beginning of the breakout exercise

Provide an overview of the exercise and expected outcomes of the breakout session. This can include what the trainees will see on their screens during the breakout session.

Include a mix of participants for each breakout session

If possible, select trainees with different levels of expertise and experience for each breakout room to ensure differing perspectives in the discussions. Ideally, create groups of at least 3 and no more than 8 people.

Provide clear instructions for the breakout activity

Define the specific tasks and goal for the activity so that trainees are be able to stay focused on that goal during the breakout session.

Assign a facilitator for each breakout room

Depending on the activity, each group should designate roles for the activity such as a facilitator to lead activities, notetaker to capture discussion points, and reporter to share key findings from the breakout session.

Announce the expected duration of the breakout session

By giving a time frame for each breakout session, trainees can better manage their time and prioritize the activities or discussion points.

Indicate how trainees can get help, if needed, during the breakout session

Instructors and co-instructors should provide a mechanism to help trainees with questions or technical difficulties once they have joined the breakout session.

Monitor the breakout sessions

Instructors should circulate throughout the breakout groups as trainees complete the breakout activity to ensure that trainees are on-task and provide guidance and additional instruction as needed.

Online Etiquette for Trainees

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Download training information ahead of time

Downloading all material ahead of time, including handouts and PowerPoints, is beneficial so that all information is available in case of a technical difficulty.

Complete all pre-training assignments and assessments

Complete all pre-training assignments and assessments in order to provide any specific needs or questions to the instructors before training begins. In addition, specific questions about the content should be posed ahead of the first session so they can be addressed during training.

Test your computer's compatibility with the platform

Log in to the session at least 5-10 minutes ahead of time to ensure the virtual classroom application is running properly.

Present a professional online presence

Dress professionally and be aware of the background behind you. Leave your camera on during the training and try to keep the camera view free of anything that could potentially be distracting to others.

Limit distractions during training

When attending a training session, limit the distractions around you and refrain from multitasking. Trying to pay attention to multiple devices or tasks decreases the quality of learning. Instead, focus on the training.

Mute your microphone when not speaking

Mute your microphone when not speaking to avoid adding unexpected background noise and distracting others from the lesson.

Share comments and questions

Follow trainer instructions on use of chat, Q&A boxes, and hand raising features to leave comments or ask questions during the training session.

Read more at www.cpwr.com/distance-learning-report.

2/2021

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The Use of Distance Learning in Occupational Health and Safety Training: Assessing Effectiveness and Sustainability in the Context of the COVID-19 Pandemic

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Acknowledgements

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Executive Summary

Introduction
The COVID-19 pandemic has caused great disruptions and uncertainty to organizations worldwide. The rapidly instituted changes to workplaces—for example, the immediate transition from in-person interaction to virtual and online communication—are now an everyday part of the workplace for many of us. Trainers, including those in the construction industry, were required to rapidly adapt health and safety and skill-based training which relies on in-person interaction and hands-on learning, to virtual format. The urgency and abruptness of the transition to distance learning formats and subsequent reliance on advanced technology has left users grappling with a series of issues: unfamiliar platforms and complicated training guides; lack of access to online resources; a lack of consistency of platforms used across organizations; need for clarity for compliance and ethical considerations; and a scarcity of readily available evaluation resources to assess the effectiveness of transitioning to the distance learning formats. These concerns highlight the need for systematic evaluations to monitor the effectiveness of distance learning training methods and assess the on-going quality improvements made when gaps are identified and addressed. Further, the dynamic nature of the pandemic highlights the need to share lessons learned and best practices as the training systems evolve. This is of particular importance in the occupational health and safety domain, in which training is being designed and delivered to meet emerging worker safety needs during the pandemic.

Purpose
The current evaluation project involves **a comprehensive system designed to assess effectiveness of the rapid transition to synchronous online training in the occupational health and safety domain**. It addresses not only the effectiveness of the safety training content and distance learning format, but also the feasibility of integrating the distance learning format into future training efforts. The evaluation system was designed to investigate: (1) comparisons of safety training delivered in a face-to-face versus synchronous online format; (2) effectiveness of newly developed online COVID-19 trainings in addressing emerging worker safety needs; and (3) best practices and lessons learned for occupational health and safety training delivered in distance learning format.

Methods
The methodology employed is based on an established evaluation system designed by Sarpy and Associates. This evaluation process is strategically designed to include: (1) use of a **mixed-method approach** that incorporates **qualitative and quantitative data**; (2) a **multiple stakeholder system** that will provide 360 degree feedback of effectiveness from major stakeholders; (3) **identification of best practices/lessons learned** from project findings; and (4) **general recommendations to enhance programmatic success and sustainability**. It should be noted that this evaluation process has previously been used to evaluate the effectiveness and impact of online and face-to-face occupational health and safety training programs, emergency management and disaster response, and resiliency training programs nationwide. Sarpy and Associates worked closely with CPWR – The Center for Construction Research and Training (CPWR) to apply this methodology to the following studies.

Study 1: Comparative Study of Face-to-face versus Distance Learning Format on Training Outcomes. Using the process described above, an evaluation was developed to provide direct comparisons of the effectiveness of a worker health and safety training course delivered in a traditional face-to-face format with the same course delivered in a synchronous online format. CPWR's Infection Control Risk Assessment (ICRA) Awareness training program was selected for evaluation because it has been presented in face-to-face format for a number of years and was modified by CPWR to a distance learning format for presentation during the COVID-19 pandemic. CPWR course evaluations, administered to all course participants directly following training, were analyzed to compare the effectiveness of instructor and teaching/learning methods, safety-related knowledge and skill gains, and the course's overall effectiveness in improving the knowledge, skills, and confidence to work safely. Results of analyses revealed that participants in the face-to-face courses reported, on average, statistically significantly higher ratings of: (1) Instructor Effectiveness; (2) Teaching/Learning Methods; and (3)

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Overall Effectiveness in developing the knowledge, skills, and confidence to work safely. However, it should be noted that while face-to-face delivery was rated more highly, respondents indicated that, on average, both delivery formats were highly effective. Importantly, no significant differences in specific safety-related knowledge and skills were reported by participants in the face-to-face versus distance learning formats, suggesting that high levels of learning occurred regardless of format.

Study 2: Online Training Developed During the Pandemic. A complementary study was conducted to assess the effectiveness of two newly developed CPWR COVID-19 courses (COVID-19 and the Construction Industry Awareness; ICRA/COVID-19 Awareness) delivered in a synchronous online format to address emerging safety needs. The evaluation was conducted three to six months after the initial training session and provides additional information to determine whether the online training effectively transferred to improved job site safety during the COVID-19 pandemic. Study 2 examined the effectiveness of the synchronous online format in addressing worker health and safety training needs in real-time during the pandemic.

Online evaluation questionnaires were designed and administered to all participants who received the training (workers, trainers, union representatives) as well as the CPWR instructors who delivered the training. Results of the evaluation demonstrated high levels of effectiveness for the synchronous online training, both for those receiving the training as well as those CPWR trainers who provided the training. The respondents reported, on average, that the training had resulted in not only high levels of safety-related knowledge and skill, but also improved their preparedness to work safely and many had used the training on the job. Similarly, they cited that their training-related knowledge and skills were supported on the job, both by their supervisors and the organizations in which they worked. The vast majority of trainers receiving the training reported that they felt prepared to train others using the distance learning format.

While work-related characteristics of the trainees (occupation, trade association membership) and training (type/length of training, month training presented) did not affect outcomes, technology-related characteristics of the trainee did have an impact. Those reporting higher levels of "Comfort in Taking the Training via Distance Learning" gave higher ratings of Instructor, Content, and Format effectiveness as well as higher ratings of Learning, On-the-job Performance, and Support of the training at the worksite than those reporting less Comfort. Similarly, those reporting greater "Skill in Using Distance Learning" gave higher ratings of Instructor and Overall Effectiveness as well as greater Learning than those reporting less Skill. These results suggest that, to engender optimal training outcomes, the technological comfort and skill of the learner should be taken into consideration when designing and delivering training using distance learning.

Best Practices/Lessons Learned and General Recommendations
To gain a greater understanding of the quantitative results, qualitative information was gathered to determine best practices and lessons learned for use of distance learning in occupational health and safety. In addition, meetings with project stakeholders and occupational health and safety training representatives were conducted to gather additional feedback and information. In general, across stakeholders, several aspects of the distance learning format were cited as most important for success: (1) instructor expertise; (2) use of synchronous online platform (Zoom); (3) up-to-date and relevant content, including its application to the workplace; (4) interaction and discussions of content with participants (breakout groups, polls); and (5) shift to distance learning methods to ensure safety of worker as well as flexibility during the pandemic.

On the other hand, respondents indicated that with remote learning: (1) face-to-face is the gold standard and is recognized as more effective; (2) has limitations regarding the extent to which interactions can be fostered; (3) presents challenges in using hands-on exercises and demonstrations; (4) creates technical issues including accessibility of computer equipment and Internet; and (5) limits the instructor's ability to see non-verbal cues and "read the room" to assess learner understanding.
The qualitative comments and suggestions were synthesized to create general recommendations for enhancing effectiveness of synchronous online training courses, including Tools and Tips for trainers and

trainees. The recommendations focus on designing and delivering training sessions in ways that address learner needs and emulate the general principles of adult learning and excellence in instructional design for traditional face-to-face training.

The Trainer Tools and Tips encourage advance planning and organization of training, interactive delivery methods that foster active participation of trainees, and practices for information sharing following the training. These strategies include: (1) gaining information about learner (technological proficiency; accessibility) and workplace needs (occupational; trade) in advance of the session; (2) providing orientation training for participants and trainers that clarifies technology, course expectations, and resources; (3) providing participants access to all course-related information in advance of the training session; (4) convening instructor planning and coordinating meetings to review roles and responsibilities; (5) rehearsing presentations using the technology (including camera), preferably with performance feedback; (6) encouraging trainee engagement and interactions using specific regular interaction/discussions and diverse methods; (7) using co-instructor(s) to assist with technology; (8) creating an open and flexible learning environment; (9) evaluating training to ensure continuous quality improvement; and (10) providing up-to-date, relevant, online resources for participants and trainers. In addition, specific best practices for recommended distance learning methods (e.g., virtual breakout rooms) and Etiquette for Online Success are also provided.

Future Research

The present study provides evidence of the viability of using the distance learning format to successfully deliver occupational health and safety training. It also demonstrates the use of a real-time, comprehensive evaluation process to identify best practices, lessons learned, and general recommendations that can be adopted for continued use of the new technology. Further research is needed to advance our understanding of the trainee characteristics most critical to success in using technology-based training for workers' health and safety. Likewise, additional evaluations of the pedagogical features influencing effectiveness of distance learning formats are needed including the conditions under which it is most effective for occupational health and safety. This information can facilitate strategic decision-making regarding use of distance technology to improve occupational health and safety training systems.

Conclusion

The present evaluation provides preliminary evidence supporting the effectiveness of the distance learning format in delivering occupational health and safety training. Trainee characteristics and training factors affecting effectiveness and impact are identified, as well as recommendations for continuous quality improvement. Finally, suggestions for future research on use of the distance learning technology in occupational health and safety training systems are provided. Taken together, these findings and general recommendations can be used to ensure successful and sustained integration of synchronous online occupational health and safety trainings.

> *"I feel ICRA related training will become a norm as training in the way we looked at it is changing. I believe 100% in face-to-face training but if we cannot it is a responsibility for us to train them on how to be safe. We sometimes forget about the art of safety. We are forced in this time not to do face to face training, but we have members working today. We had to look at the art side and find the next best avenue. Safety can never stop - no matter what obstacles are put in front of us. Great job for CPWR staff and instructors to adapt and overcome to reach the members."*

Quote from Participant in the ICRA/COVID-19 Awareness Training (April 13, 2020)

The Use of Distance Learning in Occupational Health and Safety Training:
Assessing Effectiveness and Sustainability in the Context of the COVID-19 Pandemic

Introduction

The COVID-19 pandemic has caused great disruptions and uncertainty to organizations worldwide. The rapidly instituted changes to workplaces—for example, the immediate transition from in-person interaction to virtual and online communication—are now an everyday part of the workplace for many of us. Trainers, including those in the construction industry, were required to rapidly adapt health and safety and skill-based training which relies on in-person interaction and hands-on learning, to virtual format. The urgency and abruptness of the transition to distance learning formats and subsequent reliance on advanced technology has left users grappling with a series of issues: unfamiliar platforms and complicated training guides; lack of access to online resources; a lack of consistency of platforms used across organizations; need for clarity for compliance and ethical considerations; and a scarcity of readily available evaluation resources to assess the effectiveness of transitioning to the distance learning formats. These concerns highlight the need for systematic evaluations to monitor the effectiveness of distance learning training methods and assess the on-going quality improvements made when gaps are identified and addressed. Further, the dynamic nature of the pandemic highlights the need to share lessons learned and best practices as the training systems evolve. This is of particular importance in the occupational health and safety domain, in which training is being designed and delivered to meet emerging worker safety needs during the pandemic.

CPWR: The Center for Construction Research and Training (CPWR) is a nonprofit dedicated to reducing occupational injuries, illnesses and fatalities in the construction industry. CPWR conducts specific types of construction health and safety training for members of its consortium partners and the North American Build Trades Unions (NABTU). The overarching goal of CPWR training is to enable and empower construction workers to recognize potentially unsafe working conditions, and to identify proper ways to eliminate or control those hazards that make conditions unsafe.

In 2016, CPWR developed an eight hour Infection Control Risk Assessment (ICRA) Awareness program to assist NABTU affiliates in the preparation of their workforces to perform construction, renovation, maintenance and demolition activities on healthcare facilities. Performing work in a healthcare facility requires coordination among all of the construction trades to minimize the risk of spreading infections to hospital patients, staff, and visitors. The ICRA Awareness program was part of the overarching goal of CPWR to ensure that members of NABTU understand what it is to work safely and professionally in a healthcare facility. The CPWR ICRA Awareness course was designed in a traditional face-to-face format that includes case studies, lectures with group discussions, demonstrations, and activities that involve active learner participation in the training process.

As a result of the pandemic and its impact on businesses and communities nationwide, the transition to distance and online learning was rapid and unexpected. It should be noted that for the purposes of this report, distance learning is an umbrella term used to describe training in which trainer and learner are remote during the instruction, that is, not in the same location (i.e., geographically distant). Online training is a specific distance learning format in which the training is provided using the Internet (Moore, Dickson-Deane, & Galyen, 2010). For further discussion, the reader is referred to the Glossary of this report.

The trainings delivered during the COVID-19 pandemic were designed and presented in real time to meet the immediate and on-going health and safety needs of the workers. In rapid response to the COVID-19 pandemic, CPWR revised the original 8-hour ICRA Awareness training to include occupational safety and health issues resulting from the pandemic. That is, the revised goal of the ICRA/COVID-19 Awareness training was to provide the necessary training to increase the health and safety awareness for construction workers who are impacted by the pandemic and understand the Infection Control Risk Assessment procedures for properly performing healthcare or other occupied facility construction,

maintenance, and renovation tasks. In addition, the training was revised from its original face-to-face format to be delivered as synchronous online training using the Zoom Video Communications (Zoom) platform. In this way, the trainers were able to actively engage their learners but maintain the safety and health of workers attending the training during the pandemic.

In addition, a one-hour COVID-19 and the Construction Industry (COVID-19) Awareness course was also designed and delivered in a completely online synchronous format using Zoom. The goal of the COVID-19 Awareness training was more broadly focused to increase the health and safety awareness for construction workers who are impacted by the pandemic. Training content included knowledge and skills related to basic facts about COVID-19, assessing risk of workplace exposure to COVID-19, key steps in worker protection and infection control, and protective measures employers should implement.

It should be noted that links to relevant online resource websites were provided at the conclusion of both training courses (COVID-19 Awareness and ICRA/COVID-19 Awareness). These links included: (1) CPWR's COVID-19 Construction Clearinghouse; (2) National Institute for Environmental Health Sciences Worker Training Program COVID-19; (3) National Institute for Occupational Safety and Health; (4) Centers for Disease Control and Prevention; and (5) Occupational Safety and Health Administration. Participants were encouraged to access these links to obtain the most up-to-date and accurate information regarding workplace safety during the pandemic.

Purpose

The current evaluation project involves **a comprehensive evaluation system designed to assess effectiveness of the rapid transition to synchronous online training in the occupational health and safety domain**. These evaluations address not only the effectiveness of the safety training content and online format, but also the feasibility of integrating the distance learning format into future occupational health and safety training efforts. The evaluation system was designed to address the following: (1) comparisons of safety training delivered in a face-to-face versus synchronous online format; (2) effectiveness of newly developed online COVID-19 courses in addressing emerging worker safety needs; and (3) best practices and lessons learned to enhance occupational health and safety training delivered in distance learning format.

Evaluation Process

The evaluation process used for the current project involved a two pronged approach. To examine differences in effectiveness of face-to-face versus distance learning courses (Study 1), the evaluation focused on training outcomes immediately following the completion of training. To examine the extent to which distance learning courses were effectively meeting workers' health and safety-related needs during the pandemic (Study 2), the evaluation focused on longer-term training outcomes (3 to 6 months) following the completion of training. The methodology employed in the evaluation process is based on an established evaluation system designed by Sarpy and Associates. This evaluation process is strategically designed with the following objectives: (1) use a **mixed-method approach** that incorporates **qualitative and quantitative data**; (2) incorporate a **multiple stakeholder system** that will provide 360 degree feedback of effectiveness from major stakeholders; (3) **identify best practices/lessons learned** from project findings; and (4) provide **general recommendations** for consideration to enhance **programmatic success and sustainability**. The evaluation process also follows Kirkpatrick's framework for training evaluation criteria and includes evaluation of reactions (Level 1), learning (Level 2), transfer to improvements in on-the-job safety performance (Level 3), and organizational results (Level 4). It should be noted that this evaluation process has been used to evaluate the effectiveness and impact of online and face-to-face occupational health and safety and leadership training programs (Sarpy, Burke, Rabito, & Hughes, 2017; Sarpy & Kaplan, 2012), emergency management and disaster response (Sarpy et al., 2006; Sarpy, Chauvin, & Anderson, 2003), and resiliency training programs nationwide (Sarpy, Rabito, & Goldstein, 2012) and is consistent with recommended best practices in worker training evaluation (NIEHS, 2015).

Study 1: Comparative Study of Face-to-Face versus Distance Learning Format
An evaluation was conducted to provide direct comparisons of the effectiveness of worker health and safety training courses delivered in a traditional face-to-face format before the pandemic with courses delivered in a synchronous online format during the pandemic on training outcomes.

Targeted Course. After a review of the CPWR worker health and safety course offerings, the Infection Control Risk Assessment (ICRA) Awareness training was selected for the comparative study. The ICRA Awareness course provides the necessary training to understand the procedures for properly performing healthcare or other occupied facility construction and renovation tasks. In addition, participants examine the practical use of ICRA tools including containment, negative air, HEPA filtration, and work practice techniques. The course uses a variety of adult education classroom activities to build upon participants' experience working in construction, renovation, demolition, or healthcare facility environments.

This course was chosen largely because it was presented in face-to-face format prior to the pandemic (April 2016 to February 2020) and modified in March 2020 to a synchronous online format and presented during the COVID-19 pandemic. Similarly, the COVID-19 Awareness course, developed during the pandemic to directly address workers' immediate health and safety needs and delivered in online format, was also included in the comparative study. It should be noted that the same team of CPWR health and safety instructors presented both the face-to-face and online trainings, controlling for instructor's expertise and allowing for more direct comparisons of course formats.

Evaluation Method. CPWR Trainee Course Evaluation Forms are used to assess effectiveness of all trainings presented (see Appendix A). The evaluations are administered to all participants *directly following* training. The questionnaires contain 26 items and require respondents to rate: (1) Instructor's effectiveness (e.g., "The instructor(s) explained how the course content applies to my job or trade."); (2) Teaching/learning method use (e.g., "The classroom discussions/small group activities are helpful for learning the material covered."); (3) Safety-related knowledge and skill gains (e.g., "The course helped me to improve my ability to Recognize health hazards on the job."); and (4) Overall effectiveness in improving the knowledge, skills, and confidence to work safely. Respondents rate each item on a scale ranging from 1 (not at all) to 5 (always). The questionnaire also contains an open-ended item encouraging respondents to suggest how the course can be improved. The CPWR Trainee Course Evaluation Forms are gathered and compiled in a worker training database. The evaluation data for all ICRA and COVID-19 courses (face-to-face and online) presented from April 2015 to July 2020 were included in this study.

Participants. A total of 840 training participants completed the CPWR Trainee Course Evaluations. More specifically, 516 respondents evaluated the face-to-face trainings, whereas 324 respondents evaluated the online trainings. Figure 1 below depicts the percentage of evaluations included in the study according to training format.

Figure 1. Percentage of Evaluation Responses by Training Format
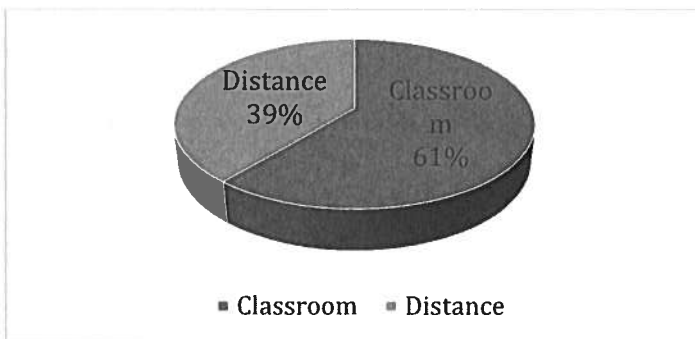
Note. Total respondents: N=840; Classroom: N=Item 516; Distance Learning N=324.

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It should be noted that number of respondents also varied according to length of course and delivery method. As depicted in Table 1, for the face-to-face trainings, the largest number of respondents attended the ICRA Awareness 8-hour course whereas a fairly equal number of respondents completed the ICRA/COVID-19 Awareness 6-hour and COVID-19 Awareness 1-hour courses in the distance learning format.

Table 1. Number of Post-Course Evaluations by Course and Delivery Method

Course by Delivery Method	Number of Respondents
Face-to-Face Courses	**516**
ICRA Awareness (8-hour)	321
ICRA Awareness - Train-the-Trainer (16-hour)	141
ICRA Worker - Train-the-Trainer (24-hour)	36
ICRA Worker - Train-the-Trainer (32-hour)	18
Distance Learning Courses	**324**
ICRA/COVID-19 Awareness (6-hour)	151
COVID-19 Awareness (1-hour)	173

Descriptive Analysis. Descriptive statistics were conducted on the CPWR Training Course Evaluation for item of the CPWR and category of effectiveness according to format of training attended (face-to-face, distance). Table 2 presents the means, standard deviations, and number of survey respondents. Item statistics for CPWR Trainee Course Evaluations are presented in Appendix B.

Reactions: Effectiveness of Training
In general, trainees report *high levels of effectiveness* with respondents providing the *highest ratings to Instructor Effectiveness* in both face-to-face and distance formats. However, results also demonstrate that respondents in the *face-to-face format report higher levels of training effectiveness, on average, than those attending the training in distance learning format.* Importantly, those attending the *distance learning courses report, on average, the lowest ratings for training method effectiveness.*

Learning: Safety-related Knowledge and Skills
With respect to learning outcomes, respondents attending *both the face-to-face and distance learning indicate high levels of attainment of the safety-related knowledge and skills associated with the trainings.* However, results generally show that trainees in *the face-to-face format reported slightly higher levels of knowledge and skill, on average, than those who attended the distance learning courses.* Two exceptions occurred. The trainees reported equally high levels of attainment of knowledge and skills associated with the use of appropriate personal protective equipment regardless of training format. The trainees attending the distance learning courses reported slightly greater knowledge and skill in recognizing the signs and symptoms that may be related to hazardous environments and exposures than those in the face-to-face trainings.

To further explore the similarities and differences between trainees' ratings of effectiveness and learning for trainees attending courses presented face-to-face versus distance learning format, comparative analyses were conducted and will be discussed in the following section.

Table 2. Descriptive Statistics for Face-to-Face and Distance Learning Effectiveness Ratings.

Evaluation Items	Face-to-Face			Distance		
	N	Mean	SD	N	Mean	SD
Instructor Effectiveness	**516**	**4.79**	**0.36**	**324**	**4.66**	**0.52**
1. Described the course and lesson objectives clearly.	515	4.80	0.45	324	4.77	0.57
2. Explained how the course content applies to my job or trade.	513	4.60	0.79	324	4.50	0.84
3. Presented the material clearly, so that I could understand it.	516	4.82	0.43	324	4.78	0.55
4. Kept the class focused on the learning objectives.	515	4.78	0.51	324	4.70	0.64
5. Encouraged class participation.	125	4.80	0.49	324	4.63	0.75
6. Reviewed key points.	515	4.87	0.38	324	4.77	0.59
7. Gave helpful feedback to the class on the exercises and activities.	516	4.84	0.42	324	4.68	0.70
8. Made good use of the student materials / manuals.	514	4.81	0.47	324	4.49	0.92
Training Method Effectiveness	**491**	**4.68**	**0.43**	**324**	**4.41**	**0.69**
9. Lectures (Instructor only talked and responded to questions)	483	4.58	0.63	316	4.47	0.83
10. Classroom discussions / small group activities	488	4.72	0.51	299	4.49	0.82
11. Demonstrations	483	4.78	0.50	203	4.32	0.96
12. Classroom-based activities / exercises	479	4.70	0.60	227	4.19	1.05
13. Hands-on activities / exercises / simulations	481	4.75	0.55	NA	NA	NA
14. Course manual/handouts	487	4.62	0.64	175	4.20	0.98
15. PowerPoints	369	4.67	0.58	321	4.59	0.73
16. Video / YouTube / DVD	301	4.61	0.65	208	4.21	0.97
Safety-related Knowledge and Skills	**516**	**4.66**	**0.51**	**324**	**4.60**	**0.63**
17. Understand the hazards/dangers of working with/around the topic(s) taught in this class.	516	4.73	0.58	324	4.61	0.75
18. Recognize health hazards on the job.	516	4.78	0.51	323	4.61	0.74
19. Recognize unsafe work conditions and practices.	515	4.72	0.59	323	4.62	0.72
20. Recognize the signs and symptoms that may be related to hazardous environments and exposures.	512	4.53	0.85	323	4.59	0.78
21. Understand when a job hazard needs me to take immediate action.	514	4.68	0.64	322	4.58	0.77
22. Use appropriate personal protective equipment.	514	4.74	0.59	317	4.74	0.62
23. Understand my legal rights.	509	4.37	0.97	302	4.32	1.08
24. Understand the importance of jobsite safety plans and emergency response planning.	510	4.74	0.61	321	4.71	0.65
Overall Effectiveness						
25. How well did this class meet the objective of helping you to develop the knowledge, skills, and confidence you need to work safely?	477	4.74	0.48	321	4.62	0.60

Note. Instructor effectiveness items rated on a scale ranging from 1 (Rarely) to 5 (Always). Training/learning method effectiveness items rated on a scale ranging from 1 (Didn't help at all) to 5 (Really helped). Overall Effectiveness and Training-related Knowledge/Skills items rated on a scale ranging from 1 (Very little) to 5 (A lot).

Comparative analyses. Comparative analyses were conducted to further explore the similarities and differences between trainees' ratings of effectiveness and learning for trainees attending courses presented face-to-face versus distance learning format. The first set of comparisons focused on effects of training format more generally (i.e., all courses) whereas the second set of comparisons were more narrowly focused on a single course. In this way, a broader comparison was conducted to assess the effects of the training format overall, while a more refined comparison (course with more similar content and training length) allows for a more refined comparison of the effects of the training format on a specific occupational health and safety course.

For both sets of comparisons, One-way Analysis of Variance (ANOVA) were conducted on the mean ratings of: (1) Instructor Effectiveness, (2) Learning/Teaching Method Effectiveness, (3) Overall

Effectiveness, and (4) Safety-related Knowledge and Skills for all trainees receiving training in the face-to-face compared to the distance learning formats. Each will be discussed separately below.

General Comparisons of Face-to-face versus Distance Learning Courses
The first set of analyses included combined evaluations from *all ICRA courses* presented face-to-face (ICRA Awareness, ICRA Train-the-Trainer) with those presented in distance format (ICRA/COVID-19 Awareness, COVID-19 Awareness) on training outcomes.

Instructor Effectiveness
A one-way ANOVA was performed on the ratings of Instructor Effectiveness for both training formats. As depicted in Table 3, results reveal, on average, respondents in the *face-to-face trainings report significantly higher ratings of instructor effectiveness* than those in the distance learning format [F(1, 838) = 16.37, p < .001, η^2 = .02].

Table 3. Analysis of Variance of Instructor Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
Face-to-face	516	4.79	0.36	<.001**
Distance learning	324	4.66	0.52	

Note. Instructor effectiveness items rated on a scale ranging from 1 (Rarely) to 5 (Always).

Training/Learning Methods Effectiveness
A one-way ANOVA was run to explore differences in ratings of effectiveness of the Training Methods by class format. Table 4 shows that, on average, ratings of training methods effectiveness for those in the *face-to-face trainings were statistically significantly higher* than those offered in a distance learning format [F(1, 813) = 47.80, p < .001, η^2 = .01].

Table 4. Analysis of Variance of Training Methods Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
Face-to-face	491	4.68	0.43	<.001**
Distance learning	324	4.41	0.69	

Note. Training methods effectiveness items rated on a scale ranging from 1 (Didn't help at all) to 5 (Really helped).

Overall Effectiveness
A one-way ANOVA was run to explore differences in ratings of Overall effectiveness of both formats in helping the trainees to develop the knowledge, skills, and confidence to work safely. Table 5 shows that, on average, ratings of Overall effectiveness for those in the *face-to-face trainings were statistically significantly higher* than those offered in a distance learning format [F(1, 796) = 9.73, p = .002, η^2 = .01.].

Table 5. Analysis of Variance of Overall Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
Face-to-face	477	4.74	0.48	.002*
Distance Learning	321	4.62	0.60	

Note. Overall effectiveness items rated on a scale ranging from 1 (Very little) to 5 (A lot).

Safety-related Knowledge and Skills

A one-way ANOVA was performed to explore if differences existed between trainees' safety-related knowledge and skill gains varied as a result of the format in which they received the training. Table 6 shows that, on average, there were *not statistically significant differences in learning* between those attending face-to-face courses and those attending training using the distance learning format [$F(1, 838) = 2.49$ p $= .115$, $\eta^2 = .00$].

Table 6. Analysis of Variance of Safety-related Knowledge and Skill Gain by Training Format

Course Format	N	Mean	SD	p-value
Face-to-face	516	4.66	0.51	.115
Distance Learning	324	4.60	0.63	

Note. Safety-related knowledge and skill items rated on a scale ranging from 1 (Very little) to 5 (A lot).

Figure 2 provides a graphical depiction of these results. It should be noted that while the results show that the effectiveness ratings are significantly higher for those in the traditional face-to-face format, *the effectiveness ratings are, on average, very positive in both formats.*

Figure 2. Mean Effectiveness Ratings Across Categories by Training Format for All Courses
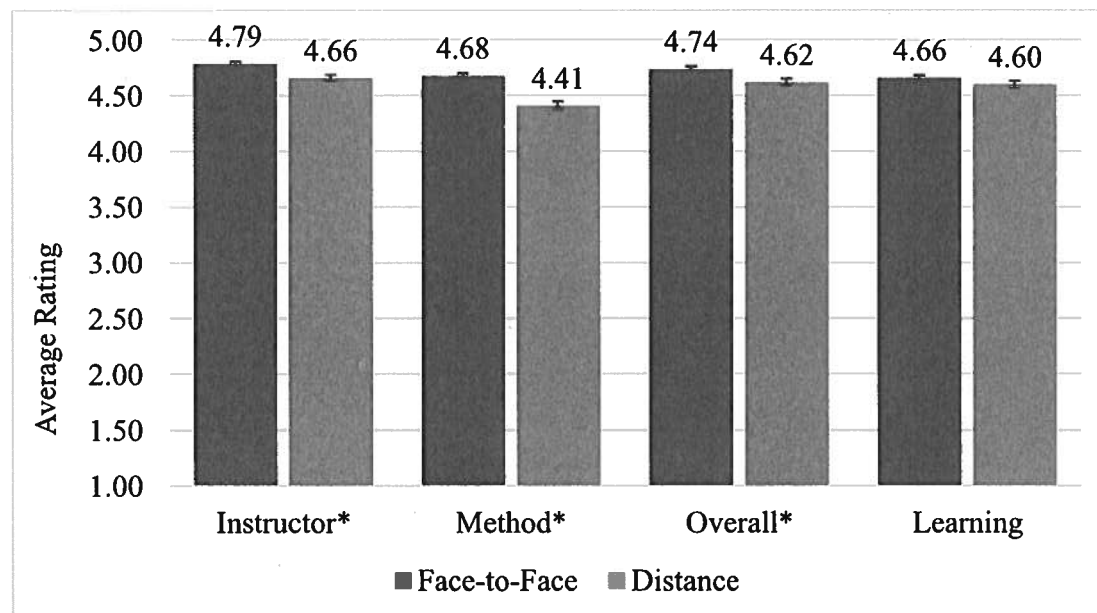
*Note. Effectiveness ratings significant at $p<.01$. Items ratings range from 1 (Least Effective) to 5 (Most Effective). Error bars represent the standard error of the mean.

Comparisons of Face-to-face versus Distance Learning: ICRA Awareness Course

Because the combined comparisons above did not account for differences among specific training content and length, a second related set of comparisons were conducted. These comparisons targeted the ICRA Awareness course, which was presented in face-to-face (8-hour pre-pandemic) and distance format (6-hour during pandemic). To maximize the similarity in comparisons and control for history effects, only the most recent face-to-face respondents were included (from June 2018 to February 2020). These inclusion criteria also generated a relatively equal number of respondents across both formats.

Instructor Effectiveness

A one-way ANOVA was performed on the ratings of Instructor Effectiveness for trainees attending the ICRA Awareness in either face-to-face or distance formats. As depicted in Table 7, results reveal, on average, respondents in the *face-to-face trainings report statistically significantly higher ratings of instructor effectiveness* than those in the distance learning format [F(1, 300) = 4.45, p = .036, η^2 = .02].

Table 7. Analysis of Variance of Instructor Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
ICRA Face-to-face	151	4.80	0.37	.036*
ICRA Distance Learning	151	4.71	0.40	

Note. Instructor effectiveness items rated on a scale ranging from 1 (Rarely) to 5 (Always).

Training/Learning Methods Effectiveness

A one-way ANOVA was employed to explore differences in ratings of effectiveness of the Training Methods by class format for the ICRA Awareness courses. Table 8 shows that, on average, ratings of training methods effectiveness for those in the *face-to-face trainings were statistically significantly higher* than those attending in a distance learning format [F(1, 292) = 12.48, p < .001, η^2 = .04].

Table 8. Analysis of Variance of Training Methods Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
ICRA Face-to-face	143	4.65	0.46	<.001**
ICRA Distance learning	151	4.43	0.59	

Note. Training methods effectiveness items rated on a scale ranging from 1 (Didn't help at all) to 5 (Really helped).

Overall Effectiveness

A one-way ANOVA was run to explore differences in ratings of Overall effectiveness of training format in helping the trainees to develop the knowledge, skills, and confidence to work safely. Table 9 shows that, on average, ratings of Overall Effectiveness for those in the *face-to-face trainings were statistically significantly higher* than those offered in a distance learning format [F(1, 287) = 4.37, p = .037, η^2 = .02].

Table 9. Analysis of Variance of Overall Effectiveness by Training Format

Course Format	N	Mean	SD	p-value
ICRA Face-to-face	138	4.76	0.46	.037*
ICRA Distance Learning	151	4.64	0.55	

Note. Overall effectiveness items rated on a scale ranging from 1 (1 (Very little) to 5 (A lot).

Safety-related Knowledge and Skills

A one-way ANOVA was performed to explore if differences existed between trainees' safety-related knowledge and skill gains varied as a result of the format in which they received the training. Table 10

shows that, on average, there were *not significant differences in learning* between those attending face-to-face courses and those attending training using the distance learning format [$F(1, 300) = 3.36$, p = .068, $\eta^2 = .01$].

Table 10. Analysis of Variance of Safety-related Knowledge and Skill Gain by Training Format

Course Format	N	Mean	SD	p-value
ICRA Face-to-face	151	4.72	0.42	.068
ICRA Distance Learning	151	4.62	0.56	

Note. Safety-related knowledge and skill items rated on a scale ranging from 1 (1 (Very little) to 5 (A lot).

Figure 3 below provides a graphical depiction of these results. It should be noted that, similar to the previous comparisons of the combined courses, the mean effectiveness ratings are significantly higher for those in the traditional face-to-face format. However, both formats were rated quite positively. Further, consistent with previous findings, there were not significant differences in learning gains, suggesting that the trainees' safety-related knowledge and skills are enhanced regardless of format.

Figure 3. Mean Effectiveness Ratings Across Categories by Training Format for ICRA Awareness Courses
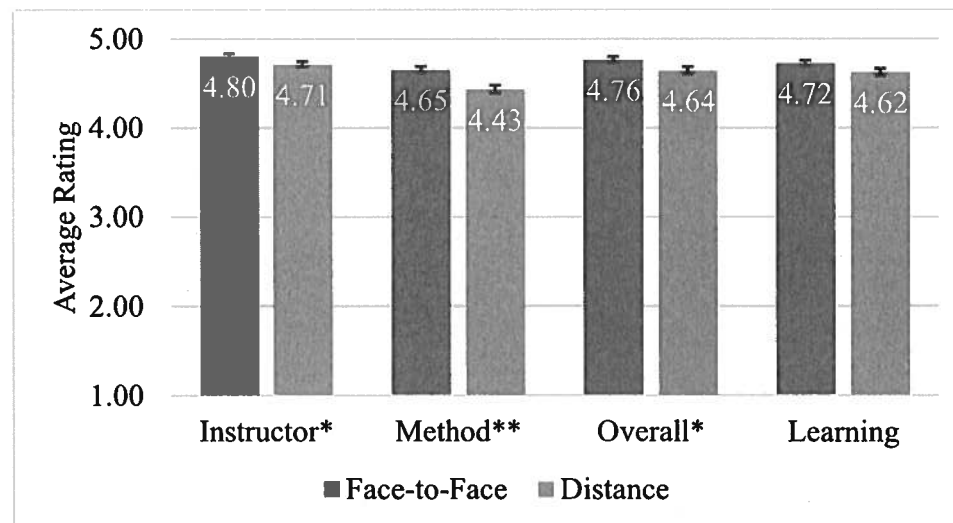
Note. Effectiveness ratings significant at *p<.05; **p<.001. Items ratings range from 1 (Least Effective) to 5 (Most Effective). Error bars represent the standard error of the mean.

Additional Analyses of ICRA Trainings Using Distance Learning Format
The transition to distance/online learning was rapid and unexpected. The trainings delivered during the COVID-19 pandemic were designed and presented in real time to meet the immediate and on-going health and safety needs of the workers. As a result, the instructors raised additional areas of inquiry specific to the distance learning format: (1) length of training; and (2) date attended training.

Length of Training. Within the occupational health and safety domain, highly engaging, hands-on face-to-face training is considered the gold standard. The use of distance learning in delivering worker health and safety training is emergent and regarded as less engaging. It was asserted that the length of distance

learning courses would be inversely related to positive training outcomes (i.e., longer courses would result in lower ratings). Comparative analyses of the COVID-19 Awareness (1-hour) and ICRA/COVID-19 Awareness (6-hour) were conducted. It should be noted that the ICRA/COVID-19 Awareness course was designed to be delivered in two 3-hour sessions. One-way ANOVAs were performed on training outcomes (see Appendix C). Results of the analyses revealed *no significant differences among training outcomes according to length of training attended.* Interestingly, although not significantly different, ratings of effectiveness and learning were slightly higher for the longer course than those for the shorter 1-hour course.

Date Attended Training. A second area of inquiry was the date that the participant attended the training event. More specifically, on April 27, 2020, the *NABTU and CPWR COVID-19 Standards for U.S. Construction Sites* were established. It was asserted that establishment of these Standards may have a significantly positive affect on learning outcomes of those attending the COVID-19 training. Comparative analyses of the learning outcomes of those attending the COVID-19 courses before and after April 27 were conducted (see Appendix C). The results demonstrated *no significant differences among reported safety-related knowledge and skills* between those who attended the training either before or after the establishment of the NABTU COVID-19 Standards.

Study 2: Online Training Developed During the Pandemic
A complementary study was conducted to assess effectiveness of the newly developed COVID-19 Awareness courses (COVID-19; ICRA/COVID-19) delivered in a synchronous online format to address emerging safety needs. This evaluation was conducted 3 to 6 months after the initial training sessions and provides information that complements the Study 1 findings. The focus of Study 2 involved retention and transfer of the knowledge and skills gained during training to improved safety performance on the job. Simply put, Study 2 examined the **effectiveness of the synchronous online format in addressing worker safety training needs in real-time during the pandemic.**

Targeted Course. All CPWR distance learning developed and delivered during the COVID-19 pandemic was targeted for the study. The training included the ICRA/COVID-19 Awareness courses and the COVID-19 Awareness courses detailed in Study 1.

Evaluation Method. Two questionnaires were developed and administered online to assess effectiveness and impact of the trainings delivered in distance learning format. Separate questionnaires were designed to capture specific feedback from CPWR instructors presenting the training as well as the participants receiving the training.

The *CPWR Distance Learning Evaluation: CPWR Instructor version* contained 23 items and requires instructors to rate items concerning: (1) Instructor's effectiveness (e.g., "The instructors were well-prepared."); (2) Content effectiveness (e.g., "The content was accurate and up-to-date."); (3) Format effectiveness (e.g., "The group discussions were helpful in trainees exchanging ideas with others."); (4) Transfer of Learning (e.g., "The training prepared the trainee to work safely on the job."). Items are rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The questionnaire also required instructors to rate general effectiveness concerning: (1) Instructor(s); (2) Content; (3) Format; (4) Overall on a scale ranging from 1 (Very Ineffective) to 7 (Very Effective). The questionnaire also contained two items that gather information specific to the training instructed (specific training(s) they instructed; month they instructed the training); and two items that required instructors to rate their level of technical competence (comfort in instructing additional distance learning courses; skilled in using the distance learning format). The questionnaires also included three open-ended items encouraging instructors to elaborate on: (1) strengths and weaknesses of the distance learning format; (2) significant challenges to the use of the distance learning format and suggestions for improvements; and (3) best practices/lesson learned including any additional comments for using distance learning in other health and safety training in the future.

The *CPWR Distance Learning Evaluation: Trainees' version* contained 45 items and used electronic branching to tailor items according to survey respondent (e.g., workers, trainers, union representatives). The survey required all respondents to rate items concerning: (1) Instructor's effectiveness (e.g., "The instructors were well-prepared."); (2) Content effectiveness (e.g., "The content was accurate and up-to-date."); (3) Format effectiveness (e.g., "The group discussions were helpful in trainees exchanging ideas with others."); (4) Transfer of Learning (e.g., "The training prepared the trainee to work safely on the job."); and (5) Organizational/Supervisory Support of Training. Items are rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The questionnaire also required respondents to rate general effectiveness concerning: (1) Instructor(s); (2) Content; (3) Format; (4) Overall on a scale ranging from 1 (Very Ineffective) to 7 (Very Effective). The safety-related knowledge and skill items (from the CPWR Course Evaluation Form) are included on the questionnaire to assess retention of knowledge (e.g., "The course helped me to improve my ability to Recognize health hazards on the job."). Respondents rated the extent to which the course has improved their current knowledge and skills on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The questionnaires also included three open-ended items encouraging respondents to elaborate on: (1) most valuable aspects of training; (2) least valuable aspects of training; (3) if training met their training-related needs and suggestions for improvement. The questionnaire also included two items that gather information specific to the training (specific training(s) attended; month(s) attended); and two items that regarding their level of technical competence (comfort in taking additional distance learning courses; skill with the distance learning format). Demographic information was gathered regarding: (1) union membership (member, trainer, union representative); (2) union affiliation; (3) professional tenure (pre-apprentice, apprentice, journeyworker); (4) gender; and (5) race/ethnicity.

The trainers' version of the questionnaire contained 4 additional items. Specifically, trainers were required to rate extent to which they felt prepared to train their workers on a scale ranging from 1 (not at all prepared) to 5 (very prepared). The questionnaire also contains three open-ended items encouraging trainers to elaborate on: (1) strengths and weaknesses of the distance learning format; (2) significant challenges to the use of the distance learning format and suggestions for improvements; and (3) best practices/lesson learned including any additional comments for using distance learning in other health and safety training in the future.

The union representatives' version of the questionnaire contained 2 additional open-ended questions. The first item asked about the extent to which the training met the needs of their members and trainers, including the strengths and weaknesses of the use of distance learning. The final question asked them to provide any additional comments about the use of distance learning for other occupational health and safety courses.

The evaluation was administered to all participants who received the synchronous online training (workers, trainers, union representatives) as well as the CPWR instructors who delivered the training. CPWR's Training Program Directors actively participated in the survey administration including identifying all training participants and instructors, disseminating the email containing study description and survey link, and encouraging participants to complete the evaluation. The emails were sent approximately 3 to 6 months following the inception of the distance learning courses (September 11, 2020). A follow-up email was sent to thank survey respondents and encourage additional participation on October 1, 2020. The CPWR Instructors received the email containing study description, survey link, and encouragement for completing the evaluation on September 30, 2020.

I. Survey Respondents
There were a total of 100 respondents to the evaluation. Specifically, respondents included 91 individuals attended the training (trainees) and 9 CPWR Instructors.

Trainee and CPWR Instructor Demographics

Gender of Trainees. Among those responding, the majority of trainees completing the evaluation were male (see Figure 4). More specifically, 95% of those responding are male, 4% female, and 1% preferred not to answer.
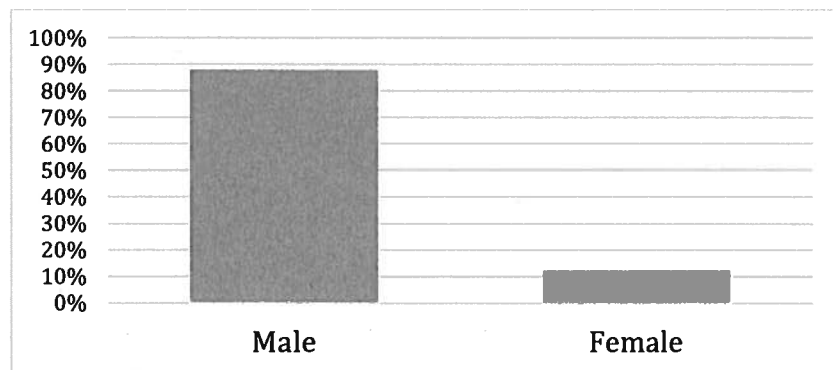
Figure 4. Gender of Trainees.
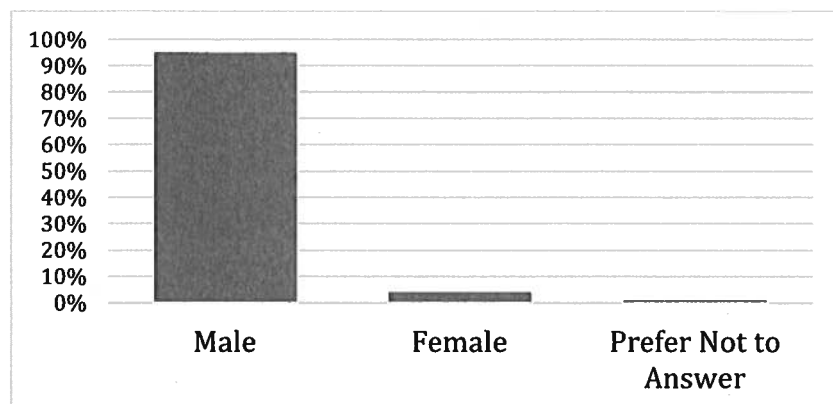
Note. N=73.

Gender of CPWR Instructors. Similar to the trainees, the majority of CPWR Instructors who responded are male. As shown in Figure 5, 88% of those responding are male, while 12% are female.
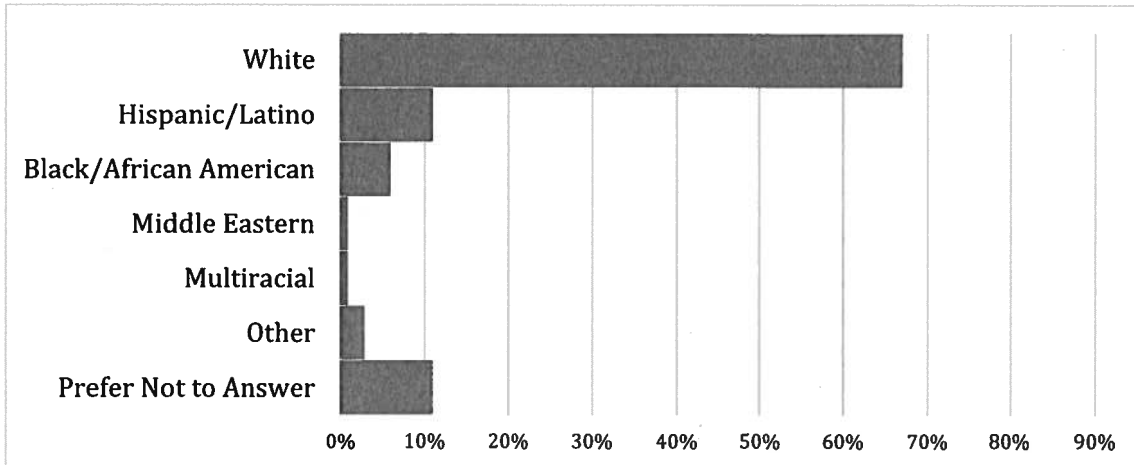
Figure 5. Gender of CPWR Instructors.

Note. N=9.

Race/Ethnicity of Trainees. The results indicated, that while the majority of respondents were White, there was otherwise a small but varied representation with respect to race/ethnicity of trainees (see Figure 6). More specifically, among survey respondents, the following ethnicities were reported: White 67%; Hispanic or Latino 11%; Black or African American 6%; Middle Eastern or North African 1%; Multiracial or Multiethnic 1%; Other race/ethnicity 3%; and 11% preferred not to answer.
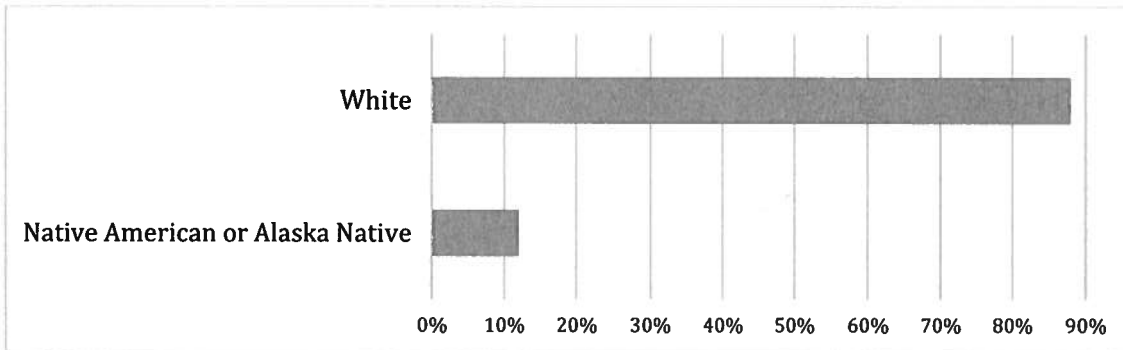
Figure 6. Race/Ethnicity of Trainees.

Note. N=73.

Race/Ethnicity of CPWR Instructors. As depicted in Figure 7, that the vast majority of respondents were White (88%) with one instructor identifying as Native American or Alaska Native (12%).

*Figure 7. Race/Ethnicity of Trainees.*

Note. N=9.

Trainee Work and Professional Experience
Information regarding the work and professional experience of trainees were gathered. Specifically, respondents were asked to indicate their occupation, membership level, and trade membership.

Occupation of Trainees. The respondents indicated that half of those receiving training are trainers, with the remaining trainees reporting, in fairly equal proportion, that they serve as either union representatives or union members (see Figure 8) in their organizations.
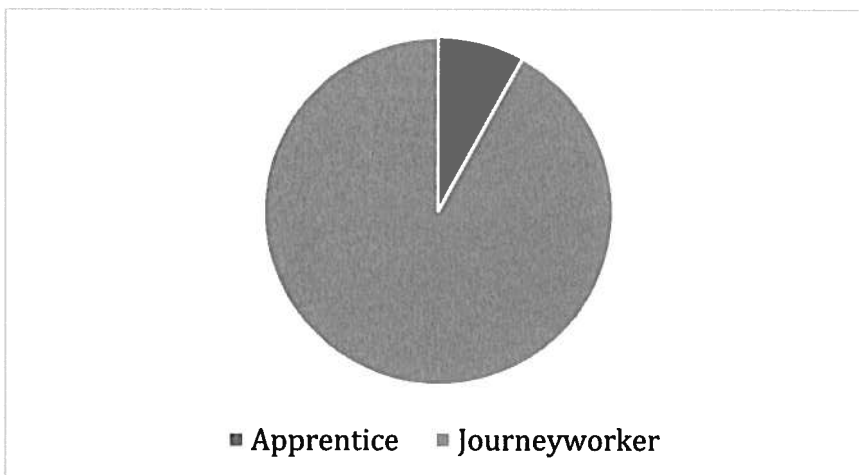
Figure 8. Occupation of Trainees Participating in the Evaluation.
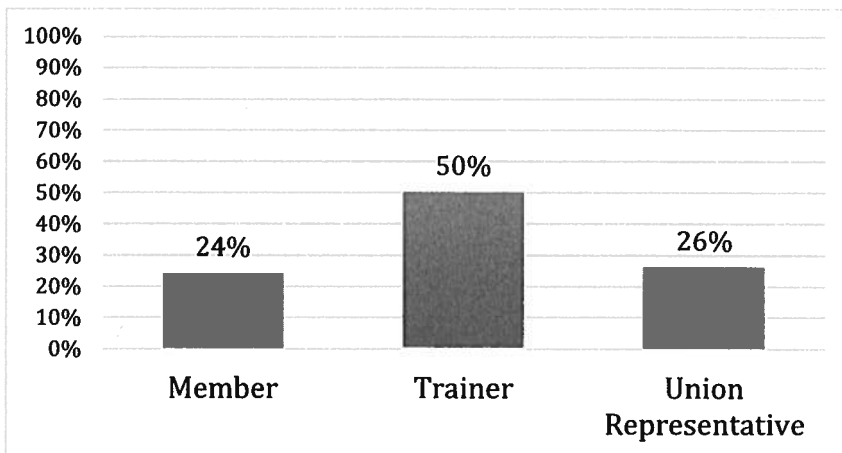
Union Membership of Trainees. As Figure 9 depicts, the vast majority of trainees responding to the evaluation are journeyworkers (92%). A small percentage of respondents were apprentices (8%).
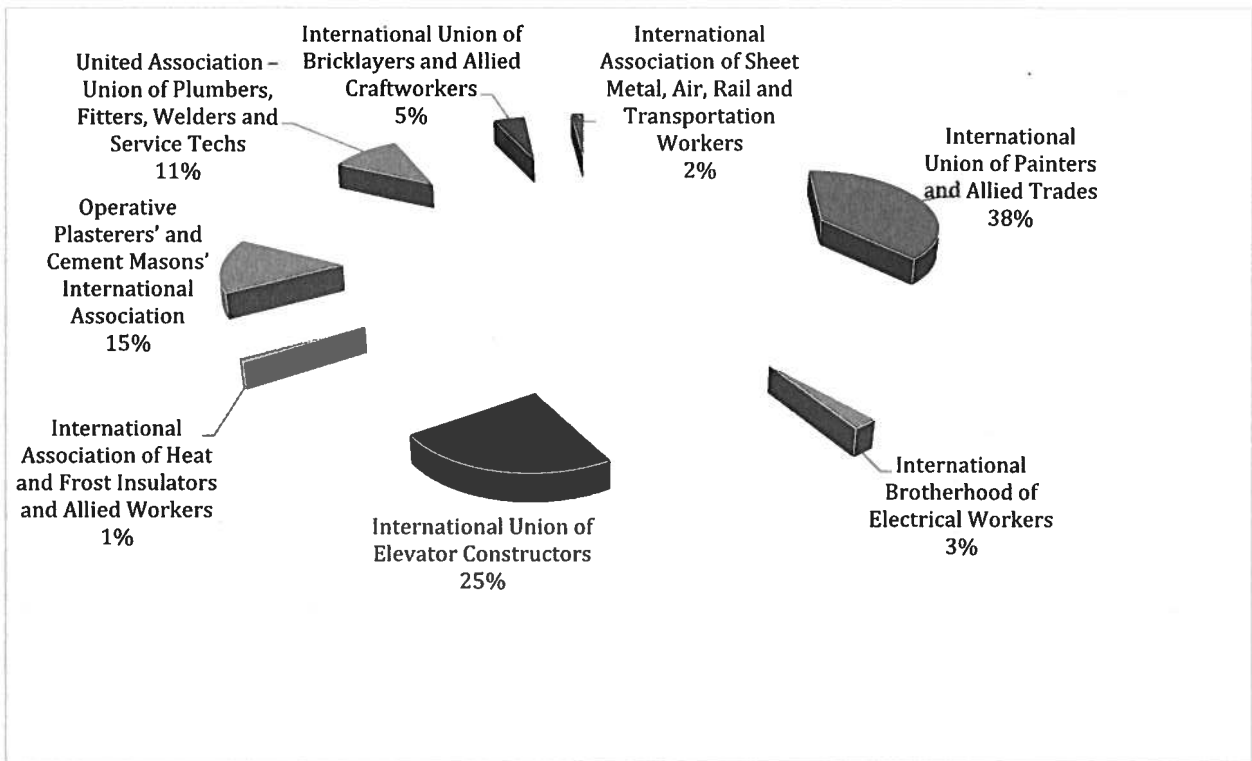
Figure 9. Union Membership of Trainees.

Note. N=75.

Union Affiliation of Trainees. The survey respondents represented eight NABTU affiliates (see Figure 10). The largest majority of trainees were members of the International Union of Painters and Allied Trades (38%), followed by International Union of Elevator Constructors (25%), and to a lesser extent Operative Plasterers' and Cement Masons' International Association (15%) and United Association – Union of Plumbers, Fitters, Welders and Service Techs (11%). A small percentage of trainees responding were International Union of Bricklayers and Allied Craftworkers (5%), International Brotherhood of Electrical Workers (3%), International Association of Sheet Metal, Air, Rail and Transportation Workers (2%) and International Association of Heat and Frost Insulators and Allied Workers (1%).

Figure 10. Trade Membership of Trainees.

Pie chart showing trade membership of trainees:
- United Association – Union of Plumbers, Fitters, Welders and Service Techs 11%
- International Union of Bricklayers and Allied Craftworkers 5%
- International Association of Sheet Metal, Air, Rail and Transportation Workers 2%
- International Union of Painters and Allied Trades 38%
- Operative Plasterers' and Cement Masons' International Association 15%
- International Association of Heat and Frost Insulators and Allied Workers 1%
- International Union of Elevator Constructors 25%
- International Brotherhood of Electrical Workers 3%

Note. N=73.

CPWR Instructor and Trainee Technological Competence

Both CPWR instructors and trainees reported their level of technological competence. Technological competence included two related characteristics of CPWR Instructors and trainees: (1) Comfort; and (2) Skill.

Trainees' Comfort with the Technology. Trainees reported their comfort in attending online training. As shown in Figure 11, the vast majority (88%) of respondents indicated that they were Very Comfortable or Comfortable in taking additional courses online. However, a small contingent did state that they were only Somewhat Comfortable or even Somewhat Uncomfortable taking distance learning courses.

Figure 11. Trainees' Comfort in Taking Distance Learning Courses.
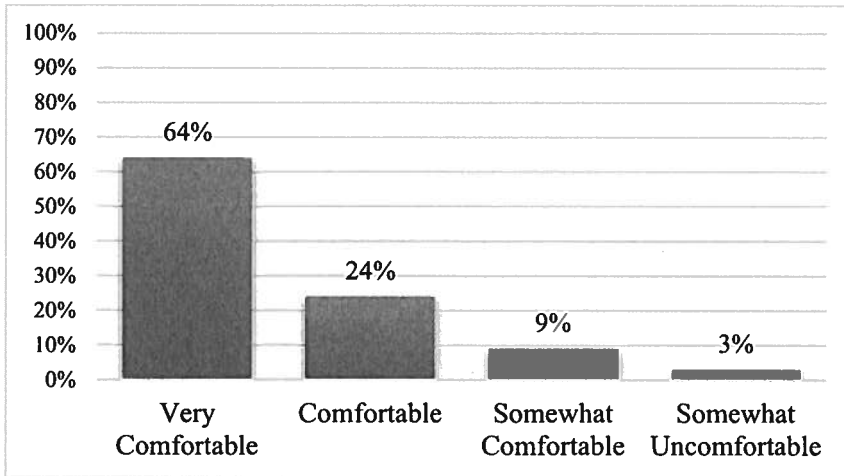
Note. N=75.

Trainees' Skill in Using the Technology. However, trainees reported somewhat less confidence in their skill in using the distance learning format to attend the online courses. As shown in Figure 12, the majority of respondents (74%) stated that they were Skilled or Somewhat Skilled with the online format. A smaller percentage indicated that they were Very Skilled with one respondent indicated minimal skill in using the technology.
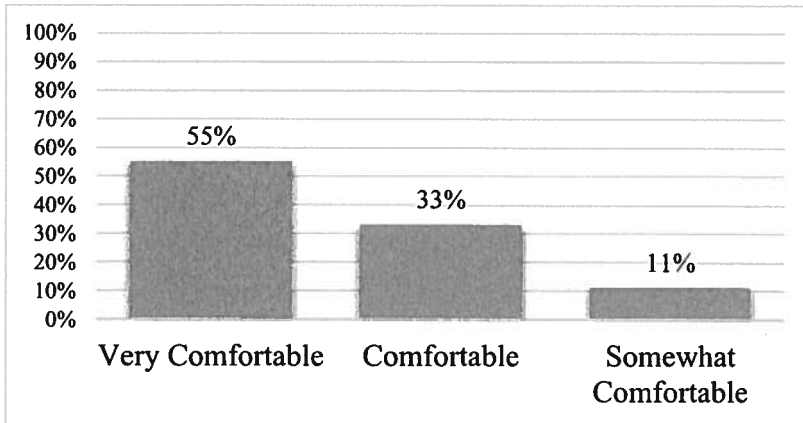
Figure 12. Trainees' Skill in Using the Distance Learning Technology.
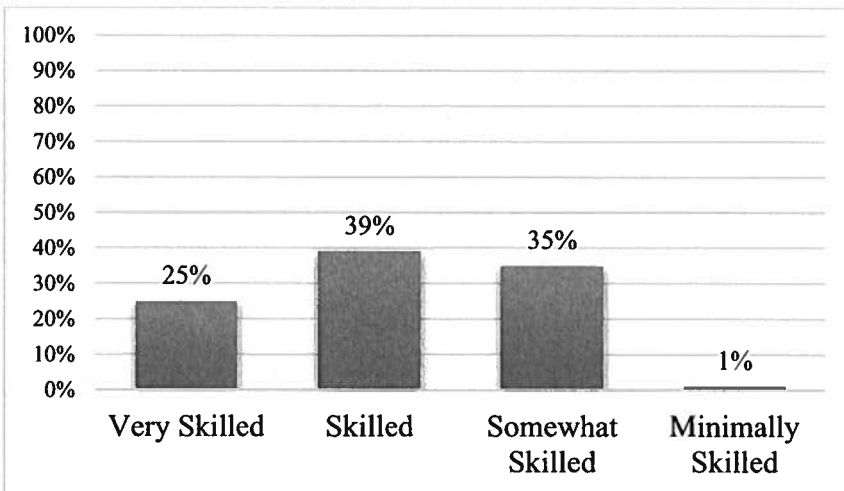
Note. N=75.

CPWR Instructors' Comfort with the Technology. CPWR Instructors reported their comfort with distance learning to deliver additional online trainings (see Figure 13). The vast majority of instructors (88%) reported that they were Very Comfortable or Comfortable with using the distance learning format with a small percentage indicated that they were only Somewhat Comfortable with the technology.

Figure 13. Instructors' Comfort with the Distance Learning Format.

Note. N=9.

Instructors' Skill in Using the Technology. Relative to reported comfort, CPWR instructors reported less confidence in their skill in using the distance learning technology. As depicted in Figure 14, the majority of instructors stated that they were Skilled in using the distance learning technology. A smaller percentage indicated that they were Somewhat Skilled with the smallest percentage reporting that they were Very Skilled in using the technology.

*Figure 14. Instructors' Skill in Using the Distance Learning Technology.*
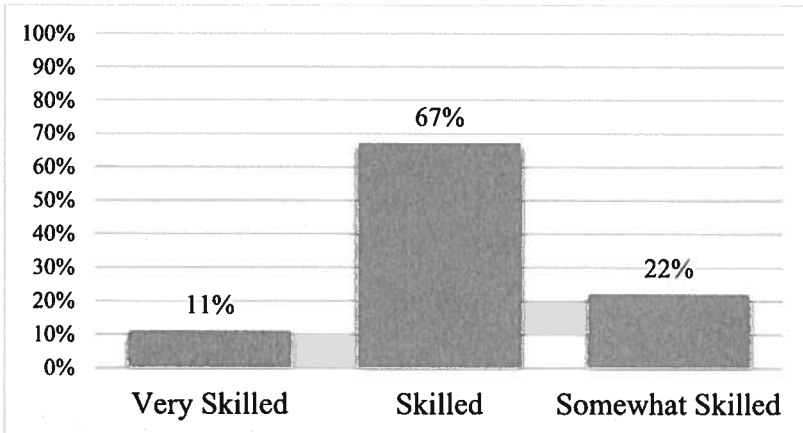
Note. N=9.

Online Training Courses

Training Attended by Trainees. Of those reporting, slightly more than half (56%) of the trainees attended the COVID-19 Awareness (1-hour) training. As Figure 15 shows, 44% of the trainees attended the ICRA/COVID-19 Awareness (6-hour) training.

Figure 15. Online Trainings Attended by trainees.
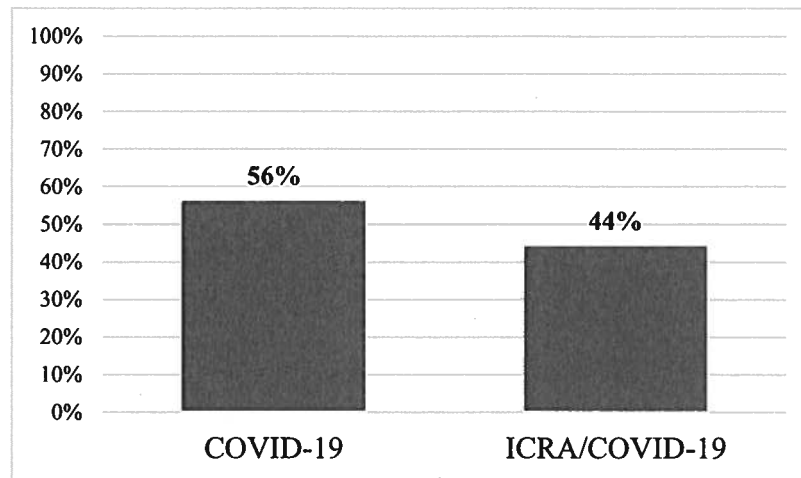
Note. N=75.

Trainings Presented by CPWR Instructors. The majority of CPWR Instructors reported experience presenting both distance learning courses. Of those responding, all instructors had presented the ICRA/COVID-19 Awareness (6-hour) training , whereas all but one instructor had also presented the COVID-19 Awareness (1-hour) training (see Figure 16).
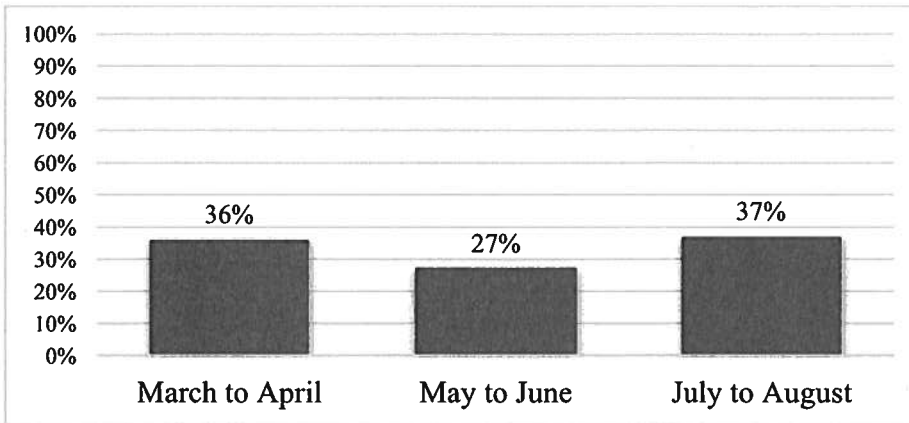
Figure 16. Online Trainings Presented by CPWR Instructors.
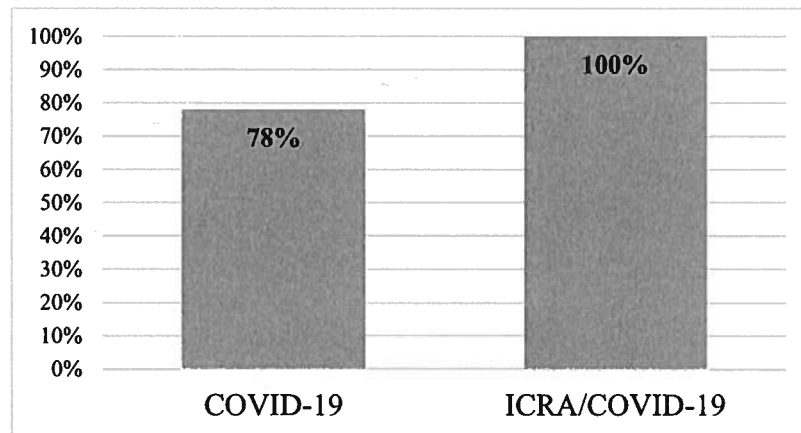
Note. N=9.

Date Trainee Attended Training. The dates trainees reported attending the distance learning training were fairly evenly distributed. As shown in Figure 17, the largest percentage of respondents attended training during July to August (37%) and March to April (36%), whereas 27% attended in the May to June timeframe.

Figure 17. Months Trainees Attended Online Training.

Note. N=75.

Date CPWR Instructor Presented Training. CPWR Instructors reported presenting the online trainings fairly consistently over the 6 month timeframe (see Figure 18). Eight of the nine CPWR Instructors reported presenting the trainings during the beginning of the pandemic (89%) with a large majority also presenting during May to June (78%) and July to August (78%).

Figure 18. Months CPWR Instructors Presented Online Training.
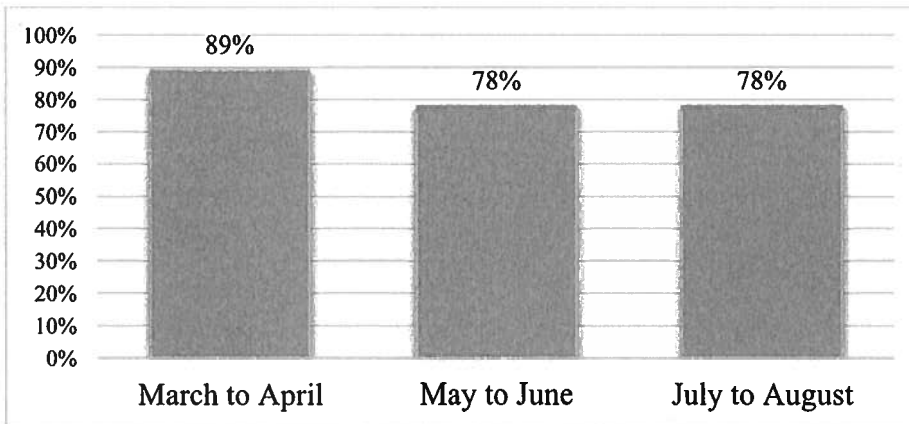
Note. N=9.

Training Effectiveness Ratings

Descriptive Analysis. Descriptive statistics were conducted on the *CPWR Distance Learning Evaluation* for each item and category of effectiveness according to survey respondent of training attended (trainees, CPWR Instructors). Table 11 presents the means, standard deviations, and number of survey respondents. Item statistics for CPWR Trainee Course Evaluations are presented in Appendix D.
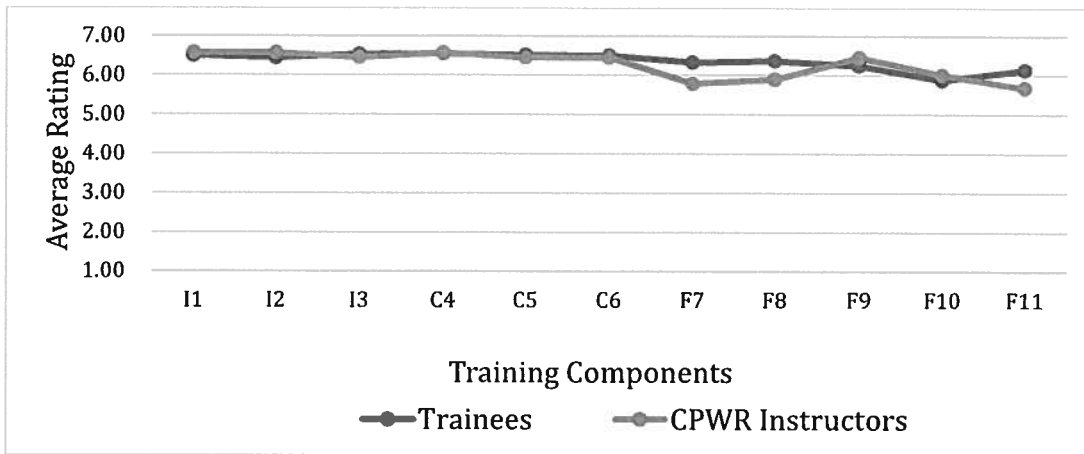
Table 11. Descriptive Statistics of Training Effectiveness Ratings for Training Participants and CPWR Instructors.

Evaluation Items	Trainees			CPWR Instructors		
	N	Mean	SD	N	Mean	SD
Instructor Effectiveness	**91**	**6.48**	**0.85**	**9**	**6.52**	**0.44**
1. The training was properly coordinated and arranged.	91	6.49	0.83	9	6.56	0.50
2. The module(s) were well-organized.	91	6.43	0.95	9	6.56	0.50
3. The instructor(s) were well-prepared.	91	6.52	0.99	9	6.44	0.50
Training Content Effectiveness	**89**	**6.51**	**0.91**	**9**	**6.48**	**0.50**
4. The training adequately covered the learning objectives.	91	6.54	0.84	9	6.56	0.68
5. The content was accurate and up-to-date.	90	6.50	0.99	9	6.44	0.50
6. The training was presented according to the needs of the trainees (e.g., language, cultural, educational level).	89	6.49	1.01	9	6.44	0.50
Training Format Effectiveness	**90**	**6.18**	**0.90**	**9**	**5.96**	**0.72**
7. The time allotted for each module was sufficient for my learning.	91	6.32	0.96	9	5.78	0.92
8. The activities and exercises were relevant and reinforced the learning objectives.	91	6.36	0.94	9	5.89	0.99
9. The group discussions were helpful in exchanging ideas with others.	90	6.24	1.05	9	6.44	0.68
10. I contributed comments or questions during the training.	91	5.86	1.34	9	6.00	0.67
11. The training format enhanced my learning.	91	6.13	1.16	9	5.67	1.15
General Effectiveness Items						
12. Content Effectiveness	91	6.49	0.70	9	5.78	1.75
13. Instructor(s) Effectiveness	91	6.65	0.72	9	5.89	1.79
14. Format Effectiveness	91	6.33	0.81	9	5.67	1.76
15. Overall Effectiveness	91	6.43	0.94	9	5.67	1.70

Note. Instructor, Training Content, and Training Format Effectiveness items rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). General Effectiveness Items rated on a scale ranging from 1 (Very Ineffective) to 7 (Very Effective).

In general, trainees and CPWR Instructors report *high ratings of effectiveness across items with the highest ratings provided to items associated with Instructor Effectiveness (see Figure 19)*. Importantly, both trainees and CPWR Instructors report, *on average, the lowest ratings for training method effectiveness*. However, results also demonstrate that *trainees attending the distance learning sessions report higher levels of training effectiveness, on average, than CPWR Instructors presenting the sessions.*

Figure 19. Trainees' and CPWR Instructors' Mean Ratings of Training Effectiveness.

Similar results are evidenced in the ratings of overall effectiveness (see Figure 20). The trainees report, on average, the distance learning format is highly effective and cite Instructors, overall, as the most effective component of the training. CPWR Instructors, while providing generally positive ratings report lower ratings relative to the trainees, indicate that Content was the most effective aspect of the training. Noteworthy, while the ratings are highly positive, both sets of respondents provide the lowest ratings of overall effectiveness to the *distance learning format* suggesting room for improvement to training in this format.

Figure 20. Trainees' and CPWR Instructors' Mean Ratings of General Training Effectiveness.
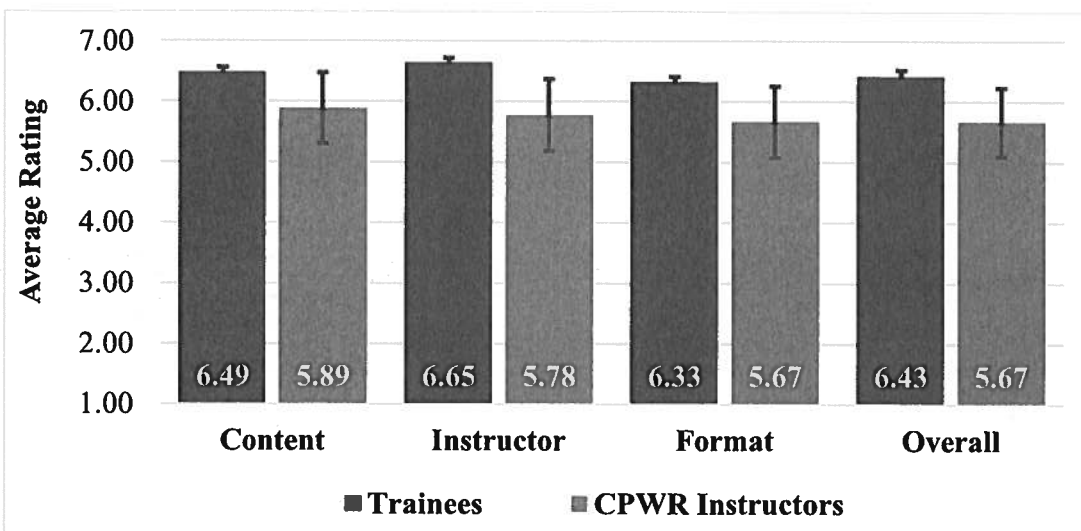
Post-Training Learning and On-the Job Performance

Descriptive Analysis. Descriptive statistics were conducted on the items and categories associated with learning and performance of the *CPWR Distance Learning Evaluation*. Table 12 presents the means, standard deviations, and number of survey respondents.

Table 12. Descriptive Statistics of Trainee's Post-training (3 to 6 months) Learning and Performance Outcomes.

Evaluation Items	Trainees		
	N	*Mean*	*SD*
Training-related Knowledge and Skills	**79**	**6.56**	**0.46**
1. Understand the hazards/dangers of working with/around the topic(s) taught in this class.	80	6.55	0.61
2. Recognize health hazards on the job.	80	6.59	0.52
3. Recognize unsafe work conditions and practices.	80	6.60	0.51
4. Recognize the signs and symptoms that may be related to hazardous environments and exposures.	80	6.58	0.52
5. Understand when a job hazard needs me to take immediate action.	80	6.54	0.52
6. Use appropriate personal protective equipment.	80	6.69	0.46
7. Understand my legal rights.	80	6.31	0.80
8. Understand the importance of jobsite safety plans and emergency response planning.	79	6.65	0.50
On-the-job Performance	**91**	**6.25**	**1.02**
9. The training prepared me to work safely during the COVID-19 pandemic.	91	6.33	1.00
10. I have used the content and skills learned in this training on the job.	91	6.18	1.24
Training Support in the Workplace	**91**	**6.40**	**1.08**
11. My supervisor supports the use of the skills learned in this training	91	6.35	1.13
12. My organization supports the use of the skills learned in this training.	91	6.45	1.09

Note: Items rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

Learning. In general, trainees report *high levels of safety-related knowledge and skills three to six months following training* (see Figure 21). These ratings suggest that trainees maintained the enhanced knowledge and skills learned reported in Study 1 (directly following the distance learning courses). Noteworthy, trainees reported the *highest ratings for the knowledge and skills associated with appropriate use of personal protective equipment and importance of jobsite safety plans and emergency response planning*, whereas they provided the lowest ratings for *Understanding their legal rights*.

Figure 21. Participant's Learning 3 to 6 months Following Training.
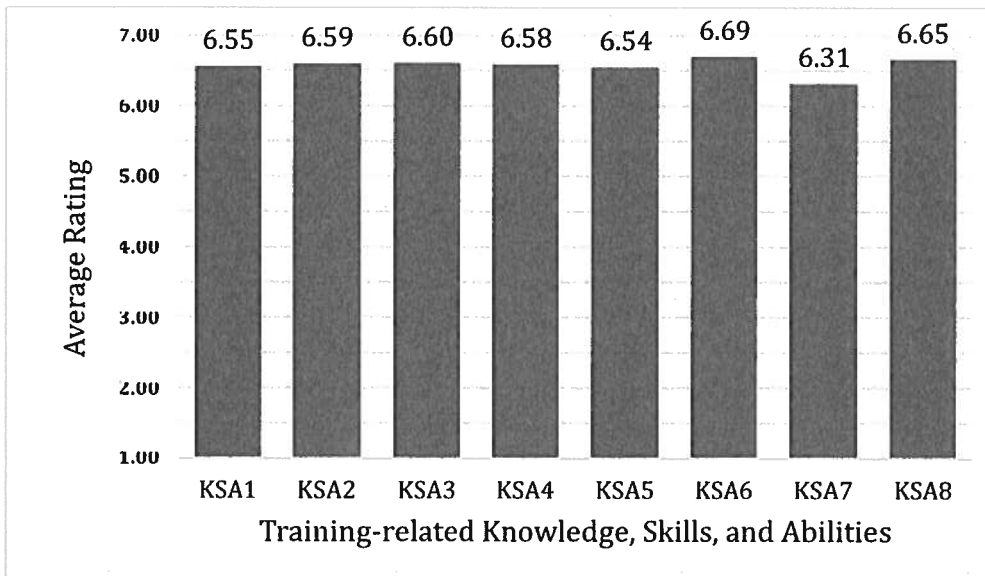
Note. N=91. Items rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). KSA=Safety-related knowledge and skill items.

On-the-Job Performance and Support. The remaining items were focused on the transfer of the safety-related knowledge and skills learned during training to improved safety on the job and support for this safety at the worksite (see Figure 22). Results demonstrate that the trainees reported the online courses not only prepared them to work safely on the job, but they had also used the training to ensure their safety at the worksite. Along a similar vein, the trainees cited that there was strong support for the training at the worksite, with slightly higher ratings given to the organizational support relative to supervisory support for working safely.

Figure 22. Participants Training-related Safety Performance and Support at the Workplace.
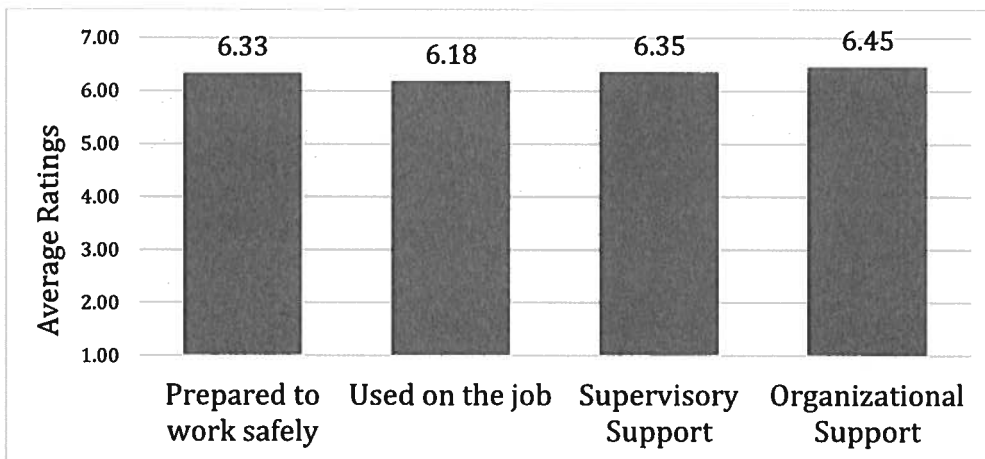
Note. N=91. Items rated on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

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Performance of Trainer's Attending Training. One additional item on the CPWR Distance Learning Evaluation was included to assess the effectiveness of the distance learning for trainers who had attended the courses. More specifically, those participants who had subsequent responsibility for training others were asked to indicate the extent to which they felt the distance learning course had prepared them to train their members. As show in Figure 23, 74% of the trainers responding reported that, as a result of the distance learning course, they were either *Very Prepared* or *Prepared* to train others. While not a specific safety-related item per se, this serves as an indicator of transfer of the training to improved performance for trainers.

Figure 23. Distance Learning in Preparing Trainers to Train Their Members.
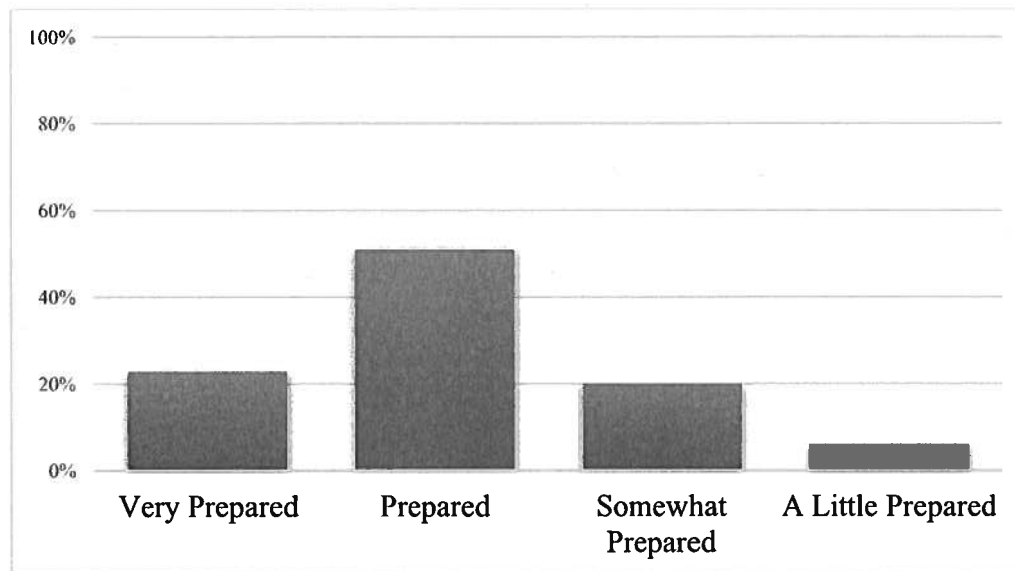
Note. N=35.

Comparative Analyses of Trainings Using Distance Learning Format

As a result of the pandemic, the transition to remote/online learning was rapid and unexpected. The trainings delivered during the COVID-19 pandemic were designed and presented in real time to meet the immediate and on-going health and safety needs of the workers. Additional analyses in Study 1 addressed questions regarding the effects of various training elements on learner outcomes directly following training. To complement these findings, additional analyses were conducted to compare the influence of training design elements and trainee characteristics on longer-term learner outcomes (e.g., 3 to 6 months following the training).

I. Training Design and Delivery

Length of Training. Within the occupational health and safety domain, highly engaging, hands-on face-to-face training is considered the gold standard. The use of distance learning in delivering worker health and safety training is generally regarded as less interactive and less engaging. Therefore, it is expected that the less engaging training would be associated with reduced learner attentiveness, particularly for longer courses. It was asserted that the length of distance learning courses would be inversely related to positive training outcomes (i.e., longer online courses would result in lower ratings). Comparative analyses of the COVID-19 Awareness (1-hour) and ICRA/COVID- 19 Awareness (6-hour) on learner outcomes were conducted. It should be noted that the ICRA-COVID-19 Awareness course was designed

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to be delivered in two blocks of 3 hour sessions. One-way ANOVAs were performed on training outcomes (see Appendix E). Results of the analyses revealed *no significant differences among longer-term (3 to 6 months post-) training outcomes according to length of training.* These findings are consistent with Study 1 results examining effect of length of training on immediate training outcomes.

Date Attended Training. Various events occurring during the pandemic could likely impact training outcomes. For example, on April 27, 2020, the *NABTU and CPWR COVID-19 Standards for U.S. Construction Sites* were established. It was asserted that these historical events may have a significantly positive affect on learning outcomes of those attending the COVID-19 courses. Comparative analyses of the learning outcomes of those attending the COVID-19 courses during each 2 month block (i.e., March to April; May to June; July to August) were conducted (see Appendix F). The results demonstrated *no significant differences among reported safety-related knowledge and skills 3 to 6 months following training according to date attended training.* These results suggest that the phase of the pandemic also did not affect longer-term learning outcomes. These findings are consistent with Study 1 results examining the date of training attended on outcomes immediately following training.

II. Trainee Characteristics
Characteristics of the trainees themselves directly influence the effectiveness and impact of health and safety training. In order to gain a greater understanding of the role that trainee characteristics play in successful transition to the distance learning format, two broad categories of trainee characteristics were explored. The first set of characteristics include work and occupational experience and the second involve technological competence of the trainees.
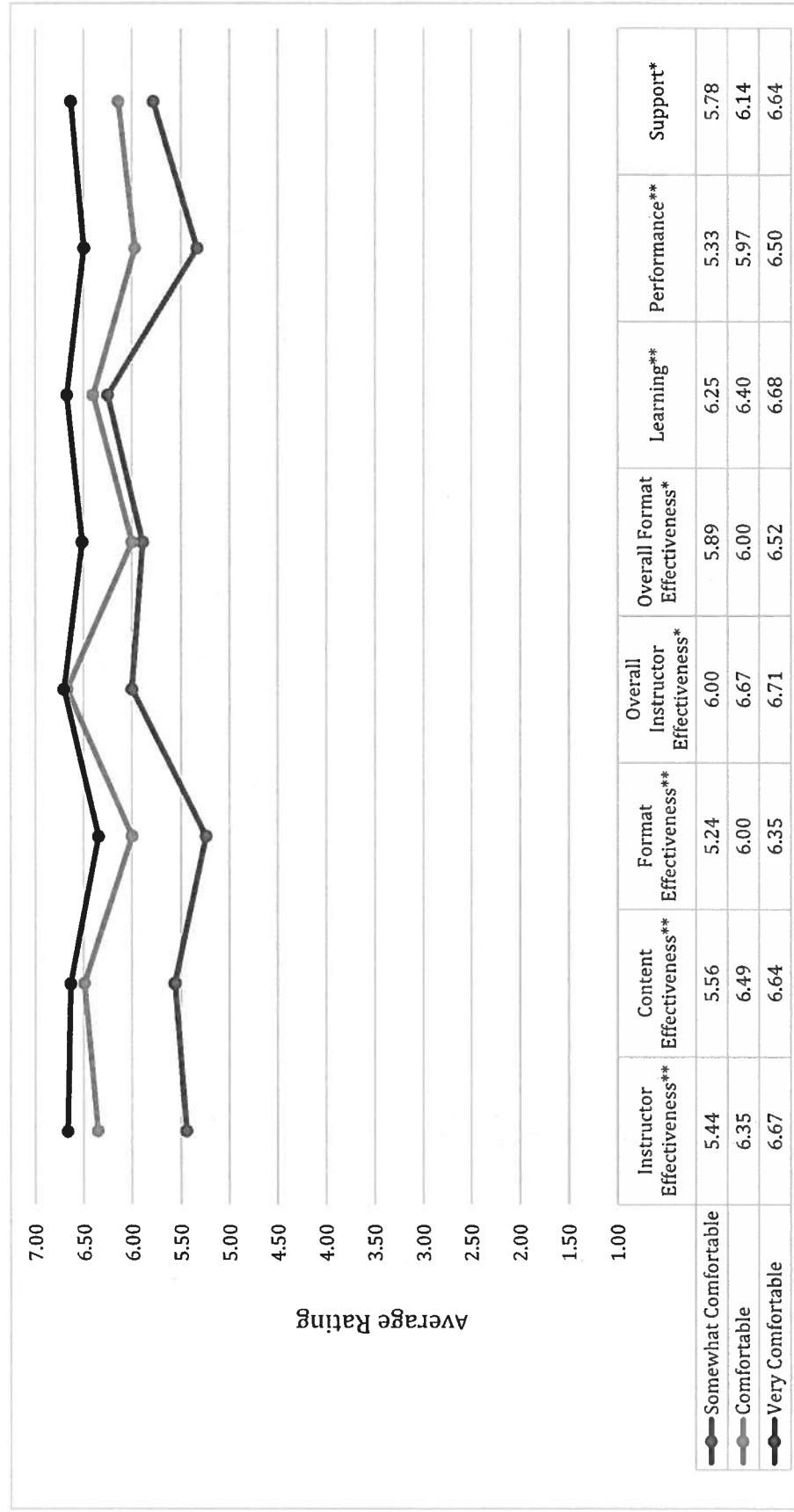
Work/Occupational Experience. The vast majority of respondents were journeyworkers (92%) with only 7 apprentices responding, thereby not allowing for comparisons. However, the occupational role they serve within the unions (member, trainer, union representative) varied among the respondents and allowed for comparative analyses. One-way ANOVAs were performed on training outcomes (see Appendix G). Results of the analyses revealed *no significant differences among longer-term (3 to 6 months post-) training outcomes according to occupational role of trainees.*

The respondents also represented a wide variety of trade memberships. Comparative analyses were conducted to explore the effect of trainees' trade membership on longer-term training outcomes (3 to 6 months following training). One-way ANOVAs were performed on training outcomes (see Appendix H). Results of the analyses demonstrated *no statistically significant differences in ratings of effectiveness, and longer-term learning, and performance outcomes between trainees from the various trades.*

Technological Competence. Because of the rapid pace of the transition to distance learning during the pandemic, technological competence of trainees quickly emerged as an essential element for training success. Similar to research in related domains, technological competence was measured using two related trainee characteristics: (1) Comfort; and (2) Skill.

Trainees' Comfort with the Technology. In the present study, trainees' comfort with the technology in attending online training ranged from *Very Comfortable* to *Somewhat Comfortable.* Comparative analyses were conducted to explore the effect of Comfort with the Technology on successful training outcomes. One-way ANOVAs were performed on effectiveness, learning, and performance ratings (3 to 6 months following training) for those who were Somewhat Comfortable, Comfortable, and Very Comfortable (see Appendix I). As graphically depicted in Figure 24, results of the analyses demonstrate the significant influence of trainees' Comfort with the Technology on many of the training outcomes (trainees' reactions, learning, performance).

Figure 24. Effect of Level of Trainee Comfort with the Technology on Training Outcomes.

	Instructor Effectiveness**	Content Effectiveness**	Format Effectiveness**	Overall Instructor Effectiveness*	Overall Format Effectiveness*	Learning**	Performance**	Support*
Somewhat Comfortable	5.44	5.56	5.24	6.00	5.89	6.25	5.33	5.78
Comfortable	6.35	6.49	6.00	6.67	6.00	6.40	5.97	6.14
Very Comfortable	6.67	6.64	6.35	6.71	6.52	6.68	6.50	6.64

Note. N=70. Effectiveness items rated on a scale ranging from 1 (Very Ineffective) to 7 (Very Effective). Learning, Performance, and Support items rated on a scale ranging from 1(Strongly Disagree) to 7 (Strongly Agree). **p<.001 Mean ratings of Instructor Effectiveness, Content Effectiveness (Somewhat Comfortable vs. Comfortable, Very Comfortable); Format Effectiveness, Learning, and Job Performance (Somewhat Comfortable vs. Very Comfortable). *p<.05 Mean Ratings of Overall Instructor Effectiveness, Overall Format Effectiveness, and Support (Somewhat Comfortable vs. Very Comfortable)
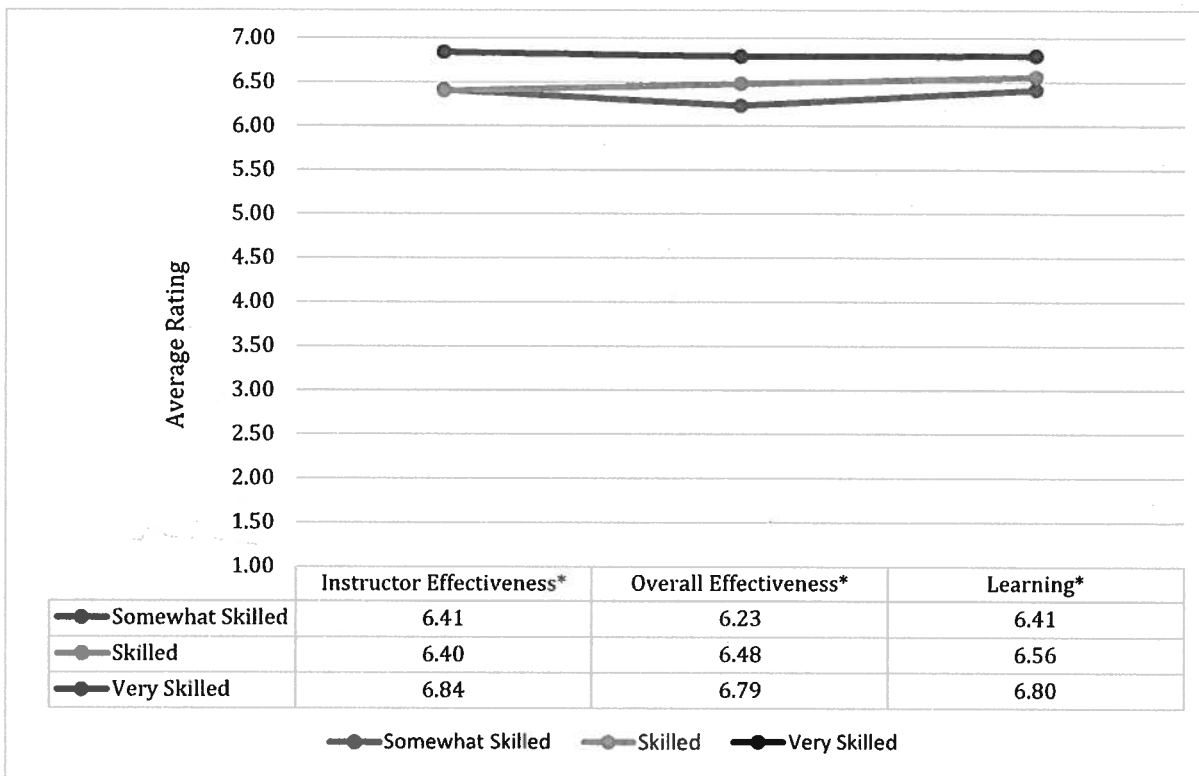
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Specifically, post-hoc comparisons revealed that trainees who were *Very Comfortable and Comfortable with Technology reported higher ratings of Instructor and Content Effectiveness than those who were Somewhat Comfortable with Technology.* Further, those *Very Comfortable with the Technology also report higher ratings of Format and Overall Effectiveness, as well as greater Learning and on-the-job Performance and Support than trainees who were only Somewhat Comfortable with the Technology.*

These results suggests that trainees' Comfort with Technology is an important factor for ensuring distance learning successfully meets trainees' work-related safety needs. Therefore, making certain that the trainees are comfortable with the technology is essential in achieving successful training outcomes when designing and delivering training in a distance learning format.

Trainees' Skill in Using the Technology. In the present study, trainees' Skills in Using the Technology to participate in distance learning ranged from Very Skilled to Somewhat Skilled. Comparative analyses were conducted to explore the effect of Skill in Using the Technology in achieving successful training outcomes for distance learning courses. One-way ANOVAs were performed on effectiveness, learning, and performance ratings (3 to 6 months following training) for those reporting they were Somewhat Skilled, Skilled, and Very Skilled in Using Technology (see Appendix J). As graphically depicted in Figure 25, results of the analyses show that Skill in Using the Technology significantly influenced trainings ratings of effectiveness (Instructor, Overall) and learning for distance learning courses.

Post-hoc comparisons showed that trainees reporting lower skills levels (Somewhat Skilled and Skilled) who *reported lower ratings of Instructor Effectiveness than trainees who are Very Skilled in Using the Technology.* Further, those *Very Skilled in Using the Technology also report higher ratings of Overall Effectiveness and greater Learning than trainees who were only Somewhat Skilled in Using the Technology.*

Figure 25. Effect of Trainee Skill in Using the Technology on Training Outcomes.

	Instructor Effectiveness*	Overall Effectiveness*	Learning*
●Somewhat Skilled	6.41	6.23	6.41
●Skilled	6.40	6.48	6.56
●Very Skilled	6.84	6.79	6.80

●Somewhat Skilled   ●Skilled   ●Very Skilled

Note. N=70. Rating scale ranges from 1 (Very Ineffective) to 7 (Very Effective). *p<.05 Mean Ratings of Instructor Effectiveness (Somewhat Skilled, Skilled vs. Very Skilled); Overall Effectiveness and Learning (Somewhat Skilled vs. Very Skilled).

Taken together, these findings demonstrate **importance of the technological competence for trainees**. The trainees' Comfort with the Technology, and to a lesser extent Skill in Using the Technology had a significant influence on their learning using the distance format. The results also provide preliminary evidence that less comfort with the technology negatively influences their ability to transfer the learned information to improved performance at the worksite. These results obviate the need for building and supporting trainees' confidence with and expertise in the distance learning format to ensure the greatest impact of the training.

Qualitative Findings

The findings from the descriptive and comparative analyses provide evidence of the effectiveness and impact of the occupational health and safety trainings designed and delivered in distance learning format. To gain a more thorough understanding of why these results occurred, qualitative data was gathered from trainees and CPWR Instructors. Specifically, the following sections highlight critical factors for success including best practices and lessons learned with the use of the distance learning format.

Meeting Workers' Training Needs. The COVID-19 Awareness and ICRA/COVID-19 Awareness trainings were designed and delivered in real-time to meet the workers' safety needs during the pandemic. Trainees, who included union members, union trainers, and union representatives were asked to elaborate on the extent to which the training met these needs including the use of the distance learning technology

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in delivering the training (see Appendix K). The comments were overwhelmingly positive that the training effectively met the needs of the attendees. Union representatives also stated that the training helped to keep members and trainers informed during the pandemic. Respondents reported that the content and materials were up-to-date and relevant. They also commended the instructors for actively encouraging discussions and interactions to engage the participants. The use of distance learning was commended as a must during the pandemic with many acknowledging they were learning the format in real-time.

Most and Least Valuable Aspects of Training Identified by Trainees. Trainees were asked to specify the most and least valuable aspects of the training. Several general themes emerged among the **Most Valuable** facets of training (see Appendix L). The respondents most often cited that the **content,** including the practical application to the workplace, was very valuable in enhancing their understanding of the virus, its transmission, and how to keep themselves and others safe at work ("The content was very helpful in teaching others in my work environment the importance of social distancing"). **CPWR Instructors' knowledge and experience** were identified as key drivers of success with the distance learning format. One respondent stated that "the online training worked for me because of very good information and very good instructors who kept us engaged throughout." CPWR Instructors' learning methods are characterized by a **highly interactive approach** that included discussions and question and answer sessions and cited as instrumental to the positive learning experience. In particular, respondents indicated the importance of the **breakout sessions** used for small group exercises and discussions that engage learners and encourage information sharing. Use of the **Zoom platform** that allows for trainers and trainees to see one another and follow the PowerPoint slides in a synchronous format also helped to simulate the traditional face-to-face format. Respondents also noted that, while they preferred the face-to-face format, they were grateful to CPWR who "made use of distance learning techniques which made it inclusive to a wide range of students during a time when in-person training is impossible."

Trainees also commented on the **Least Valuable** facets of training (see Appendix M). Comments regarding least valuable aspects of the training centered around the use of distance learning. Several respondents stated that **face-to-face is their preferred format,** with some citing that the **transition was unplanned** and they were still **acclimating to the new distance learning format** ("Change is always tough"). A few of the respondents were critical of the learning methods, particularly the **limited interaction** with one stating "As always, I miss the in-person interaction and discussions not available because of COVID." The use of distance learning caused related issues of difficulty raising questions during class and breakout discussions. Inability to see fellow trainees in person during class also created **issues that interfered with learner engagement.** One trainee cited that a knowledge assessment would have helped with **gauging learner understanding** during the course. These issues are exacerbated by the **technical issues experienced by the trainees** including weak Internet connections and use of smartphones to attend classes. It should be noted, however, that the **largest number of responses were generally positive** and indicated that there were no aspects that were invaluable ("I found value in all of it").

Strengths and Weaknesses of Training Identified by CPWR Instructors and Union Trainers

Information regarding the strengths and weaknesses of the training from the perspective of trainers was gathered by trainers attending the training as well as CPWR Instructors presenting the training (see Appendix N). With respect to **strengths,** the **knowledge and expertise of the instructors** were cited as a major strength of the training. Their **use of breakout rooms and discussions** engage learners and reinforce the concepts presented. Trainers also reported that **content** of the training was **informative and relevant** to the **issues facing workers during the pandemic.** CPWR instructors stated that the **training materials and content was adapted to facilitate presentation** in the distance format. Importantly, the instructors and CPWR were praised for the conversion of the training to **meet the immediate needs of**

the workers. One respondent stated that the "distance learning provided timely and job site relevant training to union members and signatory contractors who were returning to work after being told to shelter in place. We all needed immediate guidance on how we move forward completing projects and how we all stay safe while doing it."

The **weaknesses** of the training centered around **the limitations that the distance learning format poses relative to face-to-face instruction.** The trainers and CPWR instructors express a **preference for the in-person interactions and discussions.** They further reported that without the ability to see non-verbal cues, it was difficult to "read the room" and gauge the level of understanding, particularly when the participants did not have their cameras on at all times. While the **breakout sessions** simulated the in-person small group exercises, trainers reported that they were difficult to manage. The **hands-on exercises and demonstrations** were a greater challenge for the distance learning format. **Characteristics of the trainees** were also cited as problematic (e.g., level of interest, attention span, technological competence). Trainers and CPWR instructors reported that **technical** (volume levels) and **logistical issues** (time zones) presented additional challenges in the distance learning format.

Challenges Training Identified by CPWR Instructors and Union Trainers

Challenges to using the distance learning format in providing occupational health and safety training were also identified from the perspective of trainers (CPWR Instructors; Union Trainers). Two overarching themes emerged across respondents (see Appendix O). The first general category was related to **technological issues.** These challenges included having appropriate **equipment** (computers versus smartphones) and **Internet accessibility** that were capable of supporting the chosen platform as well as the **learning curve** associated with using the technology (e.g., sharing screens, being camera-ready). The second category of challenges were related to the use of the technology to support **interactions and engagement of learners** in the format (e.g., use of additional instructors).

Best Practices/Lessons Learned

Based on their experiences using the technology, CPWR Instructors identified best practices and lessons learned in using the online format for worker health and safety trainings (See Appendix P). Consistent with the previously reported findings, the instructors cited that, because of their expertise, **there was preference toward traditional face-to-face training.** However, the **safety and flexibility of the distance format** was acknowledged as critical during the pandemic. They stated the importance of using various types of **interactive methods and techniques** (e.g., different styles of breakout sessions, question and answer polling, Kahoot, Quizlet) **to keep the learners engaged and attentive** throughout the training. **Instructor preparation** was identified as the most critical factor for success and, **optimally at least two instructors** should be used to deliver the training. Similar to the face-to-face format, it was suggested that **instructor coordination meetings** are necessary to allow for greater management of the instructional team (lead instructor, co-instructor, technology assistant). Further, **practice** in delivering the content in the distance platform (e.g., Zoom) prior to the actual training was fundamental. This practice involves testing of lighting and camera placement to be "camera ready" for the session. If possible, use of two monitors for each instructor allows those instructing to **view the content and online class simultaneously** and affords the opportunity to "read the room" while teaching (more similar to the traditional classroom experience). One instructor cited that "As the leader in safety training, we should strive to be the best not only with the materials we teach, but also how we present ourselves on screen." They also acknowledged that this **requires trainers to be as skilled as possible** on the distance technology.

The Union Trainers and Representatives also provided information regarding Best Practices/Lesson Learned. Similar to the CPWR Instructors, they felt that during the pandemic, distance learning is "the safest most effective method via Live online training." To standardize this new format, trainers suggested

that structured **distance learning orientations** should be held. The trainers also felt that a **"Zoom etiquette"** should be developed and distributed to trainees to reduce unnecessary interruptions and distractions during training. Along the same vein, trainers should receive a formal **orientation** to the platform that includes current information on training using distance learning format, particularly for courses that require a great deal of hands-on instruction.

Suggestions for Improvement

Lastly, those receiving the distance learning training were asked to provide suggestions for improvement (see Appendix Q). Overall, the **comments were very positive** and highlighted key characteristics for success as well as suggestions for improvement. Consistent with the quantitative ratings, **instructors were cited as essential elements for effectively delivering training** in a distance format (e.g., "Instructors were knowledgeable and informative"). One respondent suggested, given their expertise, that the instructors should **include more personal experiences to highlight the content.**

Similarly, while the comments were generally positive with the content provided, they suggested that it is important to **keep the content informative and relevant to the learners.** In particular, respondents indicated that more in-depth and advanced information could be presented based on participants' needs and that **more industry- and organizationally-specific content** would enhance the learning in general. While participants felt the pace of the course was appropriate, consideration should be given to **adding breaks.** Participants also **requested copies of course materials** (e.g., PowerPoint slides, handouts) to facilitate note-taking during the training and use as reference following course completion.

Several suggestions were given that addressed use of the distance learning in general and Zoom in particular. The respondents cited that **technical difficulties** (Internet speed) interfered with the training and the discussions and sharing of information associated with the face-to-face training is more difficult in the Zoom format. They suggested using **more methods and techniques that garner interaction and participation from the trainees** during the presentations (e.g., polls, Kahoot-type game or quiz) might encourage discussions **and sharing of information and real world examples from trainees.** They also suggested that these polls and quizzes **assess learner knowledge and understanding during the course** and allow for a **review of key points** and draw in more discussion. It was also suggested that this could occur prior to the session by having **the trainees email questions and areas of concern prior to the course** that could be highlighted during discussions. Another very important area of concern is in **conducting hands-on demonstrations of equipment remotely.** Several respondents suggested **providing the personal protective equipment to all participants and trainers ahead of the training session.** In this way, it is on-hand for the trainers and trainees for live demonstrations during the session and to use at the worksite following the training.

Noteworthy, in addition to suggestions for improvement there was a **large portion of comments that were generally positive and appreciative for CPWR providing the training during the pandemic** ("It was well done. I have seen several presentations on COVID-19 and this was right at the top of the list."; "Safety can never stop no-matter what obstacle are put in front of us. Great job for CPWR staff and instructors to adapt and overcome to reach the members").

Collectively, these qualitative comments highlight important themes for the successful design and delivery of occupational health and safety courses using distance delivery. Suggestions were presented that consider the needs of both the trainees and the trainers. In particular, respondents felt that additional information is critical for those who are gaining experience and knowledge with the distance format. It should be noted that the best practices, lessons learned, and suggestions for improvement posed by the respondents are consistent with those reported for successful outcomes in related domains (Dietrich, et al. 2020; Dowling-Hetherington, et al. 2020; Khurshid, et al. 2020, McKinnie, 2020; NIEHS, 2020; US

Department Education, 2010). Therefore, general principles for excellence in distance learning for occupational health and safety training have been developed and are presented in the next section.

General Principles for Excellence in Distance Learning for Occupational Health and Safety Training

The distance learning courses (COVID-19 Awareness; ICRA/COVID-19 Awareness) were designed and developed in response to a pandemic, but moving forward, its effectiveness will depend on the interest and buy-in from the trainees and their organizations. It is important that trainees, trainers, and training organizations are invested in the distance learning online experience.

The following section highlights general principles to assist those designing and delivering occupational health and safety training in a distance learning format to achieve the desired learning and performance outcomes. These recommendations are presented for trainers and training organizations to consider prior to, during, and following the training event and are consistent with the recommended best practices in adult learning and instructional excellence in occupational health and safety training.

Before Training

One of the overarching principles for training excellence in the distance learning format is being prepared and organized prior to the training session. The following are advanced to enhance the preparation for and organization of the training.

1. Assess trainees' needs. It is critically important to **learn about trainee needs and preferences** ahead of the training session. This information can be gathered when trainees register for the session and can be included in a short survey that assesses trainees' needs (e.g., technological, language, organizational and industry-specific) to enhance relevance and better ensure interaction during training. Trainees can also be encouraged to email the instructor with specific questions or industry- trade- or organizationally-specific questions prior to the session. In addition, trainees can be encouraged to post questions and share information on a social learning page or message board to encourage participation and interaction among trainees before the course starts. The more one that is known about the audience in advance of training, the more likely that the training will be relevant and useful in enhancing safety at their workplace.

2. Provide orientation trainings for trainers and trainees. Participants have uneven access to and varied expertise with the technology. Therefore, to create a supportive virtual environment conducive to learning, orientation training is encouraged for both trainers and trainees. **Orientation training provides basic information and guidelines that are expected for all participants.** These sessions include structured information including: fundamental of accessing and using the platforms (e.g., Zoom; https://zoom.us/events); expectations for the virtual classroom (roles and responsibilities); distance learning etiquette (see Table 13); and a checklist that trainees and trainers can use before, during, and following the training.

Table 13. Recommended Trainee Etiquette for Distance Learning Success

Etiquette for Online Training Success
• Download training information ahead of time, including all handouts and PowerPoints so that information is available during training even if technical difficulties arise.
• Complete all pre-training assignments and assessments to provide any specific needs or questions to the instructors before training begins. In addition, any specific questions about the content or job/trade-specific questions should be posed ahead of the first session so that they can be addressed during training.
• Test your computer compatibility with the platform ahead of the training. Log-in to the session at least 5-10 minutes ahead of time to ensure that it is running properly.
• Present a professional online presence. Dress professionally and be aware of your online background.
• Limit distractions/multitasking. Trying to pay attention to multiple devices or tasks decreases the quality of learning. Instead, focus on the training.
• Mute your microphone when not speaking to avoid adding unexpected background noise into the training session.
• Leave video/camera on at all times during class (do not revert to blank screen).
• Share comments and questions in text chat and raise hand to ask questions.

3. Post all course-related information. Along the same vein, trainers should **post and make available all course information**, including training objectives, course outline, materials (e.g., PowerPoint slides, handouts) and training agenda, to participants *in advance* **of the training session.**

4. Practice, practice, practice (with feedback). Trainers should **conduct a rehearsal of their presentation in the distance learning format**, particularly in the case of new content and/or instructional techniques. This is not meant to be exhaustive, but rather a run through of each topic using all the tools for the presentation in the sequence that will appear in the training, at least once. This can be done informally, or more formally as part of a demonstration to a more experienced trainer with feedback.

5. Conduct Trainer Coordination Meetings. Similar to the face-to-face format, the lead trainer should **coordinate trainer meetings (pre-training, following each training session) to manage the activities of the training team** (lead trainer, co-trainer, technology assistant). These meetings clarify expectations and roles and responsibilities to assist trainers in honing the requisite skills to meet the needs of the learners in the distance learning environment. Historically, these sessions have been utilized as part of the instructional activities for the face-to-face training sessions, and this strategy should be similarly incorporated into the instructional activities for the distance learning courses. Worth noting is that these sessions tend to occur informally between sessions and at the end of each day during face-to-face trainings. It is recommended that the informal session also be conducted as a short debrief for the online training.

During Training

Instructor knowledge and skill was consistently identified as a key driver of effective training in distance learning format. CPWR instructors are consistently recognized as leaders in use of interactive training techniques that encourage active participation, knowledge sharing, and integration of relevant content that can be directly applied to the workplace. The following is offered to support these techniques in the distance learning format.

6. Encourage active participation and interaction. Similar to recommendations for face-to-face training, instructors are encouraged to **solicit specific regular interaction from the learners.** A

hallmark of the CPWR Worker Training is use of exercises, activities, and discussions to engage trainees and enhance communications and information sharing. This practice is equally critical for success in distance learning but may entail using unfamiliar technology and techniques (polls, breakout sessions, Kahoot!, Quizlet). These techniques also will allow the trainers to "read the room" virtually by checking for learner understanding in real time. It is important that careful attention is given to using the technology in ways that the platform to ensure participation. For example, while trainees are familiar with face-to-face small group exercises, online breakout sessions involve appropriate techniques to ensure effectiveness (see Table 14). Similarly, trainers can encourage regular use of the platform during lectures and group discussions (raising hand, using chat) to maintain attention and participation during less interactive sections of the training.

Table14. Best Practices to Encourage Participation in Distance Learning.

Best Practices: Breakout Rooms
• Set expectations at the beginning of the breakout exercise.
• Include a mix of participants for each breakout session
• Provide clear instructions for the breakout activity
• Assign a facilitator for each breakout room
• Provide the expected duration of the breakout session
• Indicate how trainees can get assistance, if needed, during the breakout session

7. If possible, have a co-instructor for each session. The **co-instructor can assist with content delivery, the technology** (technical difficulties of trainees, chat responses), **and assume the role primary instructor in the case of technical difficulties** of the primary instructor (screen freezing, connection dropped). Technical issues may interfere with training and how they are handled is important. Having at least two instructors, one of whom supporting technical needs, facilitates this process.

8. Be flexible and open. Being organized does *not* mean being inflexible. It is important that trainers create an open and flexible learning environment to accommodate the range of trainees learning needs and make them feel respected and supported. **Monitor pace and content according to trainees' level of understanding.** Being organized will allow for flexibility when needed (when the unexpected occurs).

Following Training
As with face-to-face instruction, training should be continuously improved. In addition, the distance learning format provides additional opportunities sharing up-to-date information and resources following training.

9. Evaluate training to ensure continuous quality improvement of the training. At the conclusion of the training, **courses should be evaluated to assess effectiveness and learning outcomes.** These evaluations **should be completed by both the trainers and trainees** to gather multiple perspectives of the training. This information can be synthesized to ensure more accurate and thorough depiction of effectiveness and provide feedback for continuous quality improvement of the training.
10. Share resources and information. It is important to continue the information sharing and continued access to resources following course completion. The distance learning format is a very viable and efficient means for sharing this information. For the trainees, these resources include **recordings of the online training, training-related information from the CPWR Clearinghouse, and other relevant online resources.** For trainers, it is also helpful to provide the most current information on **best practices and recommended new learning technologies and platforms.**

These recommendations are offered as a working document (see Appendix R) such that they may be revised as additional evidence is gathered. That is, as additional platforms and learning methods are used to deliver occupational health and safety training, these recommendations should be further developed.

General Discussion and Suggestions for Future Research

The current project involved a comprehensive evaluation system designed to assess effectiveness of distance learning in delivering occupational health and safety training. The evaluation system was designed to address the following: (1) comparisons of safety training delivered in a face-to-face versus distance learning format; (2) effectiveness of newly developed online COVID-19 Awareness courses in addressing emerging worker safety needs; and (3) best practices and lessons learned for enhancing effectiveness of the use of distance learning for delivering occupational health and safety training courses.

The current report provide preliminary evidence that distance learning is an effective method for delivering occupational health and safety training. **Comparisons of training outcomes gathered directly following training revealed that, that while face-to-face delivery was rated slightly higher, the distance delivery format was very effective and resulted in high levels of learning.** Importantly, **no** **significant differences in safety-related knowledge and skills were found** between participants in the face-to-face versus online training suggesting **that high levels of learning were occurring regardless of format.**

The study of effectiveness and impact of the online trainings on longer-term training outcomes supported these findings. Both **those receiving the training as well as those CPWR instructors who provided the training reported high levels of effectiveness (content, format, instructor).** The evaluation also revealed that the COVID-19 curriculum, newly designed and delivered by distance learning format, resulted in **enhanced safety-related knowledge and skills 3 to 6 months following the training and led to improved worker safety during the pandemic.** Therefore, the results suggests the **viability of using the distance learning format to successfully deliver a training designed in "real time" in response to an emergency event (pandemic).** However, moving forward, the results also provide insight into improving the continued use of distance learning.

The study also demonstrates the **use of real time evaluation to identify best practices and lessons learned that can be adopted for the new technology.** Across sources, the **instructors were recognized as key drivers of success** with respect to expertise in rapidly translating the learning principles used in the face-to-face training to the less familiar distance learning format. The distance instruction was **successfully designed and delivered following principles of adult instruction and excellence in instructional design** as a guide. The **best practices and tips for trainers and trainees expand upon these principles and provide general guidelines to be followed before, during, and following the training.** These guidelines are not exhaustive but are intended as a first step in the continuous quality improvement process for the online training.

Additional research is needed to continue our **understanding of the trainee characteristics and training features critical for success in technology-based formats** (Bell et al., 2017). The present findings suggest that trainees' technological competence is important to achieving desired training outcomes. More specifically, **trainees'** *comfort with* **and, to a lesser extent,** *skill in using the technology* **has a significant influence on perceptions of training effectiveness, learning and subsequent safety performance on the job.** However, it is not clear the extent to which these characteristics can be enhanced by orientation to the distance learning methods prior to training or supported by instructors during the training. Research in related disciplines have found that although Comfort with Technology is an important indicator of success (Chen, Kaczmarek, & Ohyama, 2020; Futch, et al., 2016; Rodriguez, Kingston, & Montanez, 2008), this characteristic tends to change very little over time (Cook & Thomson, 2020). Further research is needed **to gain a better understanding of its**

Suggestions to Improving COVID-19 and ICRA/COVID-19 Trainings in Distance Learning Format: Union Members, Union Trainers, and Union Representatives

Question: How could this course be improved?
Instructors
Instructors Expertise
Gary always is very informative in a relaxed and efficient manner.
Instructors were very knowledgeable on topic.
Instructors were knowledgeable and informative.
Very qualified instructors... Thanks Guys
Instructors could have included more personal experience to highlight the power point bullets.
Please ask Spence to speak up a bit.
Instructors: General Positive
Instructors did a great job.
As always, Gary did a fantastic job!
Both instructors did a great job!
The instructors did a very good job.
I think the instructors did a great job.
The Instructors did a great job with the online course presentation.
Thank you to all for putting on this training program.
Content
Current and Relevant
All in all, our members will benefit from the course as is and make them and their workplace safer.
Learned important facts about covid19 that were not discussed on the news.
The course provided helpful information based on what is known at this time.
Very informative course.
Continue updating as more becomes known.
We need to stress on the fact this is airborne, Droplets is a term for larger particle. Information is stating that airborne particles can be so small you cannot see them and that 6 feet is based on old research it can be further than that. With that I know PPE should be the last resort but mask might become a norm.
More Advanced/In-Depth Information
Provide information that is useful above an elementary level. The group in attendance were union managers and OSHA instructors.
More medical information pertaining to caring for someone or yourself infected with Covid-19.
More in-depth conversation about negative and positive pressure barriers when changing locations. Better description of the order and need for each.
Add more detail to the TTT. if a class is 8 hours for instructor to teach, TTT should be longer so you have added detail to share as you teach the class.

If you read the paper watch the news or follow your state guidelines and are involved with your State and City Building Trades this information is very redundant. Mostly common sense.
Had information most people knew.

More Industry- and Organizationally-Specific Information

I personally would have liked to have heard more about the current pandemic, and how sites that are in areas where they weren't shut down, how/what measures are being applied to the site, and tile/terrazzo trades specifically. While it's probably hard to get a good baseline on that as this is a fluid thing currently.
For me the course was really an overview of things that I already know about COVID-19 and prevention. The instructors tried to give ideas of how different trades may mitigate the exposure and observe the proper social distancing. The ideas were very generalized and leave a lot of unknowns for the people who take the course. I think this course might be more effective if given along with a company's adapted policies and procedures to comply with the new regulations so that people know what they actually need to do while working. If they were tied together it would help understand what precautions to take and how exactly to do so.
Not sure how you can improve it. A lot of information has already been out there because of the situation. Maybe discuss what your options are when your employer can't get the proper PPE but you are willing and wanting to work. Thanks for the class.
Talk more about plumbing related risks.
It could be more construction oriented.
The course could be improved by making it a little more industry specific for each trade. I know this would be a very difficult task.
More trade specific information.
Less time spent on the virus and more time on industry-specific preventive measures
It could have more information about the transmission and life expectancy of Covid-19 thru the ductwork systems on the jobsite.
In the discussions about hospital work make it more about protecting the worker not the patients.
Need to include how this safety affects our area
The guys weren't even from Massachusetts. Maybe a class related to our safety according to state would be better. Wouldn't recommend this class to a single person.
Very repetitive

Format

Pace/Length of Course

Some of the instructors went a little too fast in their presentation.
I thought the appropriate amount of time was spent presenting the material.
Seemed brief but to the point
Perhaps needs to be a bit longer.
Add one more break
1 more added break

Materials

Supply a pdf file containing the course material.
More PowerPoints

Please provide me with a copy of the PowerPoint presentation. Thank you for the class!
Include handout of course materials to be used for note taking.
It would be nice to receive the power point used in the class, so we could look it over ourselves later on if we had new questions come up. To be able to use the power point as a reference sheet.
Need video on set up containment
Use of Zoom Platform
Overall, I enjoyed this new platform of learning. Thank you
The core info is there, however the presentation needs work, I acknowledge that the Zoom platform is a challenge for instructors, but there were long stretches where the power point was simply read to me.
Zoom is not the same as real world interaction. But with the current situation being as it is, was a great outlet to learn and interact with Brothers and Sisters from the Building Trades.
Video conferencing is difficult to entice group participation, but I think these two Instructors did a great job.
It would probably be better presented in a short 15 min. video that you could watch at your leisure.
Advanced Technology: Technical Issues
Better internet connection or speed or maybe both
There were some technical difficulties also.
Interaction/Class Participation
more class participation
more class participation
more discussion less power point
It is very insightful to have the large student body from which to draw actual real world experiences from.
I think the class went very well and the input and interaction from the students was very beneficial.
More interaction instead of lecture
More interaction
My group was very quiet. Maybe some participation and class discussions would have been helpful
More Q and A with attendees. Maybe a Kahoot type game or quiz
If there were any questions coming into the class would it have been possible for the students to send a quick email with their questions and possibly talked about them when it was relevant to a certain part of the presentation?
Maybe a few poll/quiz questions to keep audience engaged.
Make it more entertaining and ask us questions so that we have no choice but to be involved
Using other methods other than reading every word from every PowerPoint slide.
Hands-on: Equipment

Provide a 3M N95 reusable Mask with interchangeable cartridge filters to everyone who takes the course prior to returning to work.
Having examples of ppe on hand to show live may be helpful.
Have the instructors have some related props for demonstration purpose. Ex: Face Mask types
Provide safety masks.
Provide safety masks.
Assessing Learner Knowledge/Understanding
Maybe a small review test just to drive the highlights home.
Checking in with us to see if we had any questions which provided the opportunity for class discussion.
General Negative
The class could be improved by having the class in-person.
Online is a difficult way to learn
In person, as well as the instructors did, I prefer in person training.
The class could improve by having it in-person.
It was a pointless class. I learned nothing. Useless.
General Positive
Very good course and presented correctly. I feel ICRA related training will become a norm as training in the way we looked at it is changing. I believe 100% in face to face training but if we cannot it is a responsibility for us to train them on how to be safe. We sometimes forget about the art of safety. We are forced in this time not to do face to face training, but we have members working today. We had to look at the art side and find the next best avenue. Safety can never stop no-matter what obstacle are put in front of us Great job for CPWR staff and instructors to adapt and overcome to reach the members
Course was presented very well given the way the Instructors were required to teach the class.
Trainers and training material will always be adjusted and modified to the audience involved. I think the material was well designed and delivered in a comfortable and professional manner. Great job by everyone involved. Thank you
I was satisfied with the course, and if it were longer with more content, I would have gladly participated. I am glad I was invited to be part of this learning group. Thanks.
It was well done. I have seen several presentations on COVID-19 and this was right at the top of the list.
Excellent course
It does not need to be improved it is good how it is.
I thought it was good the way it was, thank you
Good class
NA
No

I thought it was done well.
n/a
The class was complete
Very informative
Thank you.
All good!
Thanks
Can't think of any
The course is fine the way it is taught.
Keep helping us to be aware
I think the class went great and does not need to improve.
Great
I feel that the course is great just the way it is.
Was good
great class
The course was well presented that's all
I thought it was informative and well done
Perfect
Very well done
The course was well presented that's all
I thought it was informative and well done
Perfect
Very well done
Class was well worth the time it was very informative and presented well.
Everything was great - both days were really good for learning new things.
None at this time.
I thought it was very well presented.
Awesome!! Thank you!!
Was good
Thank you
General COVID-19 Issues
By finding a way to end COVID 19 today
Develop a Vaccine for COVID 19 or understand infection and transmission of the virus better.

Appendix R

General Principles for Excellence in
Distance Learning for Occupational Health and Safety Training

It is important that trainees, trainers, and training organizations are invested in the distance learning on-line experience. The following highlights general principles to assist those designing and delivering occupational health and safety training in a distance learning format to achieve the desired learning and performance outcomes.

These recommendations are presented for trainers and training organizations to consider prior to, during, and following the training event and are consistent with the recommended best practices in adult learning and instructional excellence in health and safety training.

Before Training
One of the overarching principles for training excellence in the distance learning format is being prepared and organized prior to the training session. The following are advanced to enhance the preparation for and organization of the training.

1. Assess trainees' needs. It is critically important to **learn about trainee needs and preferences** ahead of the training session. This information can be gathered when trainees register for the session and can be included in a short survey that assesses trainees' needs (e.g., technological, language, organizational and industry-specific) to enhance relevance and better ensure interaction during training. Trainees can also be encouraged to email the instructor with specific questions or industry- trade- or organizationally-specific questions prior to the session. In addition, trainees can be encouraged to post questions and share information on a social learning page or message board to encourage participation and interaction among trainees before the course starts. The more one that is known about the audience in advance of training, the more likely that the training will be relevant and useful in enhancing safety at their workplace.

2. Provide orientation trainings for trainers and trainees. Participants have uneven access to and varied expertise with the technology. Therefore, to create a supportive virtual environment conducive to learning, orientation training is encouraged for both trainers and trainees. **Orientation training provides basic information and guidelines that are expected for all participants**. These sessions include structured information including: fundamental of accessing and using the platforms (e.g., Zoom; https://zoom.us/events); expectations for the virtual classroom (roles and responsibilities); distance learning etiquette (see "Etiquette for Online Training Success" below); and a checklist that trainees and trainers can use before, during, and following the training.

Etiquette for Online Training Success
• Download training information ahead of time, including all handouts and PowerPoints so that information is available during training even if technical difficulties arise.
• Complete all pre-training assignments and assessments to provide any specific needs or questions to the instructors before training begins. In addition, any specific questions about the content or job/trade-specific questions should be posed ahead of the first session so that they can be addressed during training.
• Test your computer compatibility with the platform ahead of the training. Log-in to the session at least 5-10 minutes ahead of time to ensure that it is running properly.
• Present a professional online presence. Dress professionally and be aware of your online background.
• Limit distractions/multitasking. Trying to pay attention to multiple devices or tasks decreases the quality of learning. Instead, focus on the training.
• Mute your microphone when not speaking to avoid adding unexpected background noise into the training session.
• Leave video/camera on at all times during class (do not revert to blank screen).
• Share comments and questions in text chat and raise hand to ask questions.

3. Post all course-related information. Along the same vein, trainers should **post and make available all course information**, including training objectives, course outline, materials (e.g., PowerPoint slides, handouts) and training agenda, to participants *in advance* **of the training session.**

4. Practice, practice, practice (with feedback). Trainers should **conduct a rehearsal of their presentation in the distance learning format,** particularly in the case of new content and/or instructional techniques. This is not meant to be exhaustive, but rather a run through of each topic using all the tools for the presentation in the sequence that will appear in the training, at least once. This can be done informally, or more formally as part of a demonstration to a more experienced trainer with feedback.

5. Conduct Trainer Coordination Meetings. Similar to the face-to-face format, the lead trainer should **coordinate trainer meetings (pre-training, following each training session) to manage the activities of the training team** (lead trainer, co-trainer, technology assistant). These meetings clarify expectations and roles and responsibilities to assist trainers in honing the requisite skills to meet the needs of the learners in the distance learning environment. Historically, these sessions have been utilized as part of the instructional activities for the face-to-face training sessions, and this strategy should be similarly incorporated into the instructional activities for the distance learning courses. Worth noting is that these sessions tend to occur informally between sessions and at the end of each day during face-to-face trainings. It is recommended that the informal session also be conducted as a short debrief for the online training.

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Instructor knowledge and skill was consistently identified as a key driver of effective training in distance learning format. CPWR instructors are consistently recognized as leaders in use of interactive training techniques that encourage active participation, knowledge sharing, and integration of relevant content that can be directly applied to the workplace. The following is offered to support these techniques in the distance learning format.

6. Encourage active participation and interaction. Similar to recommendations for face-to-face training, instructors are encouraged to **solicit specific regular interaction from the learners.** A hallmark of the CPWR Worker Training is use of exercises, activities, and discussions to engage trainees and enhance communications and information sharing. This practice is equally critical for success in distance learning but may entail using unfamiliar technology and techniques (polls, breakout sessions, Kahoot!, Quizlet). These techniques also will allow the trainers to "read the room" virtually by checking for learner understanding in real time. It is important that careful attention is given to using the technology in ways that the platform to ensure participation. For example, while trainees are familiar with face-to-face small group exercises, online breakout sessions involve appropriate techniques to ensure effectiveness (see "Best Practices to Encourage Participation: Breakout Rooms" below). Similarly, trainers can encourage regular use of the platform during lectures and group discussions (raising hand, using chat) to maintain attention and participation during less interactive sections of the training.

Best Practices to Encourage Participation: Breakout Rooms
• Set expectations at the beginning of the breakout exercise
• Include a mix of participants for each breakout session
• Provide clear instructions for the breakout activity
• Assign a facilitator for each breakout room
• Provide the expected duration of the breakout session
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As with face-to-face instruction, training should be continuously improved. In addition, the distance learning format provides additional opportunities sharing up-to-date information and resources following training.

9. Evaluate training to ensure continuous quality improvement of the training. At the conclusion of the training, **courses should be evaluated to assess effectiveness and learning outcomes.** These evaluations **should be completed by both the trainers and trainees** to gather multiple perspectives of the training. This information can be synthesized to ensure more accurate and thorough depiction of effectiveness and provide feedback for continuous quality improvement of the training.

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NEA News

The Distance Learning Challenge

Schools shut down, but the learning continues.
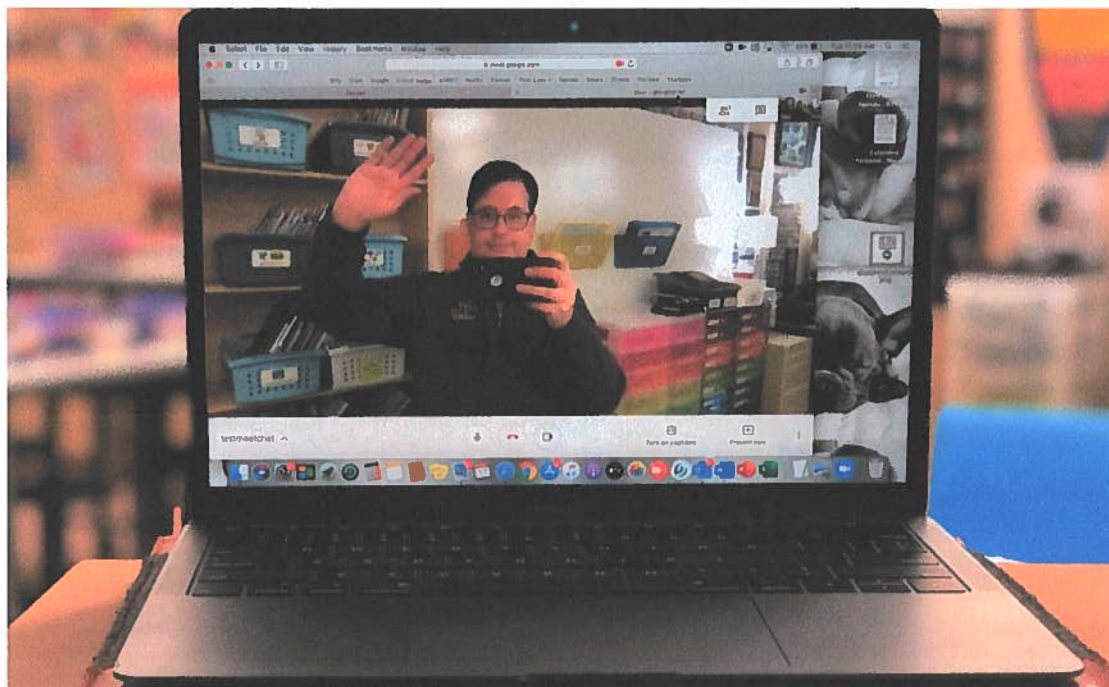
Tom Deris

Minnesota's Tom Deris was hesitant about online learning at first, mainly about creating videos, but soon realized he loved it and his students did, too!

neaToday

By: Brenda Álvarez, NEA staff writer
Published: 06/01/2020

When governors and state superintendents started to close schools in early March because of the coronavirus, more than 30 million public school students (and families) were left wondering, "Now what?" Educators answered by either ramping up existing resources or thinking creatively about lesson plans and online resources. At the same time, school districts across the country went into rapid-response mode and executed learning continuity plans for students, with varying degrees of success.

How well these plans worked depended on several factors, according to Fernando M. Reimers, director of the International Education Policy Program at Harvard University.

In a blog post for Educational International—a federation of 32 million union educators around the world—Reimers wrote that distance-learning plans "will most likely work well for children whose parents have more education, who have other social advantages, and who have access to resources, including online connectivity and devices, so they can continue to enjoy structured opportunities to learn. For many children lacking those conditions, the period of physical distancing is likely to result in very limited opportunities to learn."

SMOOTHER TRANSITIONS FOR HIGH-TECH SCHOOLS

Cecily Corcoran, a middle school art teacher from Arlington Public Schools in Virginia, was grateful to be ahead of the online learning game. She had made it her personal goal earlier in the school year to update her materials and place them online in case students missed a lesson. Once her school closed, she went into overdrive and created 60 video tutorials, each under 10 minutes long.

"My motivation was to get students into another world of focus and concentration, to be proud of what they're doing, and still learn and have fun in the midst of something we can't comprehend," says Corcoran.

Even on short notice, many educators were able to quickly adjust.

In a matter of hours, Antonio Moses, a fifth-grade teacher at Griffith Elementary School in Winston-Salem, N.C., worked with colleagues to

ensure students had access to the programs and tools they needed to stay on track.

"We shared resources amongst grade levels that would help our students learn at home," Moses says. Fortunately, his students were equipped with laptops and Wi-Fi.

"Many of my students were submitting work and continued to work on projects we had started in class," he says.

"I was surprised they were getting the work done, submitting it to me electronically without any problems, and ... reaching out to me if they had any questions."

"Perhaps now society will begin to truly value public education, how challenging the profession of teaching is, how teaching goes beyond academics, and educators ... finally receive the respect, support, pay and funding needed to do the job effectively."

-TOM DERIS, THIRD-GRADE TEACHER, MINNESOTA

Minnesota's Beth Leighton, a technology integration specialist for Prior Lake-Savage Area Schools (PLSAS), says, "Lucky for us, we already had a framework in place that teachers are familiar with and use often." PLSAS educators use Google Sites, which lets teachers across the district collaborate and share resources. Educators have used the site increasingly over the last few years, but it's really taken off since the pandemic.

LESSONS LEARNED

This ability to share work has also benefited educators such as Tom Deris, a third-grade teacher in PLSAS. "We don't have to reinvent the wheel," he says, "because the goal right now is to work smarter, not harder."

After initially sending students home with a handful of worksheets, links, and resources to use at home, Deris successfully—with the help of Leighton—moved his core subjects online to the platform Seesaw, where students could easily upload the work Deris assigned each morning.

"Most assignments are on Seesaw, and parents have expressed they like having all the work in one central location," Deris explains. "The kids can get on their devices, go directly to ... assignments, and follow the instructions step-by-step."

He can post videos, banter the way he would normally do in class, discuss the homework for the day, and go over expectations and how best to reach him. Funding for support and technology have contributed to the success of the district's online learning plan.

CHALLENGES FOR LOW-INCOME COMMUNITIES
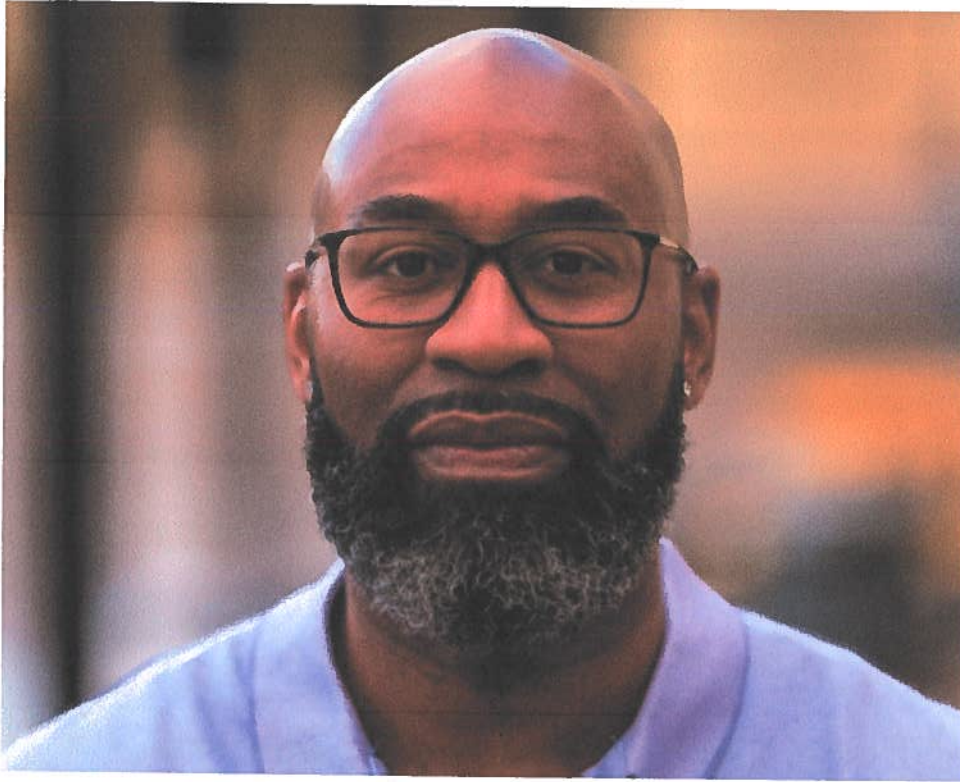
Arizona special education teacher Kareem Neal
Credit: Photo courtesy of Kareem Neal

When schools closed in Alabama, "I felt very unprepared," says Dashannikia Holston, Ed.D., a sixth-grade teacher in the Fairfield City School District. "I teach students who are in a low-socioeconomic status, and the resources we have to aid our children in times like these are very scarce."

Most of the students in Holston's district lack internet access in their homes.

Last year, the Associated Press analyzed census data and found that nearly 3 million (18 percent) of U.S. students lack home internet access, and 17 percent had no home computers. Corey Williams, a federal lobbyist for the NEA, thinks that number is actually much higher.

"The statistics vary widely about how many kids ... go home and don't have access to the internet. In some instances, we've calculated approximately 12 million, but it's really difficult to know exact numbers," Williams explains. "What we do know is that [internet access] was already inequitable and unfair to many children when school was in session," especially those in low-income and rural areas.

CREATIVE SOLUTIONS

Antonio Moses of North Carolina says his students have responded well to distance learning, but one of the biggest challenges is not knowing what happens next.

The coronavirus has made inequities worse, but that didn't stop Holston and her colleagues from giving students and their families needed support.

While district officials worked with local internet service providers to extend free Wi-Fi coverage, "we worked with many of our parents and community stakeholders to make sure students were included in this coverage," she says.

Next, they needed to address the insufficient number of devices for every student. Survey results allowed district officials to determine the number of families who were without a device, as well as how many families with multiple children within the school system could share one.

"Although we could not provide each individual child in the district with a device, we wanted to make sure that the families who had no resources were equipped with at least something to use," she says.

Students have responded well to online learning, too, and have shown an eagerness to participate, Holston says.

ONLINE LEARNING STILL ISN'T ENOUGH

Some students with individualized education programs or 504 plans—which accommodate students who can learn within a general education environment with modifications—have unique challenges.

This is where equity issues get tricky, says Arizona's Kareem Neal, a special education teacher at Maryvale High School in Phoenix and the 2019 state teacher of the year.

When school officials switched to online learning, "they trained us as if it would all be the same, but there may be differences with special education students, particularly for classrooms like mine," says Neal, who

teaches students with mild intellectual disabilities in a self-contained classroom.

While most teachers could engage dozens of students online, "my students wouldn't be able to learn that way. ... I needed the one on one."

So his school found a way. A paraprofessional was assigned to Neal, and remotely they worked together through Microsoft Teams to connect with individual students and their parents. This way, students were getting double the lessons during the week and the one-on-one attention they needed.

PUBLIC EDUCATION AFTER COVID-19

The full impact of the coronavirus pandemic on the future of the public school system remains to be seen. What has been on full display is the inequities that plague schools across the country and the commitment of educators to support their students.

"The health and safety of the entire community is the top priority always," says David Edwards, general secretary of Education International. "But I hope we are learning the value of investing in a strong public sector, including educa- tion. Our job as educators and unionists is to make sure that the adjustments needed now and into the future follow the fundamental principles of a quality public education for every student."

Find out how NEA is working to secure federal funding to help schools face the COVID-19 pandemic and how you can take action. Go to EdVotes.org/COVID.

WHAT THESE EDUCATORS THINK ABOUT THE FUTURE AND WHAT THEY HOPE THE NATION WILL LEARN

MIDDLE SCHOOL TEACHER, VIRGINIA

Cecily Corcoran

"The future of public education will still need to be in person, in a classroom setting. Teachers are often blindsided when they realize a student is in a shelter, neglected, [or] in any form of need. This realization is from personal contact and within a community of teachers, counselors, administrators and the like, and then we help that individual student. I hope the nation learns that education must be equitably funded ... for all students to have access to technology, supplies, and excellent staff."

ED.D., SIXTH-GRADE TEACHER, ALABAMA

Dashannika Holston

"This national emergency has raised awareness on how important it will be to focus on remote learning. I hope our state and local lawmakers place a greater emphasis on providing funding for making our schools a one-to-one program so every student can have a device."

FIFTH-GRADE TEACHER, NORTH CAROLINA

Antonio Moses

"The coronavirus pandemic has shown how learning can still continue in the midst of school closures. Snow days or even five-day school weeks could be a thing of the past, if we can ensure each family has access to the technology to continue learning. I hope that we, as a nation, work to make education more equitable, both in the school and in the home, and that parents understand the important work educators do—and we move forward, parents and teachers, for the success of our students."

McKinsey
& Company

Back to school: A framework for remote and hybrid learning amid COVID-19

August 31, 2020 | Article

As school systems prepare to reopen, here's how to create a safe and effective learning environment for everyone.

By Emma Dorn, Frédéric Panier, Nina Probst, and Jimmy Sarakatsannis

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In much of the Northern Hemisphere, it's back-to-school season. But this year's preparations are fraught with added anxiety as educators, public-health officials, and parents try to balance the need to reduce the spread of the coronavirus with the desire to get students into more productive learning environments.

The first priority of every school system must be to reduce virus-transmission rates and protect the health and safety of students and staff. System leaders at the national and local levels must adapt their strategies to reflect the level of transmission in their communities. In a fast-moving pandemic, that's no easy task. Circumstances change weekly, and even countries with low case counts today should be vigilant and ready to change course in the event of a resurgence.

At the moment, there is no common template for determining whether to educate students remotely, bring them back into the classroom, or create a hybrid model that combines both. In the United States, for example, more than three-quarters of the 50 largest school districts have decided to start the school year remotely as a result of continued infections. Kenya recently announced that its schools will stay closed until 2021, while officials in the Philippines have vowed to keep schools closed until a vaccine becomes available. In the Netherlands and other parts of Europe, by contrast, many schools plan to resume teaching all students full time in the classroom.

No common template exists to determine whether to educate students remotely, bring them back into the classroom, or create a hybrid model that combines both.

In every model, the first step is to get the health protocols right. Once officials have a clear sense of what's required to reduce transmission rates and save lives, they can develop robust models to minimize further learning delays and support students throughout the crisis. In this article, we focus not on the health side, which is being addressed by public-health officials, but on the learning imperative. For many students, a full-time return to the classroom won't be safe for some time. It's therefore important to understand three lessons to get remote and hybrid learning right (see sidebar, "Tools to help educators around the world navigate the pandemic").

Lesson #1: Differentiate by the level of need and capability

Educators have long understood the value of tailoring curriculums and classroom environments to the needs of different age groups, students, and school systems. There is similarly no one-size-fits-all strategy for determining the optimal model for learning in the COVID-19 crisis. What we do know, from our own analysis and data tracked by UNESCO and NWEA, is that certain groups of students have suffered greater setbacks and will continue to face more obstacles in remote-learning environments. In areas where disease transmission is under control and administrators can resume classroom learning, these students need to take priority.

Opening schools should not be an all-or-nothing proposition. Here are some potential priorities.

Focus resources on students experiencing the greatest challenges

Remote learning is especially tough on students who also have to deal with challenges such as learning disabilities, economic hardship, or unstable home environments. Many of these students will struggle to thrive in a remote environment where they lack hands-on guidance, emotional support, and access to technology.

Even when schools are mostly shut, there is a strong case to be made for creating a physical environment where these students can learn (Exhibit 1). The challenge, of course, is how to offer in-person learning opportunities to vulnerable students without putting them or their families at risk. Prioritizing the small number of students most in need of in-person instruction makes it possible to have smaller class sizes—which makes it easier for

students to follow distancing and sanitation protocols that reduce the spread of the virus. During the first wave of COVID-19, that strategy enabled the United Kingdom to continue educating children of essential workers and those with child-protection plans or special needs in the classroom, without experiencing meaningful outbreaks in schools. If it isn't possible to bring disadvantaged students safely back to school, significant resources should be devoted to them so that they have the devices, internet connection, and teacher support needed to learn at home.

Exhibit 1

The urgency to get back to the classroom varies by circumstances.

Need for in-person learning, by student segment   Low ●●●●●● High

Student segment	Urgency to return	Need to stay remote
Vulnerable students at risk remotely: Special-education students; homeless students; English-language learners; students without access to internet and devices for learning; students at risk from domestic violence (eg, with a child-protection plan)	● (high)	● (low)
Children of parents who require childcare: Children of essential workers; children of other dual-income parents who must work outside the home	●	●
Transition students: Students entering a new phase of education (eg, kindergarten, 9th grade); students transitioning out of high school (in final or penultimate year)	●	●
General student population	●	●
Students whose parents do not desire an in-person return: Students whose parents are worried about safety in schools or other factors	●	●
Students at high risk if infected by the virus: Students with personal-health risks; students living with elderly family members or others with risks to personal health	● (low)	● (high)

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As schools reopen, prioritize elementary for in-person instruction

Remote learning has been particularly challenging for elementary-school students. Younger children need a level of guidance, social interaction, and tactile-learning opportunities that are difficult to replicate in an online classroom. They are also less able to focus on remote classes for long periods, so caregivers must take on the time-consuming task of actively helping them learn. In most cases, that task falls to women.

In fact, closing elementary schools proved to be especially devastating for working mothers. As our colleagues pointed out in a recent report, the increased burden of unpaid care imposed by the pandemic is a major factor in women's rising level of unemployment. The societal consequences could be profound: forcing women to reduce their hours or leave their jobs and possibly delay the economic recovery. Other parents simply can't afford to quit their jobs and may feel forced to leave their young children in unsafe situations. Hybrid models that combine remote and in-person learning don't fully address such issues. School systems should therefore prioritize finding solutions that get these children back in the classroom full time as soon as health conditions allow (Exhibit 2).

Exhibit 2

Although the risk of infection among young children is real, it can be managed if administrators enforce vigorous health safeguards and protocols.[1] Younger children are much less likely than older people to experience severe complications from the coronavirus.[2] Studies from South Korea,[3] Australia,[4] China,[5] and elsewhere suggest that children under ten are also less likely to transmit the virus. The risk of infection for teachers can be mitigated by creating small cohorts of students, enforcing screening,

handwashing, and other safety protocols. That said, no group is free from risk. All the more reason to follow strict health protocols and allow at-risk teachers to work from home.[6] Students living with vulnerable family members can be given a remote-learning option.

Several countries have adopted the approach of opening elementary schools while tending to keep older students in remote-learning environments. Indeed, European countries such as Denmark, Germany, the Netherlands, and Norway brought elementary-school students back to schools while national infection rates continued to fall.[7] In countries or states that rushed to open high schools at the same time as elementary schools, and did not put adequate safeguards in place, infection rates soared and schools had to be closed again.

Design programs to fit the local context

Although educators strive to create an ideal learning environment for every student, the realities of budgets, time, and talent constraints require a dose of realism. Some school systems lack the digital infrastructure, resources, or local expertise to roll out online learning. For them, the ideal remote-learning model may combine use of the mass media, simple phone-messaging apps, and paper handouts (Exhibit 3). More than 30 countries are using radios for remote learning, while twice as many are using television.[8] Gambia, for example, used donor funding to distribute solar-powered radios across communities that lack electricity and broadband access. Morocco repurposed its sports channel to broadcast educational content.

Exhibit 3

proportion of those hours spent online for each age group. The split between synchronous learning, with students taught together in real time, and self-paced, asynchronous learning will vary as students mature. So will the mix of large groups, small groups, and one-on-one instruction. For younger students, educators may wish to limit total screen time to a few hours a day[9] and build in more small-group instruction and time supervised by adults (Exhibit 4).

Exhibit 4

Anchor around the teaching value chain

At the most basic level, all teaching follows an iterative process that we call the teaching value chain (Exhibit 5). Starting with direct teacher instruction for students, it continues with providing students an opportunity to explore content through experimentation, discussion, guided practice, and independent work. Teachers then assess what students have learned and what they are still struggling with—information that informs the next round of instruction and exploration. To develop effective remote- and hybrid-learning systems, educators can be trained in how to optimize different platforms so that they implement each element of that value chain effectively. Although this can take a variety of forms, six hours of videoconferencing isn't likely to be one of them.

Exhibit 5

Conditions can vary widely within the same school system. Rural schools may have choppy internet access but sufficient physical space to bring back all students. Urban schools may have more and better digital coverage but less space. Administrators can plan multiple distribution channels to ensure that every student can access learning.

Lesson #2: Design systems specifically for remote and hybrid environments

Remote and hybrid learning are more than just digital versions of the classroom. When the pandemic struck earlier this year, many educators had little choice but to move existing classes online. Now we have the opportunity to design better solutions to maximize student learning in remote and hybrid settings.

Start by defining the optimal remote-learning experience for students

Designing an effective remote-learning system starts with a research-backed understanding of the amount and mix of activities students will experience. School systems should first determine the appropriate number of learning hours each day and the

For hybrid learning, this spring's default model was splitting classes between two cohorts and providing simultaneous live instruction across both at the same time. Denmark, for example, divided elementary-school classes into half—one cohort remote, one in the classroom. Teachers provided math and language instruction to the live cohort while the remote cohort dialed in. Some Chinese schools similarly split up classes but kept both on site: teachers provided instruction across both cohorts through a live video feed, switching classrooms periodically. One advantage of this model is simplicity, as teachers need minimal retraining and can stick with existing lesson plans. However, it's often hard for remote students to follow a lesson that is also being provided to a large group of in-person students. Other models enable teachers to provide more focused small-group support to the in-person cohort, which alternates to give students some face time in the classroom.

In a traditional homework model, teachers provide instruction at school and students practice at home, either online or through traditional workbooks. In a "flipped classroom" model, students learn new ideas by watching prerecorded videos and then coming together as a class to complete exercises and assignments, with the teacher acting as a coach. In an asynchronous hybrid model, students experience a mix of learning activities at school and at home. When they meet in person, teachers assess their understanding of the remote content and then provide further instruction, practice, and feedback on new material. When they are remote, they work independently through asynchronous content.

Engage students with variety and reduced complexity

Several hours of straight videoconferencing will probably cause fatigue, but logging into different platforms at 20-minute intervals can be equally ineffective. The best virtual schools limit live videoconferencing sessions to 30 or 45 minutes and follow up with independent work to reduce fatigue and free up teachers to provide small-group and one-on-one coaching.

It's tough to engage students online. Pop quizzes, emphasizing conversations over lectures, and cold-calling students for responses can help. Single-sign-on software can reduce complexity and the strain of managing passwords. Common lesson planning by teachers within grade levels for elementary-school students and within subject groups for secondary-school students can harmonize approaches. Whatever approach a school takes, the best programs don't jump immediately into content; they spend time teaching students how to use the learning tools and platforms and explaining why the school is using them.

Consider new teacher-allocation models

The rise of remote and hybrid learning has created a need for new teaching models. Some school systems are hiring new virtual-learning teams to develop and provide high-quality virtual instruction to students who choose to stay remote, and using in-person teachers for in-person learners. Others have individual teachers provide both remote and in-person learning for groups of students to maintain consistency and relationships, which are especially important for younger students. To relieve the burden on teachers who must prepare both in-person and remote content, these systems often give teachers a prep day when all students are remote, thus reducing total in-classroom time for students. Other systems are adopting or adapting existing team-teaching models: some teachers provide in-person contact, others handle the remote instruction across the same class of students.

In all systems, creating new roles may be valuable. For hybrid learning, additional classroom aides could be needed to supervise students who cannot be in the same classroom as their teachers because of physical-distancing constraints. For remote instruction, "learning navigators" may be required to help students, teachers, and families use technology effectively.

Test plans using day-in-the-life-of (DILO) simulations

Once school systems have a plan, they can stress-test it by mapping out a typical day for students.[10] How will students log on to show attendance, for example? How will they know what time their videoconference sessions start, who will be teaching, and which classmates will join? Educators can then ask questions to identify and fill gaps in the plan. What if a student's internet goes down during a remote-teaching session, for example? Will it be recorded so that they can catch up later? What if a parent is not around to help them log in? Will there be a way for them to reach a teacher for help? A similar process can be used to map out teachers' DILOs as well.

Lesson #3: Relationships are the foundation of learning

Schools are more than places for learning. They are the centers of their communities, playing critical roles in providing nutrition and ensuring the physical safety, mental health, and social and emotional wellbeing of students. As school systems roll out their remote- and hybrid-learning plans, they must ensure that they are not only building trust with teachers, parents, and students but also developing plans to help teachers build the kinds of relationships with students that encourage learning.

Teachers need to feel safe and equipped to teach

As the frontline professionals in the classroom, teachers should play an integral role in designing sustainable models for remote and hybrid learning. In Norway, where teachers' unions were involved at the federal and local level in developing the health safeguards required for a return to the classroom, buy-in and turnout were high among teachers. At the local level, school systems and leaders need to invest significant time in listening to the concerns of teachers and working jointly with them to create solutions. School systems can also make investments to train teachers so that they provide remote and hybrid instruction effectively.

Parents are part of the solution

One side effect of the recent school shutdowns is that parents have become more engaged with their children's education. As educators bring students back to school for remote or hybrid learning, they can encourage that effort. Each school might commit to regularly connecting one-on-one with families to understand what is working, convey information about the curriculum, and address specific challenges. Simple tips and tricks for parents can make a big difference: for example, disabling notifications and locking down the devices students use for schoolwork to restrict access to nonlearning apps can transform online learning from a battle against distractions into a productive learning experience.[11]

Students must feel safe and equipped to learn

Many students will be returning to school with some degree of stress. Some will have lost family members. Others may be dealing with the hardship of having their parent lose a job. Along with being exposed to warnings about the virus, students are becoming more aware of systemic racism, climate change, and other issues that can add to a general state of

anxiety. Although it's important to assess students' academic status and try to catch up on lost learning, educators must focus first on rebuilding relationships and a sense of community. That effort will pay dividends over time, and can be integrated into remote settings through mindfulness or wellbeing checks, as well as a targeted curriculum. The BARR model, for example, provides tools to help teachers address the emotional, social, and physical needs of their students in every interaction with them; creates close cohorts of students; and provides weekly lessons on building relationships.[12] The best teachers already tend to focus on the whole child. A school system can try to bring this practice to all students.

All this may seem daunting, especially in light of reduced budgets and an ongoing pandemic. In the United States, the School Superintendents Association estimates that bringing students back to classrooms safely could cost a midsize district $1.8 million. When factoring in other costs, such as hiring more staff and addressing learning loss, the Council of Chief State School Officers suggests that the national bill could top $245 billion. [13] Meanwhile, many school systems already face severe budget shortfalls at a time of contracting state budgets.

To ensure a more equitable future, we must act together to overcome these difficulties. As educators make the necessary investments, they can use this difficult time as an opportunity to build a better educational system for the future.

1. "The path to zero & schools: Achieving pandemic resilient teaching and learning spaces," Harvard Global Health Institute, globalhealth.harvard.edu.
2. Nicholas G. Davies et al., "Age-dependent effects in the transmission and control of COVID-19 epidemics," *Nature Medicine*, August 2020, Volume 26, pp. 1205–11, nature.com; "Provisional COVID-19 death counts by sex, age, and state," Centers for Disease Control and Prevention, August 19, 2020,

data.cdc.gov; Linjie Zhang et al., "What we know so far about Coronavirus Disease 2019 in children: A meta-analysis of 551 laboratory-confirmed cases," *Pediatric Pulmonology*, August 2020, Volume 55, Number 8, pp. 2115–27, onlinelibrary.wiley.com.

3. Young Joon Park et al., "Contact tracing during coronavirus disease outbreak, South Korea, 2020," *Emerging Infectious Diseases*, October 2020, Volume 26, Number 10, wwwnc.cdc.gov.

4. "COVID-19 in schools—the experience in NSW," NCIRS, April 26, 2020, ncirs.org.au.

5. *Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)*, WHO, February 28, 2020, who.int.

6. "COVID-19 planning considerations: Guidance for school re-entry," American Academy of Pediatrics, August 19, 2020, services.aap.org.

7. *Center for Global Development Blog*, "Back to school: An update on COVID cases as schools reopen," blog entry by Lee Crawfurd, Susannah Hares, and Ana Luiza Minardi, June 12, 2020, cgdev.org.

8. "How countries are using edtech (including online learning, radio, television, texting) to support access to remote learning during the COVID-19 pandemic," World Bank, June 2020, worldbank.org.

9. "Media use in school-aged children and adolescents," *Pediatrics*, November 2016, Volume 138, Number 5, p. e20162592, pediatrics.aappublications.org.

10. For a full tool kit on the stress-test approach, see *Day in the life of (DILO) resources*, a joint report from Chiefs for Change and Chief State School Officers, July 2020, chiefsforchange.org.

11. Daisy Christadoulou, *Teachers vs Tech? The Case for an Ed Tech Revolution*, Oxford, United Kingdom: Oxford University Press, May 2020.

12. "The BARR model," BARR, August 25, 2020, barrcenter.org.

13. Carissa Miller, executive director, Council of Chief State School Officers: letter to Senator Lamar Alexander, chairman, Committee on Health, Education, Labor and Pensions, United States Senate, June 24, 2020, ccsso.org.

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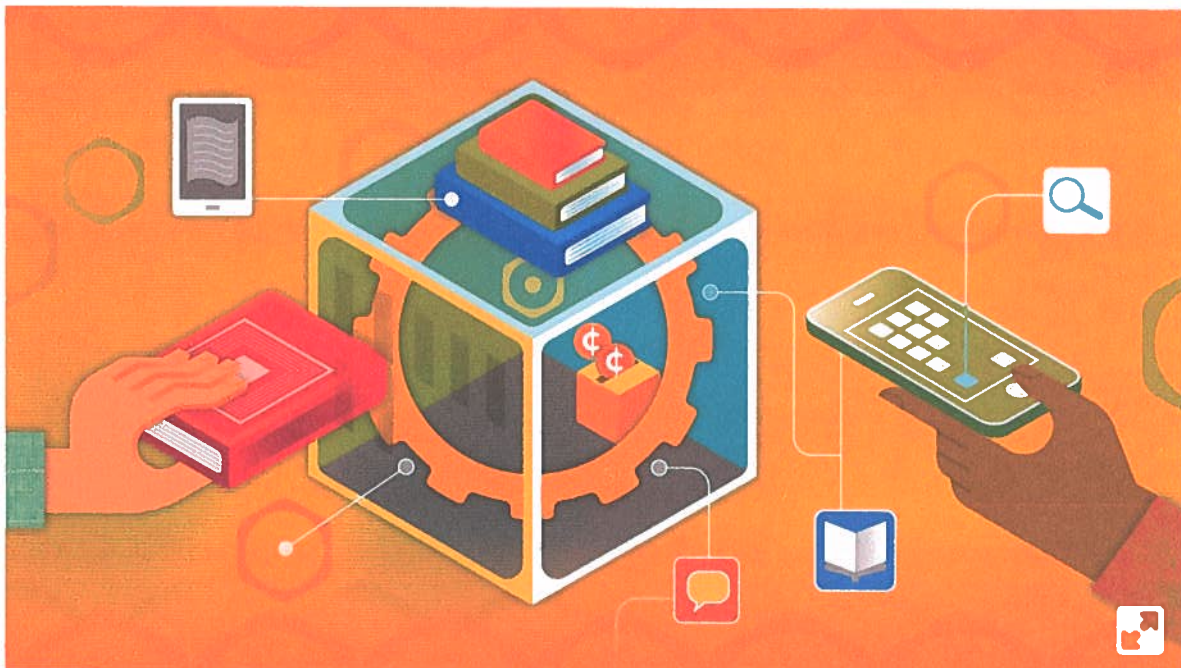Celebrating 30 years

THE RESEARCH IS IN

7 High-Impact, Evidence-Based Tips for Online Teaching

What do highly effective teachers do in online classrooms? We combed through dozens of studies to find the best research-backed ideas.

By *Youki Terada*

October 9, 2020

Jean Tuttle / theiSpot

When online classes exploded in popularity a decade ago, the U.S. Department of Education embarked on an *ambitious project*

(https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf): Researchers pored through more than a thousand studies to determine whether students in online classrooms do worse, as well, or better than those receiving face-to-face instruction. They discovered

that on average, "students in online learning conditions performed modestly better than those receiving face-to-face instruction."

But there was a significant caveat: It wasn't the technology that mattered. In fact, many studies have found that technology actually hinders learning when deployed in a way that doesn't take advantage of the medium. All too often, for example, teachers would take a face-to-face lesson and replicate it online, a costly though understandable approach that rarely led to improvements. The key question for the researchers from the Dept. of Education was whether an online activity served as "a *replacement* for face-to-face instruction or as an *enhancement* of the face-to-face learning experience."

"This finding suggests that the positive effects associated with blended learning should not be attributed to the medium," the researchers wrote. Online teaching required specialized knowledge, an understanding of the strategies that would allow teachers to adapt technology to suit their pedagogical needs—not the other way around.

Yet the large-scale disruption caused by the pandemic forced millions of teachers to quickly adapt to online teaching, often with little training and preparation. "I feel like a first-year teacher again, only worse," Justin Lopez-Cardoze, a seventh-grade science teacher told the *Washington Post*
(https://www.washingtonpost.com/education/2020/10/06/teacher-pandemic-essays/?arc404=true).

So how can teachers enhance the learning experience in online classrooms? We looked over all the research we've read about online learning to find seven high-impact, evidence-based strategies that every teacher should know.

1. YOUR VIRTUAL CLASSROOM IS A REAL LEARNING SPACE—KEEP IT ORGANIZED

"Students value strong course organization," explain Swapna Kumar and her colleagues in a *2019 study* (https://olj.onlinelearningconsortium.org/index.php/olj/article/view/2077). They point out that teachers who are new to online instruction are often too focused on content—converting their lectures, presentations, and worksheets into digital format—leaving course design as a secondary consideration.

While "novice instructors have subject-matter expertise, it's the design that falls short," Kumar points out, explaining that novice teachers often "don't know how to organize their materials or set up a design that makes sense" to students.

When students see a well-organized virtual classroom, they're more engaged, more confident, and more autonomous, *says* (/article/designing-your-lms-make-distance-learning-better) Sarah Schroeder, an associate professor at the University of Cincinnati. And students who encounter messy online learning environments actually *project that judgment onto the teacher* (https://jolt.merlot.org/vol6no4/sheridan_1210.htm); they conclude that the teacher is disorganized more generally.

Here are a few simple tips for organizing your virtual classroom:

- Have a single, dedicated hub where students can go every day to find their assignments, and other crucial announcements.

- Create and articulate the simplest communications plan you can. For example, it may be that students can reach you via text during working hours, and via email after school.

- Consider holding "learn your technology" days with your class to walk through common-use cases, like submitting work or signing on to synchronous lessons.

- Make an extra effort to be clear and concise in your directions, and consider making a short daily video summarizing the day's objectives. When writing, avoid the dreaded "wall of text" and use numbered lists and short paragraphs with subheadings.

- Get rid of visual clutter. This includes hard-to-read fonts and unnecessary decorations or images.

2. CHUNK YOUR LESSONS INTO SMALLER, DIGESTIBLE PIECES

In a *2010 study* (https://doi.org/10.1016/j.compedu.2010.03.001), researchers examined how well high school students learned from an online science curriculum and concluded that on average, online materials "require high mental effort" to process. "Working memory capacity is limited, and a learner can only deal with a few concepts simultaneously," the researchers explain.

What would normally be a 30-minute activity in a face-to-face classroom should be much shorter in the virtual one. Instead of recording an entire lecture, consider creating several smaller ones, each covering a single key idea. The ideal duration for an instructional video, according to a *2014 study* (http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.714.195&rep=rep1&type=pdf), is about 6 minutes, and researchers recorded steep drop-offs in attention after 9 minutes.

In order to give students additional time to process the material, alternate high- and low-intensity activities, and incorporate *brain breaks* (/article/research-tested-benefits-breaks) regularly throughout the school day.

3. THE BEST ONLINE TEACHERS SOLICIT LOTS OF FEEDBACK

When you're standing face-to-face with your students, you can usually tell when a lesson's working. If students are riveted, their eyes light up and their brains are in overdrive. But in a virtual classroom, much of that information is lost.

That's why the authors of a *2019 study* (https://olj.onlinelearningconsortium.org/index.php/olj/article/view/2077) which sought to identify the methods of the best online teachers say that you should regularly "gather student feedback on various aspects of...online courses" in order to identify "what was working or not."

Unlike formative assessment, which focuses on how well students *understand* the material, it's crucial that you also gauge how well students can *access* your virtual materials, according to the researchers. Most teachers and students are newbies in virtual classrooms, and serious communication and process-oriented issues can go undetected—and fester. Consider using *student surveys* (/article/reading-virtual-classroom-hard-it-can-be-done) administered via simple tools like Google Forms to ask questions such as: Are you having any technical problems? Are you able to quickly find and submit your work? Is this virtual classroom easy to navigate?

4. ANNOTATE AND INTERJECT TO SCAFFOLD LEARNING

If you're standing in your classroom and you want students to pay attention to something—perhaps a location on a map or information on a slide—you can use gestures to direct

students' attention. But that context can be hard to reproduce online.

To compensate, use simple annotations like arrows and text labels to provide "visual scaffolding and help direct the users' attention to those aspects that are important in learning materials and help guide learners' cognitive processes," say the authors of a *2020 study* (https://doi.org/10.1016/j.chb.2020.106279). The researchers demonstrated that students who were shown maps with visual and text cues, like arrows and labels identifying key locations, scored 35 percent higher on a recall test than those exposed to maps with no cues.

Also, strategically interject questions into an instructional video at key points to check for understanding. Questions that prompt critical thinking like "Can you think of any exceptions to this rule?" or that probe for comprehension like "How do you determine momentum from measures of mass and velocity?" not only keep the lesson lively but promote deeper engagement with the material and allow you to assess learning, according to a *2018 study* (https://psycnet.apa.org/doi/10.1037/bul0000166).

5. FREQUENT, LOW-STAKES QUIZZES ARE EASY TO DO, AND HIGHLY EFFECTIVE

Low- and no-stakes practice tests enhance retention of the material—and students who struggle the most benefit the most from weekly practice quizzes, according to a *recent meta-analysis* (https://link.springer.com/article/10.1007/s10648-020-09563-9). While online quizzes don't provide a greater benefit than paper ones, they can be automatically graded, saving hours of work.

You can use popular tools like *Kahoot and Quizlet* (/blog/5-fast-formative-assessment-tools-vicki-davis) to create online quizzes that are not only fun, but also help students re-process and retain the material better. If you want to boost engagement even further, you can create a *Jeopardy! board* (/article/using-student-generated-questions-promote-deeper-thinking) to gamify your quizzes.

6. FIGHT THE ISOLATION OF REMOTE LEARNING BY CONNECTING WITH YOUR STUDENTS

You're not just physically separated from your students. As classrooms move online, the psychological and emotional distance also increases, eroding the critical social context that is fertile soil for learning, according to a *2016 study* (https://doi.org/10.1016/j.compcom.2016.03.009). You'll need to make special efforts to create a sense of community in your virtual classroom.

"To offset the isolating effects of an online class, teachers can strive to communicate more regularly and more informally with students," writes Jason Dockter, a professor of English at Lincoln Land Community College in the study. The goal isn't just to address academic issues, but to demonstrate "that the teacher is personally interested and invested in each student."

John Thomas, an elementary school teacher, uses daily *morning meetings* (/article/bringing-benefits-your-morning-meetings-online), which can be done both synchronously and asynchronously, to check in with his students. Using Seesaw, he records a greeting that students can respond to and builds in "interactive, engaging activities designed to help our students learn more about themselves and their classmates"—such as sharing a favorite book or the family pet.

Beyond morning meetings, you can adapt many face-to-face activities to work in virtual classrooms:

- Use unstructured time to chat at the beginning of class.

- Try Zoom's "waiting room" feature to welcome kids to class one by one.

- Use breakout rooms to split students into small groups for show-and-tell, two truths and a lie, or other *relationship-building exercises* (/blog/fostering-classroom-relationships-larry-ferlazzo-katie-hull-sypnieski).

- At the end of the day, ask students to reflect on their learning with *discussion prompts* (/blog/reflection-assessment-empowerment-self-awareness-james-kobialka) or a closing activity like *appreciation, apology, or aha!* (/video/60-second-strategy-appreciation-apology-aha)

- Pose fun questions like "What's your favorite movie?" in your all-class video tool, or on digital whiteboards like *Jamboard* (https://edu.google.com/products/jamboard) or *Padlet* (https://padlet.com/), and have students share out.

7. TAKE CARE OF YOURSELF

You're not alone: teacher well-being has experienced a "steep decline" in recent months, with *71% of teachers reporting lower morale levels* (https://www.edweek.org/ew/articles/2020/05/08/how-principals-and-district-leaders-are-struggling.html) compared to pre-pandemic levels. As the adage goes, "You can't serve from an empty cup." If we want our students to succeed, we need to ensure that our teachers are taken care of. Not only is *teacher stress contagious* (https://doi.org/10.1016/j.socscimed.2016.04.031), resulting in higher stress levels for students, but it also passes through as *poorer academic performance* (https://journals.sagepub.com/doi/full/10.1177/1098300717732066) for students as well.

"In order for any of us to provide that safe, stable, and nurturing environment for the children that we serve, we have to practice self-care so that we can be available," said Dr. Nadine Burke Harris, a pediatrician and California's first surgeon general, in a *recent interview* (/article/trauma-written-our-bodies-educators-can-help) with Edutopia. "Please make sure to put your own oxygen mask on and practice real care for yourself so that you can be there for the next generation."

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Students Want Online Learning Options Post-Pandemic

The experience of learning remotely during the pandemic left students with a positive attitude toward online and hybrid courses, a new survey suggests.

ie   // April 27, 2021

SVETIKD/GETTY IMAGES

When colleges switched to emergency remote instruction last year, some online learning advocates feared the hasty transition would leave students with a negative impression of online learning. While more pre-pandemic online courses resulted from months of careful planning and significant financial investment, few instructors enjoyed these luxuries last spring.

Despite the challenges and shortcomings of this emergency transition to remote instruction, a majority of students want the option to keep studying online, according to new survey results.

The Digital Learning Pulse survey, published today (https://info.cengage.com/wrec_PulseSurveyResults_1470945), is the fourth in a series of surveys published by Bay View Analytics in partnership with Cengage, the Online Learning Consortium, the WICHE Cooperative for Educational Technologies, the Canadian Digital Learning Research Association and the University Professional and Continuing Education Association.

MOST POPULAR

- At long last, a tenure vote for Nikole Hannah-Jones (https://www.insidehighered.com/news/2021/06/29/long-last-tenure-vote-nikole-hannah-jones)
- Democrats introduce legislation to help students meet basic needs (https://www.insidehighered.com/news/2021/06/29/democrats-introduce-legislation-help-students-meet-basic-needs)

The survey includes responses from 772 teaching faculty, 514 academic administrators and 1,413 students who were registered at a U.S. higher education institution for both the fall 2020 and spring 2021 semesters. The results will be discussed in a Cengage webcast (https://insidehighered.zoom.us/webinar/register/6416170506317/WN_K4goWP7GRrW2g9bu_WQXtA) tomorrow.

The majority of students, 73 percent, "somewhat" or "strongly" (46 percent) agreed that they would like to take some fully online courses in the future. A slightly smaller number of students, 68 percent, indicated they would be interested in taking courses offering a combination of in-person and online instruction.

For in-person courses, 68 percent of students strongly or somewhat agreed that they would like to see greater use of technology. The use of digital materials and digital resources was also popular, with 67 percent indicating they would like to see an increase in usage of these materials.

For the fall 2020 and spring 2021 semesters, the survey also asked students, faculty members and administrators to award a letter grade, from A to F, for how well courses at their institution were meeting educational needs. Students were not as critical of their experience as Jeff Seaman, director of Bay View Analytics, expected.

"There were a very small number of students who gave their courses failing grades," said Seaman. "But generally students were more positive about their courses than faculty or administrators."

Over all, students, faculty and administrators awarded a B for courses taught in the fall 2020 and spring 2021 semester. These grades reflect a mixture of teaching modalities, including fully online, hybrid and face-to-face

Students, professors and administrators all ranked the same top three challenges impeding student success in the last two semesters, said Seaman. Topping the list was "feelings of stress," then "level of motivation" and, thirdly, "having time to do homework."

Students, faculty members and administrators are rarely so aligned in their responses, said Seaman. He thinks that faculty and administrators may feel more in tune with the struggles students are facing since this has become a bigger area of discussion during the pandemic.

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Every Learner Everywhere offers free coaching to faculty and administrators around issues related to digital learning. In addition to the challenges facing students that were highlighted in the Bay View Analytics survey, faculty often ask questions about how to keep students engaged in virtual learning spaces, said Rowland Williams.

The challenge of keeping students engaged was echoed in Every Learner Everywhere's Student Speaks report (http://www.everylearnereverywhere.org/resources/student-speak/), which was based on interviews with 100 marginalized students across the U.S. about their experience of learning during the pandemic.

"As our campuses become more diverse, we must also acknowledge that the challenges our students face will be diverse and may also be unique to student populations. The next step we need to take when evaluating challenges is to disaggregate data to explore how different populations may be disproportionately impacted by the stressors listed," said Rowland Williams. "I am hopeful that as we continue to uncover points of connection, they will serve to keep us grounded and curious as we also explore the ways our journeys and experiences are unique."

Rank	Students	Faculty	Administrators
1	Feelings of stress	Feelings of stress	Feelings of stress
2	Level of motivation	Level of motivation	Level of motivation
3	Having time to do course work	Having time to do course work	Having time to do course work
4	Support from my academic institution	Having a suitable workplace to do course work	Internet connectivity (e.g., Wi-Fi)
5	Internet connectivity (e.g., Wi-Fi)	Internet connectivity (e.g., Wi-Fi)	Having a suitable workplace to do course work
6	Having a suitable workplace to do course work	Support from my academic institution	Access to a learning device (laptop, home computer, tablet)

Students and faculty members both reported that their attitudes toward online learning had significantly improved in the past year. A majority of students, 57 percent, said they felt more positive about online learning now than before the pandemic. Close to half, 47 percent, said their attitude toward online exam proctoring -- a topic of some controversy due to privacy concerns -- had also improved.

A lot of the resistance to online learning and teaching that was expressed before the pandemic was due to "unfamiliarity rather than distaste," said Clay Shirky, vice provost for educational technologies at New York University.

"What COVID-19 and the shift to emergency remote instruction did was burn off the fog of unfamiliarity," said Shirky.

should be delivered than it was going in, said Shirky. Some students and faculty may be in a position where they could return to in-person instruction, but not everyone has been vaccinated or can be vaccinated. Additionally, there are ongoing visa restrictions that may prevent international students from entering the country for some time.

That students indicated a desire to continue learning online in the future, despite less-than-ideal circumstances, is positive, said Shirky.

The tendency in online education is to think that by spending more money, you will end up with a good product, said Shirky. He believes that there are two types of online education – good and bad. But these are not dependent on months of preparation or a healthy budget for flashy videos.

"The most important thing is that faculty are engaged and care that their students learn something," he said.

There is still concern that emergency remote learning practices do not exemplify quality online instruction methodologies, said Jill Buban, vice president of digital strategy and online education at Fairfield University. Many students continue not to know the difference between emergency remote instruction and online teaching, she said.

"My hope is that many faculty come out of this experience, after much-needed rest, with new skills that they can use when they return their traditional learning environment," said Buban.

The changes could be as simple as bringing guest lectures into the classroom remotely, utilizing a learning management system or increasing use of digital textbooks and open educational resources in courses, said Buban.

"If the past year can open more eyes to effective online teaching and learning practices, it will be a net positive for the future of postsecondary teaching and learning environments and will allow universities to be more agile," Buban said.

Read more by *Lindsay McKenzie*

(/print/news/2021/04/27/survey-
reveals-positive-outlook-online-
instruction-post-pandemic)

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TRENDING STORIES

2U, edX to combine to create online learning behemoth
(https://www.insidehighered.com/news/2021/06/29/2u-edx-combine-create-online-learning-behemoth)

Democrats introduce legislation to help students meet basic needs
(https://www.insidehighered.com/news/2021/06/29/democrats-introduce-legislation-help-students-meet-
basic-needs)

Maine community colleges train rural students for remote work
(https://www.insidehighered.com/news/2021/06/29/maine-community-colleges-train-rural-students-remote-
work)

Some colleges see surging demand for housing (https://www.insidehighered.com/news/2021/06/29/some-
colleges-see-surging-demand-housing)

How to navigate the key obstacles to getting your academic book published (opinion)
(https://www.insidehighered.com/advice/2021/06/29/how-navigate-key-obstacles-getting-your-academic-
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COLLEGE PAGES

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Using Student Feedback to Create Effective Online Learning Experiences

Last updated on: May 12, 2021

🕐 **5 minute read**

One of the key reasons many faculty struggle to embrace online learning is that they find themselves teaching in this modality without receiving proper training and support. This can lead to learning experiences they consider inferior to their traditional courses.

Learning Designers (also known as Instructional Designers) can be a beneficial support resource for college faculty, as they're trained to translate faculty's curriculum and content in the online medium. In the article below, learn how one of Wiley Education Services' Learning Designers, Loreli Smyth, thinks about online course design and development, and how she utilizes feedback to help faculty ensure their online students' learning experiences remain the core focus.

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As a Learning Designer, I know that continuous student feedback is essential to designing a course that delivers the appropriate learning outcomes and experiences. Student feedback allows the faculty and I to understand which ideas and course design elements benefit the students (and which ones don't) so that we can create more effective and engaging online learning experiences.

Based on my own experience and research (sources cited below) on the topic of student feedback in online course development, I've compiled the following list of insights that anyone designing an online course should consider if they want to meet students' needs and expectations.

What Do Students Say They Want and Need in the Online Classroom?

- *Faculty Presence: Engagement, Feedback, and Assistance.* Students don't want to feel isolated in online learning environments. They prefer when university instructors incorporate interactive elements and opportunities for communication into the course design. Research suggests that engagement increases when faculty relate course activities to students' major field of study or life experiences.

- *Course Content: Clear Expectations, Motivation, and Challenge.* When students aren't able to find important information or course components, they simply are unable to use them. This can result in frustration, lowered motivation, and decreased self-efficacy. Research suggests that findability is the most significant predictor of both self-efficacy and motivation among students in online courses. Students also find greater satisfaction when a course has real-world relevance and provides appropriate challenges. Students reported that challenging assignments have intrinsic value that further increases their satisfaction.

What Do Students Say They Struggle With Most Online?

and help build the class community. An increased faculty presence can help the students feel supported as they progress through the course.

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the students up for success by making sure they have all the information they need – including ensuring they know where to go for help.

It is also important to add social interaction elements, such as discussions, group assignments, video, etc., into the course design to build a sense of community and prevent feelings of isolation. Course organization and structure is also important as it aligns with the students' need for clear expectations. If the course is disorganized and not designed with a structure in mind, students can feel lost.

What Can Faculty Do to Incorporate This Student Feedback?

"Educational practitioners should be aware of their own learning-style preferences. Knowing our strengths and weaknesses as educators helps us to know where we will be strong and weak in terms of instructional design and delivery" (Aragon, Johnson, & Shaik, 2000).

In online course design, it is important to remember that we're creating an experience for students with different learning styles. To develop an effective and engaging course, we should switch our focus from the individual professor's preferred approach to what research shows best meets students' needs. To keep the focus on the student, faculty can do the following:

- Keep student-faculty conversation open; let students know you are available for questions and comments

- Provide prompt and detailed (when needed) feedback

- Provide clear communication around expectations

- Establish course procedures early on

Make an Effort to Obtain Student Feedback

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Students can learn equally well in either delivery format, regardless of learning style, provided the course is developed around adult learning theory and sound instructional design guidelines" (Aragon, Johnson, & Shaik, 2000).

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meaningful and beneficial to guiding course revisions, and have even read the evaluations after the second run of a course to see where there may still be a need for additional tweaking.

In sum, good online course design is all about recognizing and understanding the students' needs. Their voice matters – we just need to take time to listen.

To learn more from our Learning Designers, including how to engage students with media and moderate large online discussion boards, visit our Resources page.

Authored by Loreli Smyth – *Learning Designer at Wiley Education Services*

Research Resources:

Aragon, S. R., Johnson, S. D., & Shaik, N. (2000). The influence of learning style preferences on student success in online vs. face-to-face environments. American Journal of Distance Education 16 (4), 227-243. https://doi.org/10.1207/S15389286AJDE1604_3

Crews, T, & Butterfield, J. (2014). Data for flipped classroom design: Using student feedback to identify the best components from online and face-to-face classes. Higher Education Studies, 4 (3), 38-47. http://dx.doi.org/10.5539/hes.v4n3p38

Crews, T B., Bordonada, T. M., & Wilkinson, K. (2017). Student feedback on quality matters standards for online course design. Retrieved from: https://er.educause.edu/articles/2017/6/student-feedback-on-quality-matters-standards-for-online-course-design

Flaherty, C. (2015). Flawed evaluations. Retrieved from: https://www.insidehighered.com/news/2015/06/10/aaup-committee-survey-data-raise-questions-effectiveness-student-teaching

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Ryalls, K. (2016). From futile reviews to meaningful student feedback. Retrieved

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Distance Learning

One Positive Impact of COVID-19 Policy on Math Education and Gender Equity

Online learning helped us deal with girls' math phobias.

By Karen Atkinson | **05/27/21**

"I can't read." Not many adults would be happy to admit this. but somehow it is acceptable to say, "Me? I'm no good at numbers." It isn't seen as a slur on someone's intelligence or a sign of a poor education. It is as if being good at math is a gift like being a brilliant musician or a talented artist. This is strange as there are so many types of math. For example, there is numeracy that will require calculation and estimation; algebra which involves problem solving; geometry that entails spatial awareness, calculus that calls for abstract thinking. That is a lot of different things to be "no good at."

Carol Dweck's work showed us that about 40% of students have a damaging "fixed mindset" that makes them say I'm no good at this; another 40% believe that with the right conditions they can learn more and get better at doing math. The remaining 20% waver between the two views.1

Girls are more hesitant about math, and their lack of confidence compounds the problem. Whether taking a test or calculating a restaurant bill, some expect to fail before they start. Research in 2010 showed that the math-anxiety of female elementary school teachers

could affect their female students: "There was no relation between a teacher's math anxiety and her students' math achievement at the beginning of the school year."

By the school year's end, however, the more anxious teachers were about math, the more likely girls (but not boys) were to endorse the commonly held stereotype that "boys are good at math, and girls are good at reading." Since some 90% of early elementary school teachers in the United States are female, we as educators need to make women strong and confident mathematicians.(Sian L. Beilock, Elizabeth A. Gunderson, Gerardo Ramirez, Susan C. Levine Proceedings of the National Academy of Sciences Feb 2010, 107 (5) 1860-1863; DOI: 10.1073/pnas.0910967107)

Education has changed in many ways since that research. At Design Tech High School we have many female teachers who are confident in their subject abilities and are strong role models for the next generation. All students use a broad range of technologies in their learning. Whether this is using 3D printers, laser cutters or design software as potential tools to express and realize their ideas, we feel that it is vital for them to learn to handle new technologies comfortably.

The 'design' part reflects our math program. Instead of the outdated rote learning approach to reciting math facts, students learn to make mathematical connections. This approach is about changing the mindset and giving learners the tools and confidence to develop strategies, encouraging them to have a go and try things for themselves.

Teaching in this way, we can offer the students more interesting learning experiences where they can understand the application of mathematical skills in their lives, whether that is understanding the interest on store cards or the math needed for robotics.

COVID-19 disrupted our lives and as learning went online we wondered how our students would cope, especially the girls who were anxious about math. Not all children thrived on remote learning, but it made a contribution, especially for those girls who were motivated to improve their math.

While many would sigh over a worksheet, they were more than happy to engage with math problems that were delivered in a video game format. We used Mangahigh, which proved to be the right digital program for our learners to learn remotely. A resource such as this can help teachers to provide a differentiated approach to learning that let girls work autonomously at their own pace. Working at home, away from the distractions of

the classroom, we found that many of them thrived. They enjoyed the challenges that Mangahigh provided and were looking at a problem-solving approach, rather then the right answer.

We are noticing that some are now asking for help when once they would have avoided a math conversation at all costs. Now they are developing a sense of optimism and self-efficacy and we expect to see stronger more assured mathematicians going on to college.

It is only when students gain a conceptual understanding of how various mathematical notions can be linked and used to solve problems, that math comes to life and becomes relevant. Once girls see realistic opportunities they can apply for in science, technology, engineering and math, they will start to take higher math in high school and take a more serious look at STEM careers.

About the Author

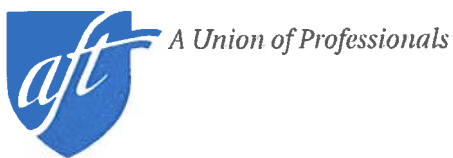Karen Atkinson is a teacher of geometry and pre-calculus at Design Tech High School in Redwood Shores, CA.

Learning Beyond COVID-19

A Vision for Thriving in Public Education

aft — A Union of Professionals

nea — NATIONAL EDUCATION ASSOCIATION — nea.org — Great Public Schools for Every Student

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Preface

Over the course of the last month, the American Federation of Teachers and the National Education Association have come together to define the essential elements that we believe are necessary to effectively understand and address the ways in which the COVID-19 pandemic has disrupted students' academic and developmental experiences.

The AFT and NEA are committed to the education and well-being of all students, especially those most severely impacted by the pandemic. A new administration provides new opportunities to strengthen public schools to meet this moment and to secure the federal investments necessary to ensure that academic and social and emotional supports are in place for whole-child development. Rather than simply trying to return to "normal," we have an unprecedented opportunity to create the public schools all our students deserve—regardless of demography or geography.

This document offers our ideas on ways our education systems can take a more holistic approach that seeks to understand and meet students where they are academically, behaviorally and emotionally and also offer well-rounded, culturally responsive and trauma-informed curricula and instruction. Our bold, shared agenda is to ensure that students receive the supports and resources they need to thrive now and in the future. We began laying this out in anticipation of new leadership in the Education Department in an administration that has demonstrated a willingness to engage. But much of the contents herein speak also to states and districts, to community and other partners, and to our own affiliate leaders and members— all key players in the collaborative effort that will be required.

The NEA and AFT recognize that COVID-19 may pose health and safety challenges even after we've safely reopened all our school buildings. It is important that effective mitigation plans and strategies are readily implemented as needed. Both being in school and feeling safe in school are necessary to thrive. As educators, we approach all things related to our students' learning and well-being from a positive and affirming place. Terms like "learning loss" or "COVID slide" have become popularized but are misguided. Because they are deficit-oriented, they diminish our students and paint an inaccurate picture of how deep and purposeful learning occurs.

We propose a positive framing that recognizes students' strengths and stirs imaginative thinking about how to overcome the extraordinary obstacles we face. Working together with parents, communities and other caring stakeholders, we believe we can and must find better solutions to today's challenges, including systemic racism, economic insecurity and COVID-19. *Learning Beyond COVID-19* reflects our desire to ensure that high-quality educational experiences are available to our students at this extraordinary time and in the future. COVID-19 opportunity gaps are real, but so is our power to overcome them. The language we choose will signal our understanding to ourselves and to others that we all have much to learn from this moment and much work to do in our efforts toward equity, opportunity and inclusion.

We look forward to deeper discussion on these ideas and more.

Introduction

For students to learn now and beyond COVID-19, we must create the conditions to help them thrive. Our commitment to justice and fairness compels us to increase an array of educational opportunities. Such opportunities must be available to all students, from preschool through high school, and to all families in our public schools. And they must grow from providing educators, paraprofessionals and all school staff the tools, time, trust and resources they need to foster meaningful academic, social and emotional growth and success.

How can educators ensure that students meet their potential? With instruction, curriculum and assessment systems grounded in the science of learning. We must offer students well-rounded learning opportunities—including in the arts, sports and sciences, and in civics and history. Think about how civics and science have taken critical places this year as America has faced the worst crisis of democracy since the Civil War and the worst pandemic in a century. Beyond well-rounded subject matter, learning must also extend to engaging and challenging activities, such as community-based research projects, evidence-based debates and interdisciplinary team work, like writing and staging a play about a social issue. And because learning is greatly influenced by students' cultural backgrounds and contexts, we must also attend to cultivating relationships between teachers, support professionals, students and families by creating more community schools. These schools are not only places where students and families are connected to wraparound services but also spaces where instruction is context-sensitive, culturally relevant and trauma-informed—all in the service of maximizing each student's potential.

As the National Commission on Social, Emotional, and Academic Development, convened by the Aspen Institute, eloquently states:[1]

The success of young people in school and beyond is inextricably linked to healthy social and emotional development. Students who have a sense of belonging and purpose, who can work well with classmates and peers to solve problems, who can plan and set goals, and who can persevere through challenges—in addition to being literate, numerate, and versed in scientific concepts and ideas—are more likely to maximize their opportunities and reach their full potential. Educators, too, understand the benefits of educating the whole child, and have been calling for more support and fewer barriers in making this vision a reality.

Embracing this vision, we offer five priorities that can serve as a guide for nurturing students' learning now and beyond COVID-19. These include a focus on assessing students' needs, supporting our most vulnerable students, expanding learning time and planning for summer academics and enrichment, ensuring professional excellence for learning and growth, and establishing an education system that centers equity and excellence.

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1   Stephanie M. Jones and Jennifer Kahn, *The Evidence Base for How We Learn: Supporting Students' Social, Emotional, and Academic Development*, National Commission on Social, Emotional, and Academic Development, Aspen Institute, September 13, 2017, p. 4, www.aspeninstitute.org/wp-content/uploads/2017/09/SEAD-Research-Brief-9.12_updated-web.pdf.

1. Diagnosing Student Well-Being and Academic Success

Diagnosing student learning needs and assessing well-being are extremely pressing given the disruptions to schooling caused by COVID-19. We need to ensure that our students who have been hardest hit during the pandemic—students of color, rural students, Indigenous students, English language learners, those with special needs and all those underserved by our education system—receive the support they need. We should maximize student learning time and engage in meaningful academic and needs assessments, created in concert with educators, that support effective instruction. This is what educators do frequently in their classrooms.

In February 2021, the U.S. Department of Education issued guidance on assessing student learning during the pandemic in relation to the requirements of the Every Student Succeeds Act. Prior to that, both the NEA and AFT stressed the need for flexibility in both the administration of assessments and their use in accountability, and both advised that standardized testing should be suspended for the 2020-21 school year. Standardized test scores have never been a valid, reliable or complete measure of an individual's instruction, nor do they accurately measure what students know and are able to do. And they are especially problematic now. The assessment flexibilities offered by the department, while helpful, do not go far enough to allow states to support the gathering of information and the distribution of resources in a way that will support teaching, learning and healthy school environments.

Granting targeted flexibility to the greatest extent possible will enable states, districts and schools to establish protocols for diagnosing and better understanding students' strengths and needs without having to expend time, funds and resources to conduct assessments that will render incomplete and unhelpful data. Regardless of the type and kind of flexibilities and waivers accepted as we look to the year ahead, it is paramount that the voices of educators contribute to shaping the future of our schools. District, state and federal leaders should collaborate with educators, families and other stakeholders in using information gathered from assessments to identify and address inequities and provide tailored supports and services.

THE WAY FORWARD

- Support the creation of alternatives to high-stakes standardized tests and accept them for use in meeting federal testing criteria. Establish mechanisms—including well-rounded, authentic assessment systems, community surveys, town halls and other collaborative tools—as a basis for diagnosing the academic and social-emotional supports that students need to succeed. The New York Performance Standards Consortium provides an example. Praised by the Learning Policy Institute, the consortium assesses student learning through performance assessments that are collaboratively developed by educators, student focused and externally evaluated to ensure quality. Another example is the Performance Assessment of Competency Education model, which the New Hampshire Department of Education has operated since 2015 as a federally approved pilot. PACE is grounded in a competency-based educational approach designed to ensure that students have meaningful opportunities to achieve critical knowledge and skills.

- Broaden the array of diagnostic assessments to include school-based student mental health screenings, such as those recommended by the National Center for School Mental Health at the University of Maryland School of Medicine, and investigate opportunities to leverage Medicaid reimbursements for eligible students. To measure learning conditions and student and staff experiences in the wake of COVID-19, regularly administer a school climate survey. The Aspen Institute's school climate playbook provides helpful examples. Likewise, periodically
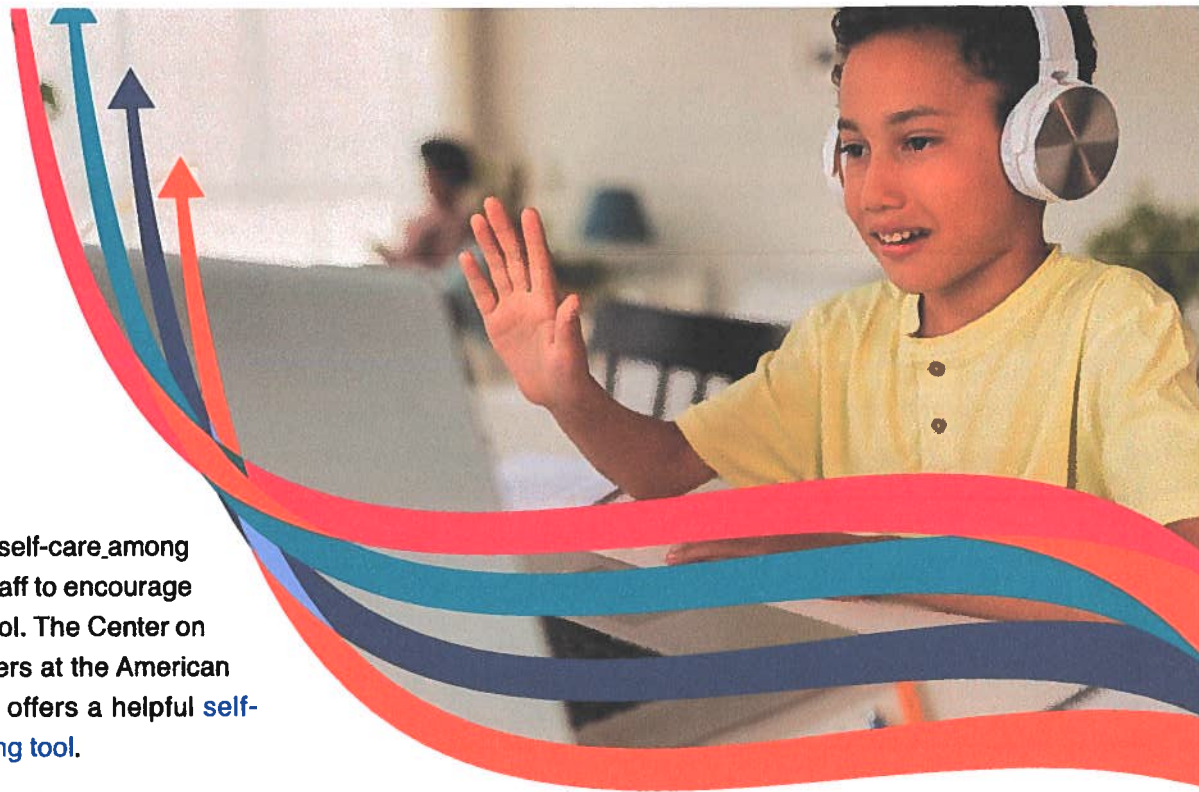
check on resilience and self-care among educators and school staff to encourage overall wellness in school. The Center on Great Teachers & Leaders at the American Institutes for Research offers a helpful self-assessment and planning tool.

- Work with states to accept requests to maximize flexibilities in assessments for the 2020-21 school year (including shorter, remote and/or delayed assessment options) and permit additional flexibilities beyond the February guidance if predicated by health and safety concerns, impracticability or impossibility, or if not in the best interests of students, families and educators.

- Ensure that Every Student Succeeds Act flexibilities are not interpreted or utilized to diminish states' responsibilities to English language learners or students with disabilities, especially where rights are outlined under other federal laws. States should be held accountable for continuing to provide services for the identification, evaluation and support of English language learners and students with disabilities. Ensure states and districts have a developmental milestone and early literacy and numeracy screener for young children entering kindergarten and first and second grades to inform instruction and interventions, not to categorize children into rigid groups defined by current academic skill level.

- Create a federally supported clearinghouse to evaluate and disseminate information about high-quality, well-rounded assessments and to establish a common lexicon with regard to assessments. Specifically, cultivate collective consensus regarding assessment types, uses and applications across stakeholder groups.

- Commit federal funds to support job-embedded professional learning to increase educators' assessment literacy and cultural competency. Doing so will ensure educators can effectively use various assessments to diagnose student development, well-being and knowledge through the evaluation of academic and nonacademic indicators of students' mental, social and emotional health.

2. Meeting the Needs of Our Most Underserved Students

Meeting the needs of our most vulnerable students—young children, English language learners and students with special needs—must be prioritized and will take tremendous investments in resources and staff. We must also put front and center the needs of students who are experiencing homelessness, food and economic insecurity, challenges in family relationships and other forms of distress and trauma. This has been anything but a normal year, but with sustained focus on meeting the needs of our students disproportionately impacted by the pandemic, we can ensure that they reach their potential.

EARLY CHILDHOOD EDUCATION

The importance of in-school learning for young children in preschool through third grade has become even more apparent in the wake of COVID-19. These early learning experiences are key for developing the academic, language, social, emotional and executive function skills students need to thrive. Research shows that high-quality early childhood education increases student achievement, supports social and emotional development, reduces dropout rates and increases social stability. Some students have not had access to remote learning during this time, and our youngest students have had little to no experience with being in school. Thankfully, young children are adaptive and resilient when they have trustworthy relationships with caring adults inside and outside of school. Educators working with our youngest students will need additional support and training on how to ease students into in-person learning and help them develop grade-appropriate skills.
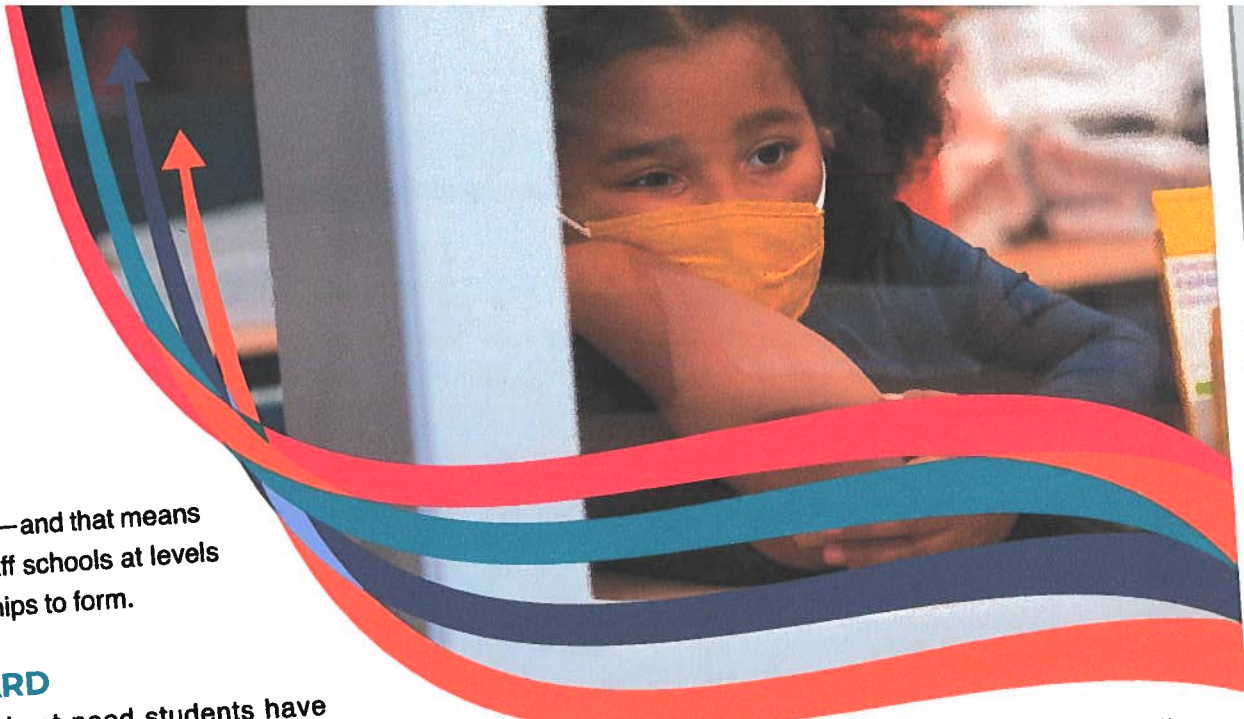
ENGLISH LANGUAGE LEARNERS

Our nation's 5 million English language learners, roughly 10 percent of the public school population nationwide, also need increased supports. Many attend schools that have been chronically under-resourced and, as a result, often struggle to provide high-quality instruction and necessary academic supports. Concern nationwide centers on whether school districts' remote learning plans offer adequate resources for ELLs to develop academically, in their home language and in English. A report from the U.S. Department of Education found that 25 to 50 percent of ELLs around the country do not have either the appropriate devices needed for online learning or access to the internet. The same report revealed that there are few digital resources designed specifically for ELLs. Aside from these challenges, ELLs and their families are confronting further barriers, such as a lack of school information in their home language, a shortage of school personnel who can communicate with them, profound lack of access to jobs with living wages, insecurity related to their immigration status and isolation-related trauma.

STUDENTS WITH DISABILITIES

For students with disabilities (ranging from mild to severe cognitive, physical, social, emotional and behavioral needs), it has been difficult for them to fully benefit from essential educational services. Despite the hard work and effort of educators to deliver special education services remotely, some services are difficult or impossible to provide, since particular therapies or assistance require close proximity. Due to the individualized nature of educational plans for students with disabilities, and the requirement to individually assess student needs and progress, there is no one-size-fits-all solution.

To engage with and care for the wide array of students whose pandemic circumstances have been especially challenging—particularly given COVID-19 illnesses and deaths, widespread job losses and isolation-induced emotional strains—educators, paraprofessionals, school nurses, counselors and other school staff need time to devote to building strong bonds with students and their families. Caring, stable relationships work wonders to heal children's and teens' spirits, rekindle their love of learning and renew their hope for the future. People who choose careers in public education are prepared to do this work, but

they need the time to do it—and that means sufficient resources to staff schools at levels that enable real relationships to form.

THE WAY FORWARD

- Ensure that our highest-need students have access to high-quality learning experiences by recruiting and retaining substantially more specialized instructional support personnel (therapists, counselors, speech-language pathologists, school psychologists, behavioral specialists, school nurses, etc.) and specialized teachers and classroom paraprofessionals with the necessary preparation, credentialing and expertise in early childhood education, bilingual education and special education.

- Increase learning opportunities so students can meet grade-level benchmarks and educators can ascertain academic growth.

- Ensure that professional development enables teachers and support professionals to build on ELLs' strengths in their home language so they can advance in core academic subjects.

- Ensure that our highest-need and most vulnerable students receive a maximum amount of interactive, intensified one-on-one instruction. Additional tutoring support, whether virtual or in person, must be prioritized. Provide structured programming and resources for parents and caregivers of young children (from preschool to third grade) because their involvement is vital to their child's education outside of school.

- Ensure every student has access to healthy and nutritious meals regardless of their ability to pay.

- Fund the Individuals with Disabilities Education Act fully and provide additional, targeted funding toward additional support for students with disabilities to enable them to make appropriate progress.

- Provide legal guidance to school districts, with educator and other stakeholder input, regarding how COVID-19 compensatory and other recovery services should be provided by school districts once in-person instruction resumes. A potential model is the guidance provided by the Pennsylvania Department of Education, which focuses the use of compensatory services on those students who, after several months back in school, need extra academic support. Pennsylvania has provided extra funding for these efforts, which will consist of after-school services and summer school.

3. Learning, Enrichment and Reconnection for This Summer and Beyond

Given the pandemic, we should create opportunities for increasing the time students spend engaged in guided learning with a qualified professional, particularly for our most vulnerable students. Such opportunities include extending the school day, extending the school year, restructuring the school day or providing other tutoring and enrichment opportunities with school district employees and retired or aspiring educators. Labor-management collaborations should find ways to close opportunity gaps by increasing learning time for students while maintaining negotiated labor standards in collective bargaining agreements. Working together, unions and districts should agree to create new staffing positions (with fair compensation) for those who want them. Such collaborative partnerships can lead to a broader understanding of the positive use of extended learning opportunities and the implementation of effective programs for students. For example, efforts to extend learning time in Pittsburgh, Pa., and Springfield and Fall River, Mass., that started over a decade ago are still going, with strong and improving student outcomes.

We must also look to learning opportunities for students over the summer, ranging from traditional programs to camp-like experiences and/or the "second second semester" that the AFT has proposed, offering a mix of academic learning, social and emotional support, and recreational activities, specifically geared toward students from under-resourced communities, as a crucial component of revitalizing public education. Summer programming would be held over four to eight weeks and include the time necessary for educators to collaborate and plan for learning that incorporates art, music, physical education and the core content subjects. It's important that learning opportunities build academic knowledge and engage students in meaningful, culturally relevant ways. Project-based learning, hands-on experiences and problem solving can ensure students acquire background knowledge and understand concepts to enhance critical thinking. Summer also provides an opportunity to reestablish relationships between teachers and students and to address trauma and social-emotional learning needs supported by nurses, counselors and psychologists. This type of nurturing "summer semester" should take place over the next couple of years, since a single summer will not be enough to adequately bolster student learning. Camp-like experiences can provide enrichment and activities that have been disrupted by the pandemic. Experienced national and local partners can play important roles in this array of summer and other extended learning opportunities.

THE WAY FORWARD

- Increase staffing to make abundant use of small-group learning the norm to increase time on task, personalized instruction and feedback, and relationship building during the regular school day and in extended learning settings. The pandemic has necessitated small-group learning in order to create safe physical distancing and lower the risk of COVID-19 transmission. Federal and state resources should ensure that schools are able to keep classes small, allowing students to receive more individualized instruction that will benefit them now and well beyond the pandemic, particularly our most vulnerable learners.

- Identify and adapt programming, in terms of grades, times, program length, meals and transportation. Given that needs and circumstances will change as more students return to more in-person schooling activities, assess critical areas of focus through memorandums of understanding. Determine interest of certified staff (teachers, paraprofessionals, student teachers, retired teachers and substitute teachers) to teach during the summer by distributing a districtwide survey. Also, provide compensation for summer work that accounts for hours devoted to instructional planning, collaborating with colleagues and bonding with students' families, in addition to time spent teaching. These

programs must be voluntary for both students and staff.

- Provide union-developed and -led professional development so that programs ensure safe environments and a focus on social-emotional learning and addressing trauma. Communication between educators and district staff is key to helping educators understand their specific roles and responsibilities as well as ensuring a seamless transition to the fall.

- Require integration of state standards and learning opportunities. Time should be spent instructing and empowering students to take ownership of their learning—for example, by choosing a neighborhood problem to research and then developing improvements or solutions for it.

4. Professional Excellence for Learning and Growth

Professional learning systems should be centered on student success and should also extend beyond pedagogy to take a more holistic approach in recognizing mental and physical well-being and the multiple disparities and injustices exacerbated by the pandemic. Given that upward of one-third of school employees are not teachers, relevant, high-quality professional development must be available to every employee who plays a role in meeting the needs of students.

For many years, our unions have taken the lead in creating high-quality professional development, working closely with school districts in implementation. This professional learning is led by hundreds of our most respected practitioners, who each year train many thousands of teachers and support professionals in everything from the foundations of effective instruction to the procedures for CPR and first aid. Professional development, and the professionalism that stems from it, is union work that we take pride in and seek to expand.
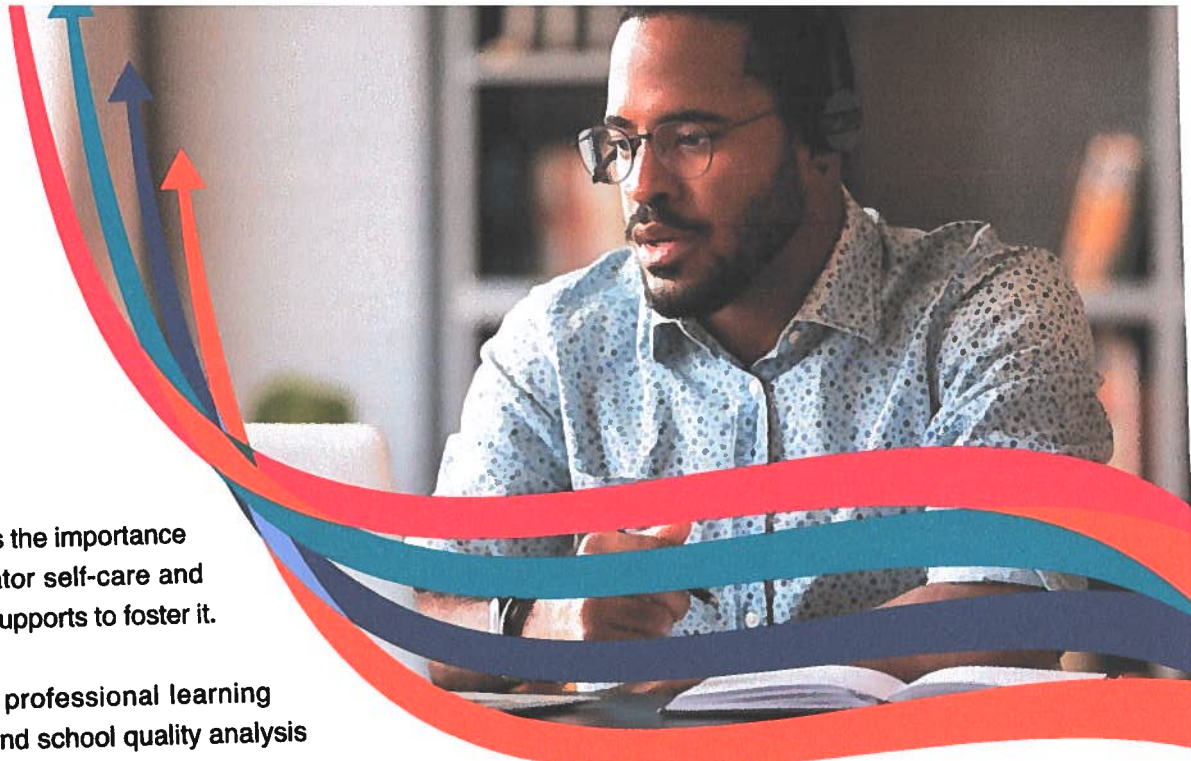
Our unions also lead in caring for the public education workforce—and we know how tapped and taxed educators and school staff are. Self-care is critically important; our schools will require resources to ensure student, staff and school resilience. The degree to which a school system authentically assesses and understands the needs of both its students and its educators, and draws on that understanding to inform its decision making, will shape its readiness to provide a healthy and holistic educational experience.

In the best of times, educating young people is a partnership between administrators, teachers, school staff, students, families and the community. Now more than ever, student growth and success will depend on an inclusive approach that is characterized by goal-oriented activities linked to student and family support and success.

To fully support students' academic, social and emotional development, school systems must prioritize the professional growth of every staff member. Learning Forward identifies four cornerstones of professional learning: leading with equity, investing in team learning, leveraging high-quality instructional materials and advocating with evidence. We add a fifth cornerstone: seeking to understand and address how racial, social and economic injustices manifest in the educational setting. A system that truly values professional excellence will actively seek to understand and address the conditions that condone shaming students for being unable to pay for their school lunches or that create circumstances where students of color are suspended at disproportionate rates. High-quality professional learning promotes justice, equity and cultural competence; continually improves to meet the changing environment; and impacts instructional practices and the school community environment for the better.

THE WAY FORWARD

- Establish professional learning priorities through collaborative partnerships of labor and management. Federal funding and related supports should incentivize this collaboration to ensure professional learning is relevant and meaningful for student and educator needs.

- Commit federal funds to support job-embedded professional learning that applies to all school professionals and codifies expectations for professional development (and a learning environment) that centers student success, equity, and racial and social justice; builds educators' abilities to effectively use a variety of academic and nonacademic assessments and tailor the best learning opportunities to ensure student success; establishes the importance of family and community engagement and cultural competence in the shaping and evolution of the school environment; understands and effectively uses restorative

practices; and recognizes the importance of, and promotes, educator self-care and provides the necessary supports to foster it.

- Tailor and differentiate professional learning based on student data and school quality analysis to meet the needs of educators to improve student learning. Blanket professional learning mandated by the district without taking into account educators' current skills and knowledge wastes time and dollars.

- Allocate federal funds to support states in building professional excellence systems that acknowledge the unique needs of educators across their teaching careers. In addition, federal funds should support the creation of teacher recognition and advancement systems, including differentiated systems and pay, that reflect opportunities for educators to serve as teacher leaders, peer observers, coaches and mentors.

Expand the Pipeline and Ensure That Educators Are **"Profession-Ready"** from Day One

National research has shown that roughly 25 percent of educators are considering leaving the profession due to COVID-19 safety concerns. Add to that being saddled with student debt and sheer exhaustion, and it becomes clear that addressing educational workforce retention and recruitment should be a national priority. Diversification of the workforce is also a priority, with 79 percent of the workforce being white and 50 percent of students being nonwhite, and research showing that students of color have higher achievement with teachers of color.

All educators must be prepared, or "profession-ready," as soon as they are responsible for student learning in their own class-room. Federal funds should be used to support high school recruitment programs, programs that help para-educators become teachers, and district-university partnerships that increase the pipeline of well-prepared educators. Teacher residency programs, like those run in Seattle and San Francisco, provide examples of how districts can partner with institutions of higher education and unions to promote high-quality teacher preparation.

Federal funding for programs, like the Department of Education's Teacher Quality Partnership Grants, should be continued and expanded to support these important efforts.

5. An Education System That Centers Equity and Excellence

The AFT and NEA are committed to the academic success and social-emotional well-being of all students, especially those most impacted by the pandemic. Rather than simply returning to "normal," we are committed to building the public schools our students deserve.

The research on school improvement and youth development is clear. Yet, instead of creating the conditions for students to thrive, we continue with a patchwork of initiatives and short-term incentives that prize accountability—not helping students reach their potential.

Researchers at the Consortium on School Research at the University of Chicago have identified specific, effective ways to support teaching and learning, starting with reimagining instruction, curricula, assessments and professional development, grounded in the science of learning. Essential supports also include leadership, family and community ties, professional capacity of staff, a student-centered learning climate and instructional guidance. Schools and districts can improve when focusing on these areas and using shared decision making as the catalyst for change.

THE WAY FORWARD

- Begin with acting on all of the recommendations in sections 1 through 4 so that our public education system is attuned to students' academic and nonacademic needs, has a laserlike focus on the most vulnerable students (and their families), offers enrichment through extended learning and summer programs, and invests in the expertise and well-being of school staff.

- Explore, advance and incentivize pathways into the profession. Many apprenticeship programs within other industrial and trade unions can serve as exemplars for the teaching profession. The AFT and NEA are eager to collaborate with federal and state governments to develop an apprenticeship program that incentivizes recent graduates to attain the skills and certifications required to fill education sector vacancies. We should look for ways to remove obstacles to entry into the education profession. Unpaid internships such as student teaching could be turned into union-facilitated apprenticeship programs that are fairly compensated (as they are in the building trades).

- Implement community schools districtwide. The community school model can address several of the racial, social and economic injustices that students and families face. When established effectively, and with the proper resources and supports, community schools become the beating heart of family and community life. The *Community Schools Playbook*, developed by the Partnership for the Future of Learning (in conjunction with the NEA and AFT), offers a clear picture of the key components of effective community schools. Transforming traditional schools into true community schools will prioritize the health, well-being and academic success of not only students who attend these schools, but also their families. Community schools, like those in Las Cruces Public Schools and in the Albuquerque/Bernalillo County Community School Partnership in New Mexico, are working with our NEA and AFT affiliates to ensure learning and well-being are addressed holistically. We support deep federal investments that will dramatically expand the number of community schools and integrate opportunities for family engagement, child care and early learning.

- Engage families and community members. Researchers cite family and community involvement as a key to addressing school dropout and note that strong school-family-community partnerships foster higher educational aspirations and more motivated students. The evidence

holds true for students at both the elementary and secondary levels, regardless of parents' education, family income or background—and the research shows parent involvement enhances the academic achievement of students from under-resourced communities. Supporting teaching and learning requires addressing students' social service needs, as well as their academic ones, and this broad-based support is essential to boosting achievement. The positive impact of connecting community resources with student needs is well documented, with community support for education being one of the characteristics common to high-performing schools.

Conclusion

Now is the time to increase educator advocacy and voice, using collaborative structures to assess what is working and where we can improve in each and every school. Within all of the challenges facing public education, we see opportunities. Together, we can build upon what we know works to strengthen teaching and learning and ensure our students have the freedom to thrive.

Through teacher leadership roles and shared responsibility for professional growth, our unions can lead the way in addressing the crises facing our country: a deadly pandemic, economic insecurity, our country's reckoning with racism, and continuing threats to our democracy. As educators, we can advocate for the equitable and just conditions our students need to build knowledge and skills, to develop caring relationships with adults and caregivers, and to learn beyond COVID-19. Returning to schooling exactly as it was before the pandemic is neither possible nor acceptable. This is especially true for our students of color, students with special needs, rural students and other underserved students who have struggled with racial and economic injustices and lack of opportunity. Our primary focus should be meeting students where they are—and getting them where they need to be—so they can recover and succeed. We also must act on what we have learned from these crises. Now more than ever, multiple systems—child care, healthcare, social services and public education itself—must be coordinated and fully funded. Only then will we be surrounding students with the supports they need and deserve and creating conditions for them to thrive.

Our two national unions commit to working with our state and local affiliates to share these recommendations and work toward making them a reality in collaboration with districts, communities, state departments of education and the federal Department of Education. Mitigating COVID-19's long-term impacts on learning and development is all of our work.

AFT/NEA Recommendations for Further Reading

Ambrose, A. J. H. (2020). Inequities during COVID-19. *Pediatrics* 146 (2). https://pediatrics.aappublications.org/content/146/2/e20201501

American Federation of Teachers. *Distance learning community: Supporting students during the COVID-19 pandemic.* https://sharemylesson.com/coronavirus/distance-learning

American Federation of Teachers. (2021, February). *Roadmap to safely reopening our schools.* https://www.aft.org/sites/default/files/aft-reopen-schools-one-pager_feb2021.pdf

American Federation of Teachers (2017). *Union role in diversifying the educator workforce: Building from within.* https://www.aft.org/sites/default/files/union_role_in_diversifying_the_educator_workforce_2017.pdf

American Institutes for Research, Center on Great Teachers & Leaders. (2020, April). Educator resilience and trauma-informed self-care: Self-assessment and planning tool. https://gtlcenter.org/sites/default/files/Educator-Resilience-Trauma-Informed-Self-Care-Self-Assessment.pdf

Aspen Institute. (2021, January). *Creating conditions for student success: A policymakers' school climate playbook.* https://www.aspeninstitute.org/wp-content/uploads/2021/01/Aspen-Institute-School-Climate-Playbook-Final.pdf

Barry, B., & Ferris-Berg, K. (2016). Leadership for teaching and learning: How teacher-powered schools work and why they matter. *American Educator.* https://www.aft.org/sites/default/files/ae-summer2016professionalism.pdf

Barton, P. E. (2003). *Parsing the achievement gap: Baselines for tracking progress.* Princeton, NJ: Educational Testing Service.

Belachew, T., & Surkin, R. (2020, October 16). *This is the new skills gap for young people in COVID-19 age.* World Economic Forum. https://www.weforum.org/agenda/2020/10/youth-employment-skills-gap-covid-19

Belfield, C. R., & Levin, H. M. (Eds.) (2007). *The price we pay: Economic and social consequences of inadequate education.* Brookings Institution Press.

Borders, G. D. (2020, June). A call to action. *The Learning Professional* 41 (3).

Colorín Colorado (2019). https://www.colorincolorado.org

Communities in Schools. (2007). *National educational imperative: Support for community-based, integrated student services in the reauthorization of the Elementary and Secondary Education Act.* Alexandria, VA.

Deliso, S., Foreman, D., Hill-Washington, T., & Narayanaswamy, S. (2020, December 9). *Why assessing well-being is important in schools: Introducing the Well-Being Index.* https://turnaroundusa.org/why-assessing-well-being-is-important-in-schools-introducing-the-well-being-index

Goldstein, D. (2020, June 5). Research shows students falling months behind during virus disruptions. *New York Times.* https://www.nytimes.com/2020/06/05/us/coronavirus-education-lost-learning.html

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement.* Austin, TX: National Center for Family & Community Connections with Schools. https://sedl.org/connections/resources/evidence.pdf

Herold, B. (2020, April 10). The disparities in remote learning under Coronavirus (in charts). *Education Week.* https://www.edweek.org/technology/the-disparities-in-remote-learning-under-coronavirus-in-charts/2020/04

Hirsh, S. (2019). *4 cornerstones of professional learning: Fundamental principles pave the way for educators' actions.* Oxford, OH: Learning Forward.

Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). *Beyond PD: Teacher professional learning in high-performing systems.* Washington, DC: National Center on Education and the Economy.

Jeynes, W. H. (2003). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education & Urban Society 35* (2): 202-218.

Jones, S. M., & Kahn, J. (2017, September 13). *The evidence base for how we learn: Supporting students' social, emotional, and academic development.* National Commission on Social, Emotional, and Academic Development. https://www.aspeninstitute.org/wp-content/uploads/2017/09/SEAD-Research-Brief-9.12_updated-web.pdf

Kamenetz, A. (2020, May 27). *Survey shows big remote learning gaps for low-income and special needs children.* NPR. https://www.npr.org/sections/coronavirus-live-updates/2020/05/27/862705225/survey-shows-big-remote-learning-gaps-for-low-income-and-special-needs-children

Kuhfeld, M., Tarasawa, B., Johnson, A., Ruzek, E., & Lewis, K. (2020). *Learning during COVID-19: Initial findings on students' reading and math achievement and growth.* NWEA.

Learning Policy Institute. (2018, August 29). *Community schools playbook.* https://learningpolicyinstitute.org/product/community-schools-playbook

Malkus, N. (2020, June 16). School districts' remote-learning plans may widen student achievement gap. Education Next. https://www.educationnext.org/school-districts-remote-learning-plans-may-widen-student-achievement-gap-only-20-percent-meet-standards

Marzano, R. J., & Heflebower, T. (2011). Grades that show what students know. *Educational Leadership 69* (3): 34-39.

Mascio, B. (2016). True teaching expertise: The weaving together of theory and practice. *American Educator.* https://www.aft.org/sites/default/files/ae-summer2016professionalism.pdf

McCombs, J. S., Augustine, C. H., Pane, J. F., & Schweig, J. (2020). *Every summer counts: A longitudinal analysis of outcomes from the national summer learning project.* Santa Monica, CA: RAND Corporation. https://www.rand.org/pubs/research_reports/RR3201.html

Mitchell, C. (2020, March 17). English-learners may be left behind as remote learning becomes 'New Normal.' *Education Week.*

National Academies of Sciences, Engineering, and Medicine. (2020). Summertime experiences and child and adolescent education, health, and safety. https://www.nationalacademies.org/our-work/summertime-experiences-and-child-and-adolescent-education-health-and-safety

National Education Association. (2020, September). *All hands on deck: Guidance regarding reopening school buildings.* https://www.nea.org/sites/default/files/2020-09/27383%20All%20Hands%20On%20Deck%20Reopening%20Guidance%20Update_Final%2009.2020.pdf

National Education Association. (2020). *Collaboration in action series: Safely reopening school buildings.* https://www.nea.org/sites/default/files/2020-10/Collaboration%20in%20Action%20-%20Safe%20Reopening.pdf

National Education Association. (2020, August). *Profession-ready teachers.* https://www.nea.org/sites/default/files/2020-08/profession-ready-teachers.PDF

National Education Association. (2020). *The six pillars of community schools.* https://www.nea.org/sites/default/files/2020-06/Comm%20Schools%20ToolKit-final%20digi-web-72617.pdf

National Education Association. (2017). Education support professional growth continuum. https://www.nea.org/professional-excellence/professional-learning/esps/continuum

National Education Association. (2014, January). *Teacher residencies: Redefining preparation through partnerships.* https://www.nea.org/sites/default/files/2020-07/Teacher-Residencies-2014.pdf

NEA Foundation. (2012, April). *Expanding learning opportunities to close the achievement gaps: Lessons from union-district collaborations.* https://www.neafoundation.org/wp-content/uploads/2017/07/elo-final-2.pdf

Pennsylvania Department of Education. (2020). *Governor's emergency education relief (GEER) funds.* https://www.education.pa.gov/Schools/safeschools/emergencyplanning/COVID-19/GEER/Pages/StudentsSpecialNeeds.aspx

Pennsylvania Department of Education. (2020). *Guidance and answers to FAQs on COVID-19 compensatory services.* https://www.education.pa.gov/K-12/Special%20Education/FAQContact/Pages/COVID-19-Compensatory-Services.aspx

Public Policy Associates, Incorporated. (2020, September). *Digital equity for students and educators.* https://www.nea.org/sites/default/files/2020-10/NEA%20Report%20-%20Digital%20Equity%20for%20Students%20and%20Educators_0.pdf

Ricker, M. C. (2016). Reclaiming our profession: The AFT's task force on professionalism. *American Educator.* https://www.aft.org/sites/default/files/ae-summer2016professionalism.pdf

Robinson, C. D., Kraft, M.A., Loeb, S., & Schueler, B. E. (2021, February). *Accelerating student learning with high-dosage tutoring: EdResearch for recovery design principles series.* https://annenberg.brown.edu/sites/default/files/EdResearch_for_Recovery_Design_Principles_1.pdf

Schott Foundation for Public Education. (2014, March). *Restorative practices: Fostering healthy relationships & promoting positive discipline in schools.* http://schottfoundation.org/sites/default/files/restorative-practices-guide.pdf

Science of Learning and Development Alliance. (2021). https://www.soldalliance.org

Shafer, S. (2020, December 11). Closing COVID-19 equity gaps in schools. *Education Week.* https://www.edweek.org/leadership/closing-covid-19-equity-gaps-in-schools/2020/09

Sugarman, J., & Lazarin, M. (2020). *Educating English learners during the COVID-19 pandemic: Policy ideas for states and school districts.* Washington, DC: Migration Policy Institute. https://www.migrationpolicy.org/sites/default/files/publications/mpi-english-learners-covid-19-final.pdf

Ujifusa, A. (2020, January 7). Sure, we teach history. But do we know why it's important? *Education Week.* https://www.edweek.org/teaching-learning/sure-we-teach-history-but-do-we-know-why-its-important/2020/01

Umansky, I. (2020, June 9). *COVID-19's impact on English learner students.* Policy Analysis for California Education. https://edpolicyinca.org/newsroom/covid-19s-impact-english-learner-students
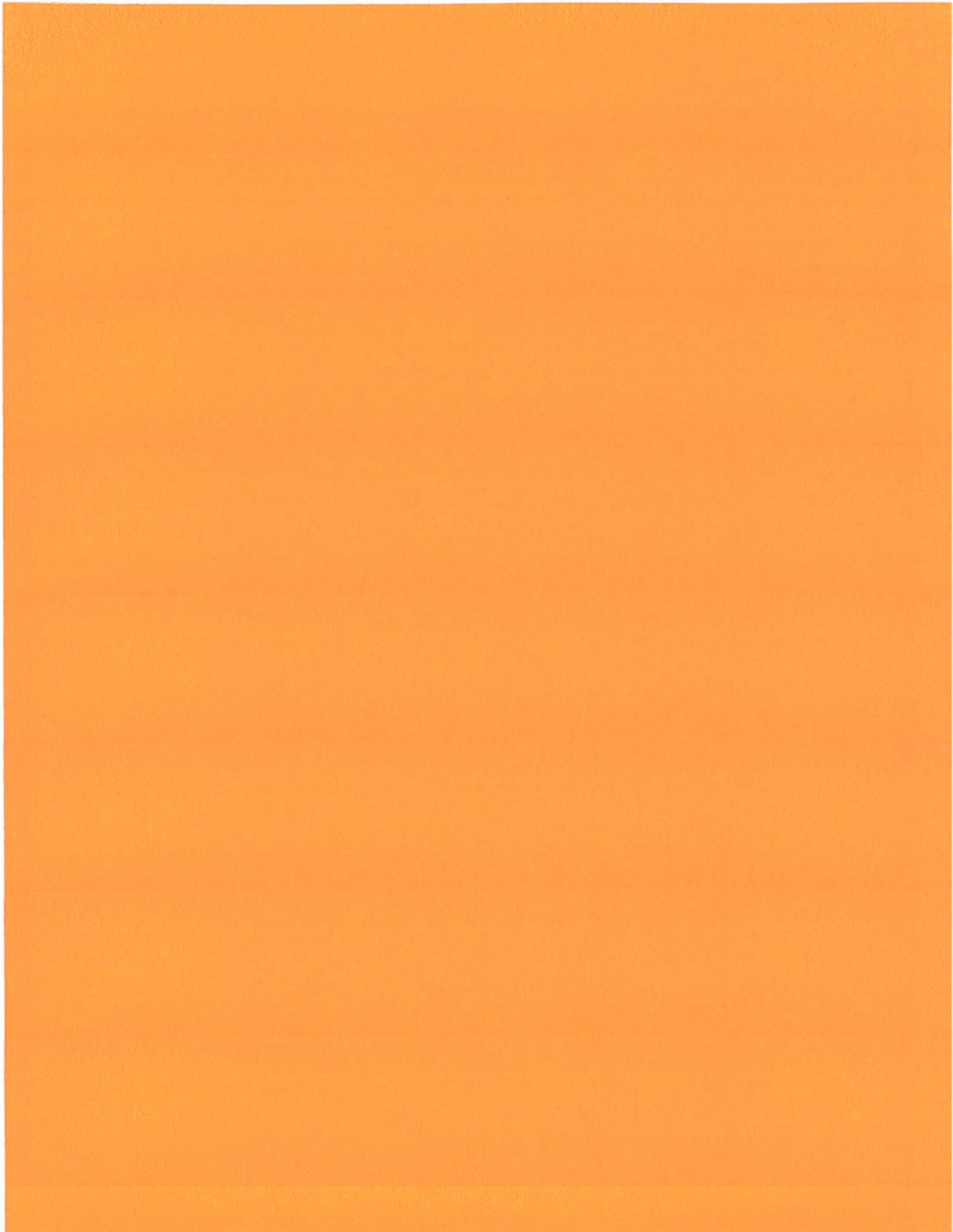
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MARCH 2021

NEA NEWS

How the Pandemic Will Change the Future of Schools

As more educators get vaccinated and schools return to in-person learning, everyone is wondering: Will the last year change the way we teach and learn?

nea**Today**

By: NEA Today
Published: 04/15/2021

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KEY TAKEAWAYS

1   The pandemic has affected every area of public education and put a spotlight on the strengths and challenges of our schools.

2   With the help of their union, educators are applying the lessons learned this past year as they plan for the future.

From the start of the COVID-19 pandemic, just over a year ago, educators have shown courage, creativity, and determination in helping their students and colleagues through the most difficult time of their lives.

This collective experience has changed us as human beings and has dramatically altered the way we teach and learn. And many of these changes—both good and bad—will likely impact K–12 education for years to come.

As we dare to look ahead, your voices will be more important than ever in ensuring that all students get the education they deserve. Read on for 10 ways the pandemic is affecting public education.

1. Educator Workload

Collaboration and bargaining can lighten the load.

Crushing educator workload is nothing new. And it has only intensified during the pandemic. As difficult as the last year has been, it has also reminded educators of the power of collaboration and collective

bargaining—especially when it comes to <u>keeping their workload under control.</u>

In Upper Moreland, Pa., for example, collaboration between the union and the district allowed them to navigate the pandemic as successfully as possible—and emerge stronger.

"Our board and our superintendent made it clear that every stakeholder is valued, every opinion and emotion is valued, and even if we don't all agree, we all can respect one another," says Shannon Sullivan, president of the Upper Moreland Education Association. The district didn't require teachers to be in school to teach. Instead, administrators trusted teachers as professionals. It wasn't about where they teach, but how they teach, which should be their choice, Sullivan adds.

Ohio special education paraprofessional and 2021 Education Support Professional of the Year Andrea Beeman.

In California, the San Juan Teachers Association worked with district administrators to draft guidelines for teaching "essential standards," rather than mastery of all the standards–recognizing the unprecedented situation and the overwhelming demands on educators.

And Ohio special education paraprofessional Andrea Beeman, who is president of the Maple Organization Support Team, worked with her union leadership to ensure that none of her colleagues lost jobs or hours.

Beeman also worked with the Maple Heights school board to ensure that paraprofessionals were able to participate in online learning. And she drafted a memorandum of understanding that allowed education support professionals (ESPs) to continue working by distributing meals and learning packets and conducting wellness checks.

"Throughout this pandemic, unions and their districts have successfully negotiated to address critical issues facing educators and students," says Dale Templeton, director of NEA's Collective Bargaining and Member Advocacy department. "It is critical they continue to engage educators and their unions in the plans and decisions they make to open schools safely and equitably."

–*Cindy Long*

LEARN MORE

Learn more about the strongest and most empowering way to give educators a voice in advocating for great public education for every

student.

2. Student Learning

Educational recovery must be equitable.

The COVID-19 pandemic created challenges for every learner, but according to some estimates, students of color <u>could be 6 to 12 months behind</u>, compared with White students, who are 4 to 8 months behind. <u>A</u>

lack of technology, higher rates of coronavirus infection, job loss, and food insecurity are just some of the struggles impacting communities of color and their education.

For many students, the struggles were insurmountable. Some students missed days, even weeks, of distance learning as they scrambled to find devices and connectivity. Others remained unreachable, despite educators' best efforts to locate them.

Ashleigh Poirier (left) with Marisol Garza, a family and student engagement coordinator. The two foster strong relationships within their New Mexico school community.
Credit: Sentinel Photo-Jim Shiley

"I spent a lot of time missing and worrying about my students," says Sheree Fagin, an elementary school teacher in South Pittsburg, Tenn. "We live in a poor area. Many of our families don't have internet access."

Even if they did have devices or access, they may not have had a place to study at home. "Many have chaotic home lives," says Samantha Bean, a high school teacher from Gardena, Calif.

But the pandemic has also brought an <u>opportunity to reimagine and reengineer</u> the policies and processes that have benefited some students over others.

"As we chart the path to the future, educators, parents, community leaders, and elected officials must work together to ensure every student and every educator can learn and work in spaces that are safe, supportive, enriching, and equitable," says NEA President Becky Pringle.

BUILDING COMMUNITY

The schools that have navigated the pandemic with more success had strong relationships with students in place before the pandemic. These relationships will form the building blocks for improved academics moving forward.

Community schools coordinator Ashleigh Poirier
Credit: Photo courtesy of Hot Springs High School

"So much of our work is trying to build bridges between students and their teachers," says Ashleigh Poirier, community schools coordinator at Hot Springs High School in Truth or Consequences, N.M. "We accomplish this by focusing on relationships with families and students while assessing the barriers that have prevented them from being active and engaged. We use a lot of positive reinforcement and trust-building ... when working with families who may feel like they are to blame for their children's difficulties in school, or [with] students who feel overwhelmed because they are so far behind."

The school also provides tutoring, mentoring, and counseling to students who need extra support.

Schools should also ensure that <u>trauma-informed practices</u> are integrated into the curriculum to support students during class time.

CREATING A ROAD MAP FOR RECOVERY

When all students finally return to the classroom, educators will need time to focus on learning recovery and social and emotional needs. That's why NEA is <u>advocating for a suspension of non-diagnostic, state-mandated tests</u> for 2021 – 2022. In the longer term, NEA recommends the following strategies to support learning recovery:

- Differentiating lessons for different learning needs.
- Ensuring adequate intensity when making decisions about extending the school day or year—including after-school activities and reduced class sizes. Sufficient, highly credentialed staff will also be required.
- Using the right assessments. Many standardized tests reward skills that closely correlate with a student's socioeconomic background.
- Creating an equity plan with stated goals and objectives to allow for equitable learning opportunities for underserved students.

—*Cindy Long*

"As we chart the path to the future, [we] must work together to ensure every student and every educator can learn and work in spaces that are safe, supportive, enriching, and equitable.

—Becky Pringle, NEA President

3. Extracurricular Activities

Art classes will get even more creative.

How do you stage Shakespeare's Romeo & Juliet when local regulations require your teenage lovers to stand at least 6 feet apart? At Westwood High School in the Boston suburbs, longtime theater teacher Jim Howard found a solution: His cast first rehearsed for months outside, then recorded their lines. Those audio tracks were merged with images from a graphic-novel version of the play to create an animated film.

After 25 years as an educator, Howard knows that the work done during rehearsals—the deep dives into scripts, the conversations around a playwright's intent and tone—matter more to student learning than performances. This fall's approach preserved that value, while providing a pandemic-safe performance for community members.

Across the nation, arts educators have been similarly challenged. How do you preserve what's important in arts education—the creativity, the social-emotional learning, the fuel for what Sir Ken Robinson famously called "the power of the imaginative mind"—while navigating virtual learning or physical distancing?

With a dash of creativity and a dollop of technology, it seems.

Theater teacher Jim Howard (center) made sure the show went on at Westwood High School in Massachusetts.
Credit: AP Photo/Charles Krupka

THE POWER OF TECHNOLOGY

Inside Christine Doherty's Franklin, Massachusetts, art room, her usual groupings of desks, where students collaborate and inspire each other, have been split up and spaced six feet apart. It could be a grim tableau — think "American Gothic" but with more physical distancing.

But Doherty has found a way to bridge the gap with technology. Last spring, when schools first physically closed, she began recording instructional YouTube videos for at-home students. Now, she's got both virtual and in-school students—at the same time—and the videos are still helpful. Whether they're sitting at their kitchen table or classroom desk, every student has an excellent view of her skills demonstrations.

Doherty, who typically creates the instructional videos on her own time, at night and on weekends. (She uses her daily half-hour of planning time to clean and prepare her classroom for in-person instruction.)

"But it'll help me in the long run because hopefully I'll be using them for years."

Doherty uses Screencastify to record the videos, and this year switched to Google Meet, her district's preferred platform, to share them with students and also with her elementary art colleagues across the district.

"The pandemic has enabled so much more collaboration than before," she says. "I've seen techniques done in new ways, skills taught in ways I never would have thought to teach them. This is an opportunity to see how each other teaches!"

GETTING THE BAND BACK TOGETHER...

Meanwhile, instrumental music and chorale teachers are working hard to make sure 2020 isn't the year the music died.

At Charleston High School in Illinois, choir director Juliane Sharp has moved her classes into the auditorium, so that masked students can sing 10-12 feet apart. Band director John Wengerski also has divided his ensemble, and is using "instrument sacks" to contain respiration.

"These are the things [students] need to do to keep being able to do what they love," Sharp told a local newspaper.

Still, music educators have had to sacrifice much of what they love this year. "Last year we started our very first orchestra, and I got so many violins, in so many sizes, for second- through fifth-graders" says Colorado elementary music teacher Yolanda Calderón. "This year, I doubled our inventory — and not a single instrument has been touched. It's so sad!"

To limit contact between groups of students in her school's hallways, Calderón and her arts colleagues have closed their classrooms. Instead of students coming to them, they're rolling carts of supplies to grade-level classrooms. "I'm taking this dog-and-pony show on the road!" she says. This means Calderón has had to set aside her ukuleles and xylophones— how could she wheel 30 ukeleles through the hallways?

For safety reasons, she's also silenced the perennial project of fourth-grade students: the recorder. (Many parents may not grieve this particular development...) "Oh no, we cannot," she says. "They're blowing into it! It's basically a COVID projector!"

What's next?

ART CLASSES WILL GET MORE CREATIVE.

"The pandemic has enabled so much more collaboration than before. This is an opportunity to see how each other teaches!"

—Christine Doherty, art teacher
Massachusetts

As an alternative, Calderón is relying more on smaller, percussive Orff instruments, like drums, triangles, finger cymbals, even Tupperwares for her at-home students, and also turning her attention to online resources, like Chrome music lab and QuaverMusic, which her students can use to compose music, mix audio tracks, and more.

"This week my fourth and fifth graders were low-key Foley artists!" she says. (A Foley artist is the person who adds everyday sound effects to movies, like clocks ticking or cars backfiring.) In this project, Calderón's students worked with a library of mini-sounds, like ocean waves, to mix together three audio tracks for short videos. "We talked about balance, which is a very fundamental musical concept," she notes.

The pandemic will end eventually, but many of these new resources will persist, educators say.

"I think, like any seasoned teacher, I'm going to recognize that everything I take from this year will go into my bag of tricks and I'll pull it out as I need it," says Howard. "As much as we want to put this experience behind us, I don't think forgetting this year would be valuable."

—Mary Ellen Flannery

4. Privatization
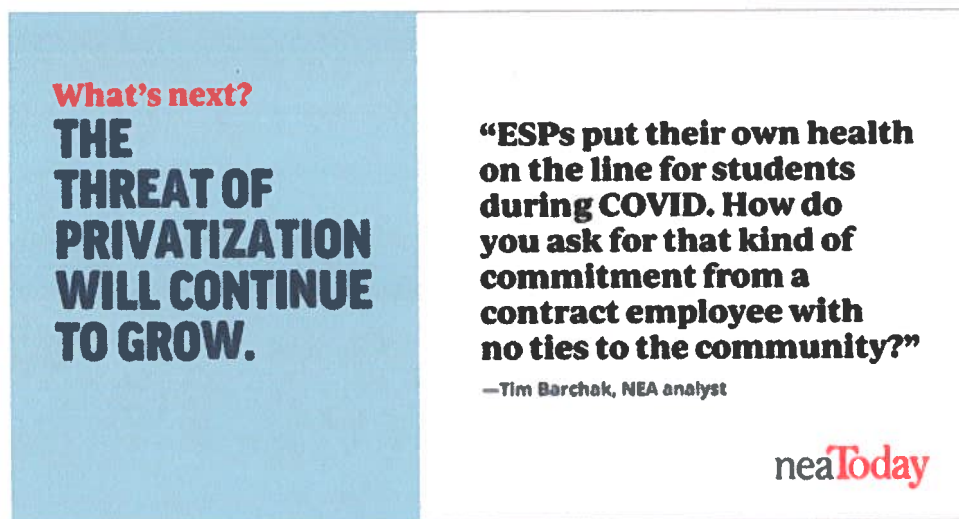
For-profit schools will continue to be a threat.

"Legislation to unmake public education is being rolled out across the U.S.," says University of Massachusetts Lowell professor and education historian Jack Schneider.

Conservative legislators in at least 15 states are aggressively pushing voucher expansion bills that divert money from public education to private schools. Rooted firmly in racism, these schemes could so profoundly degrade and re-segregate schools that if they pass as written, public schools might "never look the same," says Schneider.

We've seen it before: Privatizers swoop in and attempt to grab money from public schools during times of crisis. They peddle silver bullet solutions—such as virtual learning, privately managed charter schools, or vouchers schemes—that don't address students' needs and drain resources from the public schools that 90 percent of families rely on.

The downsides of these privatization plans are numerous, including drops in student achievement, huge class sizes, poorly paid teachers, and rampant scandals over finances and lack of transparency.

The pandemic has led to an uptick in these efforts. "They pitch these offerings as stepping up to help out the country in a moment of crisis," says Gordon Lafer, a political economist from Eugene, Ore. "But it's terrible for education, partly because so much of education depends on the personal relationship between teachers and students."

What's next?
THE THREAT OF PRIVATIZATION WILL CONTINUE TO GROW.

"ESPs put their own health on the line for students during COVID. How do you ask for that kind of commitment from a contract employee with no ties to the community?"

—Tim Barchak, NEA analyst

neaToday

Corporate interests also use crises to convince school boards to outsource jobs held by ESPs, often targeting transportation as well as custodial and food services.

"Privatizers function in a world without transparency and public accountability, two things we must have when health and lives are dependent on the operation," says Tim Barchak, a senior policy analyst at NEA. "There were countless examples of ESPs putting their own health on the line for students during COVID. How do you ask that kind of commitment out of a contract employee with no ties to the community?"

Unions have decades of experience working with community allies to stand up to privatizers. In the wake of COVID-19, fighting them off will occupy public education advocates for years to come.

—Amanda Litvinov

LEARN MORE

Find out more about vouchers, and how to fight them.

Find out how to fight privatization in a time of crisis in this webinar from NEA's ESP Quality department:

5. Equity and Fairness

Race and class inequities can no longer be ignored.

Have you ever found yourself listening carefully to what someone is saying while ignoring the background noise in the room? It's only when someone points out the other sound that you realize it's even there.

This is called selective attention. It allows us to focus on what matters most to us and block out the problems around us. But once you notice the problem, you can no longer ignore it.

For years, certain elected leaders have deprived schools in communities of color and rural districts of vital resources. Now, the pandemic has shined a glaring spotlight on the results of those deliberate policy choices, which have created inadequate school funding, inequities in access to technology and broadband, and food insecurity. The rest of the nation has finally seen what educators have known for a long time. And they cannot unsee it.

REWRITING THE RULES

Now that more people are paying attention, educators are amplifying their work to help right these wrongs, so every school has engaging materials and up-to-date approaches, healthy meals, and emotional supports to set kids up to succeed.

Special education teacher Karen Moore

Take Montgomery County, Maryland, where educators have increased access to rigorous classes and club activities for students of color through an initiative called the "Minority Scholars Program." What started out in one high school 15 years ago has now spread to 25 high schools and 22 middle schools, engaging 2,000-plus students.

And in a Chicago suburb, union members are partnering with parents, providing the tools and resources caregivers need to advocate for their children. Among other resources, the local union offers racial justice trainings and workshops on how trauma impacts student learning.

GETTING LOUD AND PROUD

Across the country, educators and their unions are pushing harder than ever before. They're demanding that those in power <u>provide adequate resources to reopen school buildings safely</u> and ensure that students no longer go without.

Over the last year, we've seen the power of this collective activism. Nationwide, <u>educators delivered meals and learning packets to students</u>, and bus drivers set up mobile hotspots for students who didn't have internet access.

And when discussions around reopening school buildings took center stage, educators made sure they were involved. In Iowa, for example, leaders and members of the Des Moines Education Association immediately connected with administrators and school board officials to prioritize student learning and educator safety. They organized members to join every district committee, so their voices and concerns were addressed up front.

MOVING FORWARD TOGETHER

When NEA President Becky Pringle was elected in August, she laid out her vision for the organization: "I am leading a movement to reclaim public education as a common good, as the foundation of this democracy, and then to transform it into something it was never designed to be—and that is a racially and socially just and equitable system that prepares every student to succeed in a diverse and interdependent world."

She added, "I cannot do this alone. It is only together that we can ensure every student lives into their brilliance."

—Brenda Álvarez

"**As educators, we need to call out the inequities every time we see them.**

**—Marcelo Kim, chemistry teacher, Vista, California**

6. School Funding

Educator jobs will need to be protected.

The pandemic has taken a steep toll on state and local budgets, resulting in a staggering number of job losses in public education—and it could get worse.

Together, public K–12 schools and higher education institutions lost more than 1 million employees in 2020, including some 670,000 K–12 jobs, according to the Bureau of Labor Statistics. Among them are nearly 200,000 ESP positions across K–12 and higher education institutions, reports the U.S Census Bureau. In total, that's nearly three times the number of education jobs lost during the entire Great Recession of 2008 – 2013.

In the end, students pay the price, facing larger class sizes and the erosion of the rich curriculum and services they deserve.
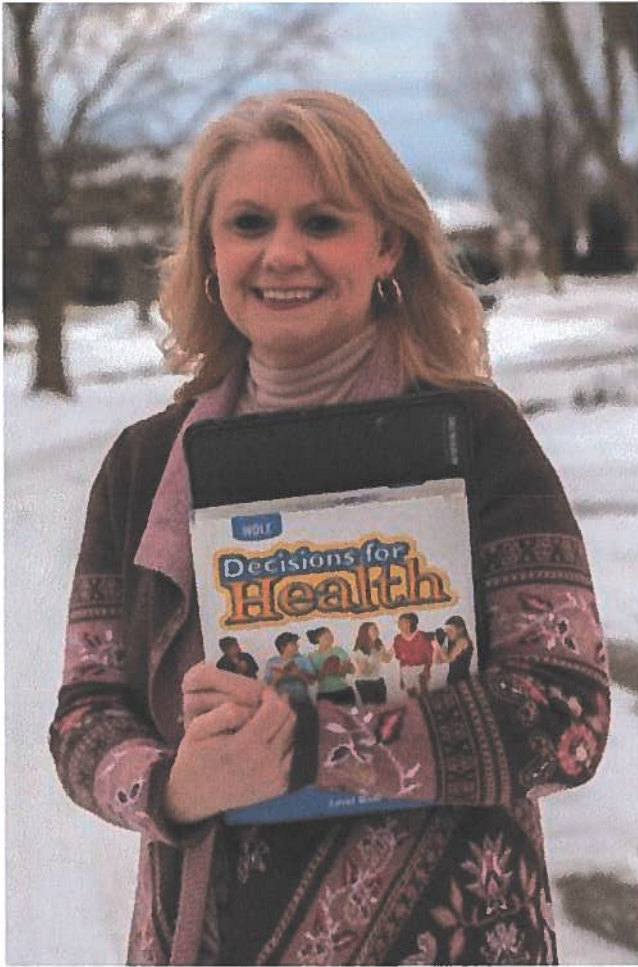
Michigan educator Sarah Bigelow.
Credit: Photo by Jim West

As an "electives" teacher of health, physical education, and nutrition at Romeo Middle School in Michigan, Sarah Bigelow always has some level of concern that her position could be cut when the economy hits a bad patch. But she was on high alert last summer when lawmakers said school budgets might be cut by up to 25 percent.

For students to lose their electives would be "devastating," Bigelow says. "For some students that's the best part of their day, where they excel."

And for her own family—her husband and daughter, who has special needs—a layoff would be disastrous. "For us to lose half our income—we would not be able to continue to pay our bills," says Bigelow, who has been a teacher for 18 years.

Fortunately, drops in state revenues were not quite as bad as predicted. Districts have moved money around, many states have dipped into rainy day funds, and federal COVID-19 relief packages have helped.

Bigelow still has her job—for now. But the economic toll of the pandemic will continue to be felt for years to come.

MAKING WAVES IN WASHINGTON, D.C.

Educator activism is already making a difference. At the federal level, educators helped bring massive change to our nation's capital by electing a new president. From day one, the Biden-Harris administration has listened to educators about what schools need to operate safely and how to serve students more equitably.

Educators clamored for Congress to pass coronavirus relief bills that have provided critical funds to address schools' immediate needs. In March, Congress passed the American Rescue Plan, which will bolster schools in the long term with an additional $170 billion for education. That funding will create and protect millions of education jobs, cut child poverty in half, and make health care more affordable.

Still, in the coming years it will take a chorus of educator voices in statehouses and school board meetings across the country to push back against education cuts proposed by policymakers who don't know (or don't care) what our students need to succeed.

—Amanda Litvinov

7. Mental Health

A new focus on educators' well-being

How many challenges did California teacher Jesse Holmes face this fall?

Three weeks into the school year, she was reassigned from first grade to fourth, a grade she never previously taught. Not long after, her district switched from all-virtual to a hybrid model that has teachers simultaneously juggling at-home and in-person students—except when schools are closed altogether for wildfire evacuations, which also happened.

Five-minute activities now take 30. Login issues happen all the time. When lessons don't get covered during the school day, Holmes feels obligated to create 30-minute instructional videos at night, at home, so that nobody falls behind.
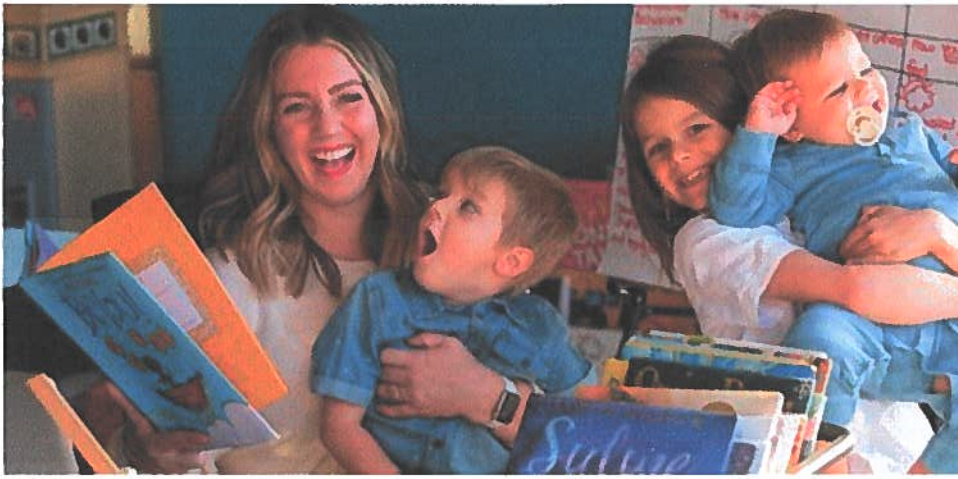
California teacher Jesse Holmes, shown with her three sons, has a new focus on work-life balance.
Credit: Tracy + David Stills and Motion

Toss in a new learning management system, her role as local union rep, and oversight of the online schooling for her own three kids, ages 1 to 7—and, oh yes, a global pandemic that has killed more than 400,000 Americans.

"By November, I just wanted to be happy and I wasn't. I wasn't eating and I definitely wasn't sleeping more than three hours a night," recalls Holmes.

Even in the best of times, the life of an educator is hard on a person's mental health. "Educators have a natural drive to care for other people, and we're left with whatever's left," notes Jessica Walsh, a Delaware teacher who trains her colleagues on self-care practices.

Last year, a pre-pandemic study by English researchers found that an increasing number of teachers face mental-health issues, and that "sleeping problems, panic attacks, and anxiety issues" had contributed to teachers' decision to leave the profession.

Now, the trauma of living through a pandemic, as well as ongoing racial and economic inequities, has deepened those issues, says Sunni Lutton, a University of Florida counselor.

Holmes reached her breaking point early this year. With her health in the balance, she forced herself to start saying no, put down her phone on weekends, and set limits on the time she spends "at work."

Similarly, across the country, educators and their unions are developing much-needed practices and resources for mental health. Many will last long beyond the pandemic—some ingrained in personal habits, others codified into employee contracts.

'SHIFTING YOUR MINDSET'

Peggy Hoy is an instructional coach and union leader from Twin Falls, Idaho, who began training her colleagues on resiliency a few years ago. "Even before the pandemic, it was like, every year, more and more things get added to teachers' plates. We're really good at taking things on, and really bad at letting them go," she says.

To be the best teachers for their students, teachers first need to figure out how to take care of themselves, she says. It's like when flight attendants tell you to put on your own emergency air mask before assisting others. "If you can't take care of yourself, you can't take care of the people who rely on you," says Hoy.

Delaware teacher Jessica Walsh

This can be a difficult lesson for educators, notes Walsh, a Delaware kindergarten teacher who also does self-care trainings for colleagues. "It's a caring profession. Through my work in education and the education associations, I spend a lot of time caring for students, whether it's in my classroom or advocating on a larger level. I know I'm not alone in that," she says.

But educators can't just live with the consequences. "We can't affect our stressors, but we can change our reaction to them," says Walsh. "It's about shifting your mindset and the habits you incorporate daily. It's how you live your life. Then, when the stressors come, you can manage them."

The consequences for stressed-out educators (and their students) are dire. Toxic stress can affect every system in your body—respiratory, cardiovascular, endocrine, gastrointestinal, nervous and reproductive—as well as your ability to listen and process information. In the short term, acute stress has been shown to trigger such things as asthma, headaches, or vomiting; in the long term, it can cause chronic fatigue, depression, metabolic disorders like obesity and diabetes, hypertension and cardiac disease.

Arizona union leader Vanessa Jimenez

Across the country, educators and their unions are developing much-needed practices and resources for mental health. Many will last long beyond the pandemic—some ingrained in personal habits, others codified into employee contracts.

Research also shows regular mindfulness practices around breathing, journaling, and more can help, although many people will need more sustained care from mental-health providers to manage their mental health.

"People really need to work on their foundations, to find out how and why they react to trauma the way they do" says Lutton. "We want a 1-2-3 solution, but it's not. Because of the layers of trauma that saturate our society, we really need to dig deep."

BARGAINING FOR EDUCATOR HEALTH

Recently, more "self-care" or mindfulness trainings have been provided to educators by their unions, like in Idaho and Delaware, but educators also have found support in contracts negotiated at the bargaining table. In Phoenix, where students and teachers have been working from home, but education support professionals in school buildings, the Phoenix Union Classified Employees Association (PUCEA) recently negotiated shift rotations for all ESPs, regardless of job category.

The union also pushed the district to hire more health and wellness coordinators, specifically for staff. "Instead of going through the Employee Assistance Program (EAP), where you have to go through the whole approval process and then only get six sessions, you'll have somebody in-house who will just be a phone call away. You can say, 'hey I'm having a hard time. Can you give me some strategies now to get through the day?'" says PUCEA President Vanessa Jimenez.

Before the COVID-19 pandemic, the union was making slow progress on these issues, says Jimenez. The new attention to staff's health is one good thing to come out of the pandemic, she says.

In Idaho, Hoy's union bargained for release time that provides educators with an opportunity to do their work—away from students—and a system that rewards educators with days off when they substitute for absent teachers. Both help to manage stress and workload. Additionally, sick leave policies now allow for mental-health days.

This is about doing what's best for educators' health, but also what's best for student learning, says Hoy. "I really, really think to be 100 percent present for your students, you have to be 100 percent present for yourself," she says.

For Holmes, her contract is a reminder that she is paid to work 6.5 hours a day, five days a week. Since the fall, she has set some personal limits on her use of technology outside the work day. "I have had to learn to tell myself no. And it's really hard," says Holmes.

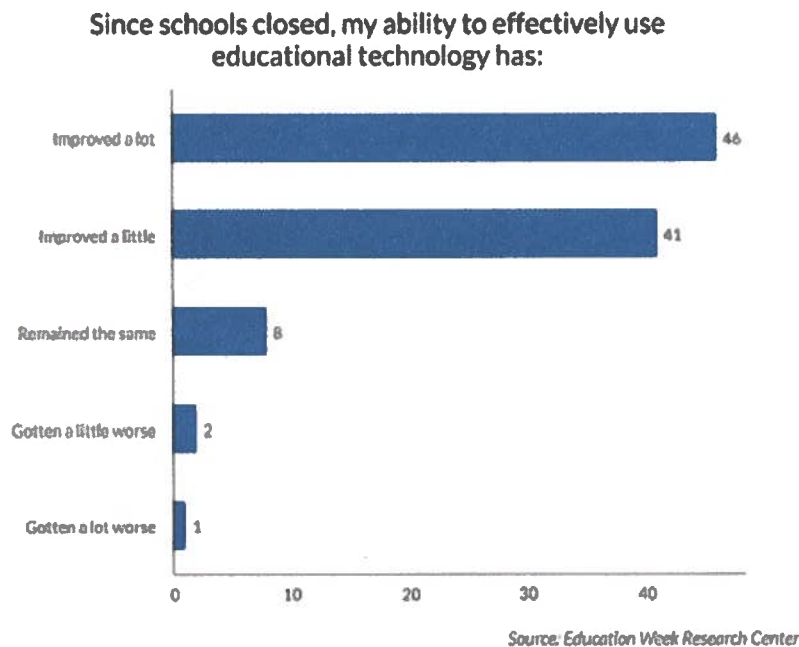But, she says, it's also really healthy.

—*Mary Ellen Flannery*

"It's about shifting your mindset and the habits you incorporate daily. It's how you live your life. Then, when the stressors come, you can manage them.

—Peggy Hoy, instructional coach

8. Technology

We should continue to use digital tools to support student learning but be aware of their limitations.

If a year of remote learning has proven anything, it's that <u>there is no substitute for face-to-face, in-person relationships among students, teachers, and other school staff</u>. But many districts have now invested millions of dollars in distance learning infrastructure, and that means technology is likely to play a more prominent role in education, even when everyone returns to the classroom.

Since schools closed, my ability to effectively use educational technology has:

Category	Value
Improved a lot	46
Improved a little	41
Remained the same	8
Gotten a little worse	2
Gotten a lot worse	1

Source: Education Week Research Center

A 2020 Education Week survey found that teachers believed that their educational technology skills were improving during the COVID-19 school closures. The same poll also found that 21 percent of teachers had developed "more negative" views of technology during the same time.

That might be OK for many educators who will emerge from the COVID-19 crisis with new skills and a greater level of comfort with technology.

According to a December 2020 survey of teachers by *Education Week*, 87 percent of respondents reported that their ability to use technology improved by "a lot" or "a little" during the pandemic.

"I feel like the system is generally thought of as stagnant and unable to adapt. [This past year] has shown otherwise," says Maurice Telesford, a high school science teacher in Lansing, Mich. "Before COVID[-19], some teachers had already flipped their classrooms or were using Google Classroom, etc., but now everyone knows how to do it, and that's great."

Still, the integration of digital technology into instruction and practice will always require access to relevant, high-quality, interactive professional development for every educator. As NEA makes clear in its digital equity statement, technology is a tool to enhance and enrich instruction for students and should not be used as a way to replace any educator or limit that person's role.

What's next?

ED TECH IS HERE TO STAY.

"**Before COVID**, some teachers had already flipped their classrooms or were using Google Classroom ... but now everyone knows how to do it, and that's great."

—Maurice Telesford, science teacher
Michigan

Ultimately, the conversation around the use of education technology should continue to focus on one overriding concern, Telesford says. "Is it the best tool in that moment? Will it help solve the problem that's in front of us? That's what we have to always figure out."

—*Tim Walker*

LEARN MORE

NEA offers **multiple micro-credentials** intended to teach educators how to leverage digital tools and to support your students using critical thinking, communication and collaboration skills. Micro-credentials are free to NEA members.

9. Solidarity

Unions will grow stronger.

Since the pandemic began, educators have continually put pressure on their school districts to provide guidance, flexibility, and support. They've done this during a time of deep social isolation and loneliness, and many turned to their unions for camaraderie, courage, and community.

While the masks never arrived (they found or made their own), the district did pay time and a half to cafeteria staff and every education support professional who worked when school buildings were closed.

Meanwhile, Grace Hopkins, a second-grade dual language teacher in Austin, Texas, battled her district along with thousands of other educators. Among their demands: a delay to in-person learning; "hero pay"; accommodations to work from home for those with underlying conditions; and the flexibility to determine how best to staff classrooms.

The group organized many actions, including a 200-plus car caravan and press conferences, and won many of their demands.

"I think the pandemic really helped people understand the power of 'us' through our organizing efforts," explains Hopkins.

Maldonado agrees: "While the pandemic isolated us, the union brought us together."

Members of Education Austin and their allies taped messages on the Austin Independent School District building, demanding that school leaders provide a safe school environment during the pandemic

Credit: Courtesy of Grace Hopkins

Tom Israel of NEA's Center for Organizing adds that, "In places all across the country, the pandemic has demonstrated to members the real value of belonging to the union. They see their local and state affiliates stepping up to demand safe and just schools, and they've seen that the association can be the best source of information during these difficult times. Going forward, the clear lesson is that when NEA affiliates lead on fighting for the issues members care about, educators will join and get involved."

—Brenda Álvarez

"I think the pandemic really helped people understand the power of 'us' through our organizing efforts.

—Grace Hopkins, second-grade dual language teacher

10. Safer Schools

Health and safety will be a priority for schools

No one knows exactly how COVID-19 will impact public health in the months to come. So everyone will have to remain vigilant, particularly in our nation's schools. While basic practices—such as mask-wearing,

frequent handwashing, and sanitizing—are effective, they also cost money. After decades of underfunding schools, lawmakers will face more urgent pressure to invest in the health and safety of our students.

PLACING A NURSE IN EVERY SCHOOL

School nurses have never been more essential to a healthy school environment. Their duties go far beyond scrapes and bruises. They manage medications, assist students with disabilities, act as liaisons between public health departments and school staff and families, promote health education, and provide mental health services, among other responsibilities. Now they also screen for COVID-19, conduct contact tracing, and manage isolation rooms for potentially infected students.

Many school nurses now manage isolation rooms like this one, which are critical in preventing virus transmission.
Credit: Allen Eyestone/The Palm Beach Post

"The pandemic trajectory confirms we need school nurses more than ever. Students need much more mental health support in coping with

academic, personal, and family challenges resulting from COVID-19," says Cynthia Samuel, the nurse at Grove Street Elementary School in Irvington, N.J. "School nurses are positioned to render support as well as resources ... to address the pandemic-related disparities encountered by Black, brown, and Indigenous communities."

CLEARING THE AIR

School nurse Cynthia Samuel

School infrastructure plays an equally important role in keeping students and staff safe. "Appropriate ventilation has always been important in schools, but it's also crucial to fight COVID-19," says Joel Solomon, a senior policy analyst at NEA who leads the organization's health and safety team.

The U.S. Government Accountability Office says that to prevent the spread of the coronavirus inside schools, more than <u>41 percent of school districts need to update or replace their heating, ventilation, and air conditioning systems in at least half of their buildings.</u>

Students in these older buildings often contend with mold, leaky ceilings, and frequent colds and flu, says Jean Fay, a member of the Massachusetts Teachers Association Environmental Health and Safety Committee. She adds that they also experience increased asthma rates from poor air circulation and lethargy from high levels of carbon dioxide. "It took a pandemic to point out that air quality is critical for the health of those who occupy a building," Fay says.

—Cindy Long

LEARN MORE

We've designed both a **comprehensive document and a short guide** to assist local leaders, staff, and members to create an indoor air quality plan as part of an overall COVID-19 mitigation strategy.

AMERICAN Educator

A JOURNAL OF EDUCATIONAL EQUITY, RESEARCH, AND IDEAS

Creating the Conditions for Students to Thrive

Increasing opportunities
for families experiencing
homelessness and youth
seeking academic,
emotional, and cultural
supports
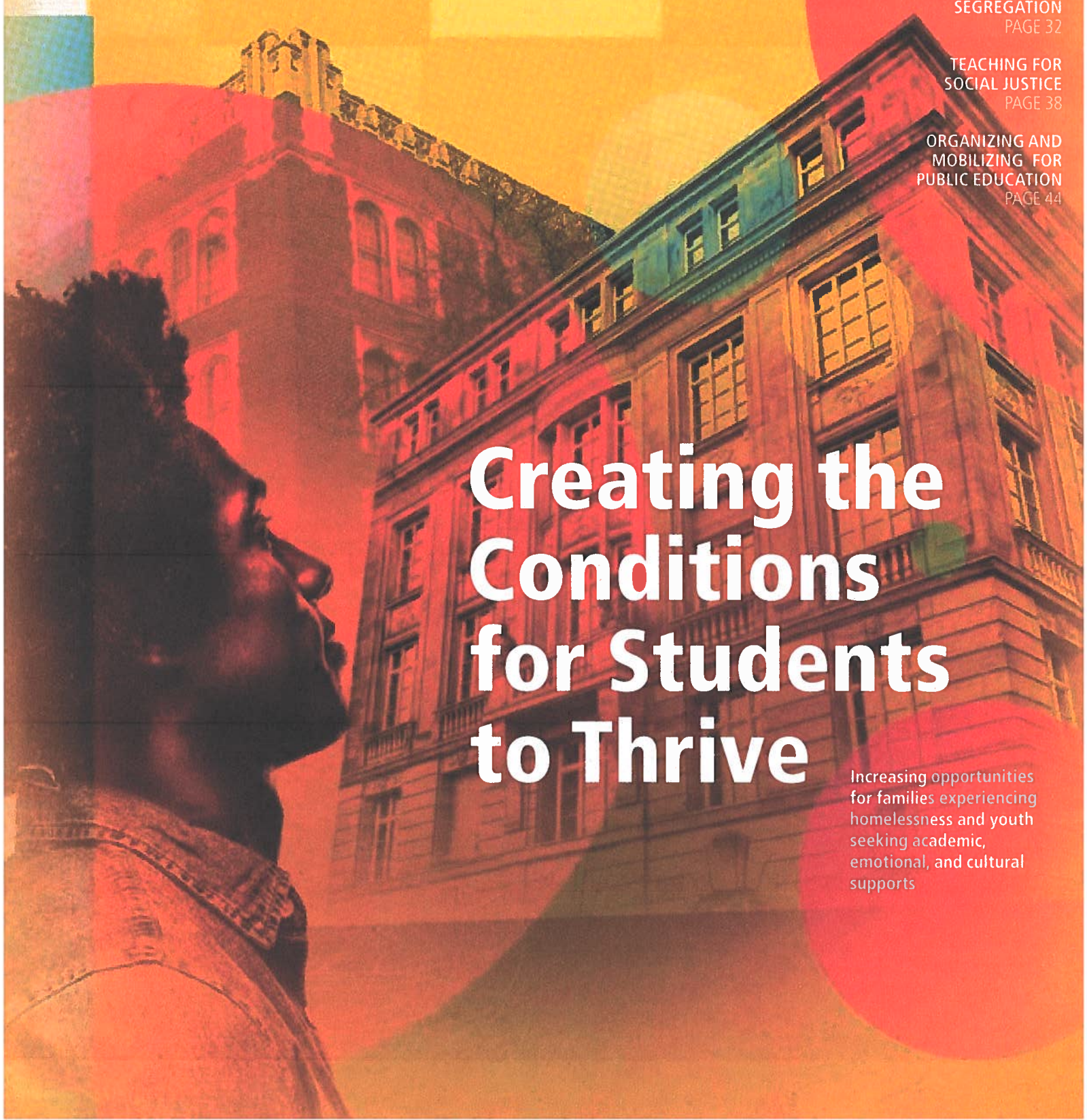
"Where Do I Start?"

Free Resources to Support Effective, Courageous Conversations About Race with Students

First Book Educator Tip

Design your curriculum and lesson plans using an inquiry-based method to help evaluate materials through an anti-bias, antiracist (ABAR) lens.

Learn More: FirstBook.org/AFTempower

Empower Your Classroom!

Explore the full Empowering Educators series of resources, thanks to support from our friends at Pizza Hut:

✓ Free educator resource: Guidebook on Race and Racism
✓ Video series with tips from anti-bias, antiracist (ABAR) teaching experts
✓ Special edition #OwnVoices stories

Access Free Resources: FirstBook.org/AFTempower

Need help finding additional resources or placing an order with First Book?
Call us at **1-866-READ-NOW** or email us at **help@firstbook.org**.

Tools, Time, and Trust

The Keys to Reopening and Recovery

RANDI WEINGARTEN, AFT President

THE AFT IS COMMITTED to ensuring that every person in America has the freedom to thrive—especially children. That's why we've been fighting to safely reopen school buildings since the COVID-19 pandemic began.

Children have gone hungry and suffered from social isolation. Families have struggled in so many ways, from tragic deaths to job losses. Although educators and school staff have made herculean efforts, remote learning was never a substitute for in-person learning—even for those students with reliable internet access. Despite legitimate fears for their own and their families' health, educators understand the importance of in-person instruction, but they have a right to be safe.

Reopening schools safely requires tools, time, and trust. Tools of mitigation, testing, and resources to prevent transmission of this deadly, invisible virus and to meet the academic, emotional, and social needs of our students and families. Time to put those tools in place. And trust that as new information emerges—such as variants of COVID-19—district leaders and other key officials will work with us to prioritize safety. The Trump administration fell down on all of this.

Thankfully, the Biden administration is literally a breath of fresh air in this fight against the COVID-19 respiratory virus. It has been transparent and honest—making decisions based on science and on the needs of Americans. President Biden is committed to safely reopening the majority of K–8 school buildings for in-person learning in his first 100 days and has championed the bold level of funding needed to increase vaccinations, support state and local governments, and provide critical resources to schools and colleges. Under Biden's leadership, the Centers for Disease Control and Prevention released (as it should have a year ago) a rigorous road map that our members can use to fight for a safe reopening.

Since releasing our first reopening blueprint in April 2020, we've learned from our experiences: *science is important, but so are common sense and collaboration.* Buildings differ, as do communities' resources. We have been calling for common sense and collaboration in applying six essential pillars for reopening:

- COVID-19 testing must become a way of life in schools, with regular and rapid testing to monitor the virus.
- Proper safety protocols—including masks, physical distancing, cleaning, and sanitizing procedures—and ventilation upgrades must be implemented.
- High-risk teachers and school staff need appropriate accommodations to keep them safe.
- Vaccine prioritization for teachers and school staff, starting with those doing in-person learning.
- Given the new variants, communities need a metric for community infection rates that will trigger increasing safeguards, including temporary closures.
- Safety committees, situation rooms, and building walk-throughs build trust and help to abate fear about reopening.

According to a recent poll of our members, 88 percent of educators favor this reopening plan and 85 percent would feel comfortable in their classrooms if these recommendations were followed.*

What should happen if a ventilation system needs major renovations? Not bringing in cheap fans that the manufacturer itself says are not appropriate for non-household use, as at least one large school district attempted. That's why educators and parents protested. But there are common-sense solutions, which working together would produce, as it has in districts large and small, like New York City and Meriden, Connecticut. These include upgrading filters, cleaning vents, opening windows, and bringing in air purifiers and appropriate fans. Also, vaccinate the teachers and staff who want it, and since many families are still choosing remote instruction, prioritize vaccines for teachers and staff who will be working in schools.

Educators want what students need, but they deserve to be safe. And there are ways to do so.† In New York City, the United Federation of Teachers (UFT) has worked with the district on a massive testing and tracing strategy, with the data posted online. After more than 250,000 tests, the in-school positivity rate was just 0.42 percent. Ongoing testing and other mitigation strategies (personal protective equipment, HVAC upgrades, distancing, building walk-throughs to check safety protocols, and more) give educators and families confidence. The Boston Teachers Union negotiated a phased reopening, starting with in-person priority students, including special education students and English language learners. The Albuquerque Teachers Federation and district devised an accommodations plan that protects the highest-risk staff and those caring for

> **Educators want what students need, but they deserve to be safe.**

high-risk family members. And, after the AFT pressed hard for educators and other essential workers to have vaccine priority (behind healthcare workers of course), the Washington Teachers' Union won vaccinations for school staff and the UFT stood up its own vaccination effort.

This fight to safely reopen our buildings for in-person learning and to reconnect with our students is some of the hardest work educators have faced—made worse by the ongoing fights against austerity and hazards like lead, mold, and asbestos in schools. Together, we are overcoming the crises gripping our country. With President Biden's recovery plan, our schools and colleges will have the resources to address trauma, meet emotional and academic needs, and ensure the full recovery of our students. □

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*For the poll results, visit go.aft.org/poll_on_return.

†For case studies, visit aft.org/reopen-schools.

AMERICAN Educator

Creating the Conditions for Students to Thrive

The myriad effects of the pandemic, from the tragic loss of life to the terrible impacts of the digital divide, underscore the need to create the just and equitable conditions that will revitalize learning. By increasing opportunities for families experiencing homelessness and youth seeking academic, emotional, and cultural supports, these articles show how we can ensure that students not only survive these challenging times but also thrive long after them.

Caring for Grieving Students and Families

CARLO107 / E+ / GETTY IMAGES

Supporting grieving students, and their families, is always challenging. Now, more than a year into the pandemic, many educators are overwhelmed, processing their own grief even as they continue doing all they can to care for their students. No one should face this challenge alone. The Coalition to Support Grieving Students, of which the AFT is a founding member, was formed to help teachers and other education professionals comfort students and families experiencing loss. Here, we highlight materials focused on grief and trauma created by the coalition that are available through Share My Lesson.

Helping Students Cope

Very few educators have had the benefit of professional development on how to understand, approach, and connect with grieving students. The coalition's comprehensive guide to its video and print materials is a valuable place to start. "Supporting Grieving Students During a Pandemic" offers modules on connecting with families remotely, explanations of grief triggers, and information about organizations supporting grieving children and their families. Similarly, the webinar "Supporting Grieving Children in Our Schools" outlines the strategies that teachers and paraprofessionals can use to help bereaved students who are withdrawing from friends, family, and academics.

An important first step in reassuring grieving students is starting a conversation. The resource "Talking with Children" offers advice on how to initiate contact with students and reassure them that they are not alone. With simple strategies for being genuine and approachable, and even some examples of what to say, this short guide will help educators take that first crucial

step: creating an opportunity for the student to share. Even if a student does not want to talk at first, it is vital to show there are people who do care and are available to listen, if and when they are ready.

In offering words of consolation, many of us fear saying the wrong thing. Even a well-intentioned comment might inadvertently encourage those grieving to hide or even deny their feelings. The coalition's "What Not to Say" module provides concrete suggestions to ensure that supportive comments are helpful and that students are given the space to express their emotions in a healthy manner. These suggestions include listening more and talking less (so that grieving students are leading the conversation), showing empathy, and avoiding efforts to simply cheer them up. Classmates also play an important role in processing loss. To support a grieving peer, the "Peer Support" resource suggests educators provide basic information to classmates about a peer's loss, give classmates opportunities to ask questions of the teacher before a grieving student returns to class, and offer a safe environment to share thoughts and feelings.

Connecting with Families and Colleagues

In the module "Connecting with Families," the coalition highlights the need to partner with students' primary caregivers to provide students a firmer basis for emotional support and to ensure family members are aware of school and community resources. Cultural considerations also play a role in building these connections. The coalition's "Cultural Sensitivity" resource underscores the importance of approaching each family in a sensitive, thoughtful manner. It's essential to ask questions and intentionally avoid making assumptions so that each family's unique perspective is honored.

In supporting students experiencing loss, coordination by the entire school staff is crucial. The module "Coordinating Services and Supporting Transitions" explains how each member of the school staff has the potential to help grieving students, and how they can provide the most effective support if they work together as a team, especially as students navigate potentially difficult transitions (such as to a new grade or school, especially since grieving is a long-term process).

Helping grieving students express their feelings and accept emotional supports will give them the tools to help themselves. It will also prepare students to sustain themselves and their loved ones in difficult times that will inevitably come later in their lives. To see what other resources Share My Lesson offers on grief and loss, visit our collection of lesson plans, materials, and activities. If you have additional ideas or requests, please reach out to us at content@ sharemylesson.com.

–THE SHARE MY LESSON TEAM

Recommended Resources

Supporting Grieving Students During a Pandemic
go.aft.org/ae121sml1

Supporting Grieving Children in Our Schools
go.aft.org/ae121sml2

Talking with Children
go.aft.org/ae121sml3

What Not to Say
go.aft.org/ae121sml4

Peer Support
go.aft.org/ae121sml5

Connecting with Families
go.aft.org/ae121sml6

Cultural Sensitivity
go.aft.org/ae121sml7

Coordinating Services and Supporting Transitions
go.aft.org/ae121sml8

Supporting Students Who Are Experiencing Homelessness

A Brief Guide for Teachers and Schools

BY RONALD E. HALLETT AND LINDA SKRLA

Anastasia sleeps on her friend's couch and borrows her friend's clothes to wear to school. Her dad kicked her and her mom out of the house after a fight that turned physical. She's unsure where her mom is staying, but her mom assures Anastasia that she's fine.

Diego lives with his parents and his dog in a bedroom illegally subleased to them by other renters after his parents lost their suburban home due to a job layoff and illness. He hides his dog when the landlord comes around because pets are not allowed.

Fredrick lives with his two brothers, one sister, and mom in a motel room after a bad storm three months ago made their old house unlivable. He attends high school in a different school district because the storm also destroyed his old school. Fredrick worries about what will happen to his family because his mom's place of work has not reopened following the storm. *

*Although we have used pseudonyms, these three examples of young people experiencing homelessness are recent and real. Among the myriad families we have worked with, we selected these because their experiences in urban and small-town settings in three different states are common, but are not typically thought of as homelessness.

These young people, though their circumstances differ, have one thing in common—they all meet the federal definition of *homeless youth* under guidelines spelled out by the McKinney-Vento Homeless Assistance Act.[1] Although this act has been in place since 1987, the act and its implications for schools are not as widely known as they should be among educators and administrators. The McKinney-Vento Act, including revisions made during its reauthorization in Title IX, Part A, of the Every Student Succeeds Act (ESSA, 2015),[2] defines youth experiencing homelessness in a far more expansive way than traditional conceptualizations. We offer details below, but in brief, the act defines homelessness as any student without "a fixed, regular, and adequate nighttime residence."[3] It also provides legal guidelines

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and funding that can be used to help improve schooling experiences for youth who are homeless. Although McKinney-Vento primarily focuses on protections related to students in preschool through high school, the revisions as part of ESSA also lay the foundations for college access, and higher education practitioners have begun to build similar protections.[4] Since the federal protections are more clearly outlined for students in high school or lower grades, we focus primarily on summarizing that information in this article. However, our sidebar on page 8 includes more information for higher education practitioners.

We believe that educators, administrators, and staff members play important roles in the lives of students experiencing homelessness. Our goal is to provide educators with information and tools[†] as they continue their essential work of educating all students. In this article, we give an overview of student homelessness and examine the federal guidelines that frame how schools and postsecondary institutions serve students experiencing homelessness. Federal law outlines legal rights for students, but these mandates should only be considered a minimum standard when providing support. Additionally, we discuss the impact of the COVID-19 pandemic and resulting economic strife on students and families experiencing homelessness. Finally, we provide promising practices that encourage academic engagement and success for students who are homeless.

National Statistics on Student Homelessness

Identifying the exact number of students experiencing homelessness is difficult. These students tend to be highly mobile and experience a significant amount of shame that reduces the likelihood of reporting their housing status.[5] Schools and districts have increasingly created processes that allow for gathering more accurate information from students. However, available estimates likely underestimate the reality of student homelessness.

Before the pandemic, families with children constituted 30 percent of the homeless population in the United States.[6] At the start of the 2017–2018 school year, 1.5 million students in the US reported experiencing homelessness. This is a 15 percent increase since the 2015–2016 school year and more than double the number of students who were homeless (590,000) in 2004–2005.[7] In large cities, the percentages of student populations experiencing homelessness are even larger than the national averages. In New York City, for example, one in ten (114,085) youth experienced homelessness during the 2018–2019 school year.[8] In addition, researchers at the University of Chicago who gathered data in 2016 and 2017 estimate that 700,000 young people between ages 13 and 17 experience some form of homelessness annually, including running away and being kicked out of their homes.[9] That's one out of every 35 people in this age group experiencing homelessness in recent years. Young people of color, LGBTQ youth, students in special education, and pregnant/parenting teens all disproportionately experience homelessness. Many urban schools and districts we have worked with report rates of student homelessness between 10 and 20 percent.

Seventy-five percent of children experiencing homelessness live doubled-up with other families. Living doubled-up means that multiple households are living in a space designed for one family as a result of economic crises and out of necessity; these living arrangements are not considered stable or adequate housing.[10] For example, we have worked with three families—involving a total of 10 people—who lived in a small two-bedroom apartment. The next highest percentage of students experiencing homelessness live in shelters (15 percent); these children are disproportionately young, with 10 percent under age 1.[11]

Experiencing homelessness negatively impacts students' schooling outcomes. Compared with traditionally housed peers, attendance and graduation rates are lower, as are academic achievement rates in reading and math. Also, special education placement rates are higher, and incidences of multifaceted trauma are much higher.[12] Even after students regain stable housing, their academic outcomes may continue to lag behind those of their peers who are consistently housed.[13]

Estimates likely underestimate student homelessness, which includes students without "a fixed, regular, and adequate nighttime residence."

McKinney-Vento Act

Research on the impact of homelessness on educational access and outcomes, as well as advocacy on behalf of students experiencing homelessness, prompted the federal government to broaden its definition of student homelessness. The emphasis on *any student without "a fixed, regular, and adequate nighttime residence"* includes children and youth who:

- share the housing of other persons due to loss of housing, economic hardship, or similar reason (doubled-up);
- live in motels, hotels, and campgrounds;
- reside in emergency or transitional shelters;
- have been left in hospitals by parents (many young and homeless themselves) who see no alternatives;
- live in public or private spaces not typically used as housing;
- reside in cars, parks, abandoned buildings, train stations, or similar settings; and
- are migrants who experience the above housing situations.[14]

This expansive and inclusive definition of homelessness affords legal protections for children and youth who are without stable and adequate housing. Importantly, states, school districts, and schools are required to meet certain obligations, including:

- allowing students to remain at their school of origin even when they move outside of the school boundaries;
- reviewing policies at all levels (e.g., state, district, and school) to ensure that children and youth in homeless situations are not denied access to school;
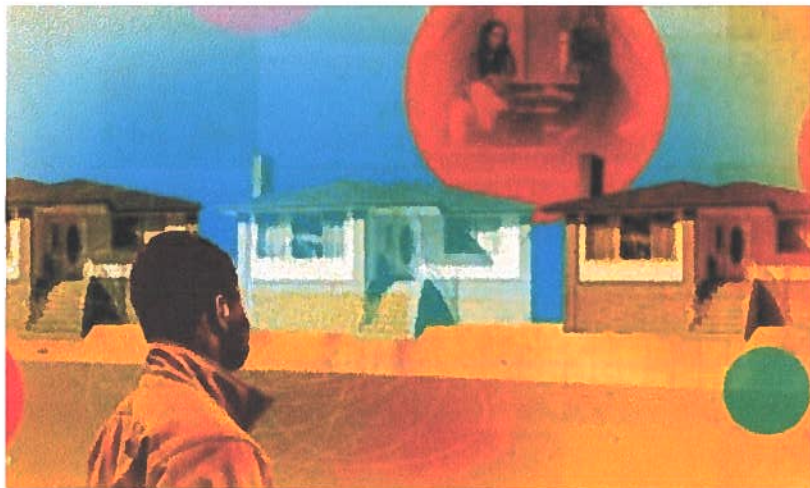
Precarious living situations can undermine students' development—but with supports, students can reach their full potential.

- designating a homeless liaison in each school district who receives professional development and trains the school-site point of contact;
- supporting district efforts at the state level by gathering and posting data, providing professional development for liaisons, and responding to inquiries;
- allowing children and youth who are homeless to enroll immediately, regardless of health records, transcripts, proof of residency, dress codes, fees and fines, application deadlines, or other paperwork;
- allowing unaccompanied youth to enroll without a parent or guardian;
- having homeless liaisons inform unaccompanied youth of their rights and independent status in relation to the Free Application for Federal Student Aid (FAFSA);
- using district and state funds for outreach and emergency/extraordinary assistance; and
- subjecting living arrangements and records to Family Educational Rights and Privacy Act (FERPA) protections.[15]

Most of these requirements have been in place for more than 30 years, yet too many districts and schools continue to be unaware of their existence or how to fully implement them.

Thus, many children and youth experiencing homelessness continue to face barriers and challenges accessing educational services. This is especially true in districts and schools that do not have homeless shelters within their attendance zones and do not have many of the traditional, visible signs of a homeless population. And most importantly, this is an opportunity for better-informed educators to strengthen their advocacy for their students.

What Teachers and Schools Can Do

Homelessness for children and youth in the US is, of course, embedded in larger societal structures over which educators have limited direct control. We do not assume that educational shifts will resolve challenges involving adequate access to housing, consistent employment with living wages, and the many social issues related to housing insecurity (e.g., foster care, immigration status, domestic violence, mental health issues, and discrimination associated with race, sex, religion, and LGBTQ identities).

Even though we recognize these constraints, research consistently shows that many districts, schools, and teachers could do more to meet the needs of students and families experiencing homelessness. Increasing educational access and success has the potential to improve the long-term economic and housing stability of students as they transition into adulthood and start their own families. In this section, we provide an overview of promising practices emerging from our research.

Educate yourself and others about homelessness in your school community. An essential first step toward addressing the needs of students experiencing homelessness is to learn—about law, policy, populations, needs, resources, and best practices. What does student homelessness look like in your community? How many students experience homelessness in your school? How did COVID-19 change the economic context of the community your school serves? Did more students become housing insecure? In particular, are more families living doubled-up than in previous years?

This information is essential. Educators should be highly skeptical if current data suggest that no students experience homelessness at their school; consider seeking another source, such as the local branch of the United Way or a food pantry that may have insights into homelessness in the community. In conjunction with gathering accurate data, pursue systematic professional development—ideally this should be done with the entire school site so the response can be coherent and sustained. A one-stop, generic professional development session is unlikely to result in any lasting improvement to the school experience for students in homeless situations.

Integrate improved responsiveness to homelessness into school plans. School and district administrators typically make decisions about resources based upon explicit goals written in school plans. The reality is that we focus on what we measure and report. Just like goals for improving student achievement, the likelihood of accomplishing goals for homelessness responsiveness greatly increases when they are written into formal plans for school improvement. Including goals to improve outcomes for students experiencing homelessness also allows for tracking growth in this area. We also encourage teachers and administrators to advocate for students to receive the resources guaranteed by federal protections because these supports will be necessary to achieve the goals outlined in school plans.

Secure resources. States receive modest funding from the federal government that is authorized by the McKinney-Vento Act. Most states divide this money into subgrants that are distributed to school districts. Find out if your district has a McKinney-Vento subgrant. If so, learn where resources are currently being directed and work with the school improvement team to see if these expenditures match current needs. If the district does not receive the grant, find out why not and if there is a possibility of applying for

one in the future. Even if there is not a subgrant, students are guaranteed the protections under McKinney-Vento, and the district is mandated to cover these costs (e.g., supplies, transportation, uniforms, etc.).

Collaborate and form partnerships. What resources are available in your local community? Many schools and districts collaborate with community agencies to help implement and expand the supports covered under McKinney-Vento. For example, a local service agency or church may provide backpacks with supplies at the beginning of the school year, or the uniform company may be willing to set aside a certain number of free uniforms for students experiencing homelessness. Some of these programs may already exist in the community.

Investigate trauma-sensitive school practices. We strongly encourage schools to explore trauma-informed approaches* to support students experiencing homelessness. To that end, we created a practitioner-focused book on how to navigate this process.[16] Interestingly, a trauma-informed approach has been linked with improving outcomes for *all* students. Basically, this approach recognizes that what occurs in students' lives outside of school influences how they participate in class, and it is beneficial for the culture of the school to be sensitive to the realities of students' lives. Many elementary school teachers engage in practices like a morning check-in to begin each day by connecting with these realities. It is important to emphasize here that the type of trauma-sensitive school culture we advocate for is assets-based. This work is not about labeling students; it is about forming authentic relationships in order to develop trust, build on strengths, and better respond to needs.[17]

Provide academic and psychological support in addition to support for basic needs. In recognizing the trauma associated with housing insecurity, students will likely benefit from counseling and other related supports. The consistent movement inherent in precarious living situations can undermine students' academic and psychological development—but with supports, students can reach their full potential. Although most educators are not trained counselors and many do not have the capacity to offer academic interventions like intensive tutoring, seeking academic and psychological supports can be another opportunity to coordinate with your school district and community-based organizations to identify resources available for students.

Prepare students for the transition to life after high school. Graduating from high school can be a challenge for students who experience housing insecurity; however, earning a diploma alone will likely not be enough for students to achieve financial security as they move into adulthood.[18] McKinney-Vento requires schools and districts to provide priority access to college preparation programming for students experiencing homelessness. We encourage schools to work with students to explore how to find postsecondary opportunities and funding. In particular, students will need support in figuring out housing issues as they make decisions about higher education. For example, if the community college does not have housing, how does the student find a stable place to live? Does the four-year institution have year-round housing? If not, where will the student spend breaks?

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*For more on trauma-informed practices, see "Supporting Students with Adverse Childhood Experiences" in the Summer 2019 issue of *American Educator*: aft.org/ae/summer2019/murphey_sacks.

Conclusion

The three young people whose stories we shared at the beginning of this article are positive examples of what can happen when schools recognize and respond to student homelessness. We return to them here.

A professor at the university Anastasia's mom attended noticed something was amiss with her mom and found out that she had been sleeping in her car on campus while Anastasia stayed with her friend. He connected Anastasia's mom to a women's shelter, which, in turn, provided legal assistance and help with housing. Anastasia and her mom are now on the path to residential stability.

Provide priority access to college preparation for students experiencing homelessness and work with them to find postsecondary housing.

COVID-19 and Student Homelessness

The COVID-19 pandemic is affecting all aspects of schooling. Students experiencing homelessness are one of the groups disproportionately hurt. Many of the resources such students depend on were completely unavailable when schools were closed, and some of these resources have not returned while schools are in distance or hybrid mode.[1] Furthermore, educational decision makers operating in completely unfamiliar circumstances when developing pandemic school plans have sometimes denied services to students in homeless situations, likely in violation of McKinney-Vento and other federal and state laws.[2]

It is vitally important that educators and administrators understand that the extraordinary situation the pandemic created for schools did not suspend requirements to serve students experiencing homelessness. For example, if a student living in a shelter does not have adequate access to technology that would allow full participation in online learning, then it is the responsibility of the school district to provide appropriate technology or to make other provisions (such as in-person learning, if it can be offered safely, or paper packets with the necessary learning materials) to satisfy legal requirements for immediate enrollment and removal of barriers to school access for students in homeless circumstances.[3]

–R. E. H. and L. S.

Endnotes

1. K. McKenzie, *Community Equity Audits: Communities and Schools Working Together to Eliminate the Opportunity Gap* (Santa Fe, NM: McKenzie-Gunn Educational Consulting, 2020).

2. SchoolHouse Connection, "FAQ on COVID-19 and Homelessness," updated October 12, 2020, schoolhouseconnection.org/covid19-and-homelessness.

3. SchoolHouse Connection, "FAQ on COVID-19."

Diego graduated from high school while living with his family in a single room and, with assistance from his school, enrolled in a college where he is in his second semester and participating in athletics.

Fredrick's community continues to slowly recover from the widespread natural disaster it experienced. His neighboring community's schools, under the leadership of their superintendent, learned about McKinney-Vento and launched an integrated response to serving the students and families displaced by the storm that hit Fredrick's town. He and his family are currently on the waiting list for a subsidized apartment, and his school year is going well.

Homelessness is one of the most life-altering experiences young people can have during their school years. It is, however, an experience that can be addressed and overcome. Responsive schools with caring and informed teachers are essential parts of the support infrastructure and process. Schools and districts that are educated about child and youth homelessness, have plans and procedures in place to respond, and are staffed with caring

Being Part of the Solution

Educators tend to develop close relationships with students. Learning that a student is experiencing homelessness or housing insecurity may lead an educator to feel a personal responsibility to resolve the issue. The size of the issue can be overwhelming. While some educators may choose to spend a portion of their hard-earned money to support students, we do not believe this is the solution. In addition to the potential hardship this creates for educators, there is no way that all students could be served by syphoning money from educators' salaries.

Being aware that homelessness and housing insecurity exist in the communities you serve is the first step. The next step is to consider what you can do to support students, families, and communities. We begin with some overarching ideas and then identify additional strategies that are specific for pre-K to 12 and higher education. In what follows, we provide some guidance for educators to improve the educational opportunities for students experiencing homelessness and housing insecurity.

General Approaches

- *Choose words carefully.* Avoid using the term "homeless" when developing resources and programming. Students and families experience significant social shame associated with lacking stable housing. Many students will avoid using resources that are targeted for "homeless" because they do not want to be associated with that term. Using "housing insecurity" can be a more amenable term. Similarly, we recommend using person-first language—for example, *students experiencing homelessness or students with housing insecurity.* This allows for prioritizing the identity of being a student and also recognizes that homelessness is (hope-

fully) a temporary situation, instead of being a permanent aspect of the student's identity.
- *Increase access to counseling.* Housing insecurity is a form of trauma. Even when students gain access to stable housing, most will benefit from processing their experiences with a trained professional. Students often need assistance and encouragement to access these forms of support. You can leverage your relationship with students to build connections with counselors in your school system or on your campus.
- *Spread the word.* Learning more about homelessness and housing insecurity can make you a more effective and empathic education professional. However, students have many relationships and experiences as they navigate the educational system. Feeling supported in one class and then discouraged in another class will undermine their ability to succeed. Students are far more likely to remain enrolled in school and graduate when they experience consistent support from educators.

Early Childhood, Elementary, and Secondary Education Professionals

- *Be informed of federal, state, and district policies related to student homelessness.* In the main article, we provide an overview of federal education policy. However, states and districts may layer on additional protections and resources to support students and families. The National Center for Homeless Education (nche.ed.gov) and the National Association for the Education of Homeless Children and Youth (naehcy.org) are two organizations that summarize policy developments, create resources for teachers and families, and announce advocacy opportunities. Each state has a coordinator who manages federal funding related to homelessness and often creates resources related to the state context.

- *Know the point of contact.* All school districts are required to have a homeless liaison. The liaison is responsible for providing direct support to schools, teachers, and students. Some school districts also require each school to have a point of contact, which is often a counselor or assistant principal. This person receives training related to homelessness and connecting students with resources. Having current contact information at the beginning of each year will enable you to assist students and families when they experience an issue.
- *Inform students and families of their rights.* Federal and state laws exist to protect the educational rights of students in preschool through high school. We encourage leveraging these laws as a resource to meet the needs of students. Students and their guardians often do not know they qualify for support. The aforementioned organizations (NCHE and NAEHCY) have multiple family resources available; consider beginning with this brochure for parents and guardians, which is available in English (nche.ed.gov/wp-content/uploads/2018/11/parent brochure_eng.pdf) and Spanish (nche.ed.gov/wp-content/uploads/2018/11/parentbrochure_sp.pdf).
- *Collaborate with social service and community agencies.* Some schools have developed food pantries, clothing closets, and other resources on campus by partnering with other agencies. Bringing the resources to your school site often makes it easier for students and families to access support, especially in emergency situations. Working with local agencies and organizations, your school can also create a comprehensive list of local resources available.
- *Keep track of and in contact with every child.* With schools operating in a variety of modes (in-person, remote, hybrid), it is easier for vulnerable children to fall through the cracks and miss out on instructional and support services. Individual educators can help by making

professionals can better support students and families experiencing this profound life challenge. □

Endnotes

1. Statement of Policy, 42 US Code §§11431-11435 (2002).

2. Every Student Succeeds Act, Pub. L. 114-95 (2015).

3. National Center for Homeless Education, "The McKinney-Vento Definition of Homeless," nche. ed.gov/mckinney-vento-definition.

4. R. Hallett, R. Crutchfield, and J. Maguire, *Addressing Homelessness and Housing Insecurity in Higher Education: Strategies for Educational Leaders* (New York: Teachers College Press, 2019).

5. W. Tierney and R. Hallett, "Social Capital and Homeless Youth: Influence of Residential Instability on College Access," *Metropolitan Universities Journal* 22, no. 3 (2012): 46–62.

6. US Department of Housing and Urban Development, *The 2019 Annual Homeless Assessment Report (AHAR) to Congress* (Washington, DC: 2020), huduser.gov/portal/sites/default/files/pdf/2019-AHAR-Part-1.pdf.

7. National Center for Homeless Education, *Federal Data Summary School Years 2015–2016 through 2017–2018: Education for Homeless Children and Youth* (January 2020).

8. R. Amin, "Number of Homeless NYC Students Remains Stubbornly High," *The City*, October 29, 2019.

9. M. Morton et al., "Prevalence and Correlates of Youth Homelessness in the United States," *Journal of Adolescent Health* 62, no. 1 (2018): 14–21.

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extra efforts to check on the whereabouts and participation levels of all students frequently.

Higher Education Professionals

- *Stay informed of state and federal policies.* At present, the federal government has not developed comprehensive guidelines related to homelessness and housing insecurity among college students. As a result, some states have created policies (e.g., California, Colorado, Florida, and Louisiana). In addition to being aware of the current opportunities in your state, we encourage advocacy for continued policy development at both the state and federal levels.

- *Develop a single point of contact on campus.* Some campuses have started developing a single-point-of-contact approach to providing services. One office exists where students can meet with someone who has information about all the resources both on and off campus. The professionals in this office meet with the student to learn about their unique needs and then coordinate connections to the available supports, including meeting with financial aid officers to review available funding, accessing the food pantry for emergency assistance, getting information about housing support, and setting up a meeting to apply for federal or state supplemental aid. In addition to providing direct support for students, the single-point-of-contact approach allows for someone to consistently be looking at the holistic needs of students as well as the potential gaps that exist in service.

- *Provide access to emergency shelter on campus.* Many of the students who experience homelessness begin college with stable housing. When a financial or personal crisis emerges, they end up housing insecure. Without emergency support, most of these students will drop out of college. Among institutions that have housing, a few rooms may be set aside for short-term housing while a social worker coordinates a long-term plan for the student. Some campuses have also turned one of their parking lots into a safe space where students can sleep in their cars, if needed. Another option is to coordinate with local hotels to obtain housing vouchers for students as an emergency option.

- *Provide access to showers on campus.* Most postsecondary institutions have showers in the gyms or other places on campus. We recommend having these showers open to all students even if they cannot afford the fees associated with the gyms. In addition, the showers should be open before the earliest class time in order for students to be able to address personal care needs prior to class. If possible, distribute hygiene and personal care items to any student who requests them.

- *Collaborate with public spaces on campus, including the library and student union.* Students experiencing homelessness often spend considerable time in public spaces on campus, including the library and student union. Individuals who work in these spaces may have a sense of which students are in need of support. In addition, understanding where students spend time on campus can allow for more effective dissemination of information. This is especially important during the pandemic, as closures, reduced hours, and increased reliance on technology for service delivery have disproportional impacts on students experiencing homelessness.

- *Inform all students of their rights.* All students on campus should be given information about how to access food and housing support. In addition to avoiding false assumptions about what homelessness looks like, you also want to leverage the social relationships of students. Having all students with information not only normalizes utilizing the support (similar to how students use financial aid) but also enables students to share information with friends who may be experiencing challenges. Information about food and housing support could be placed on all course syllabi, and financial aid offices could include a list of resources with all financial aid offers.

- *Do not hide resources.* Sometimes, resources related to food and housing insecurity are placed on the corner of campus or in spaces that are out of general view. Many times, this is done because professionals want to protect the privacy of students who use the services. While we appreciate this sentiment, the message sent to students is that they should be ashamed to need the services. In addition, having the resources hidden results in few students being aware that services exist and/or finding them when they need assistance. Centering these resources on campus helps to normalize the services, just as financial aid is a common aspect of the college experience for most students.

- *Create resources for the diversity of students you serve.* Students experiencing homelessness come from a variety of backgrounds. Avoid creating supports designed only for single, white, 18- to 24-year-old students. For example, food pantries should have baby food for parenting students and foods representing different cultures. Housing options should also be provided for those in relationships and with children and/or pets.

–R. E. H. and L. S.

Unlocking Social Studies Text

How High School Teachers Can Support Students with Reading Difficulties

BY JEANNE WANZEK

High school students with reading difficulties face incredible challenges navigating content learning. Content-area teachers in disciplines such as social studies seek to cultivate students who can identify and communicate key ideas, provide explanations of and evidence for these ideas, and evaluate differing perspectives on a topic by assessing evidence and claims. These crucial goals require active engagement of students to obtain a great deal of new content knowledge and to assimilate it with their existing background knowledge. In addition, students need to learn and use the language of the discipline, read and understand text within the discipline, and actively apply their newly obtained knowledge to reasoning and decision-making tasks.

However, across the United States there are students in nearly every class who have not achieved proficiency in reading by the time they enter high school.[1] These students face significant barriers in preparing for college, for careers with livable wages, and for civic engagement.

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Social studies teachers also face significant challenges; it is very difficult to meet all students' needs when some can easily learn independently from text and others require extensive supports to understand text adequately. The data from a recent study with 11th-grade social studies classes revealed that disparities between students are often quite stark: fall reading achievement scores in a typical class spanned more than 2.5 standard deviations of reading achievement,[2] which means reading achievement in many classes can span more than 70 percentile points (e.g., 9th percentile to 82nd percentile). With such a wide range of reading abilities in their classes, it was impossible for those social studies teachers to focus solely on the content and discourse of the primary and secondary text sources in their curricula. Although there is enormous variety among high school students with limited literacy, many have some foundational word-reading skills* but may struggle with text because of its vocabulary, structure, or length; they may also have difficulty making connections and inferences in the text, in part because they lack assumed background knowledge or effective strategies for monitoring their comprehension of the text while reading.

How can a teacher address the needs of students who are not proficient readers at the same time they are trying to teach a moun-

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*For more on foundational literacy skills, see "Teaching Reading *Is* Rocket Science" in the Summer 2020 issue of *American Educator*: aft.org/ae/summer2020/moats.

tain of content? Although it is critical that students with reading difficulties receive appropriate interventions outside of the social studies classroom to improve their reading achievement, embedding disciplinary literacy within the content may help teachers address the diverse needs of students and stay focused on the important content they are teaching. In truth, most students (even many who are strong readers) need instruction in successfully reading and understanding text in specific disciplines.[3] For example, a historian may read a diary entry by a famous politician skeptically (i.e., is she intentionally writing for posterity?), but take a diary entry by a not-famous waitress in a small town at face value. Likewise, a historian would consider related factors, such as when and where each diary entry was written, what ideas and events were prominent locally and globally, and other issues that may have affected the writers. Then, there are the vocabulary, structure, and other text-specific aspects of historical reading.

Embedding discipline-specific literacy instruction within social studies content can assist a variety of students, including those with reading difficulties, to build higher-level reading abilities, increase knowledge acquisition, and improve their overall content learning. Moreover, many state learning standards already address the need for discipline-specific literacy instruction in content areas such as social studies.[4]

Enhancing Students' Comprehension in Social Studies

So, what are some instructional practices that can feasibly be embedded in the content, that enhance (and do not detract from) the content, and that have demonstrated the ability to improve students' content understanding? The research on adolescent academic literacy suggests several recommendations, such as providing support for students to read and comprehend increasingly complex text, offering explicit instruction in vocabulary and concepts that are a part of the discipline and text reading, and engaging students in content and text discussions to promote higher-level reasoning and critical thinking.[5]

Based on this body of research, five instructional practices are outlined below. Social studies teachers can embed these practices into their existing instruction to further engage students in the subject matter and provide support for discipline-specific reading. Middle and high school social studies teachers who have embedded these instructional practices in their units consistently see increased student content knowledge as compared with typical instructional practices,[6] including for students with disabilities.[7]

Start with a Comprehension Canopy

The comprehension canopy serves as a unit starter and consists of three very brief components: establishing a purpose, asking an overarching question, and priming initial background knowledge. At the beginning of each instructional unit, teachers provide a purpose for the upcoming unit and readings, along with an overarching question to guide comprehension during the unit. This question is revisited throughout the unit as students learn new content that addresses the question. Therefore, the question gives students an explicit organizer for the content they are learning. The question should be broad and cover the key ideas from the unit so that students can organize the critical information they learn to fully address the question by the end of the unit. For

example, in a unit on the Gilded Age, the unit question may be "During the Gilded Age, how did the economic, political, and social landscape of America change?"

Teachers also provide a brief introduction to the unit, to build some background knowledge about the upcoming content. When possible, it is helpful for this introduction, or part of it, to be provided in a short video (of three to five minutes). Videos should provide information about at least one key concept that will be covered in the unit and be chosen to pique student interest in learning the content of the unit. Students briefly discuss a prompted question or two about the video with a partner to process the video. Questions can help students make connections between their knowledge and the content of the video and the upcoming unit. For example, to introduce a unit on the Gilded Age, a teacher may start with a video about Ellis Island and provide questions such as "Who in your family was the first to come to America?" and "Why did they leave their native land to come here?" Or a teacher may decide to connect to the perspective of the people in the video, asking "Imagine you were the first in your family to come to America. Why might you choose to leave your native land to come here?" To prepare for their discussion, stu-

Most students (even many who are strong readers) need instruction in successfully reading and understanding text in specific disciplines.

dents could write at least two reasons a person might have immigrated to America. That discussion concludes the comprehension canopy, which is intended to be simple and brief (taking only 7 to 10 minutes) to provide a framework to engage students in the upcoming content.

Teach Essential Content-Specific Words and Concepts

Another beginning-of-the-unit instructional practice is to explicitly introduce four or five essential words or concepts necessary for understanding the content of the unit. Explicit vocabulary instruction benefits students' comprehension of material, particularly for students with reading difficulties.[8] Selection of these words should consider usefulness and importance in the discipline. For example, the word *revenue* is an important and useful word in many social studies units. It

Students need repeated exposure to new words and opportunities to apply their word knowledge in order to retain the word or concept in their vocabulary.

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Using the Five-Step Routine to Teach *Urbanization*

Definition
The movement of people from rural to urban areas and the resulting physical growth of cities.

Visualization

Related Words
Urban expansion, urban sprawl, development, migration

Example of Word Use
The United Nations forecasts that the pace of global *urbanization* will continue to quicken, and that 60 percent of the world's population will live in cities by the year 2030. (That's amazing, considering that only 13 percent of the world's population lived in cities in 1900.)

Example
New York City

Nonexample
Harvard, Illinois (a small town in the Midwest)

Turn and Talk
Select one of the following topics to address: economic opportunity or climate change. For the selected topic, tell your partner two benefits and two challenges of urbanization.

- Example: Urbanization creates more economic opportunities for individuals because there are more businesses and more job training opportunities. However, individuals moving to big cities to pursue economic opportunities face high rents and many other newcomers also searching for jobs.

may be essential for a student to fully understand this word if they are to engage in discourse and analysis of the social studies discipline. As a result, *revenue* may be selected as an essential word to explicitly teach students. Often, teachers provide the essential word instruction right after completing the comprehension canopy to help increase equity in terms of vocabulary and background knowledge before any other unit content is taught.

After selecting the essential words for the unit, explicit instruction is provided in the meaning and the use of the words. Research on learning new words and concepts points to the importance of providing instruction beyond just definitions of the words.[9] The following five-step routine is an effective way to introduce and discuss each word. It usually takes a total of 15 to 20 minutes.

1. Provide a student-friendly definition.
2. Show a visual representation of the word to help students remember its meaning.
3. Present related words to help students make connections between the new word and other known words.
4. Discuss examples and nonexamples of the word or word use.
5. Prompt pairs of students to discuss and apply the meaning of the word.

The box to the left provides an example of this routine for the word *urbanization*.

Research on vocabulary learning suggests students need repeated exposure to new words and opportunities to apply their word knowledge in order to retain the word or concept in their vocabulary.[10] Accordingly, essential words should be used throughout the unit, including in the texts students will be reading. Essential words can also be reviewed through short warm-up activities at the beginning of several class periods throughout the unit. These warm-up activities are developed to allow the students to work independently for two to three minutes to apply word knowledge within the content. For example, after students have been learning and reading about the pros and cons of urbanization, a warm-up activity to review and apply the word might include students examining a photograph of a large urban area that they have been studying and then writing one challenge of urbanization and a potential solution in each of several areas (e.g., environment, public health, housing, transportation, employment). Warm-up activities can be spread out over the course of the unit, with each of the essential words and concepts reviewed in this mode at least once during the unit.

Provide Support for Critical Content Readings

The critical readings instructional practice helps ensure that all students, even those who are still developing as readers, work through and comprehend content within primary and secondary text sources. In order to provide sufficient support for the varying levels of readers in the class, critical readings happen during class time and typically require approximately 20 minutes.

To begin a reading, teachers provide a brief introduction that sets the context. This introduction can include emphasizing

essential words students will encounter and connecting the information they will read to the overarching question for the unit. For example, building on the question "During the Gilded Age, how did the economic, political, and social landscape of America change?," a teacher may say, "In this reading, we will learn about some of the economic issues facing workers during the Gilded Age." Students can read the text as a whole class with the teacher, in small groups, in pairs, or independently. Depending on students' needs, teachers may also divide the class, with some reading independently and others reading as a group with teacher support. Even when teachers are assisting, it is important that students do the majority of the reading (rather than the teacher or another student reading it to them). Students can only gain practice in reading and understanding content-area text independently if they are actually reading.

Teachers guide the students to stop in two to three predetermined places in the text (e.g., after one to two paragraphs or one section) to monitor comprehension of the text. At these stopping points, students answer key text questions about the text read thus far, verbally or in writing (e.g., In what ways does the author seem to feel that immigrants were once important to the American economy? How does the author feel labor conditions have now changed?), and briefly discuss responses before continuing the reading. Discussions should be brief and focused on the reading and the text question, rather than a time to provide an extended lecture on the content. The teacher also leads a debriefing of the whole text after the reading is completed. The critical readings routine is typically used two to three times during a two-week unit.

Use Teams to Monitor Content Understanding

Team-based learning, a practice first used in higher education and adapted for middle and high school,[11] involves the use of heterogeneous, permanent teams of students (three to five students at the high school level) to discuss and apply content throughout the unit. One use of these teams is to monitor student understanding and learning of the content using comprehension checks. These occur a couple of times during each unit and are designed to take about 15 minutes, with an additional 5 minutes for targeted instruction.

How are comprehension checks implemented? A short quiz (about five multiple-choice questions) of the content and vocabulary learned in the unit thus far is given to all students. Teachers intentionally develop questions that do have a correct answer, but require students to integrate and evaluate key aspects of the curriculum. For example, rather than asking "What is urbanization?," a teacher may ask "Which of the following is not a cause of rapid urbanization during the Gilded Age?," requiring students to integrate their knowledge of urbanization with the causes during the Gilded Age.

Students first complete the quiz individually and turn it in to the teacher. This provides the teacher with information on individual student understanding and retention of the unit content covered. Next, students get into their teams and answer the same questions again. Because the questions have been carefully crafted to draw on multiple aspects of the content, they are likely to elicit discussion of the content during the team work. In addition, because each student has already taken the quiz, each is prepared to contribute to the discussion.

During the teams' work on the quiz questions, they are allowed to use their texts and notes from class to find evidence supporting their answers. The teams discuss each question and come to consensus on an answer with their evidence. As teams mark their answers, they receive immediate feedback from a scratch-off card or a digital version of the quiz (that, like a scratch-off, only indicates whether an answer is right or wrong). If a team does not get the correct answer, they go back to discussing the question with their text and notes until they come to consensus on another answer. The teacher moves between teams as they discuss, facilitating their use of evidence and reasoning. The teacher can also identify any misunderstandings or content gaps in the students' discussions. The teacher collects the scratch-off cards or digital results when the teams are finished, particularly to examine questions that took teams multiple attempts before obtaining the correct answer.

Even when teachers are assisting, it is important that students do the majority of the reading.

Together, these individual and team comprehension checks provide information on students' understanding of the content thus far and their readiness for content application activities. The teacher uses the information from the individual answers, discussions, and team answers to plan individual, small-group, or whole-class instruction that is targeted to address knowledge gaps.

Use Teams to Apply Content Knowledge

At the end of the unit, students apply the knowledge they have acquired. Students once again work in their teams to integrate

the unit content in a problem-solving or perspective-taking activity. Because the activity is designed to elicit discussion and decision making using the content from the unit, prompts are complex. For example, teams may be asked to "Imagine you serve on an advisory committee to a Gilded Age president. As a team, make a recommendation regarding whether the United States should limit immigration. Provide at least two economic, two political, and two social reasons in support of your recommendation." Each team discusses each aspect of the task; identifies evidence or support for their reasoning from their notes, readings, and other class resources from the unit; and records key information.

A reading difficulty should not mean that students have to fall behind in their other academic areas.

Providing graphic organizers—such as a table for each of the unit readings on immigration where students can identify the author's perspective, audience, general argument, and supporting evidence—and breaking the task into clear steps can help high school students work through the activity effectively. By the end of the activity, each team prepares a written response stating their decision and rationale (e.g., the team's recommendation and their economic, political, and social support points). Coming back together as a whole class, the teams report on their conclusions and rationales. The teacher highlights high-quality use of text to support ideas, requires teams to report on their text evidence when it is lacking, and facilitates student questions about a team's conclusions. Key connections between the activity, the student conclusions, and the overarching question are

then discussed to bring closure to the unit. Finally, the teacher facilitates an evaluation of the team process and success working together. For example, each team member might rate their team or their peers on items such as use of text-based evidence, active contributing, active listening, critical thinking, or teamwork.

Together, consistently using this set of practices to provide instruction for each content unit can help all students, including students with reading difficulties, read and understand the content as well as fully engage in the content. These practices ensure students engage in not only knowledge acquisition but also the application of that knowledge. The table on page 15 provides a summary of the activities within each instructional practice.

Students with reading difficulties need continuity in the supports they are provided across their academics in order to succeed in high school. A reading difficulty should not mean that students have to fall behind in their other academic areas. Social studies teachers can substantially raise achievement when they have the tools to engage and support a variety of students in learning their discipline. □

Endnotes

1. Carnegie Council on Advancing Adolescent Literacy, *Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success* (New York: Carnegie Corporation of New York, 2010); and National Center for Education Statistics, US Department of Education, *National Assessment of Educational Progress Report Card*, 2019, nces.ed.gov/nationsreportcard.

2. J. Wanzek et al., "Promoting Acceleration of Comprehension and Content Through Text in High School Social Studies Classes," *Journal of Research on Educational Effectiveness* 8 (2015): 169–188.

3. C. Lee and A. Spratley, *Reading in the Disciplines: The Challenges of Adolescent Literacy* (New York: Carnegie Corporation of New York, 2010).

4. Common Core State Standards Initiative, *Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects* (Washington, DC: 2010), corestandards.org/wp-content/uploads/ELA_Standards1.pdf.

5. See, for example, Carnegie Council on Advancing Adolescent Literacy, *Time to Act*; R. Heller and C. Greenleaf, *Literacy Instruction in the Content Areas: Getting to the Core of Middle and High School Improvement* (Washington, DC: Alliance for Excellent Education, 2007); Lee and Spratley, *Reading in the Disciplines*; National Association of Secondary School Principals, *Creating a Culture of Literacy: A Guide for Middle and High School Principals* (Reston, VA: 2005); and J. K. Torgesen et al., *Academic Literacy Instruction for Adolescents: A Guidance Document from the Center on Instruction* (Portsmouth, NH: RMC Research Corporation, Center on Instruction, 2007).

6. S. Vaughn et al., "Improving Reading Comprehension and Social Studies Knowledge in Middle School," *Reading Research Quarterly* 48 (2013): 77–93; S. Vaughn et al., "Improving Middle-School Students' Knowledge and Comprehension in Social Studies: A Replication," *Educational Psychology Review* 27, no. 1 (2015): 31–50; S. Vaughn et al., "Improving Content Knowledge and Comprehension for English Language Learners: Findings from a Randomized Control Trial," *Journal of Educational Psychology* 109, no. 1 (2017): 22–34; J. Wanzek et al., "The Effects of Team-Based Learning on Social Studies Knowledge Acquisition in High School," *Journal of Research on Educational Effectiveness* 7 (2014): 183–204; and Wanzek et al., "Promoting Acceleration of Comprehension."

7. S. C. Kent et al., "Team-Based Learning for Students with High-Incidence Disabilities in High School Social Studies Classrooms," *Learning Disabilities Research and Practice* 30 (2015): 3–14; E. Swanson et al., "Improving Reading Comprehension and Social Studies Knowledge Among Middle School Students with Disabilities," *Exceptional Children* 81, no. 4 (2015): 426–442; and J. Wanzek et al., "English Learner and Non-English Learner Students with Disabilities: Content Acquisition and Comprehension," *Exceptional Children* 82, no. 4 (2016): 428–442.

8. A. M. Elleman et al., "The Impact of Vocabulary Instruction on Passage-Level Comprehension of School-Age Children: A Meta-Analysis," *Journal of Research on Educational Effectiveness* 2, no. 1 (2009): 1–44.

9. I. L. Beck and M. G. McKeown, "Increasing Young Low-Income Children's Oral Vocabulary Repertoires Through Rich and Focused Instruction," *Elementary School Journal* 107, no. 3 (2007): 251–271; M. D. Coyne, D. B. McCoach, and S. Kapp, "Vocabulary Intervention for Kindergarten Students: Comparing Extended Instruction to Embedded Instruction and Incidental Exposure," *Learning Disability Quarterly* 30, no. 2 (2007): 74–88; and T. S. Wright and G. N. Cervetti, "A Systematic Review of the Research on Vocabulary Instruction That Impacts Text Comprehension," *Reading Research Quarterly* 52 (2017): 203–226.

10. J. F. Baumann, "Vocabulary and Reading Comprehension: The Nexus of Meaning," in *Handbook of Research on Reading Comprehension*, ed. S. E. Israel and G. G. Duffy (New York: Routledge, 2009), 323–346.

11. L. K. Michaelsen and M. Sweet, "Team-Based Learning," *New Directions for Teaching and Learning* 128 (2011): 41–51; Vaughn et al., "Improving Reading Comprehension"; and Wanzek et al., "The Effects of Team-Based Learning."

Instructional Practices for Promoting Adolescent Comprehension Through Text

INSTRUCTIONAL PRACTICES	ACTIVITIES
Comprehension Canopy	• Build background knowledge and motivate students for the new unit. • Provide a brief, engaging video introducing the topic. Present a purpose for viewing the video and debrief with a short discussion after the video. • Introduce a unit-long overarching question that is researchable, has a problem to solve, or is a task to complete throughout the unit as the content is learned.
Essential Words	• Introduce four to five critical vocabulary words and concepts with high utility in the content area. • Provide student-friendly definitions, a visual representation, examples and nonexamples where appropriate, and a quick discussion prompt to apply the word meaning. • Review the words throughout the unit in readings and through brief warm-up activities to apply the meaning of the word to a real-life situation.
Critical Reading	• Provide support for reading material related to the unit topic. • Introduce the reading emphasizing essential words in the reading and what students will learn. • Read the material as a whole class, in small groups, in pairs, or individually. • Provide stopping points in the text to discuss the reading and take notes. • Make connections to the comprehension canopy's overarching question, essential words, and any previously learned content.
Team Comprehension Check	• Prepare a short multiple-choice content quiz covering content taught in the unit thus far. • Develop questions that challenge students to integrate key aspects of the content. • Have students take the quiz individually and turn it in. • Have teams (heterogeneous groups of three to five students working together throughout the course) take the quiz using their texts and notes to discuss the questions and evidence for the correct answers. Provide immediate feedback to each team (e.g., scratch-off cards or virtual quizzes) on whether team answers are correct or incorrect. Teams continue discussing the questions and examining evidence until they get the correct answers. • Provide targeted instruction to address any misunderstandings noted in the individual quizzes, team discussions, or team quizzes.
Team Knowledge Application	• Create a problem-solving and/or perspective-taking activity for the unit content that allows students to apply the content to making a decision or choice. • Have student teams (same teams described in the comprehension check) complete the activity engaging in discourse and using the unit content and evidence to support their claims, reasoning, and decision making. • Provide students support for working through the activity as needed (e.g., steps to complete the activity, graphic organizers). • Have teams share their solutions or decisions alongside their rationales and evidence with the rest of the class. • Facilitate a peer review of the team process to help teams work better together each time to achieve the class goals.

In College, But Not Always Earning College Credit

Evidence-Based Instructional Strategies for Success During—and Beyond—Developmental Courses

By Elizabeth L. Tighe, Meagan C. Arrastía-Chisholm, and Njeri M. Pringle

Academically underprepared postsecondary students make up a large proportion of college campuses. Recent estimates indicate that up to 70 percent of incoming students at two-year community colleges and up to 40 percent of incoming students at four-year colleges enroll in developmental courses.[1] These courses, sometimes also referred to as *remedial, basic skills, college preparatory*, or *pre-curriculum*, typically do not offer credit toward an associate or bachelor's degree. They largely enroll students who have completed high school (earning a traditional diploma or GED) and are offered across an array of subject areas (e.g., reading, writing, mathematics) to prepare students to progress to the demands of postsecondary coursework.

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There has been some criticism of the effectiveness of many of these developmental courses, as many students either do not complete them (most notably developmental mathematics) or do not progress to passing credit-bearing courses.[2] Fortunately, there are supportive, developmental instructional strategies that a substantial body of research demonstrates to be effective. In this article, we begin with suggestions for motivating students that apply across subject areas. Then, we provide more detailed descriptions of several evidence-based strategies that developmental instructors can use across reading, writing, and mathematics courses. We also offer some tips for teaching on virtual platforms. Although we describe these strategies individually, they are best used in concert through a mix of whole-group, small-group, and individualized instruction.

Motivating Adult Learners

Motivation encompasses many thoughts, feelings, and behaviors. Within the framework of self-regulated learning that is inherent to higher education,[3] motivation includes students' intrinsic interest, goal orientation, and self-efficacy. Each student enters the classroom with a unique motivational profile. By incorporating questions about motivation into relationship-building exercises at the beginning of a course, instructors can take this information into account and help promote higher self-efficacy. In turn, higher academic self-efficacy is associated with lifelong learning and the

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enjoyment of learning. In essence, these positive motivational attributes are associated with good short-term learning outcomes, as well as achievement beyond formal education.[4]

Some research shows that instructors assume college students in developmental courses have low motivation, despite most students reporting high self-efficacy and a desire to learn.[5] Such assumptions could be problematic if they result in instructors making fewer inquiries into their students' needs. Imagine a young man who is routinely 10 minutes late to class. One might assume that he is not motivated, or one might inquire and discover that he works full time and his manager makes him do a few extra tasks each day as his shift ends—but he always rushes to class, skipping dinner, because he is highly motivated. This is a student who needs an accommodation—such as the instructor's class opener or warm-up exercise in an email earlier in the day. Common reactions, such as a warning or even an incentive to do better, are not likely to change his behavior, since the root cause is outside his control. Indeed, research shows that developmental students who enter the classroom motivated do not need extra incentives.[6]

Although motivation is often understood in the context of teaching K–12 students, there are some added considerations when teaching adult students in developmental courses, many of whom may be nontraditional students (e.g., adults with jobs and children). When teaching adults, it is especially important to acknowledge, honor, and incorporate their lived experiences in the classroom whenever possible.[7] Instructors should not only help their students find relevance in the material and utility in the skills being acquired but also actively elicit ways students can contribute to the lesson. In other words, students in developmental courses should be positioned as the experts whenever possible. On a contrasting note, developmental instructors need to be cautious when foundational skills are missing. Whereas in other classes an instructor might employ reciprocal teaching (making students dependent on each other), collaborative peer learning may not always work if students are lacking some skills required to teach fellow students. In these situations, consider creating opportunities for students to help inspire each other through exchanging life experiences.

Because of the independent nature of higher education, self-regulation (i.e., directing one's thoughts and behavior toward a task) should be modeled and explicitly taught.[8] For example, instructors should help students set goals, monitor their own progress, reflect on their learning, and seek help. Emphasizing learning goals over performance goals, in addition to making the connection between content and real life, can decrease anxiety and promote learning.[9] More research is needed on the motivation of developmental students, but teaching a growth mindset should be combined with academic intervention so that students both understand that they can improve and are given the knowledge and skills needed to improve.

Motivational components cannot stand in place of content instruction, but they can aid in cognitive changes that may help students persist.[10] Here are a few essential strategies:

- Communicate high expectations from the course outset. Make it clear that you expect that all of the students want to learn and that they will master the content. During the first class, provide learning objectives on the syllabus and orally communicate high expectations.[11]

- Allow students to be the experts when possible. Provide opportunities for students to share their knowledge and experiences (related to their professions, personal lives, and cultures) and acknowledge the skills they bring to the class.[12]

- Use incentives only if needed. Assume all students are motivated to learn, but increase motivational messaging and inquire about needs for those who lack or appear to lack motivation (e.g., through follow-up emails or texts if they are missing class). Build optional incentives into the course that will help students boost their performance, such as extra-credit assignments, multiple submissions (with feedback to scaffold learning), and/or dropping the lowest grade.[13]

When teaching adults, it is especially important to acknowledge, honor, and incorporate their lived experiences in the classroom.

- Be consistent with expectations and deadlines. Even with self-pacing, deadlines should be enforced with penalties for the sake of consistency. Grades in the course should come from performance-based assessments, not fluff grades (e.g., attendance, logging into the course, attitude).[14]

Higher-achieving developmental students may already know how to self-regulate their learning,[15] but lower-achieving students may not. In addition to the strategies above, instructors can weave lessons and tips for self-regulation into the instructional strategies for reading, writing, and mathematics described below.

Reading and Writing Instruction

Many developmental courses have recently shifted toward combining reading and writing instruction. These skills are essential not only for most of adult life but also for almost all subject areas—even within a developmental math course, for example, there are considerable reading and writing skills that students need in order to approach more complex word problems and to develop critical-thinking and mathematical reasoning skills.[16] A recent literature review provides an excellent overview of current, high-quality research on integrating reading and writing instruction (broadly termed *literacy*) for postsecondary students enrolled in developmental courses.[17] The review differentiates between bodies of literature that highlight different types of instructional approaches that can be common to reading and writing skills needed for struggling postsecondary students. We briefly outline each broad approach, as instructors may consider adopting aspects of different approaches to fit their unique classroom needs, and present some examples from research conducted within each approach. We also include specific strategies and skills within each approach for instructors to focus on in the classroom.

morphological problem solving, and thus help increase vocabulary and comprehension, focus the materials on using knowledge of base words, roots (i.e., etymology), and affixes to decompose complex, unknown words (e.g., with *multivariate*, a student can learn to relate it to *vary* and to known words with the same prefix like *multiplication* and *multivitamin*).[18] Also, instructors can work on building fluency by timing students as they practice reading increasingly complex connected text.

- For more advanced students (i.e., those who demonstrate strong foundational reading skills and at least a basic academic vocabulary), provide opportunities with many different types of texts to engage in monitoring comprehension (reflecting on and understanding what is read), paraphrasing (putting the text into their own words), identifying the main idea and summarizing text, forming bridging inferences across sentences within the text, elaborating (incorporating background knowledge to form inferences about the text), and predicting (inferring what might come next in the text).[19]

Strategy Instruction

This approach expands and deepens understanding of the skills from the discrete, decontextualized approach by allowing for instructor modeling and scaffolding using a step-by-step model (e.g., graphic organizers, mnemonic devices, think-alouds). It also builds off the concept of reciprocal teaching, in which after instructors provide modeling, students can teach-back material to the instructor and/or peers. Reciprocal teaching can foster deeper learning, critical thinking, comprehension monitoring, and idea development (especially for writing). The following are some evidence-based strategies that instructors can apply to reading and writing in developmental courses:

- Use pre-reading strategies (e.g., brainstorming, skimming) to help students comprehend complex text. For example, PILLAR—preview, identify, list, look online, attempt, read—is a pre-reading strategy to help students digest complex reading tasks in which they have limited background or content knowledge on the specific topic.[20] Of note, the "look online" step of PILLAR integrates the idea of using online resources to gain more information about new topics and take more self-initiative in the learning process.
- Integrate instructor modeling and scaffolding during writing instruction into the drafting and revision phases. In one example, students worked in small groups to discuss teacher expectations, and then the instructor modeled on a whiteboard the steps of revision. In addition, the instructor gave evaluative, individualized feedback on students' drafts.[21]
- Introduce a variety of metacognitive reading strategies and model them using multiple examples and think-alouds in class, then have students practice on texts and collaboratively with peers. For example, asking students to relate personal knowledge or experiences to the text, generate questions about the text, use annotations and notes to self during reading, and generate inferences were metacognitive strategies identified as useful in one developmental reading course.[22]
- Allow students to self-select reading comprehension strategies, which can facilitate greater autonomy and also enhance motivation and the desire to read and write more often.[23]

More research is needed on motivation, but teaching a growth mindset should be combined with academic intervention.

Discrete, Decontextualized Skills Approach

When assessments (including projects and other assignments developed by instructors) reveal specific skills and knowledge that individual students have not yet mastered, it is helpful for instructors to be efficient in addressing the particular weaknesses. For instance, in terms of reading instruction, this may include focusing on explicit instruction in basic phonological decoding, understanding vocabulary definitions and related synonyms and antonyms, and building metalinguistic awareness, such as unpacking the structure of complex words (e.g., peeling off prefixes and suffixes). In isolation, this type of approach often relies on repeated drilling of skills through worksheets or on practicing composing several essays. There is little focus on instructors modeling strategies (e.g., to approach reading passages or composing essays), on embedding digital materials, or on connecting work to current events and trends.

If assessments indicate a broad array of literacy needs and instructors are deciding where to begin parts of a discrete, decontextualized approach, developmental instructors may want to focus on the following skills:

- For lower-level students, address needs related to basic decoding, vocabulary knowledge, and background knowledge. For vocabulary, assign worksheets to extend familiar words (e.g., *vary*) to teach more complex morphologically and/or etymologically related words (e.g., *variable, variability, variety, variance, variants, variations, invariable, invariably*). To facilitate

New and Multiple Literacies

New and multiple literacies view reading and writing as broader social constructs; instructors are more interested in how students express themselves and communicate than in coaching students to demonstrate mastery of specific discrete skills.[24] Although we caution that all students need to master reading and writing skills in academic English—for everything from writing an accurate lab report in a chemistry class to drafting a concise proposal for a business class (not to mention accomplishing these things professionally)—there is value in cultivating individual expression and helping students find their voices. The following are some ideas for instructors who want to incorporate a broader concept of literacies:

- Use blogs and social media content that align with course curricula and goals to have students draft reflective essays.
- Integrate other modalities, such as podcasting and video-making, to allow students alternatives to communicate and convey ideas (while also refining writing skills as students draft and revise scripts or talking points).
- Focus on self-reflection during the writing process and allow students to examine their self-beliefs and identities related to writing.[25]

- Encourage students to share ideas about culture and cultural practices in discussions, readings, and writing activities.

Disciplinary and Contextualized Approaches

These approaches rely on bridging discrete reading, writing, and critical-thinking skills to other content areas (e.g., anthropology, geology). In particular, embedding vocabulary and morphological training on academic words and content-area passages related to US history and civics has been shown effective with students enrolled in English as a second language courses.[26] Similarly, there has been evidence of effectiveness of embedding reading strategy and self-explanation training into an introductory biology course with college students.[27] Specific to students in developmental courses, some work has shown effectiveness of integrating reading and writing strategies, such as building vocabulary and background knowledge, generating main ideas, identifying supportive details, summarizing, and thinking critically with historical texts[28] as well as with

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Adapting Instructional Strategies for Online Courses

With the increase in online learning opportunities and the need for remote instruction due to COVID-19, it's important to consider the challenges and features of online learning.[1] For instance, increasing motivation can be a tricky endeavor, especially if students do not have adequate technology and high-speed internet; and yet, technology enables greater personalization[2] and can even be adapted to appeal to students' emotions, which helps with motivation.[3]

Online learning also increases the accessibility of coursework in terms of both differentiating instruction and geographical location.[4] Although some online classes have regular meeting times when all students need to log in, others also increase accessibility by allowing students to access modules asynchronously. Students taking such classes can work at their own pace on coursework that is personalized to their skill level. Students can skip modules for content they have mastered and find additional exercises for skills they are still practicing. With online learning, students who live in rural or remote areas can access education without the financial burden of lengthy commutes or relocation. This also increases the

capacity of any institution of higher education to provide instruction for more students.

One downside of the physical distance between online students may be a decreased sense of presence and community. Even if students are working on personalized learning plans online, providing networking opportunities may help increase collaboration, inspiration, and support among students online. For example, the use of synchronized learning—for some, if not all, sessions—can provide opportunities to connect through videoconferencing.

The following are additional practical strategies for online or hybrid developmental courses (also see the "Digital Teaching Strategies" section on page 20):

- Survey students about their resources and needs for online learning. It is important to know what technology and type of internet connection is available to students if the institution is not providing the same resources for all students.[5]
- Personalize student content based on a diagnostic assessment. This will enable acceleration or remediation so that students can focus on the skills they need to master.[6]
- Provide motivational messages and personalized feedback online. Instructors with very large classes may consider using some automated feedback through scheduled

announcements or through the use of intelligent tutors.[7] Although more capable intelligent tutors are in development, most readily available learning management systems (e.g., Blackboard, D2L, iCollege) have some built-in intelligent tutoring capacities that save instructors time.

- Provide opportunities for students to connect and find commonalities. Use videoconferencing and messaging applications to connect with students and build a learning community so that students may get to know each other despite physical distance.[8]

–E. L. T., M. C. A.-C., and N. M. P.

Endnotes

1. J. Crawford et al., "COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses," *Journal of Applied Learning & Teaching* 3, no. 1 (2020): 1–20.

2. C. Kim, "The Role of Affective and Motivational Factors in Designing Personalized Learning Environments," *Educational Technology Research and Development* 60, no. 4 (2012): 563–584.

3. C. Kim and C. Hodges, "Effects of an Emotion Control Treatment on Academic Emotions, Motivation, and Achievement in an Online Mathematics Course," *Instructional Science* 40, no. 1 (2012): 173–192.

4. T. Kidd, "Brief History of Online Learning," in *Online Education and Adult Learning: New Frontiers for Teaching Practices*, ed. T. Kidd (Hershey, PA: IGI Global, 2010), 46–53.

5. Crawford et al., "COVID-19."

6. Kim, "The Role of Affective."

7. D. Hickey et al., "Internet-Based Alternatives for Equitable Preparation, Access, and Success in Gateway Courses," *Internet and Higher Education* 44 (2020): 100693.

8. Crawford et al., "COVID-19."

scientific texts.[29] Thus, instructors should try to integrate academic vocabulary and topics specific to college-level history and science courses into discussions, writing topics, and readings.

Digital Teaching Strategies

With recent technological advances, many developmental courses have been taught partially or fully online for many years. Some courses integrate online features (e.g., discussion boards and online chats often found through common university platforms such as Blackboard, Canvas, and iCollege) and use programs (e.g., Google Docs) for live peer editing of writing and feedback as well as social media platforms to connect learners (e.g., Microsoft Teams, Slack channels, WhatsApp). For instance, in one study an instructor used a private Facebook page for a developmental writing course; compared with a traditional course (without such technology), the Facebook-enhanced version was more successful in promoting confidence among students in writing and interacting about writing.[30] Digital tools can enhance collaboration among instructors and classmates as well as foster a sense of community, particularly if instructors embrace the many modalities that are inherent in the multiple literacies approach.

Learning mathematics requires greater literacy than is often assumed—especially for students for whom math has not been easy to digest.

Empirical research has also considered various digital technologies for enhancing reading and writing skills. The program iSTART (Interactive Strategy Training for Active Reading and Thinking), for example, provides instruction and practice in five of the reading comprehension strategies described above in the discrete skills section (monitoring comprehension, paraphrasing, bridging, elaborating, and predicting); iSTART has been iteratively modified and has shown promising gains in self-explanations of complex texts and reading comprehension for middle schoolers, high schoolers, postsecondary students, and struggling adult readers.[31]

Before moving on to mathematics, it's important to remember that although we have presented these strategies individually, effective instructors combine them as needed. For instance, comprehension strategies could be integrated into developmental courses using a combination of approaches. Instructors could model and scaffold how to paraphrase complex sections of different texts and then apply this to texts on topics of interest to students, vary the type of text (e.g., blog, newspaper article, passage), and/or vary the content area of the texts (e.g., science, history). In addition, for students who need even more practice, instructors could consider offering resources such as ThinkingStorm (in particular for writing feedback, thinkingstorm.com) or MyLab (available for self-paced reading and writing as well as math practice, pearsonmylabandmastering.com).* Building on the new literacies framework, instructors could also allow students more active roles in communicating, such as through writing reflections to a complex text—and those reflections might lead to ideas, elaborations, and further predictions related to the text.

Mathematics Instruction

Learning mathematics requires greater literacy than is often assumed—especially for students in developmental courses for whom math has not been easy to digest. Students need to be able to read effectively to understand concepts and questions (e.g., word problems, directions), to acquire procedural knowledge (understanding mathematical functions, operations, symbols, and rules), and to apply the appropriate strategies. Educators can help students develop skills to move their understanding from concrete to abstract. For example, students may have developed an understanding of specific symbols and functions (e.g., percentages [%]), and instructors can help students learn to express statements as mathematical operations (e.g., convert word problems into solvable equations, such as "What is the total amount of *simple* interest (in dollars) accrued on $4,832 at a yearly rate of 5.5% over 4 years?" translates to 4,832 x 0.055 x 4, which equals $1,063.04). Research specific to students enrolled in either developmental math courses or college-level math courses finds scaffolding is particularly effective in breaking down complex strategies and rules (e.g., mathematical proofs) into explicit steps. It also allows students greater autonomy as they learn to apply different methods.[32] Instructors can gradually lessen their role, providing hints and other partial supports as students continue to progress in their understanding and gain independence.

Scaffolding that is gradually removed also discourages rote memorization of mathematical steps; instead, it encourages students to articulate and work through problem-solving strategies. Some research has suggested that rote memorization of rules and formulas may be ineffective because students may not be developing the critical-thinking skills and knowledge necessary to form connections among mathematical concepts.[33]

Developmental mathematics instruction needs to be engaging and accessible. The following are some evidence-based instructional strategies to support students in these courses:

- Provide *worked examples*—which are problems that are already solved in an explicit, step-by-step way—with scaffolding,[34] enabling students to feel more comfortable and confident in their math abilities. Consider scaffolding learning to address areas of perceived weakness by adding an additional week of learning and reviewing foundational math skills—with worked examples and problems for students to
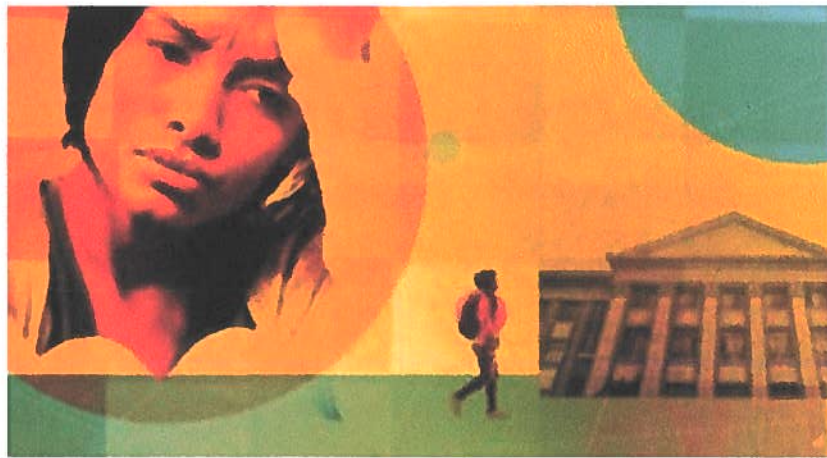
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*Most of the widely available programs are based on research but have not been empirically tested, so we encourage instructors to periodically search for stronger resources.

solve—so students can build toward more complex topics at a comfortable pace. Throughout the course, reserve time to address mathematical concepts that students struggle with and need much more scaffolding and repetition to master. Instructors need patience and flexibility to come up with creative ways to reconceptualize and reteach mathematical topics that students persistently find challenging.

- Use tools (e.g., graphing calculators) and visuals (e.g., graphing paper, flash cards) to enhance learning concepts—but discourage solely relying on a calculator for all basic calculations.[35] For example, it is helpful to use a graphing calculator to quickly and accurately visualize graphs based on linear and quadratic equations, but many students may not learn the underlying math concepts if they never plot the points and draw the graphs by hand. Tools should be used to save time, not to substitute for understanding.

- Consider using manipulatives, such as blocks or other concrete objects, when introducing discrete or abstract mathematical concepts. A demonstrative example of this would be using a staircase when teaching slope.[36] Although manipulatives tend to be popular and can increase understanding, they can also be counterproductive if they do not help draw attention to key concepts. By explaining the manipulative and how it relates to the mathematical idea, instructors increase the likelihood of the manipulative being helpful.[37]

- Offer self-directed learning opportunities that are self-paced for further remediation while also providing supplemental instruction and creating opportunities for peer support.[38] In addition, use self-pacing for acceleration. Let students work ahead if desired and allow for multiple opportunities to master skills.

- Contextualize instruction by providing real-life examples.[39] This promotes transfer to the outside world and across classes. Whenever possible, ground exercises and assignments in authentic situations or set up real problems to be solved. For example, students may appreciate incorporating financial literacy into developmental mathematics courses (e.g., learning spreadsheets, balancing a checkbook, calculating percentages for tips, projecting retirement expenses).

- Allow students to create their own data sets and problems to solve. For example, students could use a bouncing ball to collect data on rebound heights and graph relationships,[40] or they could develop a survey to determine students' views on a topic, administer the survey to collect data, and develop a variety of charts to present their findings.

Combating Math Anxiety

Although anxiety about learning exists in developmental reading and writing courses, math anxiety is a particularly important issue to address. In fact, it is estimated that approximately 80 percent of community college students and 25 percent of four-year college or university students taking mathematics courses struggle with moderate to high math anxiety.[41] Math anxiety can decrease performance in math courses, as well as performance on placement exams into developmental courses (resulting in students who do not actually need a developmental course being required to take one).[42] Further, there is some evidence that female students may need more support, as they may exhibit higher levels of math anxiety compared with male students.[43]

Some strategies that developmental mathematics instructors may want to consider to combat math anxiety include:

- Acknowledge anxiety and fear early on in the course to help normalize the uncomfortable aspects of the learning process.[44] Instructors may even share their own stories of overcoming math anxiety to model perseverance.[45]

- Cultivate fearlessness by establishing an open, collaborative, and participatory classroom.[46] Allow students to work together, share resources, and hold each other accountable through classroom partnerships.

- Foster self-monitoring by acknowledging progress. For example, have students set goals, plan steps, and identify barriers as well as supports.[47] Then, have students monitor their progress through the learning management systems (e.g., Blackboard, D2L, MyLab Math). Provide motivational feedback that includes the tracking of progress in terms of percentage of content mastered or improvement of skill level.[48]

It is important to note that there is no one-size-fits-all instructional approach to developmental education. We encourage instructors to apply a broad array of strategies that bridge different content areas and meet students' unique needs. We also hope instructors will consider integrating motivational aspects (e.g., goal setting, interests, personal experiences) into discussions, assignments, and learning—especially in online courses. □

Endnotes

1. E. Rutschow, "Understanding Success and Failure of Students in Developmental Mathematics: Developmental Mathematics Reform," commissioned paper, National Academies of Sciences, Engineering, and Medicine, March 2019.

2. Rutschow, "Understanding Success and Failure."

3. M. Cohen, "The Importance of Self-Regulation for College Student Learning," *College Student Journal* 46, no. 4 (2012): 892–902.

4. Cohen, "The Importance of Self-Regulation."

5. V. Mesa, "Achievement Goal Orientations of Community College Mathematics Students and the Misalignment of Instructor Perceptions," *Community College Review* 40, no. 1 (2012): 46–74.

6. R. Moore, "Academic Motivation and Performance of Developmental Education Biology Students," *Journal of Developmental Education* 31, no. 1 (2007): 24.

7. S. Merriam and L. Bierema, *Adult Learning: Linking Theory and Practice* (New York: John Wiley & Sons, 2013).

8. Cohen, "The Importance of Self-Regulation"; and B. Zimmerman et al., "Enhancing Self-Reflection and Mathematics Achievement of At-Risk Urban Technical College Students," *Psychological Test and Assessment Modeling* 53, no. 1 (2011): 141–160.

9. M. Ironsmith et al., "Motivation and Performance in College Students Enrolled in Self-Paced Versus Lecture-Format Remedial Mathematics Courses," *Journal of Instructional Psychology* 30, no. 4 (2003): 276–284.

A Formula for Success

Teaching Native American Community College Students Math—and to Believe in Themselves
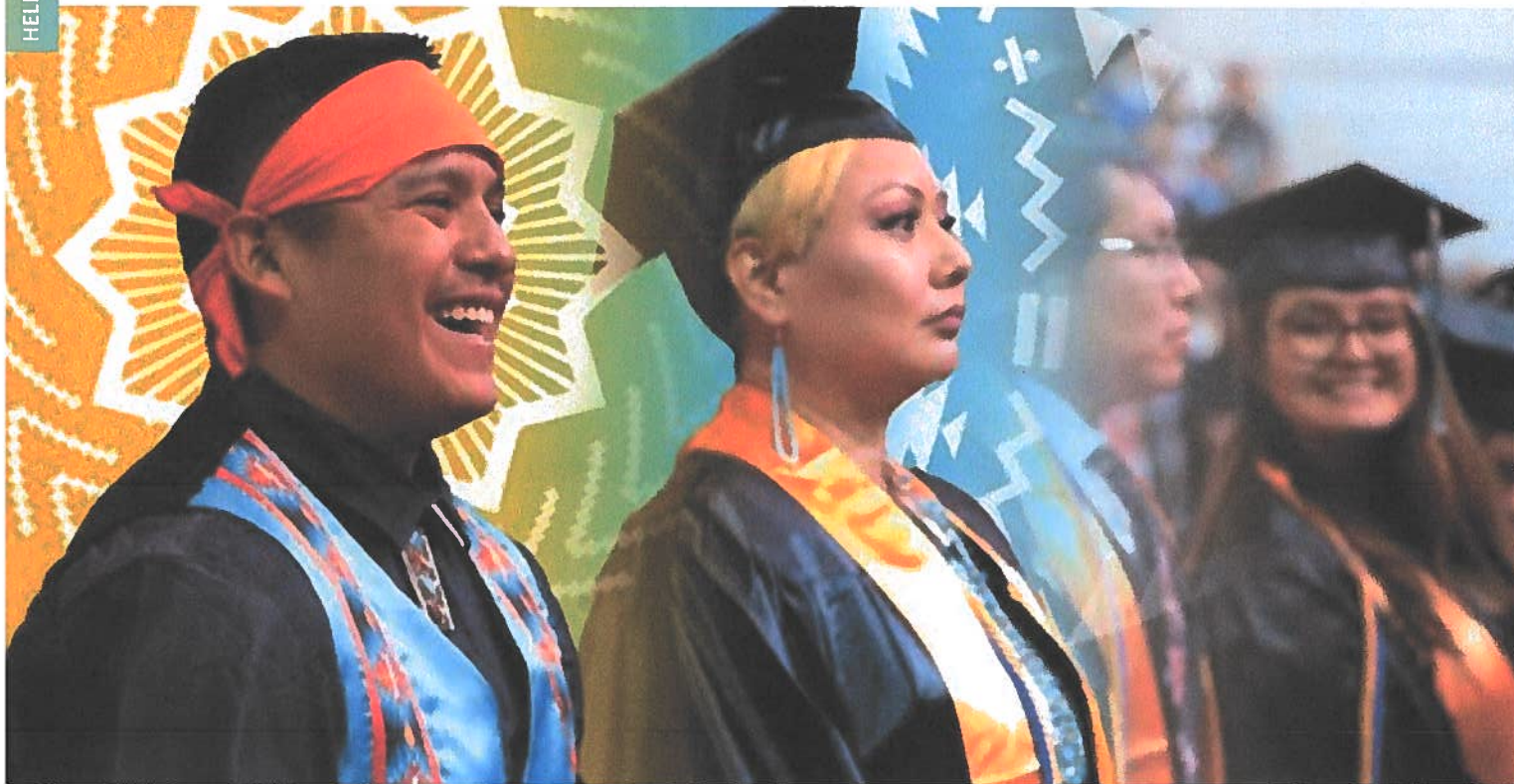
BY EVA L. RIVERA LEBRÓN

Community colleges have long provided students a gateway to greater economic opportunities, primarily through two pathways: completing two years of college courses while preparing to transfer to earn a four-year degree or career training that can lead to stable, well-paying positions. The community college where I teach offers something more: a much-needed affirmation of Native American students' histories, values, identities, and cultures.

I teach math to students at Southwestern Indian Polytechnic Institute (SIPI) in Albuquerque, New Mexico. When it comes to issues of culture, math as a discipline mostly goes unnoticed. Given that subjects in the humanities and social sciences more easily lend themselves to students' lived experiences, classes about equations and functions hardly seem to connect to values and identities. But at SIPI, we show students that these connections do in fact exist, and we ensure that they play a central role in Native students' education. In teaching math and other subject matter content, we intentionally build on our students' cultural knowledge because research shows that doing so is invaluable to their academic, social, and emotional development.* By incorporating students' backgrounds into the classroom, we as educators help them learn more effectively.

One of 37 tribal colleges and universities in the United States, SIPI is a community college funded through the Bureau of Indian Education. All of the approximately 460 students enrolled† in the college are Native American. They come from 18 states and represent 71 different tribes.

SIPI not only respects Native students' cultural backgrounds and traditions but also intentionally supports tribal nation-building through its array of two-year degree and certificate programs. SIPI collaborates with tribes to understand their education and workforce needs—which in recent years have centered on healthy food, clean and sufficient water, sustainable energy, and accessible and equitable healthcare—and then responds with tailor-made degrees and certificates in fields such as culinary arts, environmental science, natural resources management, and vision care. At the same

Eva L. Rivera Lebrón is a professor of mathematics at Southwestern Indian Polytechnic Institute in Albuquerque, New Mexico. She has given several presentations on supporting community college students' transition into and success in developmental and credit-bearing mathematics courses at conferences held by the National Indian Education Association.

*For more on why it's important to build on students' cultures, see *How People Learn II: Learners, Contexts, and Cultures*: nap.edu/catalog/24783/how-people-learn-ii-learners-contexts-and-cultures.

†I am offering an approximation because enrollment fluctuates each trimester.

time, SIPI provides degrees and certificates in fields that meet universal needs and offer broad opportunities, such as accounting, early childhood education, and computer-aided drafting and design, to name just a few.

Because mathematics is a required course for every program, I have students from a range of disciplines, and I teach the full gamut of math courses—from pre-algebra to calculus. Classes are typically small, with only 10 to 15 students, so I get to know my students quite well. Many work full- or part-time jobs, and some are raising children or caring for family members while they attend school.

Nearly 70 percent of students at SIPI test into developmental math courses, which consist of pre-algebra and algebra.[†] These courses, for which students don't receive college credit, are ones they must take in order to enroll in credit-bearing math courses required for a degree. I find teaching these courses—and building relationships with my students through them—especially rewarding.

Confronting Bias

I wanted to teach at SIPI because it's specifically for Native students. Such students are typically not well represented in higher education—as students or professors. As a Black woman from Puerto Rico, I myself did not see many people who looked like me in my undergraduate and graduate programs, not only because of my race and ethnicity but also because of my gender. I often tell my students about the time 20 years ago when one of my college math professors in Puerto Rico looked right at me and said in front of the entire class that women should not be studying math. His words stung. Because I was so intimidated by this professor, I considered dropping the class, but I decided to stay; I needed to prove him wrong. I paid careful attention in class, completed all the assignments, and studied hard for tests—and I passed the course. While proving him wrong, I also learned a lot about what being a professor could and should mean. Less than 20 percent of the students passed the class, which I think says more about that professor than it does about the students. We all had potential, but we had to look outside the class for support. I was a determined student, but I was also fortunate to find the help that my professor was not offering.

To this day, people still assume I don't have much education just because of the way I look. Whether it's due to implicit biases or systemic racism or a combination of both, they are surprised to learn I have a PhD in math education. I make it a point to share my story with my students so they know they can succeed even if others doubt their abilities.

Part of the key to being successful is having somebody who believes in you. One of my students last year was a 27-year-old transfer student who thought he couldn't do math. He really struggled with the material, and after every class he would tell me he just couldn't learn the content. But I started tutoring him after class and kept encouraging him to stick with it, and he started earning good grades. I remember the time he was so proud of his A on a test. He told me he couldn't wait to go home and show it to his mother so she could put it on the refrigerator door. He's no longer my student, but we keep in touch; he often texts me updates on his life. Sometimes I still tutor him when he's stuck on a particular concept.

Part of my job—and also my passion for teaching—is tutoring students. At SIPI, faculty members are required to spend a few hours each week tutoring students during their office hours or in the STEM (Science, Technology, Engineering, and Math) Lab and Writing Lab on campus. In my role as a math professor, I am the students' main contact for the STEM Lab, where I tutor about four hours each week. In March 2020, because of the pandemic, we moved all classes and tutoring sessions at SIPI to synchronous meetings online. So now I tutor my students through Zoom. I try to be available at times that work for them, including nights and weekends, since many of them work full time.[§]

> # Part of my job—and also my passion for teaching—is tutoring students. I am the main contact for the STEM Lab, where I tutor about four hours each week.

Engaging Students in the Content and Their Cultures

A couple of years ago, to better support students, our department decided to modularize beginning algebra. "Modularization" is a term for breaking up a semester-long course into smaller parts so that students have more time to grasp key concepts and master

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[†]For more on supporting students in such courses, see the article on page 16, "In College, But Not Always Earning College Credit."

[§]Although supporting students in and out of class is core to who I am as a professor and I am deeply nourished by my work, I recognize that in many higher education institutions there are professors who become stretched too thin as they strive—too often alone—to meet students' needs. For a thought-provoking article that explores "diversity service work," see "How Diversity Rhetoric Obscures Structural Inequities in Higher Education": bit.ly/2Kb2EUL.

skills. If students fail a module, they can repeat it (without failing the course) before moving on to the next module. We also modularized intermediate math, the course that follows beginning algebra. Although the research on modularization has shown mixed results,* it is helping our students make progress. Passing rates in beginning algebra have increased from 47 percent to 57 percent and in intermediate algebra from 44 percent to 49 percent. We've also noticed that because students are not nearly as stressed about their grades, they can focus more on understanding the content. The emphasis on tutoring and the availability and approachability of faculty members has also helped students in these courses.

One of my students talked about quilting in her Native culture, so we incorporated the art of quilting into our patterns and problem-solving unit.

As a professor, I like the modular approach because it gives me more time to teach the material over the course of the year. I don't have to rush to cover a particular concept, and I can incorporate more projects and group work to help students grasp the content.

At a tribal college, such projects are especially important. I see them as a way to bring students' cultures, languages, and experiences into our math classes and show students how math relates to their daily lives. For example, in a recent class on math for prospective elementary school teachers, as we were studying patterns and problem solving, one of my students talked about quilting in her Native culture. So we incorporated the art of quilting into our patterns and problem-solving unit. Another student in the class compared the beadwork that her family does, with its specific patterns and colors, to the math we were studying. And she then turned in a marvelous project on beading. In another class, I was teaching about percentages and students related it to their blood quantum,[†] the degree to which a person can prove a certain amount of Native ancestry. They started talking excitedly about what blood quantum their children would have if they married people from various tribes. While my students usually shy away from doing fractions because they find them challenging, they eagerly made these calculations because the mathematical concepts suddenly became real for them.

Making such connections to our students' lives happens throughout the college. In English courses, many assigned readings are by Native authors and relate to Native cultures. Culinary classes often feature projects in which students incorporate their cultures into dishes to give them a Native flair. (I'm not sure which ingredients they use, but I've tasted many of their meals, and they are delicious!) In environmental science courses, students learn about Native plants and Native botanists. In pre-engineering classes, students learn how to program robots to respond to Diné, the Navajo language. It's a language students can also learn at SIPI, which offers this language class since more than 60 percent of students are Navajo.

Since many of our students enjoy strong bonds with their tribes, they often attend ceremonies for holidays at home. The college calendar does not always line up with the various holidays students from different tribes celebrate, so sometimes students miss school. While they still must complete their course work, we definitely make space for them to engage in their cultural practices. At SIPI, we explicitly let students know just how much we respect their heritage.

It's a heritage that I'm continuing to learn more about. Growing up in Puerto Rico, the history books we read in school only superficially explained how Puerto Ricans are descended from Spaniards, Africans, and Taínos, the Indigenous people of the Caribbean. But we didn't really study Indigenous people in school, and I have no real knowledge of the Taíno or their culture, though I'm interested in building it. Attending a SIPI colleague's feast was my first real exposure to Native celebrations, and I'm eager to attend more.

Bolstering Student Success

Modularization is not the only way SIPI tries to support students' academic success. Many students take advantage of services, besides tutoring, offered on campus at the STEM Lab and the Writing Lab. The STEM Lab offers plenty of resources, such as a group collaboration area, a semi-private computer area with whiteboards, calculators, graphing paper, and workstation equipment with paper cutters, staplers, and hole punches. To further support students in

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*For more on the research behind modularization, see *Modularization in Developmental Mathematics in Two States* (bit.ly/3o4FQnK), "Modularization—a Road to Relevance?" (bit.ly/2LDmHfu), and *Effects of Modularisation* (bit.ly/3bTFsGc).

[†]For a fuller discussion of blood quantum, see "So What Exactly Is 'Blood Quantum'?": n.pr/3gShzz7.

developmental math courses, we ask that they sign math contracts. By signing such contracts, students commit to two hours of mandatory tutoring each week outside of class. Students can sign up for this tutoring at the STEM Lab or the coaching center on campus, which offers peer tutoring.

A popular childcare option for students with young children is an early childhood center on campus. Students can enroll their children in the center (as space allows) while they take their classes. Under the supervision of faculty members, students studying to be early childhood teachers work with the children of SIPI students and gain actual student-teaching experience.

One effort that is especially close to my heart is the Summer Bridge[†] program that I direct at the college. It's specifically geared for students who need support in reading, math, and study skills, and as a result, may not be college ready. I started the program in 2018 to help students successfully transition to college. We actually run two separate programs—a residential program for traditional-age students (typically 18 to 20) who live on campus and a nonresidential one for older students who live off campus. At SIPI during the school year, the majority of students live in dorms on campus, while the rest commute from Albuquerque and the surrounding suburbs.

We started Summer Bridge because we found that student attrition was highest in the first trimester. By helping students build their knowledge and skills *before* the academic year begins, we can increase the number of students who persist in college and eventually earn their degree. Throughout both the residential and nonresidential programs, faculty members support students in English and math, share study tips and information about college life, and engage students in community-building activities. The program is free for students and funded through a mix of government funding and grants. It's worth noting that students are not required to enroll in SIPI after Summer Bridge. The whole point of the program is to ensure they have a successful transition to higher education no matter where they attend.

Results so far have been promising.[§] In 2019, the residential program enrolled 30 students and ran for five weeks with classes held during the day. Of those students, 77 percent matriculated at SIPI. The nonresidential program enrolled 11 students and ran for eight weeks with classes in the evenings to accommodate students' work schedules. Of those students, 91 percent matriculated at SIPI. Because of the suite of supports for students who are not yet college ready, the percentage of students earning credit hours in their first trimester has increased from 74 to 83, while their first-term grade point average has increased from 1.81 to 2.15. Overall, the passing rate in courses has increased from 53 to 64 percent.

While students attend SIPI, we make every effort to prepare them for enrolling in a four-year college or entering the workplace. Guidance counselors help students with their transcripts and resumes. The campus holds career fairs every trimester, and a staff member works with students to land internships. Of the students who decide to pursue university studies, many attend the University of New Mexico (UNM), New Mexico State University, and New Mexico Highlands University. One of my former students is now studying math at UNM, and another is pursuing a major in Native American studies at Arizona State University.

With Summer Bridge, the percentage of students earning credit hours in their first trimester has increased from 74 to 83.

Wherever my students end up, I want them to understand and appreciate math as it relates to their lives, and I want them to believe in themselves. I still keep in touch with another student from 2019 who almost withdrew from one of my classes the first week of the trimester. At the time, he was 30 years old. He confided in me that he had never been good at math, and he said a professor at another college even told him as much. So I asked him, "Do you believe him?" When he said yes, I knew I had to help change his mindset.

I convinced him to stay in the class, and I worked with him to ensure he understood the material. At the end of the trimester, he ended up with the highest grade in the class. He is hands down one of the best students I have ever had. When he recently asked me if I thought he could be a math tutor at SIPI, I told him, "Of course you can." My job isn't just to teach students math—it's to help them see themselves as individuals who, once they make the effort, can succeed at math and anything they do. □

[†]For more on the Summer Bridge program, see sipi.edu/apps/pages/summerbridge.
[§]Because of the pandemic, we did not hold the Summer Bridge program this past summer; for months, the campus has been closed to ensure student and staff safety, and all classes are now synchronous meetings online. I'm currently working on making Summer Bridge a virtual program that can be held at any time during the year.

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LEARNING HISTORY, FACING REALITY

HOW KNOWLEDGE INCREASES AWARENESS OF SYSTEMIC RACISM

BY PHIA S. SALTER

Among the many tensions that the year 2020 laid bare, the divisions in our beliefs about the continued role of racism in the United States were central. While some of these divisions were drawn along political lines, with liberals far more likely than conservatives to see systemic racism as an ongoing problem, many were also drawn along racial lines. Although Black Lives Matter protests in the wake of George Floyd's and Breonna Taylor's deaths brought together one of the largest multiracial coalitions in recent protest history,[1] our nation remains divided in beliefs about the root causes of racial injustice, what we should do about it, and who is willing to do the work.[2]

According to several national polls, white Americans are more likely to deny that racism is a problem in contemporary US society than people from many communities of color.[3] Even in the wake of increased televised and social media conversations about systemic racism, white Americans were less likely to

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take actions to better understand the racial issues plaguing American society, or to indicate support for Black Lives Matter, than people in other racial groups.[4] In my home state of North Carolina, polling indicated that while 87 percent of Black Americans thought systemic racism was a serious issue, only 40 percent of white Americans agreed with this sentiment.[5]

In the face of persistent disparities that impact Black Americans' experiences and outcomes regarding education, health, income, wealth, and criminal justice,[6] these gaps in our perceptions about what constitutes racism and whether it is a persistent problem only widen another gap: what we need to do to address these disparities. As an educator, I'm interested in how we might bridge these perception gaps in the classroom. As a researcher, I also have some ideas about where to start. I am a social, cultural, and critical race psychologist who draws upon a diverse set of research tools—including experiments, quantitative analyses, and qualitative field research—to integrate scientific inquiry with applications to racial justice.

OUR STORIES SHAPE OUR PERCEPTIONS

To begin, take a moment to think about what you would say if I asked you to tell me your life story, your personal history. What if you had limited time or only 500 words? What aspects of your life story would you think are most important to highlight? Would your highlights (or lowlights) differ if I were to ask you to tell your

Left: National Guard troops lining Beale Street in Memphis on March 29, 1968, as civil rights activists march. Right: Tiana Day, with megaphone, leading the "March 4 Our Future" in San Francisco on November 1, 2020.

SCOTT STRAZZANTE / THE SAN FRANCISCO CHRONICLE VIA GETTY IMAGES

story to your students or to your colleagues? What kind of impact would you want your story to make, and would that change which details you included or excluded? Honestly, how much would you focus on the parts that make you feel good and those that make you feel bad?

I have been considering these types of questions in relation to our nation's history since I started graduate school 15 years ago at the University of Kansas. Social-psychological research suggests that many of us are motivated to maintain a positive view of ourselves when recounting our pasts.[7] I wondered: What does that emphasis on the positive mean for how we think about our country and, in particular, our history of racism? My master's thesis and dissertation both focused on the dynamic relationships between identity, knowledge of America's racial history, and beliefs about what constitutes racism. In my work, I consider both how our identities impact what aspects of our nation's history we include in the collective narrative (especially what we commemorate) and what impact these narratives can make on engaged students.

In 1965, James Baldwin, a scholar and civil rights activist, implored white Americans to come to terms with the oppressive and bloody history of our nation's past and asserted that doing so would be necessary to resolve the emotional and historical baggage perpetuating ongoing racism and discrimination. In an *Ebony* magazine article, he wrote:

White man, hear me! History, as nearly no one seems to know, is not merely something to be read. And it does not refer merely, or even principally, to the past. On the contrary, the great force of history comes from the fact that we carry it within us, are unconsciously controlled by it in many ways, and history is literally *present* in all that we do. It could scarcely be otherwise, since it is to history that we owe our frames of reference, our identities, and our aspirations.[8]

History—or perhaps more accurately the stories we collectively tell ourselves about the past—shapes how we see the world, who we believe we are, and who we hope to be. At the same time, how we see the world, who we believe we are, and who we hope to be all play important roles in our interpretations and attitudes about what is significant about the past. What happened in the past and its relevance for the present can be ambiguous, and this ambiguity provides space for psychological meaning-making, intervention, and action. My research leverages this ambiguity to empower educators committed to addressing racism in their classrooms. I've found that as students' knowledge of America's racial history deepens, so does their interest in addressing persistent inequities. But we have a long road ahead.

Representations of American history tend to sanitize or silence the more negative or racist elements in order to maintain a positive view of our country's past and present.[9] Our textbooks, cur-

ricula, and government-sanctioned holidays are no exception. These sources of historical information are not neutral accounts of what factually happened in the past; they are vulnerable to biases carried forward from the past and biases cultivated in the present.[10] Take the enslavement of Black people, for example. In its comprehensive report on "teaching hard history," the Southern Poverty Law Center (SPLC) indicated that American slavery is often divorced from its brutal context:

> Taken as a whole, the documents we examined—both formal standards and supporting documents called frameworks— mostly fail to lay out meaningful requirements for learning about slavery, the lives of the millions of enslaved people or how their labor was essential to the American economy for more than a century of our history. In a word, the standards are timid.... The various standards tend to cover the "good parts" of the story of slavery—the abolitionist movement being foremost here—rather than the everyday experiences of slavery, its extent and its relationship to the persistent ideology of white supremacy.[11]

As students' knowledge of America's racial history deepens, so does their interest in addressing persistent inequities.

In addition to reviewing state standards, the SPLC examined popular textbooks, interviewed teachers, and tested students' knowledge of slavery. Every source pointed to the conclusion that our country is struggling to effectively address the topic of slavery. This is an urgent problem because, as the SPLC noted, "The persistent and wide socioeconomic and legal disparities that African Americans face today and the backlash that seems to follow every African American advancement trace their roots to slavery and its aftermath. If we are to understand the world today, we must understand slavery's history and continuing impact."[12]

When it comes to historical narratives in our racial history that include enslavement, rape, segregation, lynching, political assassinations, and other forms of terroristic violence, unsanitized examinations reveal a deep and disturbing past that is not in accord with the cherished view of America as a land of liberty and opportunity. Honest discussions can raise a tension between wanting to distance ourselves from ugly truths and needing to reckon with them so that we might understand their relevance and manifestations in the present. In my own work, I've seen how this tension arises within celebrations of Black History Month, a time often dedicated to celebration, but also a time in which the relevance of these conversations is central.

HISTORICAL KNOWLEDGE CAN FACILITATE PERCEPTIONS OF SYSTEMIC RACISM

When I entered my psychology graduate program, I was primarily interested in racial identity and how that was related to perceptions of racism. However, several faculty members, including my advisor, were also discussing the implications of history knowledge as an important psychological variable for various perceptions;[13] I was immediately drawn in. We were conducting several initial studies (including my master's thesis[14]) measuring the relationship between Black history knowledge and perceptions of racism when I wondered about the cultural sources of Black history knowledge. I wondered what type of Black history content might be present (or absent) in different schools. I thought Black History Month might be a particularly good time to ask this question.

During Black History Month, schools vary in what events or people they think are best to highlight. While some schools may take their cues from larger districtwide initiatives or turn to historical societies (like the Association for the Study of African American Life and History) for ideas, the representations of Black history that wind up in the library or school display cases are also contingent on who volunteers to lead the efforts (students, teachers, or staff) and who is perceived to be the audience of such content.
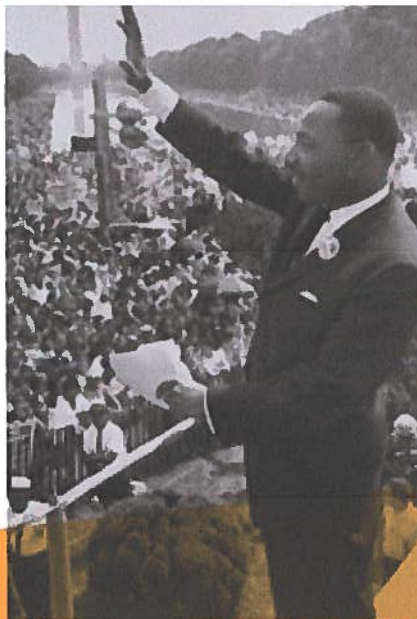
During graduate school, I began conducting a series of studies[15] to explore how Black History Month was commemorated in local high schools. The first, an ethnographic field study[16] in 12 high schools, revealed that Black History Month commemorations differed according to the student population. In the seven schools where most (84 to 92 percent) of the students were white, the more negative and painful aspects of Black history were less likely to be included than in the five schools where most (72 to 98 percent) of the students were Black and Latinx.

Generally, most Black History Month commemorations used two sanitizing strategies to silence negative histories. One strategy was to highlight individual Black American achievement— whether inventors, intellectuals, or civil rights heroes—while minimizing the historical barriers that these individuals faced or the collective struggle involved in order to eliminate those barriers. For example, Dr. Martin Luther King Jr.'s "I Have a Dream" speech would be highlighted, and he would be celebrated as a civil rights hero, but the violent context that necessitated King's speech, as well as the organizing and demonstrations of the civil rights movement, would not be mentioned. The other strategy directed discussions about Black history toward multicultural tolerance and diversity instead of discussing race or history at all. The ongoing legacy of systemic expropriation, exploitation, and oppression was not brought to the table because of concerns that these conversations could make students feel bad. Instead, messages like "diversity is the one true thing we all have in common" appeared to be designed to make students feel good.

Although these sanitizing strategies were evident in all 12 schools, they were used far more extensively in the predominantly white schools. When students of color were in the majority, Black History Month commemoration materials were more likely to acknowledge historical racism, institutional barriers, and current impacts of longstanding oppression.

In a follow-up study,[17] I asked college students to engage with high schools' Black History Month materials. The college students saw materials from schools that enrolled mostly Black and Latinx students and mostly white students, but where the materials came from was kept hidden. Notably, white college students preferred the content from the predominantly white schools (which was more likely to be celebratory and diversity focused without explicitly presenting narratives about historical racism) over the materials from predominantly Black and Latinx schools (which were more likely to acknowledge historical racism).

After this preference emerged, my research team and I wanted to know whether these varying representations of history impacted perceptions of racism today. We conducted a third study[18] in which participants were randomly assigned to engage with one of the three sets of facts (which I created based on the high school materials): celebratory representations of Black history that emphasized past achievements of Black Americans, critical representations of Black history that emphasized historical instances of racism, and (as a control condition) representations of US history that excluded people of color. Then, they were asked to indicate (1) whether various ambiguously racist events were due to racism and (2) their support for anti-racism policies.

Left: Dr. Martin Luther King Jr. after delivering his "I Have a Dream" speech on August 28, 1963. Right: Former police officer Benny Oliver kicking Memphis Norman, a college student participating in a Woolworth's lunch counter sit-in on May 28, 1963.

Historical knowledge can be a *directive force*, influencing how we comprehend current events and proposed responses.

A key finding from this work is that participants exposed to critical representations of Black history not only perceived greater racism in US society but also indicated greater support for policies designed to address racial inequality than did participants in the other two conditions. Sanitized representations that minimized racism in the past undermined perceptions of racism in the present and, in turn, resulted in less support for anti-racism policies. Think about that for a moment: accurate historical knowledge increased perception of racism in the present and also facilitated support for anti-racism policies. Historical knowledge can be a *directive force*, influencing how we comprehend current events and proposed responses (e.g., reparative action, apologies, or compensation).

Further support for the power of accurate Black history knowledge has emerged from my research collaborations examining the Marley hypothesis.[19] The Marley hypothesis generally proposes that the perception (rather than denial) of racism in US society reflects accurate knowledge about historically documented instances of past racism. The name comes from Bob

Marley's song "Buffalo Soldier," which reminds us of essential historical truths: "There was a Buffalo Soldier, In the heart of America, Stolen from Africa, … fighting for survival, … If you know your history, Then you would know where you coming from, Then you wouldn't have to ask me, Who the heck do I think I am."

In the original study[20] and the replication,[21] Black American college students were more accurate about historically documented racism than white American college students. For example, Black students were more likely to know that the Emancipation Proclamation did not abolish slavery throughout the United States and that full citizenship was not established for Black Americans until the 14th Amendment. As evidence of the Marley hypothesis, differences in historical knowledge facilitated differences in perceptions of racism in contemporary events among the Black and white students. In other words, the racial gap in perceptions about racism today—much like the gaps in perceptions evident in the national polls described in the introduction—was in part explained by racial differences in historical knowledge.

The implication of this work is that Black Americans' tendencies to perceive racism are not forms of strategic exaggeration (i.e., "playing the race card"), but instead constitute realistic concerns about enduring manifestations of racism that are grounded in accurate knowledge about America's racial history. In our studies, denial of racism was associated with ignorance about historically documented facts in our country's racial history.

CLASSROOM INTERVENTIONS TO INCREASE RECOGNITION OF SYSTEMIC RACISM

This line of research suggested some fairly straightforward, fruitful directions for interventions in the classroom. If we want to bridge the gap between perception and denial of systemic racism, then we could teach critical histories. In a study[22] led by my collaborator Courtney Bonam of the University of California, Santa Cruz, we recruited a sample of white Americans to listen to a clip of historian Richard Rothstein on NPR's *Fresh Air* program discussing the fed-

eral government's role in creating Black ghettos and the ongoing legacy of systemic racism in housing.[23] Participants learned about redlining, blockbusting, and other discriminatory housing practices. (If you would like to learn more about this history, turn to page 32 for an excerpt from Rothstein's 2017 book, *The Color of Law: A Forgotten History of How Our Government Segregated America*.) We found that listening to the NPR clip increased critical history knowledge (in comparison to a control condition), increased beliefs about the government's active role in creating Black ghettos, and, in turn, increased perceptions of systemic racism.

However, though effective overall, participants' identities interacted with the effectiveness of the intervention. In the original Marley hypothesis study,[24] the more positively Black Americans regarded their racial identity, the more likely they were to perceive racism in American society. In contrast, the more positively white Americans regarded their racial identity, the less racism they saw in contemporary events. In the context of our intervention, the tensions between white racial identity and perceptions of racism were notable. As white racial identity increased, engagement with our critical history lesson (the NPR clip) became less likely to increase systemic racism perceptions. The data suggest that critical historical knowledge is important, but the effectiveness of teaching critical history may depend on how open our students are to information that can be threatening to their identities and what we can do to mitigate that threat.[25] The study results are also consistent with my own personal experience in the classroom.

> ## Tying in critical historical content across subject areas is key if you are committed to helping your students understand racism as a historical, cultural, and structural construct.

BRIDGING THE DIVIDE IN MY OWN CLASSROOM

Over the last 10 years, I have primarily taught courses in higher education that count toward diversity requirements for bachelor's degrees, diversity requirements for psychology majors in particular, or courses that meet other general requirements related to racial equity or justice. In the past, sometimes those classes were large, hosting around 100 students, and other times they were intimate, small-class settings with only 10 to 12 students. Regardless of the size, there were always some students who self-selected into my courses because of genuine interest, while others openly admitted that they were just looking to check off another course from their list of required classes.

I am committed to teaching these courses because critical diversity content is intimately tied to my research expertise and my training as a cultural and critical race psychologist. I think it is important to tie in critical historical content across subject areas, even in

domains where students may not believe the connections are relevant (at least initially). This is not always an easy approach, but it is a key one if you are committed to helping your students understand racism as a historical, cultural, and structural construct.

I accepted early on that one of the consequences of teaching critical diversity content is that it can be emotionally challenging for students.[26] Highlighting the kind of issues instructors can encounter, Alexander Kafka of the *Chronicle of Higher Education* discusses the disproportionate amount of emotional labor spent by instructors in diversity courses.[27] Kafka reviews research presented at the Association for the Study of Higher Education's annual conference by Drs. Ryan Miller, Cathy Howell, and Laura Struve in which they defined emotional labor as "attending to students' needs beyond course content, both inside and out of the classroom, as well as addressing one's own emotional management and displays as a faculty member."[28] Of course, any class could require some additional attention to students' needs and requests outside of the classroom, but as Howell, who is a Black woman, revealed, a significant portion of her own emotional labor included "being the depository of anger and frustration experienced by students."[29] As a regular instructor for these types of courses, I have experienced being such a depository personally (often through eye-rolling and outbursts in class) and grappled with it on teaching evaluations. I know those written-in comments can really shine or rain on your parade.

A few years ago, as I was preparing to deliver a lecture on "Racism and Oppression" in my Psychology of Culture and Diversity course, I realized that I had come to anticipate some level of anger and frustration among some of my students—so much so that it had impacted some of my teaching practices. After some critical reflection, I knew I was managing their reactions to both the message and the messenger. I learned that it was important to cover what is typically experienced as the most uncomfortable content after I've had some time to earn their trust. At the very beginning of the semester, many students express their excitement for learning more about psychology in "other" cultures. They do not necessarily anticipate the critical, challenging lessons about racism that lie ahead.

My courses challenge students to understand themselves as cultural beings with "different" cultural patterns too. Culture and diversity are not just about "others" and their psychological experiences; everyone's psychological experiences are intimately tied to cultural processes as consumers and producers. My lectures on racism and oppression build on this idea by asserting that racism is systemic and embedded in our cultural context. In psychology textbooks, systemic racism is not a term often used; most of my students are not used to thinking about racism this way. One way I manage this is by packing the lecture with interactive and experiential activities[30] that aim to help them process a sociocultural understanding of racism; this larger concept of racism may be more threatening than the typical portrayal of racism as individual bias.[31]

Another approach I use includes arriving to class early to play Bob Marley's "Buffalo Soldier" before introducing my students
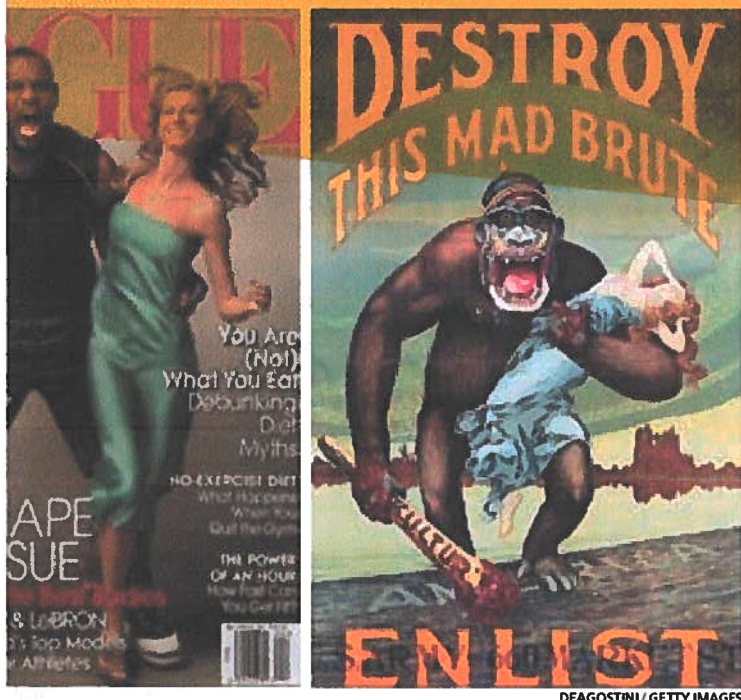
Left: A 2008 *Vogue* cover of LeBron James and Gisele Bündchen. Right: A 1917 US Army recruitment poster. Contrasting the two reveals the importance of historical knowledge.

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to the Marley hypothesis. We discuss explicit and ambiguous examples of racism and their connections to the past. One particularly vivid example includes discussion of a 2008 *Vogue* cover of LeBron James and Gisele Bündchen. When the image is presented on its own, many students suggest that claims of racism are wildly exaggerated. When paired with a World War I recruitment poster from 1917 with a gorilla abducting a fragile white woman (a la King Kong) with the central message "Destroy This Mad Brute," the juxtaposition of the two images suggests that James and Bündchen were styled to mirror racial stereotypes about Black men as dangerous. I ask them to consider Emmett Till and how false accusations of him inappropriately interacting with a white woman precipitated his lynching. Then, I ask the students to consider how their knowledge of the historical poster has shaped their perceptions of racism when reexamining the *Vogue* cover. Suddenly, claims of racism are not deemed so wildly exaggerated.

Throughout my courses, we look backward and forward. When we discuss historical instances of racism, we also discuss their implications for the present. For example, many psychology students will read about the Tuskegee Syphilis Experiment as a lesson on research ethics, but it's also important to discuss the legacy of historical racism to gain new perspective on who feels comfortable participating in medical trials and who has access to quality medical care.
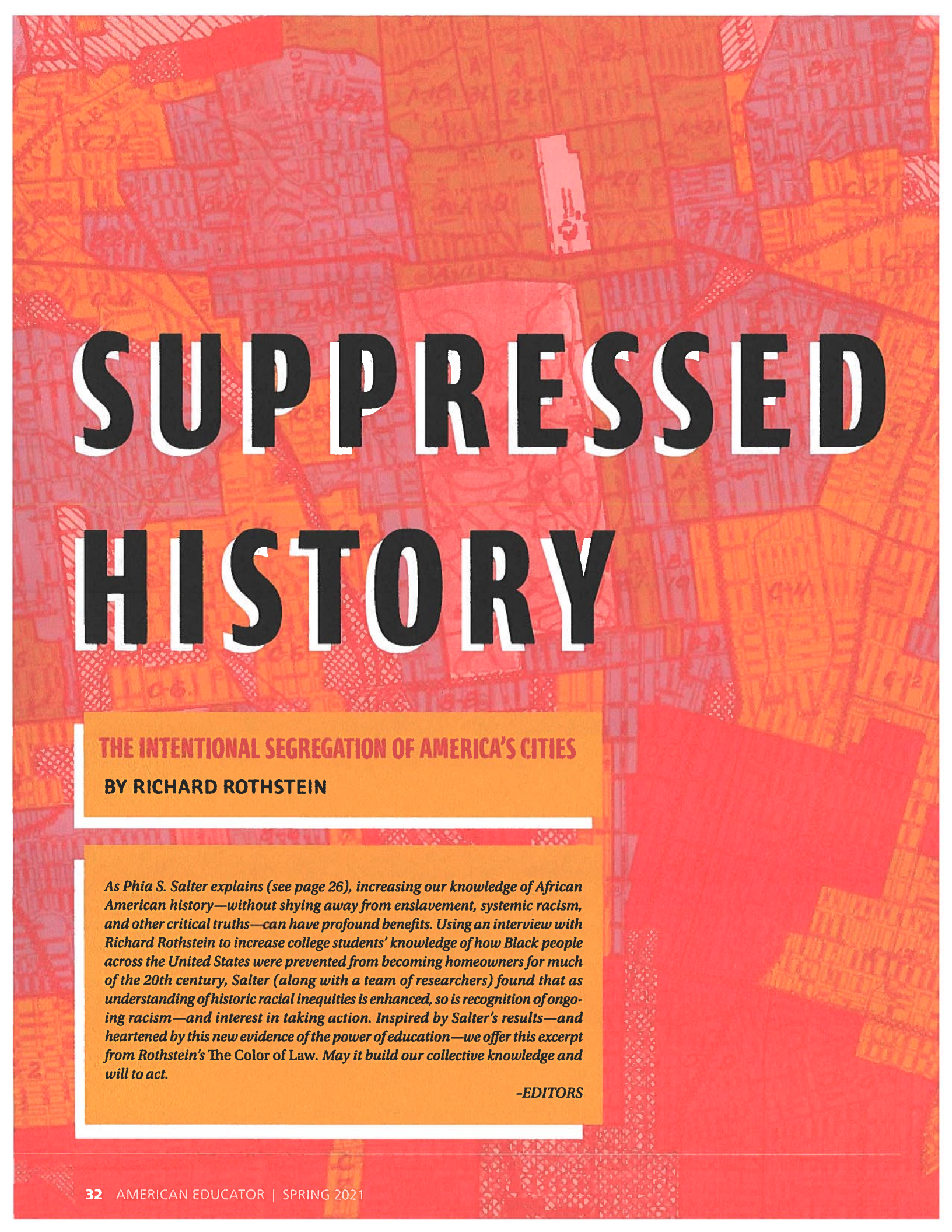
Despite the challenges, my research and teaching experiences have only strengthened my belief that, as teachers, we can have a positive impact on our students' and our society's responses to systemic racism. In many ways, it is striking that brief interventions in laboratory settings can shift our awareness and perceptions of systemic racism. Recognizing sys-

temic racism is only a first step; dismantling racism will require collective action with support from robust anti-discrimination laws and anti-racist policies. But, recognition is a crucial step, nonetheless. I hope, with future work, that we can better understand the social conditions that facilitate acceptance of the difficult truths in our racial history and commitments to social action. The classroom is a great place to start deepening society's understanding of racism past and present, and our willingness to do something about it. ☐

Endnotes

1. L. Buchanan, Q. Bui, and J. K. Patel, "Black Lives Matter May Be the Largest Movement in U.S. History," *New York Times*, July 3, 2020.

2. F. Newport, "Seeking Solutions for Racial Inequities," Gallup, September 11, 2020.

3. See, for example, UMass Lowell Center for Public Opinion, "American Opinions on Race, Policing, Systemic Racism," August 20–25, 2020; CNN, study conducted by SSRS, August 28–September 1, 2020, cdn.cnn.com/cnn/2020/images/09/04/rel9b.-.race.pdf?utm_source=link_newsv9&utm_campaign=item_320096&utm_medium=copy; and M. Brenan, "Optimism About Black Americans' Opportunities in U.S. Falls," Gallup, September 16, 2020.

4. A. Florido and M. Peñaloza, "As Nation Reckons with Race, Poll Finds White Americans Least Engaged," NPR, August 27, 2020.

5. M. Burns, "Poll: Nearly Quarter in NC Don't View Systemic Racism as a Problem," WRAL, October 16, 2020.

6. See, for example, S. Roberts and M. Rizzo, "The Psychology of American Racism," *American Psychologist*, June 25, 2020, advance online publication; and D. Francis and C. E. Weller, "The Black-White Wealth Gap Will Widen Educational Disparities During the Coronavirus Pandemic," Center for American Progress, August 12, 2020.

7. A. Wilson and M. Ross, "The Identity Function of Autobiographical Memory: Time Is on Our Side," *Memory* 11, no. 2 (2003): 137–149; and D. P. McAdams and K. C. McLean, "Narrative Identity," *Current Directions in Psychological Science* 22, no. 3 (2013): 233–238.

8. J. Baldwin, "The White Man's Guilt," *Ebony*, August 1965, 47.

9. J. W. Loewen, *Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong* (New York: Touchstone, 1996); and Richard Rothstein, "Historian Says Don't 'Sanitize' How Our Government Created Ghettos," interview by Terry Gross, "Fresh Air," NPR, May 14, 2015.

10. A. Wong, "How History Classes Helped Create a 'Post-Truth' America," *The Atlantic*, August 2, 2018.

11. K. Shuster, *Teaching Hard History: American Slavery* (Southern Poverty Law Center, January 31, 2018), 29.

12. Shuster, *Teaching Hard History*, 9.

13. J. C. Nelson et al., "The Role of Historical Knowledge in Perception of Race-Based Conspiracies," *Race and Social Problems* 2, no. 2 (2010): 69–80; and B. Doosje et al., "Guilty by Association: When One's Group Has a Negative History," *Journal of Personality and Social Psychology* 75, no. 4 (1998): 872.

14. P. S. Salter, "Perception of Racism in Ambiguous Events: A Cultural Psychology Analysis" (master's thesis, University of Kansas, 2008).

15. P. S. Salter and G. Adams, "On the Intentionality of Cultural Products: Representations of Black History as Psychological Affordances," *Frontiers in Psychology* 7 (2016); P. S. Salter, G. Adams, and M. J. Perez, "Racism in the Structure of Everyday Worlds: A Cultural-Psychological Perspective," *Current Directions in Psychological Science* 27, no. 3 (2018): 150–155; P. S. Salter and G. Adams, "Provisional Strategies for Decolonizing Consciousness," in *Antiracism Inc.: Why the Way We Talk About Racial Justice Matters*, ed. F. Blake, P. Ioanide, and A. Reed (Santa Barbara, CA: Punctum Books, 2019), 299–323; and G. Adams and P. S. Salter, "They (Color) Blinded Me with Science: Counteracting Coloniality of Knowledge in Hegemonic Psychology," in *Seeing Race Again: Countering Colorblindness Across the Disciplines*, ed. K. Crenshaw et al. (Oakland: University of California Press, 2019), 271–292.

16. Salter and Adams, "On the Intentionality," 1166.

17. Salter and Adams, "On the Intentionality."

18. Salter and Adams, "On the Intentionality."

19. J. Nelson, G. Adams, and P. Salter, "The Marley Hypothesis: Denial of Racism Reflects Ignorance of History," *Psychological Science* 24, no. 2 (2013): 213–218; and C. Bonam et al., "Ignoring History, Denying Racism: Mounting Evidence for the Marley Hypothesis and Epistemologies of Ignorance," *Social Psychological and Personality Science* 10, no. 2 (2019): 257–265.

20. Nelson, Adams, and Salter, "The Marley Hypothesis."

21. Bonam et al., "Ignoring History."

22. Bonam et al., "Ignoring History."

23. Rothstein, "Historian Says Don't 'Sanitize.'"

24. Nelson, Adams, and Salter, "The Marley Hypothesis."

25. See also A. Haugen et al., "Theorizing the Relationship Between Identity and Diversity Engagement: Openness Through Identity Mismatch," in *Venture into Cross-Cultural Psychology: Proceedings from the 23rd Congress of the International Association for Cross-Cultural Psychology*, ed. M. Karasawa et al. (2018).

SUPPRESSED HISTORY

THE INTENTIONAL SEGREGATION OF AMERICA'S CITIES

BY RICHARD ROTHSTEIN

As Phia S. Salter explains (see page 26), increasing our knowledge of African American history—without shying away from enslavement, systemic racism, and other critical truths—can have profound benefits. Using an interview with Richard Rothstein to increase college students' knowledge of how Black people across the United States were prevented from becoming homeowners for much of the 20th century, Salter (along with a team of researchers) found that as understanding of historic racial inequities is enhanced, so is recognition of ongoing racism—and interest in taking action. Inspired by Salter's results—and heartened by this new evidence of the power of education—we offer this excerpt from Rothstein's The Color of Law. *May it build our collective knowledge and will to act.*

–EDITORS

I n 2014, police killed Michael Brown, a young African American man in Ferguson, a suburb of St. Louis. Protests followed, some violent, and subsequent investigations uncovered systematic police and government abuse of residents in the city's African American neighborhoods. The reporting made me wonder how the St. Louis metropolitan area became so segregated.

Most of us think we know how segregated neighborhoods in places like Ferguson—with their crime, violence, anger, and poverty—came to be. We say they are "*de facto* segregated," that they result from private practices.

That has some truth, but it remains a small part of the truth, submerged by a far more important one: until the last quarter of the 20th century, racially explicit policies of federal, state, and local governments defined where whites and African Americans should live. Today's residential segregation in the North, South, Midwest, and West is not the unintended consequence of individual choices and of otherwise well-meaning law or regulation but is the result of unhidden public policy that explicitly segregated every metropolitan area in the United States. The policy was so systematic and forceful that its effects endure to the present time. Segregation by intentional government action is not *de facto*. Rather, it is what courts call *de jure*: segregation by law and public policy.

To prevent lower-income African Americans from living in neighborhoods where middle-class whites resided, local and federal officials began in the 1910s to promote zoning ordinances to reserve middle-class neighborhoods for single-family homes that lower-income families of all races could not afford. Certainly, an important and perhaps primary motivation of zoning rules that kept apartment buildings out of single-family neighborhoods was a social class elitism that was not itself racially biased. But there was also enough open racial intent behind exclusionary zoning that it is integral to the story of *de jure* segregation.

St. Louis appointed its first plan commission in 1911 and five years later hired Harland Bartholomew as its full-time planning engineer. His assignment was to categorize every structure in the city—single-family residential, multifamily residential, commercial, or industrial—and then to propose rules and maps to prevent future multifamily, commercial, or industrial structures from impinging on single-family neighborhoods. If a neighborhood was covered with single-family houses with deeds that prohibited African American occupancy, this was taken into consideration at plan commission meetings and made it almost certain that the neighborhood would be zoned "first-residential," prohibiting future construction of anything but single-family units and helping to preserve its all-white character.

According to Bartholomew, an important goal of St. Louis zoning was to prevent movement into "finer residential districts

Racial segregation was a nationwide project in the 20th century. *The Color of Law*, from which this article is excerpted, demonstrates that racially explicit government policies to segregate our metropolitan areas were neither subtle nor intangible and were sufficiently controlling to construct the *de jure* segregation that is now with us in neighborhoods (and hence in schools). The core argument of this book is that African Americans were unconstitutionally denied the means and the right to integration in middle-class neighborhoods, and because this denial was state sponsored, the nation is obligated to remedy it.

–R. R.
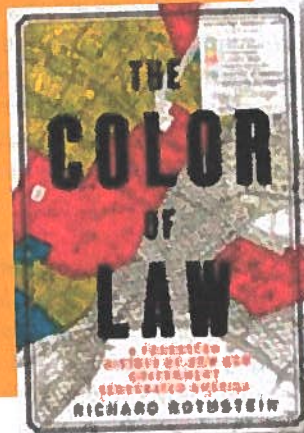
Until the last quarter of the 20th century, racially explicit policies of federal, state, and local governments defined where whites and African Americans should live.

... by colored people." He noted that without a previous zoning law, such neighborhoods have become run-down: "Where values have depreciated, homes are either vacant or occupied by colored people." The survey Bartholomew supervised before drafting the zoning ordinance listed the race of each building's occupants. Bartholomew attempted to estimate where African Americans might encroach so the commission could respond with restrictions to control their spread.

The St. Louis zoning ordinance was adopted in 1919. Guided by Bartholomew's survey, it designated land for future industrial development if it was in or adjacent to neighborhoods with substantial African American populations.

Once such rules were in force, plan commission meetings were consumed with requests for variances. Race was frequently a factor. For example, one meeting in 1919 debated a proposal to reclassify a single-family property from first-residential to commercial because the area to the south had been "invaded by negroes." On other occasions, the commission changed an area's zoning from residential to industrial if African American families had begun to move into it. In 1927, violating its normal policy, the commission authorized a park and playground in an industrial, not residential, area in hopes that this would draw African American families to seek housing nearby. Similar decision making continued through the middle of the 20th century. In 1948, commissioners explained

REVERSE REDLINING

Racially discriminatory government activities did not end 50 years ago. On the contrary, some have continued into the 21st century. One of the more troubling has been the regulatory tolerance of banks' "reverse redlining"—excessive marketing of exploitative loans in African American communities. This was an important cause of the 2008 financial collapse because these loans, called subprime mortgages, were bound to go into default. When they did, lower-middle-class African American neighborhoods were devastated, and their residents, with their homes foreclosed, were forced back into lower-income areas.

In 2000, 41 percent of all borrowers with subprime loans would have qualified for conventional financing with lower rates, a figure that increased to 61 percent in 2006. By then, African American mortgage recipients had subprime loans at three times the rate of white borrowers. Higher-income African Americans had subprime mortgages at four times the rate of higher-income whites. Even though its own survey in 2005 revealed a similar racial discrepancy, the Federal Reserve did not take action. By failing to curb discrimination that its own data disclosed, the Federal Reserve violated African Americans' legal and constitutional rights.

In 2010, the Justice Department agreed that "the more segregated a community of color is, the more likely it is that homeowners will face foreclosure because the lenders who peddled the most toxic loans targeted those communities." For those dispossessed after foreclosures, there has been greater homelessness, more doubling up with relatives, and more apartment rental in less stable neighborhoods where poor and minority families are more tightly concentrated.

–R. R.

For Levittown and scores of such developments across the nation, the plans reviewed by the FHA included a commitment not to sell to African Americans.

Subsequent editions of the *Underwriting Manual* through the 1940s repeated these guidelines. In 1947, the FHA removed words like "inharmonious racial groups" from the manual but barely pretended that this represented a policy change. The manual still specified lower valuation when "compatibility among the neighborhood occupants" was lacking, and to make sure there was no misunderstanding, the FHA's head told Congress that the agency had no right to require nondiscrimination in its mortgage insurance program. The 1952 *Underwriting Manual* continued to base property valuations, in part, on whether properties were located in neighborhoods where there was "compatibility among the neighborhood occupants."

After World War II, the newly established Veterans Administration (VA) also began to guarantee mortgages for returning servicemen. It adopted FHA housing policies, and VA appraisers relied on the FHA's *Underwriting Manual*. By 1950, the FHA and VA together were insuring half of all new mortgages nationwide.

EXCLUSIVE ENCLAVES

The FHA had its biggest impact on segregation not in its discriminatory evaluations of individual mortgage applicants, but in its financing of entire subdivisions, in many cases entire suburbs, as racially exclusive white enclaves. Mass-production builders created these suburbs with the FHA- or VA-imposed condition that they be all white.

Levittown, New York, for example, was a massive undertaking, a development of 17,500 homes. It was a visionary solution to the housing problems of returning war veterans—mass-produced two-bedroom houses of 750 square feet sold for about $8,000 each, with no down payment required. William Levitt constructed the project on speculation; it was not a case in which prospective purchasers gave the company funds with which to construct houses. Instead, Levitt built the houses and then sought customers. He could never have amassed the capital for such an enormous undertaking without the FHA and the VA. But during the World War II years and after, the government had congressional authority to guarantee bank loans to mass-production builders like Levitt for nearly the full cost of their proposed subdivisions. By 1948, most housing nationwide was being constructed with this government financing.

Once Levitt had planned and designed Levittown, his company submitted drawings and specifications to the FHA for approval. After the agency endorsed the plans, he could use this approval to negotiate low-interest loans from banks to finance its construction and land-acquisition costs. The banks were willing to give these concessionary loans to Levitt and to other mass-production builders because FHA preapproval meant that the banks could subsequently issue mortgages to the actual buyers without further property appraisal needed.

TEACHING FOR SOCIAL JUSTICE

Using *All American Boys* to Confront Racism and Police Brutality

By Ashley S. Boyd and Janine J. Darragh

acism is a systemic issue, meaning it is much larger than one person, although people certainly uphold and perpetuate it both knowingly and unknowingly.[1] It is woven into the fabric of daily life so tightly that it can be difficult to untangle. Racism works alongside white privilege, a system of unearned benefits, such as obtaining financial breaks and loans, being reflected consistently in classroom curriculum, and being assumed as the "norm." Assumptions about people with light skin include their being honest, responsible, and safe. Thus, white privilege also simultaneously works through the oppression of people of color, about which the opposite assumptions are made—they are often portrayed (especially through the media) as unsafe, powerless, and less deserving of resources such as health care.

In this article, we focus on the novel *All American Boys* by Jason Reynolds and Brendan Kiely (2015) to help students work through the implications of racism and the manifestation of racism in police brutality. Reading about youth who are similar in age will potentially help students discern how they are affected by racial relations in their own lives and to consider (and hopefully act on) the methods through which they can enact change to combat the negative effects of racial inequity.

All American Boys

All American Boys is a novel that reflects an incident of police brutality through the perspectives of two adolescent males, one Black, Rashad, and one white, Quinn. Told in alternating points of view, the story catalogs how Rashad is wrongly assaulted by a police officer, Paul, who mistakenly assumes that Rashad is stealing from a local convenience store. Paul's attack is ruthless and leaves Rashad with a broken nose, fractured ribs, and internal bleeding from torn blood vessels around his lungs.

Quinn, a classmate of Rashad's, accidentally stumbles upon the scene and watches from the shadows, horrified and astonished that Paul, a person he looked up to as an older brother, could commit such violence. As the novel progresses, Rashad is treated in the hospital for his wounds and is encouraged by his brother, Spoony, to confront the racist act of which he is a survivor. Raised by his former-police-officer traditional father, who is "all about discipline

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> *All American Boys* is an especially valuable text because it simultaneously tackles white privilege and racial oppression.

and believed that if you work hard, good things happen to you no matter what,"[2] Rashad learns more about his family and struggles to come to terms with institutional racism and its impact.

As the story progresses, Quinn learns to recognize his white privilege and to speak out for others. His best friend, Guzzo, is Paul's brother, who has served as a father figure to Quinn after Quinn's own father was killed in Afghanistan while serving in the US military. Being raised by a single mother, Quinn wrestles with defying close friends and family members to do what is right, recognizing that if he does not act against such forms of racism, the system will continue to thrive. In the end, all characters participate in a march to protest police brutality and perform a die-in, or lying on the ground, to protest. They then read a list of real names to honor those who have suffered from such assault. The novel's conclusion, however, does not include any indication of what becomes of Paul, and thus readers are left in somewhat of a state of uncertainty regarding systemic racism and justice.

All American Boys is an especially valuable text because it simultaneously tackles white privilege and racial oppression, rather than focusing only on one issue or the other. It provides students multiple perspectives from which to examine the social problem and does so in ways that are thoughtful and prompt dialogue. Thus, we chose this book to delve into police brutality because of the way it represents the themes from readers' potential viewpoints and because it challenges and informs its audience.
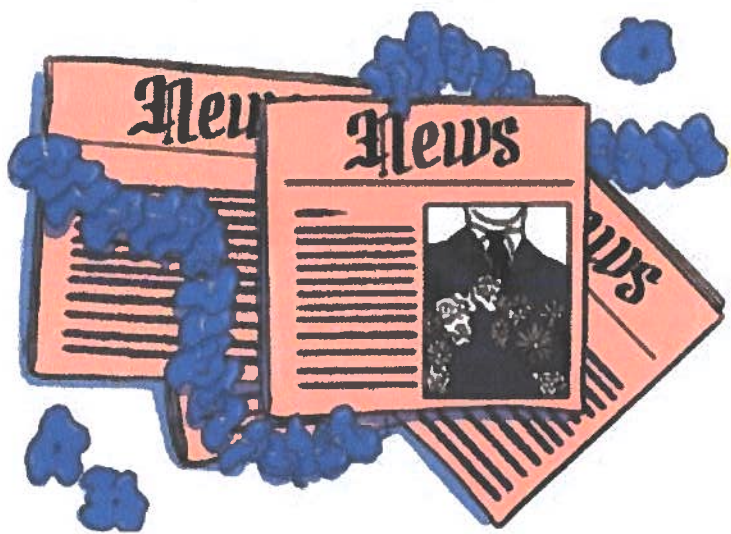
Teaching Strategies

Before Reading

The context in which a teacher works will certainly influence the approach they should take with this novel. Often, students of color will be familiar with systemic discrimination and racism, having experienced it in their own lives. White students who may be less familiar with structural privilege will need an introduction to the concept. All students, however, could benefit from unpacking key terms. Thus, we suggest that teachers begin with basic vocabulary with which to discuss the topic of the book and the social problem it addresses, including terms such as *privilege, oppression, micro-aggressions, discrimination, prejudice, race,* and *socialization.* It will be key to note that:

> Oppression is different from prejudice and discrimination in that prejudice and discrimination describe dynamics that occur on the individual level and in which all individuals participate. In contrast, oppression occurs when one group's prejudice is *backed by historical, social and institutional power.*[3]

The chance to explore lives and cultures different from our own is among the many benefits of reading for pleasure. Whether fiction or nonfiction, the written word has the power to deepen our understanding of ourselves and others— and inspire us to change the world. In *Reading for Action: Engaging Youth in Social Justice Through Young Adult Literature,* Ashley S. Boyd and Janine J. Darragh show educators how to harness that power in their classrooms. The authors devote each of the book's 12 chapters to a work of young adult fiction focused on a critical issue of our time, such as bullying, global poverty, women's rights, and immigration reform. Here, we excerpt chapter 9, which addresses police brutality through the novel *All American Boys* by Jason Reynolds and Brendan Kiely. The novel can help to ground discussions of systemic racism in the United States and engage youth in learning more about our country's complex relationship with race.
–EDITORS

Reading for Action, by Ashley S. Boyd and Janine J. Darragh, is published by Rowman & Littlefield, which is offering a 20 percent discount off the purchase of this book. To order, visit rowman.com and use discount code RLEGEN20. This offer is good through December 31, 2021.

brutality and examine court documents, news articles, and first-hand narratives to construct their understanding of the instance and then share it with the class. As a whole class, they can trace patterns across these cases to again discern how the issue is systemic and broad reaching.

In order to further emphasize the institutionalized nature of racism, students could research national and local policies for training police, especially as related to implicit bias.* They would first need to unpack the concept of implicit bias, which "refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner" and "are activated involuntarily and without an individual's awareness or intentional control."[23] Students can examine an Implicit Association Test themselves that assesses the test taker's own biases, and they could explore the Project Implicit website (implicit.harvard.edu/implicit).

In the novel, Quinn states, "I don't think most people think they're racist," to which Jill later responds, "I think it's all racism."[24] The notion of implicit bias will help students discern that while individuals may not consider themselves racist because they do not commit individual acts of discrimination openly or knowingly, social conditioning leads many to harbor negative associations with people of different races. This can be connected to Rashad's dad in the book, who mistakenly assumes a Black adolescent male is culpable in a fight with a white male. These biases are deeply embedded in our culture and can infiltrate the psyche of all members.

Ideas for Social Action

From the research conducted after reading, students can then move into action. Students might decide to organize their own resistance movements, protesting police brutality at large, or they could choose a more local (even school) issue dealing with racism about which to raise awareness and work to remedy. For instance, students might wish to address microaggressions, or "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults toward people of color."[25] These include comments such as, "'You [a Black person] are not like the rest of them. You're different,' 'If only there were more of them [Black people] like you [a Black person],' and 'I don't think of you [a Black person] as Black.'"[26]

In order to act for change surrounding microaggressions, students might design a poster campaign, sharing examples of microaggressions through social media and visibly throughout the halls of their school to encourage their peers to stop using damaging language. They could research common microaggressions and provide evidence of how these are psychologically destructive to the groups they target.

Students might also design a survey to implement at their school to determine what areas of racial inequity are most prevalent and need to be

It's important that students understand the historic oppression in which today's events are rooted rather than highlighting a few key figures and only praising them as heroes.

The realistic nature of the ending, however, which portrays resistance but not necessarily justice for Rashad, shows the complex nature of the topics tackled in the book, and this ending is worth having students consider deeply. Students could therefore research the history of resistance, especially in movements such as the civil rights movement of the 1960s and the #BlackLivesMatter movement, and discuss the forms of resistance taken and the achievements for change such movements have secured.

As many critique classroom curricula for romanticizing the civil rights movements, it's important that students understand the historic oppression in which today's events are rooted rather than highlighting a few key figures and only praising them as heroes. Educator and author Jamilah Pitts[22] offers guiding questions for this research, such as, "What distinguishes a rebellion from a riot? Whose murders are labeled genocide? What racial groups and tactics of resistance are praised over others?"

Once students have researched these histories, they can then draw connections to contemporary instances of police brutality and racism. In groups, they can investigate one case of police

addressed, and they could analyze the results and present their findings to school administrators, board members, and district representatives and provide recommendations for addressing the concerns they collected.

From their research on resistance, students might also write and perform their own protest songs or poems at an open-mic night hosted at the school. This would require research on popular songs and poems of resistance from the past and the movements they supported, such as Curtis Mayfield's "People Get Ready," Sam

> # From their research on resistance, students might write and perform their own protest songs or poems at an open-mic night.

Cooke's "A Change Is Gonna Come," or Gil Scott Heron's "The Revolution Will Not Be Televised." Students might attempt to emulate these and relate them to their present concerns. They might also wish to examine current songs such as Childish Gambino's "This Is America," which rocked the popular music scene in 2018 for its graphic presentation of injustice in the country. Students could consider why such songs receive national attention and how they reflect those affected as well as the public conversation about topics such as racism and police brutality.

Since police brutality is an issue that affects the entire community, students could organize a community meeting to discuss the issue and generate solutions. They might consider a public reading group in which parents, stakeholders, and community members are invited to read and discuss the book with the students.[27] Engaging intergenerational dialogue about racism could deepen understandings as well as develop empathy among all participants.

Students might also wish to broaden their study of police brutality and race to examine how other minoritized groups, such as Latinx and Native American populations, are similarly targeted. They could research specific instances, such as police assault at Standing Rock or even at the US border with Mexico, extending their understandings of how racialized groups are mistreated and are often the recipients of violence.

Finally, from their work on police training and implicit bias, students could create a document compiling suggestions for officer preparation and continued education. They might include articles, documentaries, and personal narratives they located and think are relevant. The key here is that their recommendations are research based but are balanced with their own creative ideas for what could make a more just world for all. Enacting and offering solutions to police brutality will help students see that this is a social problem that can and should be addressed.   □

Endnotes

1. Ö. Sensoy and R. DiAngelo, *Is Everyone Really Equal? An Introduction to Key Concepts in Social Justice Education* (New York: Teachers College Press, Routledge, 2012).

2. J. Reynolds and B. Kiely, *All American Boys* (New York: Simon & Schuster, 2015), 51.

3. Sensoy and DiAngelo, *Is Everyone Really Equal?*, 39.

4. M. Mendez, "Should We Say Black or African-American?," *The Observer*, October 14, 2016.

5. T.-N. Coates, "What We Mean When We Say 'Race Is a Social Construct,'" *The Atlantic*, May 15, 2013.

6. P. McIntosh, "White Privilege: Unpacking the Invisible Knapsack," National SEED Project, Wellesley Centers for Women, nationalseedproject.org/Key-SEED-Texts/white-privilege-unpacking-the-invisible-knapsack.

7. McIntosh, "White Privilege."

8. B. Applebaum, *Being White, Being Good: White Complicity, White Moral Responsibility, and Social Justice Pedagogy* (Lanham, MD: Lexington Books, 2010), 29.

9. Applebaum, *Being White*, 31

10. Applebaum, *Being White*, 179.

11. Reynolds and Kiely, *All American Boys*, 182.

12. L. Rosenblatt, *Literature as Exploration* (New York: Modern Language Association of America, 1938).

13. Reynolds and Kiely, *All American Boys*, 59.

14. Reynolds and Kiely, *All American Boys*, 180.

15. Reynolds and Kiely, *All American Boys*, 184.

16. B. Robin, "Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom," *Theory Into Practice* 47 (2008): 220–228.

17. Reynolds and Kiely, *All American Boys*, 94.

18. E. Morrell et al., *Critical Media Pedagogy: Teaching for Achievement in City Schools* (New York: Teachers College Press, 2013).

19. J. Trier, "'Sordid Fantasies': Reading Popular 'Inner-City' School Films as Racialized Texts with Pre-Service Teachers," *Race Ethnicity and Education* 8, no. 2 (2005): 171–189.

20. Critical Media Project, "Topic Overview: Race and Ethnicity," March 2018, criticalmediaproject.org/wp-content/uploads/2019/02/Race-and-Ethnicity-Topic-Overview.pdf.

21. Critical Media Project, "Pepsi Protest Ad (Kendall Jenner)," 2018, criticalmediaproject.org/2088-2.

22. J. Pitts, "Bringing Black Lives Matter into the Classroom, Part II," *Teaching Tolerance* 56 (2017).

23. Kirwan Institute, "Understanding Implicit Bias," Ohio State University, 2015, kirwaninstitute.osu.edu/research/understanding-implicit-bias.

24. Reynolds and Kiely, *All American Boys*, 184.

25. D. Sue et al., "Racial Microaggressions in Everyday Life," *American Psychologist* 62, no. 4 (2007): 271.

26. D. Solórzano, M. Ceja, and T. Yosso, "Critical Race Theory, Racial Microaggressions, and Campus Racial Climate: The Experiences of African American College Students," *Journal of Negro Education* 69, no. 1/2 (2000): 60–61.

27. A. Boyd and J. Darragh, "Complicating Censorship: Reading *All American Boys* with Parents of Young Adults," *English Education* 51, no. 3 (2019): 229–260.

Organizing and Mobilizing

How Teachers and Communities Are Winning the Fight to Revitalize Public Education

By Leo Casey

As winter swept across the United States at the outset of 2018, ushering in the bitterest and bleakest days of the year, American teachers and their unions had little to celebrate. The first eight years of the decade had exacted a heavy toll, and still more trouble was lurking on the horizon.

In the wake of the Great Recession, funding for public education had been slashed across the country, with particularly deep cuts in the red states, many of which were granting massive tax cuts to the wealthy and corporations and thus reducing state revenues. A growing portion of the funds that remained were diverted from public schools to voucher programs for private schools and to charter schools.

For American teachers, the 2010s had been a long, dark night. And at the start of 2018, there had been very few signs that it would end. But, in the words of the old Irish peasant saying, it is always darkest before the dawn.

In those early months of 2018, West Virginia teachers, education workers, and their unions found themselves grappling with one of the state governments that had acquired a deep red political hue over the decade.

As 2018 began, the salaries of West Virginia teachers were near the bottom nationally, and lagged well behind the surrounding states of Kentucky, Maryland, Pennsylvania, Ohio, and Virginia.[1] The salaries, health insurance, and pensions of West Virginia teachers and education workers were decided by the state, and for a number of years the government had been shifting the costs of health insurance onto teachers and other public workers through increased copays and premiums. These changes cut into real income, as the increased health insurance costs ate away at stagnant salaries. In early 2018, the governor had proposed a token 1 percent raise in teacher salaries in his State of the State address, and another round of cost shifting in healthcare threatened to further plunder teachers' take-home pay.

Four southern counties of West Virginia—Logan, McDowell, Mingo, and Wyoming—had been the center of its coal mining industry and the heartland of the United Mine Workers. It was in these counties, where teachers were often the children and grandchildren of coal miners who had lived and breathed union, that the first rumblings of resistance to the state government's plans were heard.[2] In January, teachers and education workers from these counties organized meetings to discuss what was happening in the state capital—the inadequate salary proposal, the detrimental changes in health insurance, and the underfunding of public education—and what to do in response. In keeping with their rich labor heritage, they made plans for one-day county walkouts in defiance of the law. On February 2, they conducted a one-day strike and held a protest at the state Capitol. For the first time in West Virginia history, this action brought together members of the three statewide education unions—AFT-West Virginia, affiliated with the American Federation of Teachers; the West Virginia Education Association, affiliated with the National Education Association; and the independent West Virginia School Service Personnel Association, a union of school-related support workers such as custodians, bus drivers, and cafeteria workers.

The February 2 walkouts were reported by state and national media outlets. They quickly became the talk of West Virginia

teachers in their schools and on social media, and they provided inspiration to teachers from other parts of the state.[3] A Facebook group of West Virginian teachers that was the center of much of the social media discussion grew to over 20,000 members in the first months of 2018.[4] In short order, teachers and education workers in additional counties, including Wayne, Cabell, and Lincoln, were organizing their own one-day walkouts. A movement was rapidly taking shape and spreading across the state.

Coming as it did in the doldrums of a decade when American teachers and their unions had been under sustained attack and were expecting more of the same, the dramatic appearance of these walkouts on the political center stage was unexpected. No one—not the state government, not the state unions, not even the teachers who organized the first walkouts—had anticipated that this movement would emerge, much less how quickly it would proliferate. But as soon as the walkouts began, the three state unions began to mobilize, with their national affiliates providing key organizational support. Local leaders were asked to assess the potential support for a statewide strike action, and state leaders organized tele-town halls and took to social media to take the pulse of members around the state. Meetings were organized that brought together the members of all three unions in each of the state's 55 counties, and a vote was taken on whether to call for a statewide walkout, with an overwhelming "yes" response. On February 22, the entire education workforce of West Virginia was on strike and demonstrating at the state Capitol. Their slogan was "55 Strong," a statement of the solidarity that had been built among teachers and education workers from every county in the state.

They remained on strike for nearly two weeks, faithfully walking the picket lines in the dead of winter. Five days into the strike, the governor announced his support for a 5 percent raise for teachers, education workers, and other public-sector workers, and union leaders recommended its acceptance and a conclusion to the strike. But teachers were profoundly distrustful that the state government would deliver on the governor's promise: the Republican president of the state Senate, an outspoken opponent of the strike, had declared his unwillingness to pass the deal advocated by the governor and was doing his best to sow discord between teachers and other public-sector workers and between public-sector employees and the community. Consequently, teachers refused to end the strike and demanded actual legislation. It was only after the full salary increase was signed into law on March 6 that teachers and education workers ended their strike. They had won their major demand, and they returned to their classrooms the next day.

The West Virginia strike provided a spark, and in the months that followed, it lit a prairie fire of teacher strikes across the United States. On April 2, Oklahoma teachers and education workers began what would become a 10-day statewide strike for improved salaries and increased funding of public schools. On the same day, teachers in several Kentucky counties held one-day walkouts over the governor's efforts to gut their pensions. On April 26, Arizona teachers and education workers launched a weeklong statewide strike, also for improved salaries and increased school funding. And on May 16, North Carolina teachers and education workers held a one-day statewide strike demanding improved compensation and increased funding for public schools. These strikes were signs of the dawn of a new day for American teachers, their unions, and America's public schools.

The West Virginia strike had been focused not simply on the needs of teachers and education workers, as important as they were, but also on the chronic underfunding of the public schools and the fiscal policies that provided tax cuts to corporations and the wealthy while starving schools and other public services. Against efforts to divide the strikers from other public workers and the community, it put forward a broad solidaristic vision that fought for all public-sector employees and for the schools that their communities needed and deserved. In one especially telling illustration, West Virginia teachers organized to make sure that students who relied on public schools for the meals were fed dur-

The West Virginia strike in 2018 focused on the needs of teachers and the fiscal policies that provided tax cuts to corporations and the wealthy while starving schools.

ing the strike. As a consequence, it enjoyed an unprecedented level of public support, as did the subsequent strikes of 2018.

The strikes were all the more powerful for having taken place mostly in states where they were prohibited by law, making them acts of civil disobedience. Moreover, they had mostly occurred in deep red states with extremely conservative Republican state governments. In four of the five states—West Virginia, Oklahoma, Kentucky, and Arizona—teacher salaries, health insurance, and pensions were set centrally by the state government, with only a minimal role for local school districts. This system, which is employed by relatively few states, meant that the strikes were of necessity mostly statewide, a largely unprecedented development in both teacher union history and in American labor history. That statewide strikes were organized

> The strikes of 2018 were all the more powerful for having taken place mostly in states where they were prohibited by law, making them acts of civil disobedience.

is all the more remarkable when one understands that in these deep red states, teacher union membership was less dense and teacher union organizational infrastructure less developed than in most parts of the country. The one exception to this rule was West Virginia, where union density is approximately 75 percent, taking into account all three statewide unions.[5] It is telling that the West Virginia strike had the greatest success in winning its demands.

In 2019, the fire continued to spread, with four particularly noteworthy strikes. In Los Angeles, the second-largest school district in the United States, teachers struck for eight days in January. Teachers in Denver walked out for three days, and teachers in Oakland struck for eight days in February and March. In Chicago, the third-largest school district in the nation, teachers and education workers walked out for 11 days in the middle of October. These four strikes were by no means the only ones in that year; many smaller districts also experienced walkouts.

Unlike the 2018 strikes, many of the 2019 strikes occurred in deep blue states where the governments were controlled by Democrats. (Even the Denver strike in purple Colorado took place after the Democrats had taken control of state government in the 2018 election.) Given the greater likelihood of blue states' public employees having the right to strike, these strikes often took place in the states (only one-quarter of all states) where they were legal.

The spread of the teacher strikes to the blue states indicated that while the issues that generated them may have found their most extreme manifestations in deep red states, they were being experienced across the country. Not content to simply raise traditional union demands on compensation and work conditions, and even moving beyond educational issues such as class size that teacher unions had always bargained, the 2019 strikes took up issues such as the impact of excessive testing on education, the need for social and health services for students living in poverty, supports for homeless students to ensure the continuity of their education, the impact of the unregulated expansion of charter schools on public district schools, and protections for undocumented students from Immigration and Customs Enforcement raids.

Resistance and Rebirth

Social movements and protest movements—including the labor movement—are by their nature dynamic and changing, not permanent and fixed. Movements wax and wane: they are born in bursts of activism, and they wither into periods of inertia and even inactivity. On occasion, they completely expire. But these trajectories are life cycles, so a movement can be renewed and reinvigorated, even reborn. And the life of a movement can be long or transitory, productive or barren. It can be like the civil rights movement, vanquishing de jure Jim Crow segregation and begetting landmark civil rights and voting rights legislation, or it can be like Occupy Wall Street, which, for all the attention it brought to the growth of extreme income inequality, rapidly disappeared without any discernible impact on American economic policy.

In no small measure, these different trajectories are shaped by what the participants and leaders of a movement do. Their actions directly impact how long a movement thrives and what it accomplishes in the way of social, political, and economic changes while it is still vibrant and dynamic. When a movement is young and in the ascendant, as the Teacher Insurgency* that began in 2018 now is, the interventions of participants and leaders are particularly important in shaping its trajectory and life path. Simply put, there is no law of history, politics, or economics that guarantees that the Teacher Insurgency will continue to advance and impact American education in progressive ways: it will happen because teachers and unionists employ sound strategic and organizing approaches, or it will not be.

As teachers and union activists, our strategic approach must be based on a thorough understanding of the relations of power in education politics and American politics more generally, with the knowledge of how to craft interventions on that political terrain to positive

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*I use this term to describe the entire movement of strikes in 2018, 2019, and beyond.

effect; our organizing must be rooted not only in the issues that are important to teachers, but in a deep understanding of why they are important to teachers and how they shape a collective "teacher" identity. The issues that motivated the teacher strikes of 2018 and 2019 fall into two general categories: those that ensue from the underfunding of public education, and those that involve the deprofessionalization and deskilling of teaching. Both sets of issues are the product of discrete government policies. In some instances, these policies were long-standing, such as austerity plans that date as far back as the mid-1970s; in other cases they are of a more recent origin, such as the deprofessionalization caused by the expanding role and importance of standardized exams. But all of these policies developed a particularly aggressive intensity in the decade of the 2010s, creating the basis for the Teacher Insurgency. The logic of the Teacher Insurgency is fundamentally a political one, with government choices and policies—and resistance to them—being the driving forces.

In *The Teacher Insurgency: A Strategic and Organizing Perspective*, I explore these forces in detail. Here, I focus on teacher union strikes. There is a productive tension between protest (including strikes and demonstrations) and politics (including election activism); each brings distinct capacities and unique strengths to a social change project, and a strategic approach that employs both in their appropriate context is most likely to be successful. The continued use of the strike as a vital direct-action tactic in the Teacher Insurgency requires a solid understanding of what leads to success, if it is to be replicated.

The Teacher Strike: Conditions for Success

Strikes are not spontaneously born. They are a form of collective action and, like all collective action, must be organized and mobilized. As protest and direct action, strikes can gather energy and acquire momentum from the general tenor of the times. In a period of mass protests such as the 1960s and early 1970s and again in more recent years, teachers and other working people are inspired by witnessing and participating in nonviolent direct action against the exercise of illegitimate and arbitrary authority. Such protests make clear that resistance is possible. But inspiration is the start, not the finish, of effective collective action, and is no replacement for organization.

Strikes are complex operations, involving a multiplicity of critical tasks that must be coordinated: picket lines, rallies, internal union communications, union meetings, media relations, community relations, and negotiations. The better organized the strike and the more fully these tasks are accomplished, the greater its chance of success. In this respect, the 2019 strikes in Chicago and Los Angeles, with their careful and thorough school-by-school and teacher-by-teacher organizing and years of preparing the ground for the actual strike mobilization, stand as exemplars.

The most essential organizational task is winning and keeping the allegiance of teachers to the strike. Teachers are knowledgeable and discerning political actors. They understand full well that strikes are a high-intensity and high-risk tactic, with the potential both to deliver advances and victories that could not be otherwise obtained and to end in major setbacks and defeats. The risk side of this equation is particularly acute in the three-quarters of all states where teacher strikes are illegal; in these states, striking becomes an act of civil disobedience and can result in severe penalties to teachers and their unions.

To be willing to go on strike and stay out until a settlement is won, therefore, teachers need to be convinced on a number of different counts: first, that they are fighting for important, worthwhile objectives; second, that those objectives cannot be achieved through other means that are not as high-intensity and high-risk as a strike; third, that the strike has reasonable prospects of success; fourth, that the strike objectives have strong support in the community; and fifth, that the solidarity among teachers, which is essential to a strike's success, is strong and will hold. In significant measure, the last of these points is dependent not simply on the organization and mobilization of the strike, but also on the four antecedent conditions. If teachers become doubtful on any of these points, it will become difficult to mount or sustain a successful strike.

Given these conditions, what political reasoning do teachers employ to make the difficult decision to strike?

The Civic Traditions of Labor

Adapting the precepts of the civic republicanism expounded by Thomas Jefferson and Abraham Lincoln, among others, the 19th-century American labor movement saw the strike as a fundamental right of citizenship.[6] According to this perspective, the strike was not simply an expression of the collective power of working

THE TEACHER INSURGENCY
A STRATEGIC AND ORGANIZING PERSPECTIVE
LEO CASEY
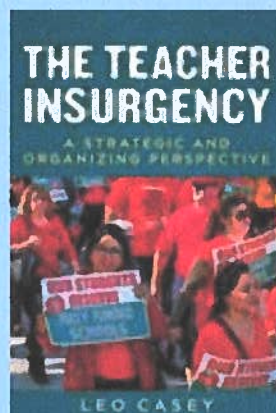
The purpose of *The Teacher Insurgency*, from which this article is drawn, is to identify the strategic and organizing approaches that will best situate us to build and sustain collective power—power that is capable not only of defending public education and teaching from those who seek to dismantle and diminish them, but of realizing their rich democratic promise. With the right strategic and organizing approaches, a new day is possible.

The strategic challenges posed by the Teacher Insurgency strikes of 2018 and 2019 are questions of what we teachers should collectively do to build our power, especially through our unions, so we can change our schools and our society for the better. What is the work of mobilization and the work of organization, and in what ways are both forms of work central to collective action? What is the relationship between mobilization and organization, and what role does social media play in that relationship? What is the relationship between protest and politics? How and when should we use the two different forms of collective action—direct action and electoral politics? What does each form of action accomplish, and how can synergy between them be optimized? How should we organize our strikes to maximize their success? And how should we work in partnerships with community? These are the strategic challenges we face, and each requires choices on the political roads we will take.

Edicts delivered from on high do none of the hard work that must take place in schools, and they can even be counterproductive when they provide none of the supports or resources necessary for such change. Real democratic change in education is demanding, but possible when teachers take the lead and engage in collective action. That is the most important lesson of the Teacher Insurgency.

–L. C.

people, but also a manifestation of the republican liberty of free labor—an assertion of the freedom from domination that is the necessary foundation for the self-rule of the citizenry in a republic.[7] Workers must be able and willing to withdraw their labor through a strike, 19th-century unionists contended, or they will no longer be their own masters, but powerless subjects in a system of wage slavery. Much as elections and voting were understood to be the means for the civic reenactment and renewal of the social compact on which the republican government was based, strikes were viewed as public affirmations of the dignity and civic worth of the citizen-worker. The often-elaborate pageantry of

19th-century strikes—the marches, demonstrations, rallies, and picket lines; the songs and dramatic performances; and the banners, garb, and regalia of the unions—would symbolically stake this public claim on a republican citizenship for working people. Successful teacher strikes often highlight an analogous theme of the dignity and civic worth of teachers and the value of the work they do, and that powerful symbolic statement is one of the less appreciated motivations for teachers when they go on strike. It has been a theme in the strikes of the Teacher Insurgency.

If this discussion of the republican liberty of working people seems like an exercise in antiquarian history and political philosophy, it is worthwhile to consider that under current American labor law, workers surrender most of their rights of citizenship— freedoms of speech, of press, of peaceful assembly, and to petition to seek redress of their grievances; rights to due process; rights to fair and equal treatment—at the door of a nonunionized workplace. The legal protections for workers organizing a union have been whittled away over seven decades, and they are now very weak and mostly unenforced by government.[8] American law allows nonunion workplaces to be "private governments," or what philosopher Elizabeth Anderson calls "dictatorships in our midst."[9] Under the doctrine of at-will employment that governs such workplaces, workers can be fired for any reason or no reason at all, save those instances where a firing involves documentable discrimination against a member of a protected class under civil rights law. In jurisdictions with incomplete civil rights protections,

workers can be fired for nothing more than their sexual orientations or gender identities—only 22 states provide full employment protection for LGBTQ employees. If workers in nonunion workplaces wear buttons supporting candidates for public office opposed by their employers or have bumper stickers on their cars supporting causes opposed by their employers, they can be fired with no remedy in law.

As Alexander Hertel-Fernandez has thoroughly documented, US employers in nonunion settings use their unchecked power over their workplace to compel political action on behalf of candidates, legislation, and causes that promote the interests of the business and its owners.[10] When economic domination is turned into political coercion in these ways, it collides directly with the foundational republican idea of the self-rule of citizens. This is why the founding slogan of the AFT— "Democracy in Education, Education for Democracy"—focused on the vital connection unionists saw between teachers' ability to exercise the rights of citizenship inside the educational workplace on the one hand, and their work to promote democracy through their teaching on the other.

Civic republicanism was the source of another central concept in American labor's understanding of the 19th-century strike: the duty of solidarity. The first truly national labor union in the United States, the Knights of Labor, articulated a labor-republican vision of the future society it sought to establish, the cooperative commonwealth. At the center of that vision was the idea that government should promote the common good: "The best government [is one] in which an injury to one is the concern of all."[11] For the Knights of Labor, this principle of seeking the common good—what classical republicans called *civic virtue*—defined not only how government and society should function but also how working people themselves should act with respect to each other.[12] Contemporary American unionists will recognize the Knights of Labor formulation as an early version of an axiom of labor solidarity that has continued to this day: "An injury to one is an injury to all."

At the heart of republican citizenship and civic virtue is the willingness to make personal sacrifices: citizens in a republic exercise civic virtue through a myriad of sacrifices, great and small, from putting their lives at risk to defend their nation from attack to paying taxes that support government goods and services that do not personally benefit them. Going on strike and practicing solidarity entails sacrifices ranging from the loss of one's income to the loss of one's job. When strikes are prohibited by law, rank-and-file unionists can incur fines and union leaders can go to jail. Yet American teachers have demonstrated again and again that they are prepared to make such sacrifices if going on strike means that they can secure a better future not only for themselves and their families, but also for the students they teach and nurture, the schools in which they work, and the communities they serve. By their very choice of vocation, entering an occupation with modest pay and benefits in order to make differences in the lives of young people, teachers have demonstrated that they are prepared to make sacrifices for a greater good.

Building Power Through Direct Action, Politics, and Community

Since the early 1980s, the decline in the use of the strike has been as much an effect of the decline of the power of the American labor movement as it has been a cause. A successful strategy for the revitalization of unions must be more multifaceted and more dialectical than a simple focus on mounting strikes. At its height during the 1960s, the civil rights movement engaged in constant tactical innovation and experimentation, with the insurgency peaking again and again as new forms of direct action were introduced. As Doug McAdam explains in his study of the "Black insurgency," this creativity was key in keeping the Jim Crow regime off guard and off balance; no sooner did white supremacist authorities adjust to one tactic, finding ways to respond to and check it, than they would find themselves confronted with a new strategy.[13]

The point here is not to retreat from the use of direct action, with its capacity to disrupt the existing balance of political forces, but to expand its use—to not become dependent on just one tactic, even a tactic as potentially powerful and important as the strike. To the extent that teachers and their unions have a wide repertoire of direct-action tactics, every action in that repertoire—including the strike—will be more effective.

In the United States, politics have always been central to the outcomes of strikes, both in victory and defeat. The refusal of President Franklin Roosevelt and Michigan Governor Frank Mur-

> To the extent that teachers and their unions have a wide repertoire of direct-action tactics, every action in that repertoire—including the strike—will be more effective.

Learn More About Teacher Unions, Organizing, and Mobilizing

Inspired by teachers' activism—especially their demands to provide the schools that all youth deserve—several scholars have written recently about teacher unions, bargaining for the common good, strikes, and more. Here are two new books that complement Leo Casey's *The Teacher Insurgency*.

Strike for the Common Good: Fighting for the Future of Public Education

**Edited by Rebecca Kolins Givan and Amy Schrager Lang**

Although amplifying collective voice and being heard are central to any strike, relatively little of the writing about the recent Teacher Insurgency strikes has been by the teachers, students, and parents at the center of the action. *Strike for the Common Good,* published by the University of Michigan Press, stands out for prioritizing the voices of these essential strikers and supporters. Through personal essays, and some contributions by analysts, we better understand the motivations and aspirations of educators and the families they serve. From the inadequate resources directed toward schools in communities of color to the devaluing of women's work, many longstanding, urgent

issues are examined—and it's clear that systemic inequities are preventing public schools from fulfilling their promise. To truly educate for democracy, we must address the deplorable conditions of far too many school buildings, rampant school violence, structural racism, and neoliberalism's weakening of public education. This volume shows that there is much to celebrate in teachers' recent victories and also much more to be done. To learn more, visit press.umich.edu/11621094/strike_for_the_common_good.

Teacher Unions and Social Justice: Organizing for the Schools and Communities Our Students Deserve

Edited by Michael Charney, Jesse Hagopian, and Bob Peterson

Published by Rethinking Schools, this comprehensive anthology includes more than 60 articles and offers insights into social justice unionism past and present—all for the purpose of helping students reach their potential. Educators are sure to be inspired reading "Why Teachers Should Organize," a speech Margaret Haley, vice president of the Chicago Teachers' Federation, gave at
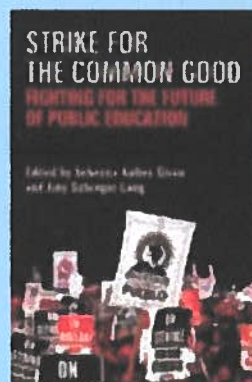
the 1904 National Education Association convention.

As Haley said, "It is the public school teachers whose special contribution to society is their own power to think, the moral courage to follow their convictions, and the training of citizens to think and to express thought in free and intelligent action." In recent years, and especially through the Teacher Insurgency, our nation's teachers have displayed that moral courage. And with this anthology, today's activists are sure to learn new strategies, from mobilizing to establish more community schools to organizing through site-based engagement and social media to fighting privatization and student debt. Tying social justice unionism to social justice teaching, a section is devoted to bringing issues like anti-racism, equity, and climate change to the classroom. To learn more, visit rethinkingschools.org/tusj.
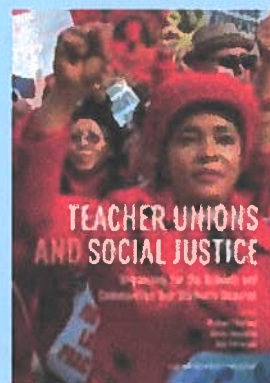
–EDITORS

phy to use troops to suppress the 1936–37 Flint sit-down strike was decisive in forcing General Motors to recognize and negotiate with the United Auto Workers, thus generating the breakthrough of industrial unionism in the United States that followed the unionization of the largest corporation of its era.[14] President Reagan's willingness to break the 1981 air traffic controllers' strike destroyed their union and was a significant factor in the decline of strikes as a direct-action tactic of unions in the following decades.[15] Different elected officials with different relationships to labor would most likely have produced different outcomes.

What is true of strikes in general is doubly true of teacher strikes and other public-sector strikes, as the employer is the government. By their very nature, these strikes are political. The 2018 strike in

> ## Politics have always been central to the outcomes of strikes, in victory and defeat. This is doubly true of teacher strikes, as the employer is the government.

West Virginia had the most success of the strikes that year precisely because the unions in that state were well established, with strong union density and a real and active political force; they were able to use their political capacity to move the state legislature and governor to act on those demands. The 2019 Los Angeles strike brought to public attention the question of how charter school expansion had a negative impact on district schools, but it still required the organized political presence of the state's teacher unions to pass legislation that reformed, for the very first time, the process by which new charter schools were authorized. A reliance on the strike alone would not have achieved either of these victories.

This understanding of strikes as part of a broader strategic approach is especially important when one considers a critical factor in the decline of the potency of teacher union strikes in the late 1970s and 1980s—the divisions that had opened up between the unions and the communities they served. The austerity conserva-

tism that emerged out of the fiscal crises of the mid-1970s—known as Reaganism in the United States—had as its primary objectives the gutting of the public sector and the evisceration of the social welfare safety net. It thus set its sights both on the workers and the unions that provided public goods and services on the one hand, and on the working-class and poor communities, disproportionately of color, that relied on those public goods and services on the other. Attacks on public-sector employees as lazy, incompetent, and overcompensated were matched with attacks on racialized "welfare queens" and the "undeserving" poor, and both were condemned as "parasitical" on the "taxpayer." To have had any realistic hope of blunting the assault of this austerity conservatism, it would have been necessary to develop a common front between the workers who provided public goods and services and the communities that relied on them. Like any political alliance, this front would have to be actively built and organized. But as much as the logic of joint opposition to attacks on the public services and goods was clear, there were also deep-seated suspicions and distrust on each side.

One of the most positive aspects of the strikes of the Teacher Insurgency has been the strong support the teachers and their unions have received from their communities. That support did not simply appear. It was the product of a decade and a half of work on the part of teacher unions to build deep, long-lasting ties to communities. Far too much of what passes for thinking about strikes in the United States—including teacher strikes—rests on a "field of dreams" theory: call it, and they will come. We must go beyond such romantic notions, which are recipes for disaster, and consider the different conditions and approaches that have led teacher strikes to victory and defeat, to find a way forward that will continue the success of the strikes of the Teacher Insurgency. □

Endnotes

1. M. Will, "See How Your State's Average Teacher Salary Compares," *Education Week*, April 24, 2018.

2. There are a number of published narratives of the West Virginia strike, often combined with the other strikes of 2018. Steve Greenhouse's recent book *Beaten Down, Worked Up: The Past, Present, and Future of American Labor* (New York: Knopf, 2019) contains an informative chapter (chapter 20) on the subject. See also Diane Ravitch's *Slaying Goliath: The Passionate Resistance to Privatization and the Fight to Save America's Public Schools* (New York: Knopf, 2020), chapter 15. While it will become clear over the course of this book that I disagree with the theoretical framework that informs Eric Blanc's *Red State Revolt: The Teachers' Strike Wave and Working-Class Politics* (New York: Verso, 2019), his account of the strikes of 2018 should also be read. I have found particularly useful a collection of first-person accounts written by West Virginia teachers themselves: E. Catte, E. Hilliard, and J. Salfia, eds., *55 Strong: Inside the West Virginia Teachers' Strike* (Cleveland: Belt Publishing, 2018). The collection allows the reader to see the events from different teacher vantage points in different parts of the state, while many other published narratives are seen through the eyes of only a small number of teachers.

3. For national coverage, see J. Delk, "Hundreds of Teachers Hold Walkout, Protest in West Virginia," *The Hill*, February 2, 2018.

4. Jay O'Neal, "Jay O'Neal, Stonewall Jackson Middle School, Kanawha County," in *55 Strong*, 22.

5. Personal communication with Bob Morgenstern, an AFT regional representative with responsibility for West Virginia.

6. On the strike and republicanism, see J. Bartlett-Lambert, "If the Workers Took a Notion": The Right to Strike and American Political Development (Ithaca, NY: Cornell University Press, 2005). For a more general consideration of labor and republicanism, see A. Gourevitch, *From Slavery to the Cooperative Commonwealth: Labor and Republican Liberty in the Nineteenth Century* (New York: Cambridge University Press, 2015); and D. Montgomery, *Citizen Worker: The Experience of Workers in the United States with Democracy and the Free Market During the Nineteenth Century* (New York: Cambridge University Press, 1994). For an appreciation of the influence of civic republicanism on trade union and then Socialist Party leader Eugene Debs, see N. Salvatore, *Eugene V. Debs: Citizen and Socialist* (Champaign: University of Illinois Press, 1984).

7. For an exposition of civic republicanism based on the idea of freedom as nondomination, see P. Pettit, *Republicanism: A Theory of Freedom and Government* (New York: Oxford University Press, 1997).

8. Human Rights Watch, *Unfair Advantage: Workers' Freedom of Association in the United States Under International Human Rights Standards* (New York: Human Rights Watch, 2000), hrw.org/reports/pdfs/u/us/uslbr008.pdf.

9. E. Anderson, *Private Government: How Employers Rule Our Lives (and Why We Don't Talk About It)* (Princeton, NJ: Princeton University Press, 2017).

REFLECTIONS ON TEACHING ABOUT RACE

I want to thank Louise Derman-Sparks, Julie Olsen Edwards, and Catherine M. Goins for their article, "Teaching About Identity, Racism, and Fairness," which appeared in the Winter 2020–2021 issue. As a white female teacher in a school with a large number of students who are Hispanic, and as someone who studied the topic throughout my doctoral program, I am all too aware of the need to validate our students' feelings when racism exists.

I was particularly glued to the following text: "Very early, white children come to value their whiteness, presume it is the definition of normal, and believe that therefore all other skin colors are strange and less than." The article speaks to a sense of "white superiority" for these children. When I admit that I teach my students that this sense of superiority is ridiculous, there are some comments from even the most educated individuals who deny that racism or white privilege exists. While I am still learning, a class on deep-rooted bias challenged me to look deeply into my own beliefs. I have become more focused and ready to step up through reflection and reading.

Dr. Martin Luther King Jr. and his "I Have a Dream" speech put truth at the forefront. The only way to recognize that racism and white privilege do in fact exist is to dig very deep, which can be painful and raw. Can we, all humans, put down any bullying ways and walk as brothers and sisters in love and truth?

—DR. KATHY O'BRIEN
Middle School Teacher

In "Teaching About Identity, Racism, and Fairness," I want to comment on the sidebar "Strategies and Activities About Racialized Identities and Fairness." In the example given in the "Use Teachable Moments" section, after Jamal says that he didn't like Hector touching his hair, the teacher proceeds to ask Jamal if it would be OK if Hector asked first. Instead of this, the teacher could have acknowledged Jamal's boundaries. This would have still been a teachable moment (in respecting one's body and boundaries), and the teacher could have gone on to still have a lesson about appreciating different kinds of hair. It would have been

quite OK for Hector to be told "No" and for that to be the end of it.

Sometimes when a person in a position of authority (a teacher) asks a child (or an adult for that matter) to answer a question, one can feel pressured to answer the way they think the person would like them to answer—especially at age 4.

—DANICA ONWUDIWE
Robert F. Wagner Middle School
New York, NY

THE CALL TO SAVE OUR DEMOCRACY

I am not one to write in response to magazine articles, but I was moved to do so after the Fall 2020 issue. The cover title, "Saving Our Democracy," encapsulates what is at stake in our country, and all of the articles included in this issue are not only timely and vital, but should be required reading for everyone who cares about the direction our country is going in. I want to applaud AFT President Randi Weingarten and the editorial team for curating such an inspiring and useful selection of articles.

In my current teaching post, I worked to ensure that all of my students registered to vote and actually got out and voted. Even though I teach theatre, it is critical that my students learn how to be informed and engaged citizens. The development of their theatre abilities comes as a nice bonus.

We certainly live in precarious times, made more dangerous by our former administration. I want to thank President Weingarten and all who work at the AFT for helping us navigate this season of

unrest. We will do all that we can to ensure our country learns from its past mistakes and creates a new paradigm moving forward.

—MIKE RICCI
North Hennepin Community College
Brooklyn Park, MN

Steven Levitsky and Daniel Ziblatt's article, "The Crisis of American Democracy," summarized much of our current situation well, but it is guilty of promoting the very polarization it bemoans. Specifically, it makes no mention of the plurality of Americans, estimated at 40 to 45 percent, who now consider themselves independent, irrespective of how they may officially register to avoid being disenfranchised in a closed or semi-closed primary election. Questions such as "Are you Republican or Democrat?" or "Are you liberal or conservative?" create false dichotomies and divert our attention from the obvious solution, which is to build a strong centrist coalition. ("Paper or plastic?" "No, I always bring my own reusable bags.") If we centrists (guilty as charged since my high school days) are no longer welcome in either major party, so be it, but the system has to be opened up to eliminate the two major parties' stranglehold on every aspect of it.

My prescription starts with outlawing closed primary elections and caucuses as unconstitutional, particularly as long as taxpayers foot the bill for them. It continues with eliminating party preference from voter registration. California's top-two primary system can help to ensure that an intelligent, pragmatic Republican voter, instead of sitting out a Democrat v. Democrat runoff, will vote for the more moderate and less extreme of the two choices.

—JOHN A. ELDON
University of California San Diego

Supporting Students Who Are Experiencing Homelessness

(Continued from page 9)

10. R. Hallett, *Educational Experiences of Hidden Homeless Teenagers: Living Doubled-Up* (New York: Routledge, 2012).

11. Child Trends, "Children and Youth Experiencing Homelessness," May 8, 2019, childtrends.org/indicators/homeless-children-and-youth.

12. R. Hallett and L. Skrla, *Serving Students Who Are Homeless: A Resource Guide for Schools, Districts, and Educational Leaders* (New York: Teachers College Press, 2017), 11–25.

13. Institute for Children, Poverty, and Homelessness, *Aftershocks: The Lasting Impact of Homelessness on Student Achievement* (February 15, 2016).

14. Hallett and Skrla, *Serving Students*, 28.

15. Hallett and Skrla, *Serving Students*, 28–31.

16. Hallett and Skrla, *Serving Students*.

17. M. B. Spencer, "Increasing the Opportunity for Academic and Life Success: Trauma-Informed Schooling and Consequences" (annual meeting of the American Educational Research Association, San Antonio, TX, April 27, 2017).

18. Hallett, Crutchfield, and Maguire, *Addressing Homelessness*.

In College, But Not Always Earning College Credit

(Continued from page 21)

10. I. Mills and B. Mills, "Insufficient Evidence: Mindset Intervention in Developmental College Math," *Social Psychology of Education* 21, no. 5 (2018): 1045–1059.

11. Cohen, "The Importance of Self-Regulation."

12. Merriam and Bierema, *Adult Learning*.

13. Mesa, "Achievement Goal Orientations."

14. M. George, "Ethics and Motivation in Remedial Mathematics Education," *Community College Review* 38, no. 1 (2010): 82–92.

15. Moore, "Academic Motivation and Performance."

16. D. Pugalee, *Writing to Develop Mathematical Understanding* (Norwood, MA: Christopher-Gordon, 2005).

17. D. Perin and J. Holschuh, "Teaching Academically Underprepared Postsecondary Students," *Review of Research in Education* 43 (2019): 363–393.

18. J. Anglin, "Vocabulary Development: A Morphological Analysis," *Monographs of the Society for Research in Child Development* 58, no. 10 (1993): v–165.

19. See, for example, E. Snow et al., "iSTART-2: A Reading Comprehension and Strategy Instruction Tutor," in *Adaptive Educational Technologies for Literacy Instruction*, ed. S. Crossley and D. McNamara (New York: Taylor & Francis, 2016), 104–121.

20. S. Armstrong and J. Lampi, "PILLAR: A Reading Strategy for a New Era of Strategy Instruction at the College Level," *Journal of College Literacy and Learning* 43, no. 3 (2017): 3–17.

21. See, for example, S. Perun, "'What the Hell Is Revise?': A Qualitative Study of Student Approaches to Coursework in Developmental English at One Urban-Serving Community College," *Community College Review* 43 (2015): 245–263.

22. S. Nash-Ditzel, "Metacognitive Reading Strategies Can Improve Self-Regulation," *Journal of College Reading and Learning* 40, no. 2 (2010): 45–63.

23. See, for example, P. Flink, "Adapting Self-Selected Reading Practices for College-Level Developmental Reading Courses," *Reading Improvement* 54, no. 3 (2017): 87–92.

24. Perin and Holschuh, "Teaching Academically Underprepared."

25. See, for example, L. Fernsten and M. Reda, "Helping Students Meet the Challenges of Academic Writing," *Teaching in Higher Education* 16 (2011): 171–182.

26. A. Durgunoglu et al., "Improving the Comprehension and Vocabulary Skills of English Language Learners with Content Integrated Language Instruction for Adults," *Adult Literacy Education: The International Journal of Literacy, Language, and Numeracy* (2021).

27. D. McNamara, "Self-Explanation and Reading Strategy Training (SERT) Improves Low-Knowledge Students' Science Course Performance," *Discourse Processes* 54, no. 7 (2017): 479–492.

28. S. Armstrong and M. Newman, "Teaching Textual Conversations: Intertextuality in the College Reading Classroom," *Journal of College Reading and Learning* 41, no. 2 (2011): 6–21.

29. D. Perin et al., "A Contextualized Curricular Supplement for Developmental Reading and Writing," *Journal of College Reading and Learning* 43, no. 2 (2013): 8–38.

30. A. Ingalls, "Facebook as a Learning-Management System in Developmental Writing," *Journal of Developmental Education* 40, no. 2 (2017): 26–28.

31. See, for example, A. Johnson et al., "iSTART-ALL: Confronting Adult Low Literacy with Intelligent Tutoring for Reading Comprehension," in *Proceedings of the 18th International Conference on Artificial Intelligence in Education*, ed. E. Andre et al. (Wuhan, China: Springer, 2017), 125–136; and Snow et al., "iSTART-2: A Reading Comprehension."

32. M. Blanton, D. Stylianou, and M. David, "The Nature of Scaffolding in Undergraduate Students' Transition to Mathematical Proof," *International Group for the Psychology of Mathematics Education* 2 (2003): 113–120; and R. Brower et al., "Scaffolding Mathematics Remediation for Academically At-Risk Students Following Developmental Education Reform in Florida," *Community College Journal of Research and Practice* 42, no. 2 (2018): 112–128.

33. See, for example, J. Stigler, K. Givvin, and B. Thompson, "What Community College Developmental Mathematics Students Understand About Mathematics," *MathAMATYC Educator* 1, no. 3 (2010): 4–16.

34. Brower et al., "Scaffolding Mathematics"; S. Coleman, S. Skidmore, and N. Martirosyan, "A Review of the Literature on Online Developmental Mathematics: Research-Based Recommendations for Practice," *Community College Enterprise* 23, no. 2 (2017): 9–26; and L. Smith et al., "Students' Reactions to Reform Mathematics Pedagogy in a Postsecondary Remedial Mathematics Course," *Mathematics Enthusiast* 14, no. 1–3 (2017): 289–308.

35. Coleman, Skidmore, and Martirosyan, "A Review of the Literature"; and R. Lacefield, "Bouncing Ball Experiment," in *Best Practices in Developmental Mathematics*, ed. T. Armington (New York: Mathematics Special Professional Interest Network, National Association for Developmental Education, 2002).

36. WGBH (PBS), "Stairway Slope," Corporation for Public Broadcasting, 2014.

37. D. Willingham, "Ask the Cognitive Scientist: Do Manipulatives Help Students Learn?," *American Educator* 41, no. 3 (2017): 25–30, 40.

38. Brower et al., "Scaffolding Mathematics"; Coleman, Skidmore, and Martirosyan, "A Review of the Literature"; L. Deka and J. Lieberman, "An Effective Model for Teaching Developmental Mathematics," *Journal of Mathematics Sciences & Mathematics Education* 8, no. 1 (2008): 48–61; and X. Wang, N. Sun, and K. Wickersham, "'Turning Math Remediation into Homeroom': Contextualization as a Motivational Environment for Community College Students in Remedial Math," *Review of Higher Education* 40, no. 3 (2017): 427–464.

39. Wang, Sun, and Wickersham, "Turning Math."

40. Lacefield, *Bouncing Ball Experiment*.

41. S. Beilock and D. Willingham, "Math Anxiety: Can Teachers Help Students Reduce It?," *American Educator* 38, no. 2 (2014): 28–32.

42. A. Dowker, A. Sarkar, and C. Looi, "Mathematics Anxiety: What Have We Learned in 60 Years?," *Frontiers in Psychology* 7 (2016): 508.

43. See, for example, T. Woodard, "The Effects of Math Anxiety on Post-Secondary Developmental Students as Related to Achievement, Gender, and Age," *Inquiry* 9, no. 1 (2004): 1–5.

44. Wang, Sun, and Wickersham, "Turning Math."

45. Ş. Kesicic and A. Erdogan, "Predicting College Students' Mathematics Anxiety by Motivational Beliefs and Self-Regulated Learning Strategies," *College Student Journal* 43, no. 2 (2009); and Zimmerman et al., "Enhancing Self-Reflection."

46. J. Bakal, "Creating a Participatory Classroom Environment," in *Best Practices in Developmental Mathematics*, ed. T. Armington (New York: Mathematics Special Professional Interest Network, National Association for Developmental Education, 2002); Deka and Lieberman, "An Effective Model"; and Wang, Sun, and Wickersham, "Turning Math."

47. L. Bol et al., "The Effects of Self-Regulated Learning Training on Community College Students' Metacognition and Achievement in Developmental Math Courses," *Community College Journal of Research and Practice* 42, no. 2 (2016): 480–495; and Mesa, "Achievement Goal Orientations."

48. Kesicic and Erdogan, "Predicting College Students' Mathematics"; and Mills and Mills, "Insufficient Evidence."

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## Learning History, Facing Reality

(Continued from page 31)

26. C. Kernahan and T. Davis, "Changing Perspective: How Learning About Racism Influences Student Awareness and Emotion," *Teaching of Psychology* 37, no. 1 (2007): 49–52.

27. A. Kafka, "Instructors Spend 'Emotional Labor' in Diversity Courses, and Deserve Credit for It," *Chronicle of Higher Education*, November 15, 2018.

28. Kafka, "Instructors Spend."

29. Kafka, "Instructors Spend."

30. T. Kurtis, P. Salter, and G. Adams, "A Sociocultural Approach to Teaching About Racism," *Race and Pedagogy Journal* 1, no. 1 (2015); and B. Morling and D. Myers, "Teaching Current Directions in Psychological Science," Association for Psychological Science, March 30, 2018, psychologicalscience.org/observer/teaching-current-directions-in-psychological-science-47#racism.

31. G. Adams et al., "Teaching About Racism: Pernicious Implications of the Standard Portrayal," *Basic and Applied Social Psychology* 30, no. 4 (2008): 349–361.

Organizing and Mobilizing

(Continued from page 50)

10. A. Hertel-Fernandez, *Politics at Work: How Companies Turn Their Workers into Lobbyists* (New York: Oxford University Press, 2018).

11. T. Powderly, *Thirty Years of Labor, 1859–1889* (Columbus, OH: Excelsior Printing House, 1889), 248, 250. On the Knights of Labor and solidarity, see P. Dray, *There Is Power in a Union: The Epic Story of Labor in America* (New York: Anchor Books, 2011), 122ff.

12. A. Gourevitch, *From Slavery to the Cooperative Commonwealth: Labor and Republican Liberty in the Nineteenth Century* (New York: Cambridge University Press, 2015), chapter 5.

13. D. McAdam, *Political Process and the Development of Black Insurgency, 1930–1970* (Chicago: University of Chicago Press, 1999), 164ff.

14. S. Fine, *Sit-Down: The General Motors Strike of 1936–1937* (Ann Arbor: University of Michigan Press, 1969); and N. Lichtenstein, *The Most Dangerous Man in Detroit: Walter Reuther and the Fate of American Labor* (New York: Basic Books, 1995).

15. J. McCartin, *Collision Course: Ronald Reagan, the Air Traffic Controllers, and the Strike That Changed America* (New York: Oxford University Press, 2011).
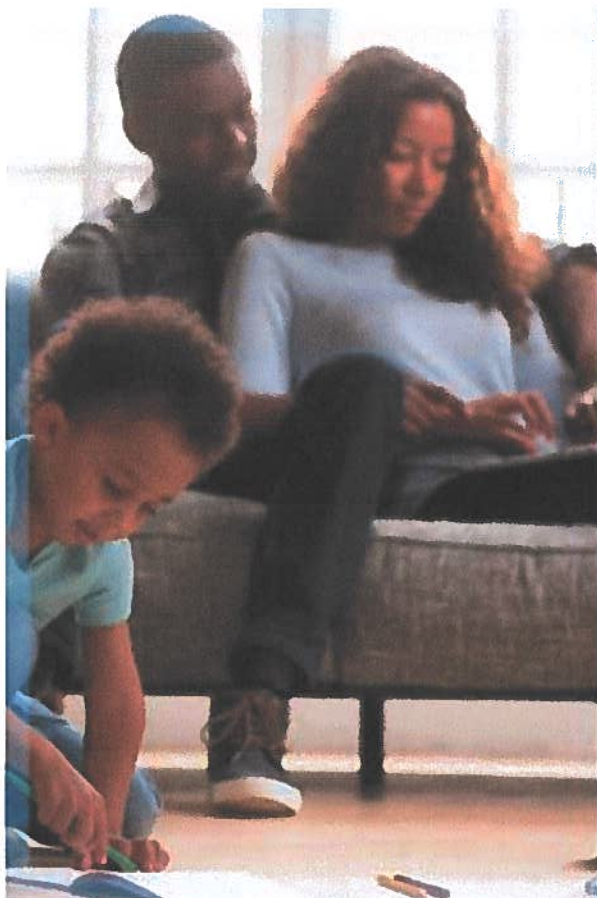
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Counting on Community Schools in New York's North Country

By Jennifer Dubin

When Paula Wilson read the letter, she started to cry. Her son, John Empey, had enrolled in a natural resource management course at the Seaway Career and Technical Education Center in Norwood, New York,

and the letter explained that he needed the following: a helmet, work overalls, and steel-toe boots, among other gear. Wilson knew the boots alone typically cost $200, and the overalls close to $100. "There was no way I could afford it," she said.

She called the center, and administrators there suggested she contact her son's high school, Massena Central, where John was a junior. Soon, Wilson and her son were meeting with Kristin Colarusso-Martin, the community schools director for the Massena Central School District. Colarusso-Martin walked them to a pantry down the hall from her office where clothing, books, and food are stored. "Whatever you want, John, you can take it," Colarusso-Martin said. She handed him a pair of boots in his size that looked almost new, and he found some name-brand hoodies that he liked. "He was just so happy to be able to get those things," Wilson, a single mother, recalls. Colarusso-Martin also gave her two of the $50 gift cards she keeps in her office so that Wilson could purchase the helmet, work overalls, and any remaining supplies John needed for his course.

The meeting with Colarusso-Martin took place in the summer of 2019. At the time, Wilson was struggling financially. She and John had been living in public housing, out of her van, and with friends since she lost her job as a waitress; she had a heart attack in 2008 and hasn't worked since then because she has chronic obstructive pulmonary disease. Last year, her financial situation improved when her disability claim was finally approved. In October 2020, she bought a two-bedroom house for herself and John.

This story of support for one student's educational opportunity was made possible by a well-coordinated districtwide effort designed to help families navigate life challenges. Educators all know students like John who need resources outside the classroom so they can succeed inside

the classroom. As the article on page 18 shows, community schools provide those resources by partnering with youth-serving organizations, food banks, social service agencies, health clinics, and businesses to support the academic and nonacademic needs of students and their families. The result? Teachers can focus on teaching, and students can focus on learning.

In the last 20 years, the movement to establish community schools has grown significantly. While community schools hark back to the idea of the one-room schoolhouse as the center of a rural community, many of the early community schools were established in urban settings.[1] Today, rural areas like Massena, a town in St. Lawrence County in upstate New York—known as the North Country—are increasingly[2] implementing the community school model to connect members of their geographically dispersed and isolated communities so that teachers, students, and families can thrive.

Finding Inspiration in Reconnecting McDowell

A once-bustling industrial town, with employers such as Reynolds Metals and General Motors long gone,[3] Massena in recent years has become known for its economic woes—and for its residents banding together to confront them. When Alcoa, an aluminum manufacturing plant in Massena, announced in 2015 that it planned to close and lay off 500 workers after downsizing in previous years,[4] the community leapt into action. Various labor groups, including the United Steelworkers, the AFT, and the New York State United Teachers (NYSUT), worked with community members to convince Alcoa to remain. Grassroots efforts and union mobilization culminated in a "People Over Profits" rally[5] in December 2015 that Erin Covell, then president of the Massena

Federation of Teachers (MFT), helped organize. Hundreds of people attended the event, and labor leaders such as AFT President Randi Weingarten spoke about the plight of workers in Massena and plans to advocate for them.

As a result of union and community pressure, the state paid Alcoa $70 million to keep the Massena plant open and preserve 600 jobs for three and a half years, thus averting the latest labor crisis.[6] Knowing they needed to spend those three and a half years mobilizing and organizing, the effort to strengthen Massena's economy and make life better for its residents officially became known as the St. Lawrence County People Project in 2016. A grassroots coalition of unions, businesses, community members, and organizations, the People Project focuses on supporting economic development, education, and health and wellness. Their efforts are paying off—for students and the economy. In March 2019, the community scored another win for its workers when Alcoa and the New York Power Authority announced a seven-year deal in which Alcoa pledged to keep its plant open after the state gave it a significant discount on electricity from the hydropower dam on the St. Lawrence River.[7]

The People Project was inspired by an effort the AFT launched in 2011 with community partners in McDowell County, West Virginia, another rural area, where a declining coal industry had weakened the local economy over time. Called Reconnecting McDowell, this public-private partnership has managed to connect the county to more than 100 partners who have given more than $20 million in goods and services.[*] Among the major investments are improvements in internet access, the digging of water lines for new home developments, and the construction of an apartment building to attract educators to McDowell's hard-to-staff school system. Known as Renaissance Village, the apartment building was completed in August 2020 and is the first new

multistory construction project in the city of Welch, McDowell's county seat, in 50 years.[8]

When asked about the similarities with Reconnecting McDowell, Mary Wills, the People Project's coordinator, says, "We're not building buildings, but we're doing a lot of smaller things that are really making a difference in people's lives." Chief among them is a focus on community schools. It's no coincidence that establishing such schools is also a hallmark of Reconnecting McDowell; the wraparound supports core to the work of community schools can help educators, students, and families no matter where they live, be it "coal country" or the "North Country."

So far, the community school effort in St. Lawrence County has made the biggest impact on the Massena Central School District. One of 18 districts in the sprawling county, Massena transformed all five of its schools when school district officials, with the support of the MFT, decided to use more than $200,000 set aside by the state legislature for community schools in 2016. Two other school districts in the county have hired community school coordinators and are starting to develop community partnerships. Wills is currently advising the rest of the county's districts seeking to implement aspects of community schools— such as back-to-school events, food pantries, and partnerships with community organizations—as they try to learn from what Massena has done.

Patrick Brady, Massena's superintendent, says the need to provide more targeted supports to the district's 2,793 students was and remains considerable. With more than 60 percent of the student body qualifying for free or reduced-price meals,[‡] the purpose of implementing community schools was "really to try and level the playing field," he says.

Facing the COVID-19 Crisis as a Community

With a background in youth development and nonprofit work in the region, Kristin Colarusso-Martin was the right person to coordinate Massena's community schools. Originally from Potsdam, about 20 miles away, she knew the challenges families faced in a rural area with limited access to jobs and opportunities, and the self-reliant culture that sometimes keeps people from seeking help. She immediately built systems to support students and developed relationships with community partners—the very heart of her work. So when the pandemic hit last spring, and schools moved to online learning, all that preparation paid off. The district's community school infrastructure and

relationships were strong enough to meet dire needs to provide food and internet access.

Randy Freiman, a chemistry teacher at Massena's high school and the current MFT president, recalled that last spring a father was driving his daughter to the high school parking lot every afternoon so she could access the internet and complete homework in the car. "Teachers got wind of that and brought it to Kristin's attention," Freiman says. "She jumped right on it and said what can we do?" Colarusso-Martin worked with the Salvation Army to set up a hot spot near the family's home. But when the location was too remote for it to work, she connected the student with tutors and free Wi-Fi at the Boys and Girls Club. As of March 2021, 20 other families were using hot spots the district was able to get installed, Freiman says.

When families needed food last spring, Colarusso-Martin directed them to food pantries and churches providing free meals. Throughout the summer, for an extended school lunch program, she worked with the district's director of transportation and the head of food service to coordinate food deliveries to students lacking transportation. "We had volunteer drivers dropping off bags of food for a week," she says. "It was pretty incredible."

Since the winter, when the district implemented a hybrid model with students learning both in person and remotely, breakfast and lunch has again become available during school. To ensure no student goes without food, students can also pick up a free lunch at schools every Monday (the district's fully remote day), and a school bus driver delivers lunches to 51 students at home. In January, the district received a $50,000 grant from No Kid Hungry, a national campaign committed to ending child hunger, to continue coordinating these efforts.

Colarusso-Martin also notes the importance of the district's Rapid Response Team, which she helped develop two years ago. A group of 95 people—including administrators, counselors, school psychologists, food pantry directors, and law enforcement officials, among other community partners—belong to the team and meet monthly (via Zoom since the pandemic) to discuss the needs of students and families and to resolve challenges. If, for instance, a family needs housing or furniture (such as a desk for remote learning), a member of the team sends an email to the group asking for help. Typically, someone offers a solution in a matter of hours and specific support ensues. Colarusso-Martin recalls one mother who needed safe housing after leaving a domestic violence situation, but an outstanding bill of $1,000 prevented her from qualifying for a place to live. "Our faith-based community was able to patch together that thousand dollars along with some donations from people on the Rapid Response Team," Colarusso-Martin says. The mother paid her bill, the team found her stable housing, and the district's Supplemental Nutrition Assistance Program coordinator connected the family with benefits. The team also made sure her children had school supplies.

In previous years, Colarusso-Martin has organized a back-to-school event at the high school in which families are invited to pick up free backpacks and school supplies, learn about resources from 50 community partners, meet some of the district's teachers, and get a free haircut from 10 hairdressers. About 2,500 people attend each year. Massena was the first district in the county to coordinate such an event in 2018, and 10 additional school districts held their own back-to-school events in 2019.

Because of the pandemic, no such event was held at the start of the 2020–21 school year. But Massena was able to continue its family home visit program this past summer. As part of the program, which

began in 2019 with a $7,000 grant from NYSUT, 18 educators visited families of students entering kindergarten and junior high, two key transition points in schooling. To practice social distancing, educators met families in driveways and backyards and on porches to discuss the upcoming school year, answer questions about online learning, and listen to their hopes for their children. Colarusso-Martin says educators were trained and paid for their time, and district officials are now preparing for a third summer of family home visits.

Making Mental Health a Priority

Even before the pandemic, Massena prioritized meeting students' mental health needs. The district employs 10 school counselors: one for each of the three elementary schools, two at the junior high school, and five at the high school. Each school also has its own school psychologist.

Wendy Serguson has worked as a counselor at Jefferson Elementary for 31 years. The move to a community school model is "the best thing that ever happened in our district," she says. Communication between schools and outside agencies has improved, and it's now easier for counselors to connect families with resources. Serguson says making those connections has been especially important this year, since there are more instances of depression among students who feel isolated at home.

Because the district issued Chromebooks to all students last spring when schools were fully remote, those who needed mental health supports were able to attend telehealth visits with therapists from two primary mental health organizations: the Massena Wellness Clinic and Citizen Advocates. Fortunately, Colarusso-Martin had already

embedded these supports in the district's five schools before the pandemic. After learning moved to a hybrid model, students could resume attending appointments either in school or at the clinics' offices. Currently, the district is in talks with two local hospitals to pilot a virtual school-based health center.

Every month, Colarusso-Martin checks in with all of the counselors to see what supports students need to stay on track and to address attendance issues. In addition, a social worker is available to meet with students in the high school and junior high on in-person learning days.

One program, aptly named Handle with Care, shows just how attuned the district is to students' mental health needs. The program, which Colarusso-Martin developed with law enforcement, outlines a specific protocol for sharing information when students are exposed to violence or trauma at home. In such cases, a law enforcement official will contact school officials, who share information with appropriate counselors and teachers so they are able to be extra sensitive to students' needs. If a student needs counseling or other supports, Colarusso-Martin works with school staff to find the right resources.

In October 2020, the district received further support for students' social and emotional development when the MFT won a $25,000 grant from the AFT Innovation Fund.[1] The grant has enabled the district to join in and expand a partnership with the Holistic Life Foundation, a nonprofit organization that fosters the well-being of children and adults in systemically underserved communities, that had been established by the nearby St. Regis Mohawk Tribe (whose children make up 10 percent of the district's students). Together, these groups are incorporating mindfulness training and yoga in Massena schools and helping teachers and students heal from trauma, manage stress, build resilience, and develop coping skills.

Cathy Donahue, a French teacher at the junior high school, says the mindfulness initiative makes teachers feel cared for and supported—just as they care for and support their students. And working directly with a community school coordinator makes it far easier to translate their compassion into action. "If I have a student who I'm worried about, I don't call the principal," Donahue says. "I call Kristin, and I know that she is going to probably know the family and have some sort of contact or support in place so we can help those kids, 100 percent. And if she doesn't, she'll find them."

For more on AFT-driven efforts to support students and families in Central New York through community schools, see ["Building Community with Community Schools."](//www.aft.org/ae/summer2021/dubin)

*For more on Reconnecting McDowell, see [here](http://mcdowell.connections.aft.org) and ["Mountains to Climb"](//www.aft.org/ae/summer2016/dubin) in the Summer 2016 issue of *American Educator*. ([return to article](#))

†Thankfully, all students in the district have been eligible for free meals this school year because of the US Department of Agriculture's pandemic-driven waiver. ([return to article](#))

‡For more on the AFT Innovation Fund, see [here](//www.aft.org/about/innovation-fund). ([return to article](#))

Endnotes

1. L. Benson et al., "The Enduring Appeal of Community Schools," *American Educator* 33, no. 2 (Summer 2009): 22–29, 47.
2. Coalition for Community Schools, "Community Schools Right at Home in Rural Areas," December 2012,

communityschools.org/community_schools_right_at_home_in_rural_areas; and D. Williams, *The Rural Solution: How Community Schools Can Reinvigorate Rural Education* (Washington, DC: Center for American Progress, 2010).

3. National Public Radio, "After Factory Plant Closures, Job Loss, A Small N.Y. Town Struggles to Bounce Back," April 17, 2016.

4. D. Raymo, "Alcoa Massena West Plant to Close, 500 Jobs Lost," *Press-Republican*, November 5, 2015.

5. L. Robinson, "Pro-Alcoa Rally Draws Hundreds," *NNY360*, December 6, 2015.

6. D. Sommerstein, "Alcoa Announces 3 1/2 Year Grace Period for Massena Plant," *WRVO Public Media*, November 25, 2015.

7. B. Beckstead, "Alcoa Stays: Cuomo, in Massena, Announces 7-Year Deal with NYPA to Keep Plant Open, Save 450 Jobs," *NNY360*, March 22, 2019.

8. C. Bluefield, "McDowell Renaissance Village Ready for Occupants," *Register Herald*, August 14, 2020.

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