What we are learning about distance learning

A collection of short readings for schools

Complied by Mark Potterton, August 2020

Sacred Heart College, Johannesburg

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What we are learning about distance learning

By Mark Potterton, 14 April 2020, Mail & Guardian Online

The coronavirus has caused a major disruption to education around the globe. The United Nations Educational, Scientific and Cultural Organisation (Unesco) reported that nine out of 10 of the world's children were out of school at the start of April. This is huge, and we remember that the purpose of school closures is to try to prevent further transmission of Covid-19 through isolation and physical distancing. The challenge around the world is how to ensure that the effect on children's learning is minimised.

The disruption of schooling by Hurricane Katrina in New Orleans in 2005 provides some clues to what the effect of Covid-19 might be. Researchers at Tulane University tracked children when they returned to New Orleans and found that it took two years for them to catch up with their schoolwork. They also argued that it is likely the negative effect was worse for low income and African American children. Interrupted learning wasn't the only problem; the researchers said the economic effect and emotional trauma were probably just as important.

As soon as it became clear that the Covid-19 pandemic would affect schooling, we at Sacred Heart College in Johannesburg discussed how we would continue classes. In the high school and in grade 6 the teachers were familiar with Google Classroom and that's the technology they went with. In the preschool they had used a platform called Seesaw, but in the end mainly used WhatsApp. In the primary school, study packs and workbooks were sent home and teachers made use of email, the school's app, phone calls and WhatsApp. We decided from the outset that we would make it personal and include weekly phone calls to the parents, as well make the services of the school counsellor available.

Communicating with parents on WhatsApp was effective. In reviewing our programme one teacher said: "I really got to know our parents and our families … we have become so close." A parent said: "Thank you for handling the class's transition to online study so

effectively. What could have easily been ‘remote’ schooling was a very connected and vibrant experience for Tim.” Feedback from the children, parents and guardians during these three weeks was that many of the learners missed the structure of school, as well as the sport and other activities they were used to.

While distance education, particularly online learning, was appropriate for older children, it wasn’t always the best way for younger children to learn. Not all children have their parents at home throughout the day, which meant they didn’t have regular adult supervision. Some people may argue that children might have better spent the day cooking, doing household chores, exploring nature and participating in meaningful play. But our grade 1 teachers were creative and even assessed the children’s reading over the phone.

In a newly published Unesco report the authors argue that learning away from school can be effective. They contend that there is no one size fits all distance learning. Some subjects are more easily translated into online environments than others. Subjects such as science and biology require special equipment and are not easily replicated outside the school. Distance learning can involve a combination of synchronous learning where children work with the teacher at the same time, and asynchronous learning where they work at different times. Asynchronous approaches are more appropriate with older children than with younger children. The authors believe that a quick mini lesson or assembly at the start of the day adequately serves to connect children with their peers.

The Unesco study notes that distance learning doesn’t have to mirror learning in school. The authors argue that in trying to replicate the pace and type of work that would be done at school is unrealistic. Schools must decide on a daily structure, a timetable and a to-do list. The authors say that less is more when it comes to the scope of work teachers set in distance learning, especially in times of uncertainty and instability.

The three weeks of teaching from a distance has shown us what works and what doesn’t for both the children and parents. It has also allowed us to better understand the pace at which work gets done.

The Unesco study provided an example of managing time in the primary school where children have the same teacher for most of the day. The authors suggest that a good structure might include a check-in online, a checklist for the day and five 30-minute periods. Teachers can stay in touch with parents and children using texting, apps, emails and phone calls.

To summarise, over these three weeks we have learned that:

- Personal contact is important to ensure that children feel connected to their teachers and classmates.
- Most teachers are flexible and can learn new technologies and approaches quickly.
- Teachers are able to do the best with the platforms they know. The familiarity and ease of WhatsApp groups worked well for quick, short communication between teachers and parents.
- Teachers must be empathetic and assign reasonable amounts of work and realise that children have other classes and other things to do at home.
- Children of different ages and abilities participate differently. Children who struggle in class, have difficulty concentrating and don't submit work tend to do the same when learning online.
- Different approaches are needed with different age groups. Younger children appear to thrive more with more immediate contact (synchronous learning).
- Getting feedback from learners, staff and parents is important to understand what works and what needs to be changed.

These are unprecedented times and we must respond as best we can. It is crucial that in addition to worrying about the effect on teaching and learning, we think about the psychosocial needs of children too.

https://mg.co.za/article/2020-04-14-what-we-are-learning-about-distance-learning/

Online learning: Rethinking teachers' digital competence in light of COVID-19

By Neil Selwyn, 30 April 2020, *Lens*, Monash University

Global school shutdowns in the wake of the COVID-19 pandemic have pushed online education and virtual schooling to the forefront of the political agenda.

Millions of young people being educated through Zoom tutorials, Google Classroom, and Microsoft Teams was soon touted as a significant tipping point in the evolution of educational technology use. After this – it is reasoned – we'll have to seriously consider the prospect of online education taking on a more prominent role as school systems adjust to the post-pandemic world.

At this point, it's important to push back against the hubris emanating from some in the EdTech community, as well as the equally strong dismissals from their detractors.

It certainly is not appropriate for leading EdTech figures to talk excitedly of "the genie being let out of the bottle", or there being a technological "silver lining" to the COVID-19 disruptions. Neither is it appropriate for educational conservatives to talk of the past few months as evidence of "just how impractical and inferior [EdTech] is".

Instead, the online education being deployed by schools during the first half of 2020 is best described as a form of "temporary distance education". These are emergency measures – involving what Sean Michael Morris describes as teachers, students and parents "who never expected – nor ever wanted – to use digital technology to communicate or work" forced into quickly developing ways of studying and teaching as best they can.

What teachers, students and parents have been doing over the past few weeks is certainly not comparable with the sophisticated and deliberate forms of online education covered in the research literature.

Nevertheless, there are plenty of lessons that can be taken from our ongoing experiences of what happens when technology-based remote teaching is enacted at scale. These range from issues of data privacy and security that arise when students are learning exclusively at home, through to the networks of commercial interests that quickly spring up to gain advantage.

Alongside these questions of the politics and ethics of online education, it's also salutary to reflect on the lessons being learnt about teaching with technology.

Of course, there has been 30 years' or more discussion before the pandemic of what constitutes teachers' digital literacy", "digital competence", "digital fluency", and the like. These definitions and frameworks have understandably tended to focus on issues of technical proficiency, e-safety and information literacy. Yet, the COVID-19 shutdowns are highlighting the need to go beyond these previous descriptions – especially in terms of terms of better acknowledging the delicate social contexts and circumstances of online education, as well as the relationships between teachers and students.

Additional digital competencies

As such, this is a good time to begin reflecting on the additional forms of "digital competence" that have come to the fore during the ongoing period of COVID-19 remote teaching. These include the following aspects of teaching with technology:

First, is the importance of having heightened awareness of the inequalities implicit in online education. One of the immediate reconfigurations of the COVID-19 teaching period has been the relocation of any "class" wholly into the households of 25 different students. Suddenly, it's no longer possible to work around differences in students' varying capabilities to engage in schoolwork at home. This includes obvious differences in students' technology resourcing (the so-called "homework gap"), but also notable differentials in students' "social envelope"– that is, support from parents and families to engage in technology-based schoolwork. Faced with a class of 25 students, each with very different household circumstances and commitments, online teachers have quickly learnt not to rely on "one-size-fits-all" assumptions about the type, timing and mode of working.

Indeed, teachers have quickly found that they cannot expect students to be doing the same things online at home as they might be reasonably expected to do online at

school. This raises the need for digitally-flexible approaches that reflect the multi-situated nature of students' learning environments. Timings need to be flexible and asynchronous, scheduling needs to be stretched, alternate options need to be available for working offline, and teaching needs to be designed to fit around the complex needs of different students (rather than students all being expected to fit around the teaching).

While COVID-19 is clearly an exceptional upheaval, it illustrates the fact that students and teachers are facing all manner of emotional issues at the best of times.

Following from this need for pedagogic flexibility is a capacity for digital improvisation. Again, the COVID-19 pivot to online education has underscored the fact that technology often fails, and that even the best-planned digital education offerings can fall short of expectations. This was illustrated by the Queensland government schools website crashing during the first day of 1.8 million students in the state logging on for their remote schooling. Elsewhere, much has been made of the Zoom-bombing of online lessons, and other instances of digital sabotage. Teachers have found themselves having to improvise quick workarounds for all manner of glitches, breakdowns and unexpected intrusions. This involves teachers having a Plan C alongside a Plan B, as well as exploring ways of trusting students (and parents) to organise some learning arrangements for themselves – whether on an individual "do it yourself" or more collective "do it ourselves" basis.

Perhaps the most overwhelming element of the COVID-19 teaching period has been its emotional and fragile nature. This raised the need for teachers to display high levels of digital empathy, care and compassion towards their students. The pandemic is clearly a period where tensions have been running high. Students are understandably unsettled – their school careers are being interrupted, parents' job prospects under threat, and families facing the prospect of serious illness. As such, teachers have found themselves having to sensitively deliver programs of online education amid considerable turmoil – reflecting lockdown mantras along the lines of "be kind, be calm, be safe". While COVID-19 is clearly an exceptional upheaval, it illustrates the fact that students and teachers are facing all manner of emotional issues at the best of times. Any digital educator working at a distance from their students needs to be sensitive to this.

Allied to this need for compassion is the core competency of being able to exercise digital restraint. In contrast to the promises of the limitless and abundant nature of

digital technologies, teachers and students are finding that remote online schooling requires clear boundaries in order to be manageable. Both have quickly found that synchronous video classes and meetings are mentally exhausting in ways that their face-to-face equivalents are not. Teachers have found that preparing online classes can require much more preparation time and planning, as can dealing with student and parent "feedback". Some teachers have quickly experienced push-back from students feeling genuinely over-burdened by multiple tasks and activities. All told, digital technologies can easily exacerbate a collective descent into unhealthy patterns of overworking on a 24/7 basis. COVID-19 is therefore highlighting the need for teachers to exercise discretion and restraint in terms of choosing when to not use digital technologies. Digital video presentations can be "good enough" rather than pitch-perfect. Online learning systems might offer the opportunity to continuously monitor and surveil students' activities, but these features simply instil a culture of performativity, mistrust and busy-work. Knowing what not to do with technology is a key digital competence.

All these aspects of digital education have long been talked about in some corners of the higher education educational technology community – such as the likes of the Critical Digital Pedagogy collective, and Edinburgh University Manifesto for Teaching Online Manifesto for Teaching online. Yet, these issues are far less often raised in terms of school teachers, and it's certainly rare to see these issues being foregrounded in mainstream policy and industry conversations about how educators need to "do" technology.

Yet, we've reached a point where hundreds of millions of school students, teachers and parents now have first-hand experience of being reliant on digital technology, and a better sense of what qualities and characteristics have made these experiences easier, more engaging and perhaps even more effective.

The relational nature of online education

In all these senses, COVID-19 has taught us all to value the social, emotional and profoundly relational nature of online education.

Of course, most of these additional digital teaching "competencies" are straightforward human qualities that apply to any aspect of education (and, indeed, any aspect of daily

life). But the COVID-19 experience has shown how it's important to reassess how these familiar qualities and traits (such as flexibility, contextual awareness, and compassion) translate over into the less familiar settings of video conferencing and learning management systems.

So, from now on, talk about teachers' "digital understanding" and "digital confidence" shouldn't be taken to refer only to knowledge about managing cloud storage, and engaging with platform analytics.

Teachers need to have good awareness of the social, emotional and affective aspects of technology-based education, and feel confident in their capacity to respond appropriately. Teaching of any sort is never simply a technical process – this is certainly the case when teaching online.

https://lens.monash.edu/@education/2020/04/30/1380217/online-learning-rethinking-teachers-digital-competence-in-light-of-covid-19

Distance Teaching lessons for the classroom

By Sarah Cooper, *Edutopia*, May 22, 2020

When schools closed, teachers were forced to get creative—and they've learned things they can use when they're back at school.

Before my eighth-grade history students moved into online learning this spring, I had no idea about one student's affection for Cup Noodles or another's sweet way of talking about her 5-year-old brother. Perhaps I should have known, but I didn't, and I wish I had.

Distance learning has enabled these intimate glimpses into students' lives and thought processes, and I worry that these moments won't happen as much once we eventually return to campus. However, I realize that doesn't have to be the case—and so I've been thinking a lot lately about ways to translate the best aspects of online instruction to the physical classroom.

What I want to bring back to the classroom

Providing feedback on what works in a quick email: With all of us being so far from each other and everything being turned in online, it feels natural to send a handful of kids two-line emails for each small assignment, highlighting something specific that worked. I'm judicious about doing this so that I don't spend forever grading quick-completion assignments. However, I do want students to know that I'm seeing their work and thinking about them.

I'd love to continue this practice back in the physical classroom, even if it's only for a minute during class while students are working on something else, because it can be more permanent and private than saying something aloud.

Following along online while talking with students about their projects: While discussing research that students have done for history projects, it's been easy to look at and comment on the group's shared Google Doc while they're in a Zoom breakout group with me. Back in the physical classroom, I'd like to carry my laptop around more often so that I'm not simply looking over their shoulders, but also engaging with them by making written comments in real time that they can follow up on later.

Screen sharing has been invaluable for helping students investigate whether a source is valid or find citation information. It's also helped me navigate tech questions, such as how to move a file into a Google Drive folder. Even in a regular classroom, I could take more time to walk individual groups through processes like these.

Using exit tickets as a formative assessment: I've used online exit tickets for different purposes, whether asking students to summarize their progress on a group project or to write about what made a podcast powerful. I hadn't consistently used exit tickets in the physical classroom, but now I want to. The information they provide has shaped my understanding of my students and helped me plan for the next class.

When we're back in the classroom, I'd like to think about how best to do an exit ticket according to the daily lesson. Some days it might be a Google Form so that I can compile, copy, and save information easily.

Other days it might be a projected chat window where students can talk about what they found interesting about a topic. Other times, it might be an old-fashioned slip of paper so that I can keep feedback anonymous and sort ideas into categories.

Offering creative and fun summative assessments: Since we transitioned to distance learning, my students have appreciated that their teachers have assigned creative projects, both to individualize instruction and to give students a chance to socialize through virtual breakout groups. My students also like offering feedback on their classmates' projects through Google Drive and Google Forms. These compliments are much easier to pass along than the handwritten comments that students used to write in class.

Providing space for relevant side chatter: Even with a focus on content-driven responses, there's still room for appropriate humour and on-the-side interaction among students. I've been delighted by the informality of kids' chipping in an idea that they don't necessarily want to interrupt class to share but that they do want to get out there. (As I'm teaching, I monitor the chat, laugh along with the students, and then suggest that they lay off if it goes too long!) It would be ideal to keep this chat going every day in the physical classroom, maybe on a screen behind me, so that I can hear from every kid more frequently throughout class.

Introducing warm-up questions about students' lives: My favourite part of online learning has been the immediate glimpse of students' lives that they offer in the chat at the beginning of our eighth-grade U.S. history Zoom sessions each day. I post a question, students respond, and I call on a few to explain.

Lighter questions have included: What did you have for breakfast or lunch today? What is something you've enjoyed creating or doing with your hands this week?

Heavier questions have included: What is something nice you could do (or have done) for someone else while in quarantine? What have you learned about yourself or others while at home?

For the last question, I have loved hearing from some seemingly extroverted students who found that they were enjoying time alone, and vice versa. Some kids have discovered that they like cooking, and others their siblings' sense of humour. I have also heard from a few kids whose answers concerned me, and I followed up later with them or their counsellor.

In a recent survey, several students said that they also love this daily warm-up, that it makes "the feel of this class familiar and comfortable." I plan to incorporate this quick

check-in either by voice or onscreen, or both, when we're back together in real life—which I hope will be sooner rather than later.

https://www.edutopia.org/article/distance-learning-strategies-bring-back-classroom

Insights on remote learning from College students

By Norman Eng

In this article in 10X Your Teaching, Norman Eng (City University of New York) reports what his students found most difficult about online learning this Spring. Even through this article is from a Higher Education learning perspective we can learn a lot from it:

- Organizing and keeping track of everything – 71%
- Motivating myself to get things done – 62%
- Finding a quiet place to concentrate – 53%
- How often I'm asked to hand in assignments – 47%
- The assignments – 44%
- Tech issues – 18%

It's interesting that self-organization rather than technology was the number one concern. Reflecting on this, Eng's takeaway as a teacher was:

- Keep a routine so students know what to expect.
- Keep everything in one place.
- Keep sending reminders.

It's also important to check in with students – which he did. Some insights from students:

Clear, prompt communication means everything to students. This includes skilful, explicit instruction, ready access to materials, and always responding to e-mails

The quality of lectures and assignments is a key factor in student motivation and focus. "Do not make your assignments boring and long," wrote one student, and others remarked on the distractions and temptations of being at home.

It takes longer to do things online. Many students said they were in a state of high anxiety and felt burdened by their instructors' demands. Some were pestered by their parents to do chores. "It's so sad that I can't even relax in my own house," said one.

The debate about synchronous and asynchronous learning continues. Students found synchronous classes difficult to manage and appreciated the autonomy of doing assignments and listening to recorded lessons on their own schedule. "The downside of having an asynchronous class," said one student, "is that we have to be more responsible for teaching ourselves the content… I believe I'm teaching myself incorrect information if it's all up to me." To teach effectively online, teachers need to provide an appropriate amount of synchronous instruction; hold regular office hours; and respond promptly to e-mails.

Read the full article for yourself (I shortened this one): "What Frustrates Students Most About Online Classes (Covid-19 Edition)" by Norman Eng in*10X Your Teaching*, May 17, 2020

What education looks like after lockdown

Thomson Reuters Foundation, 14 May 2020

Here's how schools around the world are trying to protect children as they reopen.

Social distancing measures

Denmark eased its coronavirus lockdown in mid-April by reopening schools and day care centres, although concerns they might become breeding grounds for a second wave of cases convinced thousands of parents to keep their children at home.

Teaching staff there are under instruction to keep social distancing in place between children and, with many school buildings staying closed, some teachers are taking pupils outside and writing with chalk on the playground instead of a blackboard.

In Switzerland, children at Geneva's La Tour School had to adapt to new rituals, with parents dropping them off at a distance. Classrooms were half full to reduce crowding and desks spaced two metres (6.5 feet) apart.

Under a courtyard shelter in heavy rain, children laughed while others played hopscotch and one girl helped a smaller child put on disposable gloves.

Plastic shields and hand sanitizer

In the Netherlands, the Springplank school in the city of Den Bosch installed plastic shields around students' desks and disinfectant gel dispensers at the doorways.

"Our teachers are not worried," said Rascha van der Sluijs, the school's technical coordinator. "We have flexible screens that we bought so we can protect our teachers if students are coughing."

Staggered school shifts

Schools in Australia's biggest state, New South Wales, reopened on Monday but only allowing students to attend one day a week on a staggered basis.

Australia's second-most populous state, Victoria, will resume face-to-face teaching from May 27, weeks earlier than expected. The state including the city of Melbourne will allow teenagers in classrooms first, followed by younger pupils from June 9, Andrew said.

Israel reopened some schools this month, but the move was boycotted by several municipalities and many parents who cited poor government preparation.

Kitted with masks and hand-cleaners, the first three grades of elementary school and the last two grades of high school were allowed back, redistributed in classes capped at 15 pupils to enforce social distancing.

Across France, primary school pupils on Tuesday sat at least a metre apart in small classes and listened to teachers in masks on their first day back after two months of home-schooling during the coronavirus lockdown.

Testing and temperature checks

In Cyprus, health workers wearing personal protective equipment tested students for COVID-19 at a school in Nicosia after high schoolers could return beginning May 11.

In Shanghai, students and staff alike were required to enter the school building via a thermal scanner when school reopened last week after three months of lockdown. The walls are papered with posters on measures to tackle the coronavirus and in the spotlessly clean school canteen, glass walls divide the tables, so only two students can eat together.

It may be more like going to a hospital than a school, but the Shanghai students returning to class after three months of lockdown are thrilled to be there.

"I feel so excited coming back to school. Usually we look forward to the holidays but suddenly our holidays became so long," 17-year-old Zhang Jiayi told Reuters. "This time, we longed to go back to school, where we can see our friends and teachers."

Covid-Era practices that should continue

By Gina Denny, *Education Week Teacher*, May 18, 2020

In an article in Education Week Teacher, teacher/author Gina Denny says the school-closure crisis "has given us insights and tools to better serve our students." She lists six ways she plans to change "once there is a semblance of normal":

- *Use online technology routinely to deliver assignments, notes, and resources*. These months have brought millions of educators and students up to speed on Google Classroom and other platforms. This will serve them well, even in standard-issue schooling, and in college, where a fair amount of instruction is online.
- *Stop grading formative assignments*. Remote schooling has deemphasized grades, which has showcased the benefits of feedback for improvement versus

summative judgment. “Fewer assignments with more detailed feedback can help students stay motivated,” says Denny, “understand the material more fully, and alleviate some of the pressure on teachers, even when giving individual feedback takes more time than right-wrong grading.”

- *Assign home-based performance tasks and projects*. Remote schooling has required students to upload choreographed dances, scripted scenes, and music performance for teachers’ critiques – great for avoiding snarky comments from peers and excellent preparation for college and real-world auditions.
- *Bring other professionals into the loop*. Many educators have become less shy about recruiting actors, musicians, authors, politicians, and activists to interact virtually with their students. No reason this shouldn’t continue.
- *Create a more-flexible schedule*. Teachers have often been surprised to see students who performed well in “regular” school floundering in stay-at-home schooling – and students who felt stifled by a bell schedule and micro-assignments flourishing with less structure. This suggests that a loose-tight approach might be better when regular school resumes, giving students more control over their time while holding them accountable for results and becoming more self-sufficient with time management.
- *Force students to use “old people” technology*. “Kids who plan to enter the workforce in the next decade,” says Denny, “need to know how to use Microsoft Office, properly thread e-mails, and use technology to manage their workflow.”

What Makes an Excellent Online Teacher?

By Emily Boudreau, *Harvard Education*, 1 July 2020

Writing in Harvard’s Education Now *Boudreau argues that strong decision-making skills can help teachers build engaging and welcoming virtual classrooms.*

A teacher's "decision-making base" helps determine whether teaching engages students and fosters deeper learning. Good decisions are *informed* by the intersections of

- content knowledge
- pedagogical knowledge
- cultural awareness
- self-awareness.

Excellent teaching is rooted in the kinds of decisions that are shaped by these four elements. As students enter classrooms, teachers need to be prepared to reflect on how their decision-making base supports and limits their ability to respond to a wider range of student experiences.

How does technology factor into decision-making?

In online learning, technology threads together those four elements of decision-making.

Teachers also need cultural awareness to ensure that their curriculum and teaching practices are both relevant and sustaining, and they need content knowledge to ensure that the technology-rich activities enable students to develop accurate conceptual understandings.

New approaches to classroom community, learning time

While the principles guiding the use of technology have stayed the same, two major factors that influence decision making have changed: classroom space and learning time.

The strength of a physical space is that it fosters connection, but it can also limit effective teaching. Teachers may have been relying on physical presence to manage students without making instruction that's worth learning to motivate and engage students. Teachers now need to make deliberate decisions about how students will feel belonging in a classroom community in a space without walls, see themselves reflected in the virtual space, feel both independence and belonging, and share power dynamics intentionally. Teachers need to think about:

- Nurture connections and build relationships with students.
- Leave space and time for students to connect and socialize with peers.
- Invite students to share something from where they are currently located in the virtual classroom space.
- Manage time for individual check-ins and for giving feedback.
- Circulate and observe student learning.

- Translate physical supports, like bulletin boards that celebrate student work, to a virtual space.

One of the greatest benefits of online learning is that it affords teachers and students flexible time periods. However, this means students must be able to manage their own learning time, independent of a teacher.

Teachers need to set up different learning pathways. For example, is it helpful to watch a video to give students background knowledge before they start reading? Or do they want to read first and then watch the video?

Teachers need to scaffold time management. Timers and schedules provide this structure in a physical classroom and can still be used in a virtual space.

Teachers need to ask students for feedback — teachers don't have to have all the answers. Students are a great resource for technology tips and suggestions about learning that is truly important.

Recommendations for Teachers

Teachers, too, have the gift of time in a virtual classroom. Written and recorded discussions provide teachers with time to analyze their decisions. Teachers can use this time to think about what students are saying in discussions or in written postings and then respond in very deliberate ways, practicing giving high-quality feedback that generalizes or transfers from one task to another through carefully considered responses.

On being flexible and nimble

The pandemic has removed many of hurdles. With no physical materials to manage and fewer physical time commitments, teachers can and should feel empowered to be more agile.

Recommendations for teachers:

- Mark places in their lessons where they can listen and learn from students. This will build in time and space to make changes.
- Anticipate problems before they happen. Make contingency plans for when the physical environment prevents students from engaging in online learning.
- Remember that there are only three levers you can use or combine to adjust the student task and each task structure has different opportunities for engagement:
- Task structures: Are students learning with peers or independently or receiving direct instruction? lesson or assignment.

- Help resources: Are students required to get help and from what sources?
- Choices offered: Do they choose the topic? The materials? Are they selecting from a series of teacher-vetted options?
- Read the full article at: https://www.gse.harvard.edu/news/uk/20/07/what-makes-excellent-online-teacher

For teachers planning virtual classrooms:

- Examine how technology supports your content knowledge, pedagogical knowledge, and cultural and self-awareness. Strengthen the area where you have the least expertise in using technology.
- Leverage the opportunities that online learning affords, such as differentiated instruction and collaborating with experts and other students from around the world.
- Continue to communicate with students and families using every means available — send letters, make podcasts, or put up signs outside of the schools with vital information.

More insights from Harvard Graduate School of Education's Rhonda Bondie

Maintaining Catholic Identity in Distance Learning

By Denise Donohue and Dan Guernsey, *Issue Bulletin: Examining Critical Issues in Faithful Catholic Education*, 6 April 2020

With little time to prepare, Catholic schools have had to respond quickly to the COVID-19 pandemic by moving education from traditional brick-and-mortar buildings to students' homes. Thousands of teachers are now seeking to re-package instruction tailored to distance learning…

Catholic schools are not only content providers but also evangelical learning communities. It's important that we come at this situation with our own needs and goals in mind. Facing weeks of missed in-class instruction and the loss of all the critical formation that happens outside of the classroom in a Catholic school, we need to devise more thoughtful and comprehensive strategies to try to compensate for the suspension of in-person instruction.

The first step is to make explicit what we do daily that makes Catholic education unique and then seek to find ways to translate as much of that magic as possible to a

distance learning environment. Vatican documents on education identify several distinctive elements of Catholic education, including:

1. the centrality of community and importance of relationships;

2. the presence of a rich prayer and sacramental life;

3. the integral formation of students' minds, bodies, and spirits; and

4. the development of a Catholic understanding of the world.

So much of who we are in Catholic education is based on our existence as a faith-based community, where we gather together to see, hear, and be with each other in prayer. Participation in the Sacraments, feast-day celebrations, prayer, and rituals form the basis of daily interaction and activities. The regular school day also has other community building activities like class meetings, breaks, games, and just time to hang out with each other.

All day long we are building community with each other in school, and it has a cumulative effect of creating and transmitting culture. It is through the community that students receive "a systematic and critical assimilation of culture" which passes along our Catholic traditions, values, and beliefs. In Catholic education, the community itself is considered a formative and educative means of student formation and development, where students learn Christian values by being exposed to Christian values—primarily through the witness of adults and others with whom they interact daily.

How much more important now is the presence of the teacher in these unsettling times, when coming together is difficult and "social distancing" is the norm. Teachers can never be as present in distant learning programs as they are in a real classroom, so it is more important to do as much as possible to bridge the gap. It is assumed that teachers will be posting video help for lessons and instruction to the degree possible, but among the community building options available are short videos from the teacher, not just explain a lesson introduction, but speaking from the heart and saying and doing human things to lighten the load and let students know you lives would be like if we didn't have the Sacraments. Why is attending Mass or going to confession so important? What would my life be like if these activities were permanently eliminated?

- If possible, perhaps arrange for an all-school Mass to be video streamed by the school's chaplain. This can provide a common experience and keep students and teachers tied to each other in prayer.
- Recognizing that students may not engage in prayer at home as frequently as they do in school, make extra efforts to insert prayer and Catholic themes into home assignments.
- Provide mothers and fathers, the spiritual heads of the domestic Church, with suggestions for leading the family in morning and evening prayer, the Rosary, the Church's daily Mass readings, the Liturgy of the Hours, or Lenten Stations of the Cross.

Unlike Catholic school buildings with religious art and classrooms with prayer corners, some homes may have few religious items and no sacred spaces set aside to contemplate God's word. Since the pandemic has prevented many people from entering the sacred space of our churches, now would be a good time to suggest to families to set aside sacred spaces in the home where children can go throughout the day to quiet their hearts and minds and thank God for His gifts, express sorrow for their failings, or ask for His assistance. A simple crucifix, a picture of Jesus or the Holy Family, a Rosary, or prayer cards can initiate a contemplative, prayerful space.

Source: https://newmansociety.org/maintaining-catholic-identity-in-distance-learning-instruction/

How do school shutdowns affect student achievement gaps

McKinsey Blog, 2 July 2020

The damage COVID-19 is inflicting on student learning in the United States could last a lifetime. One report found that continued school shutdowns could increase existing achievement gaps, especially among Black and Hispanic students, and create overall learning losses that are likely too great to re-gain in the next academic year. Jimmy Sarakatsannis talks about an article he has just written and tells us how his school experience has helped him (this is a shortened version).

Tell us about your background in education before joining the firm.

I taught middle school science at a public school in Washington D.C. Teaching was extraordinarily rewarding—and extraordinarily difficult. I've always seen education as one of the most powerful levers we must create social mobility for people, in particular for students who experience poverty and other socioeconomic challenges.

One of the biggest things I learned as a teacher, however, is that the challenges students face goes well beyond learning. For students experiencing poverty especially

the margin for error in their lives is so small. A $50 speeding ticket or medical bill can have enough of an impact on a family to knock a student off their trajectory for a month or more.

Why did you leave teaching for McKinsey?

I came to McKinsey thinking I should get some management and organizational experience, and potentially return to public schools. But once I joined the firm, I realized how much of a positive difference I could make addressing the challenges of public education through an entirely different lens.

In June 2008, the year before I joined the firm, I was teaching about 30 students in a classroom overlooking the U.S. Capitol. A year later, I was presenting to a major stakeholder on our national K-12 strategy, about a mile from my old classroom. I miss the one-on-one interaction with individual students, but I'm also grateful that at McKinsey my work can continue to help improve the lives of students.

How does your experience in public schools inform your work today?

Not a day goes by that I don't think about either individual students or my time in the classroom. It's grounding because it reminds me that all of the policy and strategy decisions, we help clients make end up manifesting in interactions between teachers and students, and what students do every day.

When I work now, I remember that. The work we do ends up trickling down to affect students and teachers individually. I can see those connections now and know what it feels like to be in a teacher's shoes—how they interact with students—and it informs what I do daily.

Our new research finds that continued school shutdowns will magnify existing gaps in learning for Black and Hispanic students—and lead more of them to

drop out. Among the bright spots we outline, what are some efforts you're excited about?

We haven't solved this by any stretch—our achievement gaps have persisted for decades. So no one thing is going to move the needle here. But one thing we could do, which a few systems are doing, is to recognize that while not all kids will return for in-person learning in schools this year, we can prioritize getting those students with fewer opportunities generally—students of color, or students experiencing poverty—back into classrooms first.

We also have an opportunity to disaggregate the role of the teacher and ensure that teachers are really focusing their time on activities that only skilled teachers can do and allowing other adults to do the other tasks. This can magnify the impact and time teachers can have, particularly with students who need it most.

Finally, we simply need to get more resources for students who are further behind—we need to ensure they have access to devices and connectivity, and we need to find ways to get them more instructional time throughout the year, and more one-on-one time from tutors to help them catch up.

To that point, what role does childcare play in education, particularly for the most vulnerable learners?

There are two elements here. First, our previous research has found that significant learning gaps are created by the time kids go to kindergarten, which is tied to the opportunity's children must develop in years zero to five. And those gaps typically remain for the rest of their school careers and lives. So yes, we absolutely must make sure that the youngest children have some sort of developmental support before kindergarten.

And the second is just the broader challenge for all parents. If school schedules shift to cope with the pandemic, for instance, parents may need to be home during times that don't mesh with their work schedules. This isn't easy for anyone, but I really worry about parents who can't afford to lose a shift at work to stay home with their kids. I go back to that margin of error I talked about. It's stressful for everyone; it's existential for some.

You're the father of two sons, one of whom just completed kindergarten through remote learning. What has this personal experience as a parent to a remote learner been like?

We're very fortunate. I think about how my son has grown a lot from the time he's spent with learning software, working with me and his mom, and through his video check-ins with his teachers. Now, contrast that against if neither my wife nor I could spend time with him during the day or have the technology that lets him work with his classmates. You can imagine how easily a child might experience a trajectory like those we outlined in the report.

Read more at: https://www.mckinsey.com/about-us/new-at-mckinsey-blog/a-mckinsey-partner-on-the-impact-of-covid-19-on-achievement-gaps-in-education-and-where-bright-spots-lie?cid=other-eml-alt-mbl-mck&hlkid=fd12ef007ae846e39e15bced9e000196&hctky=12059198&hdpid=d50f7af6-f96e-49dd-a8f7-fc709a083e34

Strategies for returning to the Maths classroom

Rebecca Vukovic, *Teacher*, 2 July 2020

As students return to classrooms after lockdowns, teachers should focus on rebuilding relationships, avoid rushing through missed content, and preference a deep understanding of a few topics over a superficial understanding of many.

Sullivan and colleagues outline some principles that might inform strategies for welcoming students back to mathematics classrooms. These principles are:

Build the relationship again

Sullivan says this is particularly important for students starting school at the Foundation level or the first year of secondary school, but should apply to everyone. 'Teaching is essentially about the relationship that a teacher has with the students, getting to know the students and understanding what the students are experiencing,' he tells Teacher. 'It's necessary to build the relationship and try to turn the separation period into an advantage, like the teacher asking the kids, "what did you learn about

yourself from the time away from school?" It's actually, in a sense, reconnecting the teacher with the student, and the teacher coming to understand the students, and the students being aware that the teacher cares.'

Avoid the temptation to talk fast, loud and long

'It happens all the time. You see someone is doing a presentation and they're running out of time and so they talk fast and they go through the slides quickly because they think, so long as they say something into the air people will learn things, but that's not what happens,' Sullivan says. 'People learn by having time to think, by having time to listen and do. It's important – and this is probably the most critical of all those pieces of advice: go slow, go deep.'

Spend as much time on a given topic as normally

Sullivan says the Australian Mathematics Curriculum is cyclical – meaning that it comes back to topics repeatedly. He warns that moving through a topic quickly, where students don't grasp the fundamental concepts, is going to be a waste of time. 'Even if students only do three-quarters of the topics that they might have done had they been at school for the whole year, it's not going to be a problem. Teachers need to make sure the nine months students do spend learning are nine full months of learning, not 12 months crammed into nine months, which actually turns out to be six months of learning,' Sullivan says.

Give students time to learn, to engage with challenges and to think

The report says it can be anticipated that some students have become used to easy successes and, as a result, tasks that require extended thinking might seem confrontational. Sullivan says that students require different amounts of time to do things and to think. 'Some students think quickly and one minute into the lesson, they're already working and down to it – whereas others take 10 minutes to get their pen out. It's really just trying to find ways to give kids time to engage.'

Use previously successful experiences again

Sullivan advises that if an experience has been successful the first time it's worth doing again, to develop familiarity with the process and to build student confidence. 'When an experience has been rich the first time, doing it again not only doesn't do any harm, but it is positively good because the students know what's happening, they can extend their thinking and it's low in risk for them.'

Match the style of assessment with the assessment goals

Understanding what students have learned throughout the experience of remote learning is important, but it doesn't mean setting them a test necessarily, Sullivan says. 'Pencil and paper tests are good for gathering data that you can put in your record book and report to parents on a parent-teacher night. But the most important assessment is the assessment that teachers do to find out what the students know and can do (not what they can't do), and then to use what they can do as a way of planning the next stage of their teaching.'

Prepare to engage more with parents and carers

Sullivan says teachers are reporting that a lot of parents have been taking more interest in their child's education while they've been learning from home. He says that it's important that teachers build on this and find ways to actively engage parents into the learning routines. 'Finding ways to broaden the nature of home learning experiences will be an important challenge for some time,' the journal paper adds.

Source: Sullivan, P., Bobis, J., Downton, A., Feng, M., Hughes, S., Livy, S. & Russo, J. (2020). Threats and opportunities in remote learning of mathematics: implication for the return to the classroom. Mathematics Education Research Journal, 1-9.

7 Tips for managing distance learning in Preschool

By Melanie Muskin, 29 April 2020, *Edutopia*

A preschool education director shares what her school is doing to keep childrens' screen time to a minimum while fostering play-based learning at home. Our current health crisis has given remote learning a global platform, with stay-at-home orders closing school buildings across the country. For early childhood educators who promote play- or project-based approaches, going remote can be a particularly daunting task.

Preschools rely heavily on an openness to free play within carefully curated environments. Through play, children develop foundational social and emotional, executive functioning, and academic skills. Early childhood educators often act as facilitators, building upon children's natural curiosities. To inspire play, we curate spaces with open-ended materials that provoke children's engagement with each other and their surroundings.

Even as preschools have closed their doors and transitioned to remote learning, it is essential that these core principles remain. It is possible to work with families to establish play-based, child-centered learning that pushes beyond engaging with a screen. At my school, we are keeping virtual meetings short—a maximum of 30 minutes—and instead giving families tools to foster learning at home.

Once a week, we host a large group sing-along with about 30 families. All other virtual meetings are in small groups of three to six children to accommodate turn-taking and ensure all children have opportunities to speak. Attendance is voluntary.

Here are the other things my preschool is doing to help families continue the learning at home—while staying true to what young children need most.1. **Let children guide you:** Although we're not together, children are still playing, exploring, and learning in their homes. Ask families to submit photos or videos of children's play. Look for trends in this documentation. During the small-group meetings, we display these photos or videos so children's voices are heard and teachers are not the only leaders of remote discussions.

To take an example from my school, one of our teachers noticed a trend in the photos and videos we were receiving from families in one small group: Several children were playing with trains, cars, or trucks at home. During a virtual class meeting, this teacher sang automobile-related songs and posted videos of children playing with their automobiles so that children could see themselves and their friends. The children then discussed and compared their play.

2. **Provide meaningful alternatives to screen time:** Children between the ages of 2 and 7 are still in the preoperational stage, and it is developmentally inappropriate to expect their learning to be entirely screen-based. With the automobile-inspired play, the teacher invited children to continue their exploration after their virtual meeting by building automobiles using cardboard

boxes. The teacher then invited families to share photos or videos of their children's creations.

To inspire these real-world prompts and ensure that they're feasible in your students' homes, invite families to submit photos of their spaces or survey them to better understand the resources available to them. At our school, we've had at least half of families in each class share these details with us.

3. **Remember that families are your partners:** Families are excellent allies and can support you by extending children's learning at home. However, we must remember that families have other responsibilities outside of supporting us with our lessons. Make attendance at the virtual meetings voluntary, and if a family misses one or neglects to complete a project, send a note to check in and share what was missed, but don't require participation.

4. **Remote relationship-building is critical:** Relationships are the bedrock of our schools. Although we cannot be together, we can stay in touch and show we care. Work as a staff to connect with families once a week over the phone or via video chat—whatever works best for them. Send a school-wide email every day.

To ensure that this work is spread sustainably across your staff, create a schedule with faculty that rotates responsibility for writing the daily email so that each person's voice is heard. Ideas for daily emails include: a note of gratitude, video recordings of read-alouds or songs, child-friendly cooking recipes, and directions for how to use household items to make paint or build an imaginary structure.

5. **Music is magical:** Children respond well to singing and dancing online. For a child, participating in a song or dance is an easy way to engage with a screen because they can follow the leader. The rules of this interaction are clear and translate well into an online format. Try a school-wide sing-along or use songs intermittently to re-engage children who may be distracted during a virtual meeting.

6. **Leverage your tech-savvy team members:** Even if your school is typically a low-tech environment, there are likely teachers or families who are tech-savvy. Lean on them for their creativity. Taking your school online is a collective effort—any idea is worth trying.

7. **Be kind to yourself:** Previous metrics of success no longer apply. Measure your success in participation and smiles. If children are disinterested during a virtual meeting, remember that they are young and this is new to everyone. Don't take abrupt exits personally. If overall attendance is dwindling, call or survey families to find out what they need and try your best to adapt. Lastly, acknowledge that you cannot always be the exact right thing for everyone. We are all just doing our best.

https://www.edutopia.org/article/7-tips-managing-distance-learning-preschool

Caring for pre-schoolers at home

Useable Knowledge, 17 March 2020

With early education in flux, expert guidance on maintaining structure, routine, and healthy habits for learning and growing at home.

Many of us have been home now for weeks or months with our preschool-aged children. With summer plans disrupted, and with continued uncertainty as to when and how daycare centers and preschools will resume operations, the time at home is stretching on longer than many had anticipated. The Saul Zaentz Early Education Initiative at the Harvard Graduate School of Education is sharing ways to talk to your children during this time; to create structure and routine; and to continue to develop their social emotional skills.

Key points

Create a daily schedule with your children. Draw pictures (or get them online) of each "activity" and a general time frame for when they can expect each thing to happen. Include the activities like those your child does in preschool: mealtimes and snacks, handwashing, outdoor time (recess), "learning time," and rest.
Maintain, as much as possible, regular mealtimes and family routines. If you usually go to dance or soccer practice in the afternoon — go to a field instead and exercise outside together. Consistency is important in helping young children feel secure and safe.

Practice your own self-care when possible. Short breaks from the family (solo walks, a bath, or a phone call with a friend) will help you manage your own stress.

Build and practice important social emotional skills. Model empathy and kindness by looking for ways to be helpers in your community. Offer to run errands for an elderly neighbour, make and drop off cards to a nursing home.

Create a kindness jar — write down all the acts of kindness you see your children doing, (e.g. helping with a chore, sharing a toy with a sibling, drawing a picture for a friend, etc.) Then, periodically select a paper from the jar and read it out loud with the family.

Create a feelings chart or use stickers or pictures to help your child communicate how they are feeling each day. Use books and pictures to discuss emotion words like angry, scared, and worried.

Create a sharing time each day at bedtime or mealtime. Ask a daily question: "What was the best part of your day/the worst part of your day?" "Name one thing that felt good today and one thing that felt hard?" "Name one kind thing you did today."

Manage fears or worries. Keep communication open, but non-alarmist. Be honest but reassuring and keep it fact-based and developmentally appropriate. Children will react both to what you say and how you say it. They will pick up cues from the conversations you have with them and with others.

Children can feel afraid and not express it. Encourage your child to talk about their feelings. Validate their emotions and provide reassurance.

Limit the amount of COVID-19 news you consume as a family, especially in front of young children. Don't assume they are not listening, even if they are not actively watching.

Healthy habits. Reinforce healthy routines like handwashing, healthy eating, and exercise. Keeping everyone's immune system humming is an important step to avoiding getting sick.

It's more important to keep the learning positive and fun than to worry about maintaining academic skills for preschool-aged children. Enjoyable experiences such as reading together, storytelling, and games are fun ways to keep learning going without putting too much stress on young children.

Do use technology as a tool for keeping kids connected with friends and family. Zoom is a great tool to spend time with a grandparent, a cousin, or friends online.

Seeing their family well and having fun together can be very reassuring to young children. (Continue to be mindful of recommended guidelines for limiting screen time in accordance with your child's age, however.)

https://www.gse.harvard.edu/news/uk/20/03/caring-preschoolers-home

Keeping classroom connections alive

By Jill Anderson , *Useable Knowledge*, 27 March 2020

If preschool educators are feeling lost about what to do during these closures, developmental psychologist Junlei Li says there are simple and important steps they can take to maintain community among children and families.

"It's such a big change in the lives of young children," Li says. "They've gotten so used to being with their friends every day, and so to not be able to be with their friends, and for grownups to not be able to tell them when this will end — that has to be so hard. It's really hard for grownups."

Li offered three simple ways preschool educators can act as connectors for their students.

1. Help parents and families not stress about formal learning.

When it comes to your young students, while learning their letters and days are important aspects of the curriculum, Li stresses that what young children really need right now are social connections with each other – much more than academic lessons.

Preschool educators can send this message to families and parents by not sending **all** the lesson plans and by helping families understand that they don't have to replicate formal learning spaces at home.

2. Find ways to create a sense of community.

"What young children miss most is to be able to connect with their friends," Li says. "Preschool teachers have an opportunity through Zoom or something like that to

connect the children." Li advocates that preschool teachers find and schedule time — 30–60 minutes — each week for virtual meetings among the classmates.

"It's important for the children to be with each other, hear each other, tell stories about what they've been doing at home," he adds. "Find that way to maintain a sense of community — that should be a priority."

Once you are on a virtual meeting, resist the urge to start into a lesson right away. Be prepared for the children to be excited about seeing each other and allocate a few minutes for that time during the meeting. "As opposed to feeling pressure, leave some time and space to let them be happy and see each other on the screen," Li adds.

Lastly, Li says the mute function can be helpful in allowing each child to have a chance to talk and share, and for the rest of the class to hear each other's voices. If you only have an hour, spend the first 10–15 minutes to let them be rowdy, hear each other, then give the last five to 10 minutes to let them say bye and give a virtual hug, he suggests.

3. Build reciprocal partnerships with families.

Social networks or perhaps even text chains can help preschool educators develop relationships (if they didn't already exist) and maintain connections to students' parents and caregivers. "The key word here is reciprocal. So it's not just sending enrichment materials and activities to families," Li says.

The idea is to open the lines of communication with parents and caregivers so they can ask questions and share information. The educators can also use this as a way to hear from parents about their children: What are the children asking? What are the parents seeing in the children? What are parents hearing from the children?

Li stresses the significance of using these networks as a way to decrease the social isolation all families are experiencing right now. "Typically, in preschool, you have that pick-up and drop off where you get to say a few words to the parents – so this aims to be an extension of that," Li says, pointing out that families also have limited access to each other now, too. By creating that space, it provides the chance for families to interact and share with one another as well.

https://www.gse.harvard.edu/news/uk/20/03/keeping-classroom-connections-alive

Adapting Science Lessons for Distance Learning

By Shawn Sutton, 25 June 2020, *Edutopia*

With a little creativity, students can still take part in science experiments and discussions while learning at home. Shawn Sutton demonstrates how he records himself doing an experiment for his students.

In a traditional, face-to-face classroom setting, teachers can interact with students, flexibly spot-check understanding, and present learning material in an engaging manner. Our new normal of science teaching, the distance-learning model, has severely compromised these good instructional practices. In all likelihood, remote teaching will take up a meaningful part of the upcoming academic year. In this impersonal teaching environment, how might we maintain quality learning experiences for our students?

During distance learning, teachers may feel the need to focus on broader concepts rather than march through a typical curriculum. Educators are likely asking themselves, "What are the most essential skills that I want my kids to gain?" I would argue that memorization of fact-based content that students can easily search for online is low on the essential-skills spectrum. Substantive learning in the science classroom involves dynamic critical thinking and the ability to communicate and evaluate arguments.

I'd like to offer some tips on keeping two significant elements of science teaching alive during the remote-learning experience: phenomenon-based instruction and purposeful scientific discourse.

Presenting scientific phenomena

Covering scientific phenomena is the mainstay of Next Generation Science Standards–aligned instruction. Phenomenon-based learning is framed around a science mystery, or a discrepant event, to engage and motivate the student. For example, students may be asked to determine if adding six ice cubes to a drink makes it cooler than adding three. Rather than recalling discrete facts, students are

tasked with applying novel information and using transferable problem-solving skills to explain a natural scientific event.

Unfortunately, we no longer have access to lab materials that would allow us to demonstrate most discrepant events to our students. Similarly, the sheer volume of science-themed video content online is downright overwhelming. Where would we even begin if we wanted to inspire a remote science lesson with a natural phenomenon?

Whether we're trying to create demos at home or sift through videos of scientific phenomena online, the event we share must be relatable and accessible. If we're asking students to perform mini experiments at home, exceedingly basic materials would create an experience that was accessible to all learners. In a demonstration illustrating the properties of a cell membrane, for example, I asked my learners to use a cup, dinner plate, and dish soap to create a bubble. If we wish to share a video of a science demonstration, it would be more relatable for students to see their own science teacher perform the experiment rather than offering a YouTube video of an anonymous scientist.

I've had success making remote content both relatable and accessible by interjecting storytelling into my presentation of natural phenomena. When we dramatize the science mystery with captivating, student-friendly language, we can add suspense to an otherwise mundane natural phenomenon. During a recent task relating to osmosis, I replicated my typical live labs by asking students to evaluate some scenarios in which the scientific process has taken place. In one mystery, I brought out celery as a healthy snack and wondered what would happen if I placed one stalk in a beaker of saltwater. The mystery here: Why did the celery become wilted and shriveled? In another scenario, a young boy won a goldfish on the boardwalk and almost released the fish in the ocean. Students are asked to consider: Why can't a goldfish survive in saltwater?

Science mysteries prime students for the learning experience. Instructional materials such as articles, interactive websites, and informative videos can now serve as evidentiary sources as students strive to describe the science behind the mystery.

Furthering scientific discussion

The fundamental job of a scientist is to offer, critique, and refine explanations of the natural world within a community of informed peers. In remote learning, it's important to provide students the opportunity to share prior experiences, offer

informed insights, and clarify their thinking with the help of their classmates. Such discourse allows learners to vet explanations given by others as they arrive at a shared understanding.

Video recording and screencast tools, such as Screencastify and Screencast-O-Matic, can be utilized by the science teacher to promote peer interaction. Students can use screencast software to explain a relatable science mystery through a narration of a slideshow presentation. Live meet-up tools, such as Zoom and Google Meet, are certainly useful in helping the class connect from home, but they can be a bit awkward. Many students are at a loss as to what to say. Some kids turn their cameras off and participate sparingly. Encouraging students to vocalize their ideas through a screencast allows for more structured and purposeful communication.

Responsive feedback from others is another important component of student discourse. This can be achieved by linking student screencasts to a shared Google Doc that all members of the class can access. Learners can be prompted to view a peer's explanation of a natural phenomenon and reply to that student's work. Guiding questions like "What is the best point this person made?" "What aspect of this argument surprised you?" and "What would you like to know more about?" drive a conversation with substance. While the experience is not nearly as immediate as face-to-face discussion, learners are still able to hone communication skills while evaluating peer arguments.

https://www.edutopia.org/article/adapting-science-lessons-distance-learning

6 Tips for Mentoring New Teachers During Distance Learning

By Amie Weinberg, 26 June 2020, *Edutopia*

Experienced teachers typically mentor novices by observing their classes and meeting regularly. That can still happen as both teachers work from home. In the United States many novice educators leave the profession after only a few years of classroom experience. Prince William County Public Schools in Virginia created a mentor

programme to retain quality teachers while also building their skills, self-efficacy, and professional vision.

Mentors provide support through frequent interactions in which they listen, ask questions, and guide novices' professional growth. Mentors meet with mentees for scheduled discussions at least weekly and have additional contact through text, email, phone calls, and impromptu classroom visits. In March, when we began distance schooling, our mentoring program had no choice but to follow suit. Though mentor-mentee interactions now look different, the focus remains the same.

Six strategies

1. **Meet weekly in a virtual, real-time platform so you can see and hear each other:** Using live

   video and audio capabilities like Zoom or Skype allows the pair to see and hear each other, maintaining continuity of typical face-to-face interactions. Additionally, teacher-mentors can better interpret nuances in voice and posture when both participants are engaged in visible, live discussions.

   We encourage mentors and mentees to re-create their school-based planning and reflecting conversations by using active video to provide a deeper, more relatable conversation between both educators. '

2. **Keep a consistent schedule:** If you held a weekly meeting when school was in session, do the same now that you are meeting from home. The day or time might be different from your face-to-face sessions, but it's important to continue with planned meetings each week.
   These planned interactions provided opportunities for our mentors to offer timely support as well as meaningful, open-ended, reflective questions.
3. **Reflect on the face-to-face year:** Being physically distant from classrooms can be an opportunity for contemplation. Our district's mentors took advantage of this by guiding teacher-mentees through deep reflections about the school year. We provided sample open-ended questions that encouraged advancement of professional growth, such as "How might you modify next

year's formative assessments to more accurately reflect students' understanding?"

4. **Share documents and video for authentic feedback: When** they were teaching in their school buildings, mentors often co-taught a lesson or visited their mentees' classrooms. Co-teaching opportunities still exist with remote teaching, and they can be powerful.

5. **Take advantage of the mentor-mentee reciprocal relationship:** Mentors and mentees adjusted to distance learning and new ways to implement lessons. The opportunity encouraged teachers to tap into each other's strengths. Throughout the year, we encouraged a professional, supportive collaboration, and the sudden shift in schooling advanced relationships organically. When both educators focus on professional growth, both teachers' students reap the benefits.

6. **Be available:** First-year teachers anticipated end-of-year celebrations with their students, staff, and mentors. Instead, the school year wrapped up in unanticipated ways, with unpacked classrooms, teachers in isolation, and summer plans on hold. Being available as a mentor provided professional and personal support for young professionals. Experienced teacher-mentors eased mentees' minds about year-end procedures and the unknown start to the upcoming school year. https://www.edutopia.org/article/6-tips-mentoring-new-teachers-during-distance-learning

4 Major Pandemic Challenges Facing Leaders and How to Solve Them

By Joe Galvin, Chief research officer, Vistage

It's hard to be a leader in the best of times, and the Covid-19 pandemic crisis has created an entirely new set of challenges. In the Q2 Vistage CEO Confidence survey in the USA they asked their community of small-and midsize-business leaders what their most significant leadership challenges are today. The findings are amazingly relevant for school principals too.

In the analysis of their nearly 900 open-ended responses, they found four common challenges, along with approaches to overcoming them and continuing the journey toward recovery.

1. Morale

The most common theme shared by CEOs was maintaining and building morale with their leadership teams and employees. It has been a highly stressful six months, which is now compounded as the number of Covid-19 cases rises across the country. This, coupled with increasing uncertainty around timing of the recovery, is raising the fear factor for everyone. Burnout is becoming a real threat, and leaders will continue to be challenged to motivate a diverse workforce struggling with multiple stressors and the pressure to perform.

Leaders need to encourage their people to take a break away from work when they need one--even if they aren't going away for their typical summer vacation. This is going to be increasingly important for maintaining morale over the next few months as we continue to limp toward recovery. Going forward, your priorities should include keeping employees focused and positive, avoiding executive burnout, and inspiring the organization despite continued uncertainty.

2. Workspace concerns

The pandemic has changed what we consider the workplace. CEOs are grappling with not only when to return to the office but also how to do it. You're likely challenged to redesign the workplace with physical health and safety as top priorities. For those workers who are willing to return to the workplace, creating a feeling of safety is vital. But the challenge is well beyond physical workspace.

Even after Covid-19 is under control, there will likely be more people who will look for and change jobs specifically to have the ability to work from home. Working remotely will no longer be a benefit but a requirement for a certain percentage of the workforce. You'll have to define how a hybrid model will work best for your organization.

3. Growth

Driving and sustaining growth is especially difficult to achieve in this environment. To reboot growth, leaders have to really understand the status of their market and the change in buyer needs, wants, and behaviours based on the level of devastation they've experienced.

At the same time, leaders need to continue to innovate and transform to meet new needs. Almost half of Vistage members surveyed have created new products and services during this time. About half of those innovations are going to be permanent offerings going forward.

Creating new demand, reengaging with customers, and rebuilding opportunity pipelines are all prerequisites to increasing business volume. Quickly adjusting to changing customer behaviors and shaping messages that connect to their new reality will be essential in accelerating growth.

4. Uncertainty

Undercutting everything is the overwhelming uncertainty about the length of the pandemic, the direction of the economy, and the unknown impact to the markets. Forecasting has become far less predictable as pre-Covid financial models have lost relevance.

To make decisions now, leaders must rely on the information that is available at the time. They are increasingly relying on instinct--how they feel about an issue--and judgment--the combination of experience, knowledge, and what they've learned, seen, and think. Leaders need to also pull in perspectives of people and resources they trust and respect, such as a tax or financial adviser, other CEOs, and research from credible and objective sources.

The key is to seek multiple perspectives, add them to instinct and judgment, and then make the best possible decision. Be prepared, however, to admit you are wrong in a nanosecond and quickly pivot to what the information, the data, and your instincts tell you is a better path.

Read the full story at: https://www.inc.com/joe-galvin/4-major-pandemic-challenges.html

We cannot go back to what was normal in the past

By Bishop Kevin Dowling, 7 May 2020, The Tablet (with permission of author)

The Church faces two tasks, to help those suffering in the present crisis and to look to a different future. South Africa, even after 26 years of independence, remains one of the most unequal societies in the world. The immediate need to respond to the health crisis

cannot obscure the urgent need to create a more just and equitable society once the pandemic passes. The Church must be involved in both struggles, writes Bishop Kevin Dowling.

The number of infections and deaths recorded so far has been lower than expected. The peak will perhaps arrive only in September, and a long, uncertain road lies ahead. The prevention strategies being implemented only highlight the reality of life for most people here. Since 1 May, everyone who goes to work in a taxi or a car, anyone in the public domain, has to wear a face mask – but they are responsible for making these masks themselves. Social distancing is regarded as essential for diminishing the rate of infections – in that sense it is the right thing to do – but it is simply not always feasible.

Thousands of very poor families in the huge shack settlements around the platinum mines in my diocese live in one room. Social distancing in such

conditions is virtually impossible. How can they stay at home and wash their hands frequently, when there is no readily available water?

The same often applies in the overcrowded townships. People are doing their best, but in my once a week trip to town for food I have seen a lot of people moving around outside their homes, including children playing with their friends.

Many people here are desperately hungry. NGOs, the government's social service departments and ordinary people are responding. But there have been examples of unrest, as thousands of desperate people are not able to find enough to feed their families. We are facing a serious crisis. The Church leadership in Southern Africa, under the bishops' conference and its president, Bishop Sithembele Sipuka, has encouraged us to respond as creatively as possible to the needs of the people, especially the poorest and most vulnerable.

A religious community which lives next to me at St Joseph's Mission, called Tsholofelo Community ("a place of hope"), works in some of the poorest shack settlements. The community supplies over 500 adults and children with food parcels once a week. One sister, a highly qualified nurse, is running a primary health care and ARV clinic in a converted shipping container; other sisters had been running education and training programmes until they were shut down when the lockdown began because they were not considered a "essential service".

I hope that as time goes on, we can start to discern what the experience of this pandemic calls for from the Church in terms of its vision, mission and ministry. We are living a primarily sacramental model. The closing of churches and the suspension of public Masses is challenging us to become a different kind of Church. We cannot go back to what was normal in the past. We must be a Church which is much more inclusive of the destitute and of those who are suffering in so many ways: the victims of violence against women and children, all those who are stigmatised or suffer discrimination.

This requires addressing honestly the systemic issues in the political fabric of the nation, the massive corruption, mismanagement, and incompetence. But it also requires of us as Church to reflect on and discern what the signs of the times call us to be and do, what model of Church we need to create and develop. I hope and pray that this crisis will bring out the treasures of who we are called to be as disciples of Jesus, and to be the field hospital that Pope Francis dreams of. This means building on what we have achieved in the past – but then, to be creative in imagining something new for the future.