

Published by:

ICET: The International Council on Education for Teaching (www.icet4u.org)

and

The MESHGuides network (www.meshguides.org)

An initiative of the Education Futures Collaboration charity

(UK registration number 115 7511)

Copyright © 2021 by:

ICET: The International Council on Education for Teaching (www.icet4u.org)

and

The MESHGuides network (www.meshguides.org)



All rights reserved. Reproduction, copy, or electronic transmission of this publication can be used with written permission from the publishers along with acknowledgement and appropriate referencing.

ISSN 0799-6624

EDITORIAL

Which children in the world experienced little disruption to their schooling during the Covid pandemic—do you know?

The attached report *Teacher Experiences and Practices during Covid-19* (ICET and MESHGuides, 2021) is based on focus group/interview data gathered on teachers' experiences during Covid-19 from 40 countries and 500 educators, plus two international webinars during June to December 2020. The report documents the many challenges teachers faced and solutions that were developed, to support continuity of schooling during the Covid pandemic.

Educators reported children's education continued satisfactorily during Covid where:

1. Virtual schools already existed e.g. in Australia, Canada, the UK, these exist for children in remote areas or for children for whom normal school attendance is not possible. This existing provision usually has some face to face elements built in, but even without this, children could progress their learning for the most part, as before.
2. Schools had well-developed existing online systems and where families/schools could provide internet connectivity and personal devices to all the children. Families without internet access and devices were prevalent in high, medium and low income countries.
3. Where existing home schooling systems and networks were in place.

In a number of countries, the rapid extension of programmes using existing widely accessible technologies such as radio- including solar powered radios, and television took place.

These resources remain and can be harnessed for ongoing national virtual schools—potentially opening up schooling to those who have previously missed out just as the Open University movement provides open access to university level learning.

We found several types of virtual school which were well established and which have been able to continue to operate satisfactorily during the Covid pandemic:

1. Australia's Schools of the Air;
2. Canada's "telephone school";
3. Alternative provision for high needs children such as those available, for example, in some English local authorities.

Teachers from across the world and from low, medium and high income countries report they have experienced positive professional development and rapid upskilling in the use of technologies to support remote learning - and that they want to continue to use technologies for teaching.

This then is the moment to build on the achievements under the Covid constraints and build back differently post-Covid.

Virtual schools with personal and flexible tutoring provide an opportunity for motivated students for personalised catch up - necessary due to Covid disruption of schooling as well as opportunities for those who missed out on schooling first time around.

Are there enough people of good will and influence in your country to act on the lessons from Covid to make school-based virtual education available to all - rural and urban dwellers, young and old, poor and rich?

If so the models of schooling mentioned above together with the new knowledge teachers have about teaching and the potential for universal connectivity provided by low flying satellite technology give you a solution. Collaboration with other countries should enable knowledge and cost sharing and speedier development along with supportive co-development.

If you are ready to seize the moment you are invited to let us know by emailing the ICET chairperson at contact@icet4u.org and/or Professor Marilyn Leask at enquiries@meshguides.org. If there is sufficient interest, we will be starting a series of ICET/MESHGuides webinars to discuss potential collaborations to achieve Education for All in your country or your community.

We hope you find this report useful.

James. G O'Meara

Professor James O'Meara, President of ICET

Dr. Carol Hordatt Gentles

Dr. Carol Hordatt Gentles, ICET Chair 2019-2021

Dr S. Younie

Professors Sarah Younie and

Marilyn Leask

Marilyn Leask (UK)

for the Education Futures Collaboration charity's MESHGuides initiative (www.meshguides.org)

August 2021

CO-RESEARCHERS

RESEARCHERS	INSTITUTION	PARTICIPANT'S COUNTRIES
Sumalee Sungstri Darunee Jumpatong Ratana Daungkaew Taweewat Watthanakuljaroen Niranart Sansa	School of Educational Studies Sukhothai Thammathirat Open University Thailand	Thailand
Tonya Huber Alexandra Christiane Daub Maria Cristina Ferraz Soares Maricruz Flores Vasquez Kristen Pedersen Erdem Sara Abi Villanueva	College of Education, Texas A&M International University, Laredo, Texas, USA	USA
Tracey Tokuhama-Espinosa Cynthia Borja Mishel Tirira Lina Lopez	Connections: The Learning Sciences Platform/Conexiones: La plataforma de las ciencias del aprendizaje	Ecuador, Peru, Colombia, Argentina, Guatemala, USA, Honduras, Mexico, and Paraguay
Mariana Coolican	Partnerships Public Sector Officer, United Nations Children's Fund Regional Office of Latin American and the Caribbean (UNICEF LACRO)—Panama, Republic of Panama ICET (International Council of Education for Teaching)	Argentina, Barbados, Guyana, Belize, St. Vincent, Dominican Republic, Hawaii
Carol Hordatt Gentles	School of Education, The UWI, Mona ICET (International Council of Education for Teaching)	Jamaica

CO-RESEARCHERS (cont'd)

Marilyn Leask Sarah Younie	MESH - EFC (Education Futures Collaboration charity) De Montfort University, UK	UK
Stephen Hall	Staffordshire University	UK
Linda Devlin	Wolverhampton University	UK
Purna Shrestha	Education Lead, VSO (Voluntary Services Overseas)	Myanmar, Uganda, Nigeria, Nepal
Jwalin Patel	President, Co-Founder & Trustee, Together in Development & Education Foundation	India
6 Foluke Bosede	<ul style="list-style-type: none"> Federal College of Education (Technical). Omoku, Rivers State, Nigeria The Mathematical Association of Nigeria (MAN) Forte City Global Services 	Nigeria
Theophile Nsengimana	University of Rwanda- College of Education	Rwanda
Khong Heng Yen Ling Siew Eng	Universiti Teknologi MARA Sarawak Branch	Malaysia
Joanna Madalinska-Michalak Paulina Nowak	Faculty of Education, University of Warsaw	Poland
Kezang Sherab	Paro College of Education, Royal University of Bhutan	Bhutan
Ewa Johnsson Urszula Janczar	Adam Mickiewicz University	Poland
Martha Prata-Linhares	Federal University of Triângulo Mineiro (UFTM)	Brazil

TABLE OF CONTENTS

EXECUTIVE SUMMARY | 9

INTRODUCTION AND CONTEXT | 12

FINDINGS | 13

THEME 1: How teachers' jobs have changed since the pandemic | 14

1.1 Ways of communicating with students, colleagues and parents | 15

1.2 Teachers' personal, emotional and professional lives changed | 16

1.3. Changes in Income | 18

1.4 Pedagogy changed: Mindset and paradigm shift | 18

1.5 Changes in accustomed ways of power and authority | 21

1.6 Scope and weight of workload | 21

1.7 Curriculum and assessment changes | 22

1.8 Relationships with students and families | 24

1.9 Accountability | 18

THEME 2: Useful strategies | 25

2.1 Strategies for continuing learning | 25

2.2 Online tools | 27

2.3. Online classroom challenges | 28

2.4 Adopting a new mindset and paradigm shift | 28

2.5 Unexpected benefits | 28

THEME 3: Strategies/practices teachers plan to keep | 29

THEME 4: What teachers will do differently in the future | 31

THEME 5: What teachers say needs to be done to sustain education in this pandemic
and any future global crises | 33

TABLE OF CONTENTS

- Challenge 1. Government leadership | 33
- Challenge 2. Initial and in-service teacher training and new pedagogies | 34
- Challenge 3. Teaching practical subjects | 35
- Challenge 4. Loss of learning and increased dropout rates | 35
- Challenge 5. Equity and student and teacher access to technology, internet and electricity | 35

TEACHERS' RECOMMENDATIONS | 30

CONCLUSIONS | 38

Questions that need to be answered by policy makers and teachers/teacher educators to ensure continuity of learning and assessment for future crises | 38

LIST OF TABLES

Table 1. Media/approaches used when schools closed, person/organisation responsible and comments | 26

Table 2. Tools teachers reported using for online teaching | 27

APPENDIX A • Definitions | 39

APPENDIX B • Facilitators and note takers:
Virtual symposia, 8 and 15 October 2020 | 40

APPENDIX C • List of those contributing via the virtual symposia | 42

REFERENCES | 46



FIELD QUOTE

“The pandemic has entirely changed the course of my job. It has taught me the true definition of leadership...”

ACKNOWLEDGEMENTS

This was a truly collaborative project, in which the voices of 500 educators from 40 countries were acknowledged and documented. We want to express our deep appreciation for their willingness to participate. We are indebted to our co-researchers who conducted interviews, collated data and peer reviewed the report. We also acknowledge our symposia participants and colleagues who facilitated the breakout sessions.

We also wish to acknowledge the contribution of Western Governors University (WGU), particularly Deborah Eldridge, Aaron Dodson and Julie Hernandez, who so kindly provided technological leadership and support for our two Virtual Symposia.

We offer a special thank you to our Symposia keynote speaker, Dr. Helen Woodley, Senior Lecturer at Northumbria University, Durham, United Kingdom, for her powerful presentation entitled: *Teacher Voice in a Global Pandemic: Why it is Essential*.

Appreciation is extended also to Heather Munro from the School of Education Publications Unit, The University of the West Indies, Mona (heather.munro@uwimona.edu.jm) for her design and copy-editing work, and to Ben Hramiak (benhramiak@gmail.com) for editing.



EXECUTIVE SUMMARY

The COVID 19 pandemic has created challenges for education that have been unprecedented with implications for significant changes in how we think about and practice the work of teaching and learning. The International Teacher Task Force (ITTF, 2020) estimated in 2020 that “around 63 million primary and secondary teachers around the world were affected by school closures in 165 countries” due to the pandemic. This placed teachers “on the frontlines of the response to ensure” that learning continued for 1.5 billion students worldwide. In rising to this challenge many teachers had to shift rapidly from accustomed ways of teaching in physical classrooms to teaching online. In contexts where this was difficult or not possible, teachers had to figure out unconventional ways to reach vulnerable and marginalized students.

Initial reports (ITTF, 2020; EI, 2020) suggest that while the response of teachers in the first stages of the pandemic was seen as heroic and praiseworthy, it also affected them psychologically and professionally. In many instances, for example, teachers worked during school closures without adequate socio-emotional support. Many functioned in a climate of fear and anxiety around their own safety and that of their families, while adapting to working from home. Teachers also had to figure out how to adjust curricula, their pedagogy and practice for online or other delivery without professional training or support. Currently, as countries move towards reopening schools (although the threat of the pandemic is not over), expectations for teacher work have changed again. Uncertainties about how to return to in-person schooling safely and political tensions around how to finance this are also impacting teachers. Not only are they expected to return to physical classrooms and continue providing quality learning for all students, they are also expected, at the same time, to play key roles in making schools into safe spaces.

Critical to the success of planning for and managing this new normal in education, is the development of policies guided by the firsthand experiences of teachers. This view is supported by the call from the ITTF (2020) to “include teachers in developing COVID-19 education responses... at all steps of education policy-making and planning.” It speaks to the notion that “teacher voice is a critical element in any successful approach” (Armand et al., 2020, p. 2) to delivering quality education in this time of COVID-19, and indeed in times of any future global crises. This is so because it is teachers who know their students and know where they were academically when schools shut down. It is teachers who have monitored their students’ social-emotional and mental health (Armand et al., 2020), communicated with students’ parents and tried to support their students’ transition to online learning. In situations where online delivery has been problematic and students could not be reached, it was teachers who noted and monitored the increasing marginalization of their students. It was teachers

who strategized and led the search for ways to connect with students. It is also teachers who experienced having to function without proper support. It is thus teachers who are best positioned to offer insight into the types of professional learning opportunities and training they need to function effectively now and in the future.

Thus, the premise that underpinned this project was that listening to and documenting the voices of teachers must be a core part of charting the way forward for education in this unprecedented time. This report documents the experiences of teachers from thirty countries in the period March to December 2020. It reports in teachers' own words what they experienced, what they learned, the challenges they faced, what they did to overcome these, and what they envisage as possibilities for teaching and learning in a post COVID-19 world.

The interviews and surveys providing data for this report were gathered by members of the ICET and MESHGuides networks from June to December 2020. The data show that across the continents, teachers from low, medium and high income countries (LIC, MIC and HIC) were very positive about the new skills and knowledge they acquired and most report an ongoing interest in using online teaching, learning and assessment strategies to support students - not to replace face to face teaching but to supplement this. (See Appendix A).

This step change in skills and knowledge is a phenomenon which could be of long term benefit to societies, teachers and learners worldwide: if access to the internet and to data could be universal. There is an opportunity at this point in time, for all countries to consider the long term future for online supported teaching as part of their plans for raising achievement. During the COVID-19 period, many companies and governments made free offers and provided resources which may disappear post-COVID. For those children in families with no access to internet or personal technology, the COVID-19 period is likely to have led to loss of education. UNESCO estimates 1.6 billion learners in 190 countries children have lost schooling during this period (UNESCO, 2020).

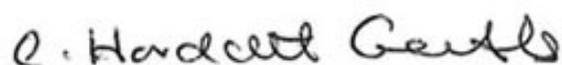
As might be expected, factors which impacted on teachers' experiences and practices during COVID-19 included the economic status of the country, time of year, size of the population, degree of centralisation of the education sector and its relationship with the government. Despite differences in culture and context, we found that teachers' experiences, the new practices needed, and the challenges were similar across all countries - regardless of whether the county is a low, middle or high income country.

One factor that stands out as supporting teachers and students through a difficult time and providing continuity of education for all is high quality leadership at the national level, coupled with a national commitment to entitlement for schooling for all children. Another factor that stands out is the commitment of teachers globally to do the best they can for their students, in spite of the many challenges created by the COVID-19 pandemic.

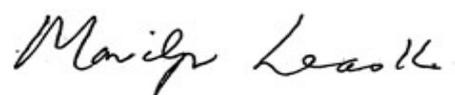
We raise a series of questions at the end of this report about how this momentum can be maintained and whether universal access to learning materials, via the internet or satellite communications could be seen alongside access to clean water, food, education and health care as core goals for all governments. The UN's Sustainable Development Goal 4c, is focused on improving the quality of education for all children. The COVID period has shown what can be done with online learning to support this goal. It has also shown how we can, as educators, take ownership of our practice and learning in times of crisis. The question is whether the lessons learned from our experiences during this pandemic will be seen as significant by those charged with planning for education in the future. What value will be placed on the voices of teachers?



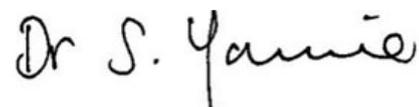
Professor James O'Meara, President of ICET



Dr. Carol Hordatt Gentles, ICET Chair 2019-2021



Professor Marilyn Leask*



Professor Sarah Younie*

**Co-chairs Education Futures Collaboration Charity on behalf of the MESHGuides network and De Montfort University, UK*

1. INTRODUCTION AND CONTEXT

In early 2020, worldwide, as the COVID-19 pandemic spread, teachers found their schools were closed with little notice but that governments expected the education of children to continue. In low, medium and high income countries (LIC, MIC and HIC), teachers found they were expected to make an almost immediate transition to online teaching. In some countries teachers had 48 hours notice, in others, closure came just before the summer holidays giving a couple of months to prepare.

The Style of the Report

One of the purposes of this report is to record the voice of teachers. The text in italics in the report are teachers' own words.

METHODOLOGY IN A BOX

Data were gathered during June to December 2020 by ICET and MESH network members from over 500 educators from across 40 countries and from discussions held in two international symposia on 8th and 15th October 2020. What was gathered are seen as snapshots of educators' experiences - classroom teachers, teachers in training and teacher educators. The following questions were posed to educators in focus groups, in individual interviews and surveys. There was also the opportunity for educators to speak about other issues they thought to be important.

- Question 1: How has your job changed since the pandemic?
- Question 2: What new strategies/practices did you develop?
- Question 3: What strategies/practices do you want to continue using?
- Question 4: What do you see yourself doing differently in the future?
- Question 5: What do you see as challenges for sustaining education during times of crisis?

Data Analysis: The data were collated around the themes which emerged from the data collection. The themes are listed in the Contents list.

Ethics: The researchers complied with the ethical requirements for research in their contexts.

2. FINDINGS

The findings are presented below around the five themes emerging from the data:

Theme 1: How Teachers' jobs have changed since the pandemic

Theme 2: Strategies teachers found useful

Theme 3 : Strategies/practices teachers want to continue using

Theme 4: What teachers will do differently in the future

Theme 5: What teachers see as challenges for sustaining education during times of crisis



THEME 1: How Teachers' Jobs Changed Since the Pandemic

What follows in this section summarises the ways teachers in both LIC/HIC reported that their jobs and personal lives changed as a result of schools closing. For many, this was followed by a requirement to teach online. While some lost their jobs, others who remained teaching report experiencing rapid development of new practices.

"Altogether, this pandemic has changed the course of our job for the better. It taught us lessons that will prepare us for a better future."

Initially for many teachers the immediacy of the shutdown - closure of schools created a state of paralysis and fear. Many School leaders were also at a loss as to what to do. The early success of transitioning to remote teaching was very much dependent on personality, disposition and teachers' competences with online teaching. The capacity of school leaders to be responsive to the new normal was also a major factor. Many teachers reported being expected to be on call 24/7 at a time where they may have had caring responsibilities for family/neighbours.

"At the beginning of the quarantine, the first month, we remained in a state of suspension, without knowing what or how to do. But as the news started to announce it was serious and everybody started to realize how dangerous it would be, my colleagues started to think about some initiatives."

"At first, I was really static. I couldn't think of anything I could do to teach very young kids to speak English remotely. I confess I am not a very creative type of person. But as I saw my colleagues preparing and delivering lessons to the students I started to believe that I would be able to help kids too, somehow."

Some busied themselves as they would after a natural disaster - catering to their students' physical needs.

"We never taught for the first three weeks. My principal was so worried about the children who would not have a proper meal because they would miss the school lunch. So some of us went everyday to the school to cook lunches to deliver to their homes."

"Fundamentals of my job such as preparing for lessons, teaching and assessment did not change. However, my approach to these fundamentals has changed a lot, especially in teaching and assessment. Teaching was virtual and so was assessment. Virtual teaching wasn't easy as organizing virtual lessons depended on many factors such as internet connectivity, ICT facilities on both sides (teacher & student), availability of time from both ends (students would be attending to family and agricultural chores during the day) and network clogging. In fact, classes could happen in late evenings and early mornings."

"It has changed immensely. I find myself working around the clock with no respite from the continuous flow of directives being given even on holidays. Unlike time-tabled timings, during the pandemic there is no such thing as working 'clocked hours'. It is an

avalanche of directives and tasks that keep changing with the change in the pandemic patterns. I played three roles-lecturer, teacher to my child and parent.”

School leaders found themselves providing leadership on health matters not just to the school community but also to the local community:

The pandemic has entirely changed the course of my job. It has taught me the true definition of leadership. As a Vice Principal (Academic Head), I had to emerge smartly to the needs of this pandemic. Our colleagues expect us to know everything. So, we had to read as much as we could regarding the online teaching alternatives, liaise with relevant agencies and get back to the teachers with solutions. The pandemic has interfered with our detailed and comprehensive plans which had been made with high commitment from the teachers to work hard at their best to bring good results in the [public examinations]. Moreover... remedial classes... came to a sudden halt.”

1.1 WAYS OF COMMUNICATING WITH STUDENTS, COLLEAGUES AND PARENTS

In all countries, whether low, medium or high income countries, online teaching was expected where possible. A number of countries made extensive use of radio (including the use of solar powered radios) and television and teachers went to considerable lengths to deliver and distribute materials to students - driving/walking/cycling, using local tradespeople and shops. In some countries teachers delivered and set up laptops/tablets and wireless connections to support online learning.

Online teaching required teachers to develop new language to manage their classes and different ways of interacting with students. The dynamic of “classroom” interactions changed. The list below provides examples from teachers of how the ways they communicated changed. Sometimes the experiences are contradictory as similar interventions led to different outcomes in different contexts. Nevertheless what they shared gave insights into what was experienced. Teachers reported:

- Having to face the pandemic led to lowering of traditional classroom walls.
- At short notice in most countries, teachers left physical classrooms and started teaching online - some from home, some were required to do this in their classrooms. In one country, summer holidays were just starting at lockdown which gave teachers two months to prepare for online teaching, others had 48 hours notice.
- Teachers had to reach out to parents to establish what technology and connectivity was available to students and to teach them how to help their children. Parents appeared in online lessons, and complaints about the quality of online teaching were received. Because of the cost of data, parents had to prioritise the schooling of some of their children over others, and some subjects over others.
- Qualified parents (e.g. university faculty, teachers) reached out to teachers and offered to help them with their online teaching and delivery.
- Teachers realised the power of virtual communication as a means of professional collaboration.
- Some teachers did not have home environments which were easy to work in. Issues about students’ and teachers’ privacy were reported as all could see into their bedrooms and homes.
- Teachers found students who were previously silent in class contributed more with online teaching through typing questions into ‘chat windows’ but also the lack of social interaction created a hindrance in promoting learning.

- Following international webinars as part of research for this report, teachers in LIC felt there was a level playing field for contributions in online webinars which is not what they felt when attending face to face international conferences.

1.2 TEACHERS' PERSONAL, EMOTIONAL AND PROFESSIONAL LIVES CHANGED

At the beginning of the pandemic, no one had any idea of how quickly the virus would spread and how widespread deaths would be. At the time of writing, we have some understanding of how to slow down spread and treatments are improving so it is easy to forget the massive uncertainty and anxiety everyone faced in March 2020 when school closures started to accelerate across countries. Governments varied in their recognition of the health risks to teachers when schools in many countries resumed after the initial surge of infections. Consequently, teachers' lives changed as they faced not only personal and emotional challenges, but they also experienced personal and professional development gains.

1.2.1 TEACHERS FACED PERSONAL CHALLENGES THAT WERE BOTH PSYCHOLOGICAL AND EMOTIONAL

Teachers described feeling:

- *"Plunged into a different world"*
- *"Ripped from my comfort zone"*
- Frustrated and demotivated
- Fear and anxiety: for students who dropped out, for their own family, for themselves. Teachers reported not having time to mourn: many colleagues were dying but teachers had to keep going. Bereaved students also had to be supported.
- Embarrassment because of inadequate skill levels with the use of technology
- Stressed:
 - » because certainty changed to uncertainty
 - » by feeling "naked" in front of the parents who now see them at home giving the class. This was a very big change. *"At the beginning it was very nerve-wracking to record classes and be visible on camera"*
 - » By feeling they had to be available all the time, *"instead of teaching for 6 hours we were on call 24/7"*
 - » *"Blurred boundaries between the physical and mental aspects of work"*

Teachers living on their own, in particular, suffered emotionally. They felt socially isolated - separated from students and colleagues. Teachers reported the following:

- *"I honestly prefer going to work at the college as home is a place full of other distractions"*
- Loss of social life: *"It is tough to live without the connection with society"*
- Concern about losing ties with the other teachers
- *"I am stressed socially because my school has been closed for five months. I am worried about my students because most of them come from economically poor backgrounds"*
- *My students are left with an educational delay that we don't know how to rescue*

Others felt betrayed by the ways in which the pandemic changed how colleagues behaved. One of the teachers pointed out that there were teachers selling teaching materials prepared by teachers themselves, which before the pandemic were often offered for free exchange among colleagues.

“There is one thing that started to irritate me a lot...there are groups of teachers’ on Facebook and before, when you needed some materials, or you had something to share with others, you could send them to an email or something; now everything is ‘for sale’”

1.2.2 TEACHERS SAW SOME CHANGES IN THEIR PERSONAL AND PROFESSIONAL LIVES AS POSITIVE

They appreciated that:

- working from home meant less stress from traffic and less effort for self-grooming,
- relationships with others changed and became more personal. Teachers who were concerned about each other’s physical and mental health, reached out to colleagues and relationships developed from just saying “hello” in the hallways,
- The use of digital technologies facilitated the participation of more teachers in meetings.
- *The union between co-workers was a practice that worked. I am closer to my colleagues. The dialogue between us teachers has increased. Dialogue, being able to share and share to overcome the difficulties we face in crises.*
- *Some complained about the excess of meetings and live events in teacher training programs.*
 - » They were learning how to use technology to enhance their personal and professional lives
 - » Their lives broadened. They:
 - * developed multi-tasking skills.
 - * were afforded opportunities to be an online content writer.
 - * had increased information and knowledge through internet access.
 - * had more time for book reading other than syllabus and office work.



1.3 CHANGES IN INCOME

Some teachers lost their jobs, had their wages reduced, and/or lost additional income they usually earned from extra classes and private tutoring.

Some returned to agriculture and vending to make do financially. Others were left unemployed. In one LIC, the government said private schools were not allowed to charge for online courses thus putting teachers' jobs at risk. On the other hand, in some countries extra teachers were hired after the lockdown to teach online. Some were hired by governments to support the task of reaching students online. Some teachers were hired privately by families or groups of parents to provide schooling at home for their children. Teachers with specialist IT skills reported responding to a demand for paid facilitation of workshops, webinars for their colleagues.

1.4 PEDAGOGY CHANGED

To survive and manage in virtual spaces teachers made changes to their pedagogy. Many reported they found that online delivery made their teaching more student centred and they needed to be more mindful of practising differentiation. Teachers reported that the paradigm shifts they have been resisting for so long have taken place, for example moving from teacher to learner centred teaching and towards integration of technology. There were numerous ways in which pedagogy changed:

- A new mindset was emerging: *Previously technology was used as a side dish – now digital tools are the main dish.*
- Students not used to self-regulation were at a disadvantage.
- They were becoming more creative: “my teaching improved”.
- I had to think about moving from pen and paper assessments.
- I realised I can now actually cater to all the different learning needs of my students.
- Teachers changed ways of:
 - » providing feedback to students, parents.
 - » ways of record keeping.
 - » ways of recording memories of teaching and learning (actual snapshots and recordings possible and now allowed).
 - » techniques for engaging students.
- Where online radio was used, the teachers' role was to inform the students, rather than teach.
- ‘Foreign’ ideas don't necessarily work.
- Distance learning is less efficient as compared to class learning.
- Increased independent learning took place: “I have begun to engage my students increasingly into self-exploration and independent learning. Before pandemic 60% of my classes were used in information input through lecture. Today, information input in the form of lecture is almost 0%”.
- The pandemic demanded a new methodology and teaching practices to support the students on a large scale. It has changed the whole teaching and learning environment scenario from classroom to home. Unlike in the class, where we have lively and interactive students, online classes are less of an interaction and more of a lecture. At home, teachers spent most of their hours just preparing PowerPoint slides which ultimately compromise the quality of delivery and instruction in the class.
- I added time in every class forum to discuss matters concerning [students] besides teaching and learning.
- A combination of synchronous and asynchronous methods seems to be most effective.

tive for me. While recorded video seems to help, I have realised some students need the guided face-to-face zoom meeting to keep them focused and serious about their studies. Some content (like grammar rules), is actually easier to record and share – this seems to give students plenty of time to watch the video as well as practise.

- Encouraging students to explore on their own and asking them to share their observations/understandings of concepts/skills/knowledge have been found to be very useful.
- Uploading reading articles on the college Virtual Learning Environment and creating a discussion forum for every reading that the students did was the most useful strategy for me.
- Forum discussion seems to be much more engaging in Facebook than VLE, and video presentation allowed students to show their creativity.
- I intend to continue my facilitating students in their learning through exploration. I will also put in more effort into encouraging my students to build independent learning and study skills.
- Teachers have become more adaptable on a day-to-day basis. Teachers are required to now respond to the small things more frequently in their daily teaching, rather than the grand ideas that frame teaching. They find they concentrate more on smaller issues.
- Being prepared for issues like power-failures.
- Internet connectivity causes the teachers to constantly repeat themselves. Eye contact has been replaced with probing questions, “Do you understand me,” instead of body language cues. Teachers felt that this lack of visual feedback was a challenge.
- There was no “recipe” that can guide appropriate responses, regarding provision of high-quality professional learning for teaching students. They spent more time preparing study materials (selecting articles, preparing presentations, selecting videos, recording lectures) and more time explaining how to study recommended content.
- Virtual classrooms offer a challenge of reaching and identifying students who need assistance. Often you have no way of knowing if a child has grasped a concept or not.
- With online teaching the teacher struggles to be able to monitor the participation of learners in the lesson.
- A first-year teacher felt very daunted by the whole process. Felt that there was a challenge to identify the level of performance of students and their level of engagement in the lesson. Felt that lessons learned before lockdown, as a first-year teacher, around not being a perfectionist were vital to being able to cope. Online teaching is a challenge for a person who needs to constantly feel in control.
- Questioning techniques to learners had to change.
- Pace of teaching is slower. Thus, there exists a challenge with getting through the curriculum and teachers have to adapt to this and find new ways to achieve this.
- Challenges are subject specific: Teaching of different subjects requires different skills and presents with different challenges. Respondents said that teaching biology went faster as they students were less likely to be distracted by each other. Teaching maths was found to be more difficult as the teacher has to rely on the students bringing problems to the lesson. With normal classroom teaching there is the option to walk around and check on student progress.
- They provided the students with more independent work to do to keep them active all the time and so that students felt more responsible for their own progress. In summary giving more independent work seems to be a useful strategy.
- Students have responded well to independent learning and it has benefitted them.
- Less assessment-based teaching has been a result, this has been found to be useful as there is more contact time for discussion and learning. Assessment was replaced with independent learning.

- Teachers found that there was a challenge with interaction and discussion. Two respondents offered up a useful strategy as a solution, they found that to get everyone (students) engaged they used a 'rolodex' method where they would go methodically through the student's names, calling each student out, to elicit responses.
- Teachers have employed the use of one-on-one meetings on the Microsoft Teams platform during lessons where students have to 'screen share' their work for discussion. This has been found to be a useful strategy to increase student accountability.
- Screen sharing replaced walking around the class as a method of gauging learner performance on an ongoing basis.
- Another strategy: When teachers want to see if a student who is logged on to the lesson is actually present in the lesson, they remove the student and then re-invite them. This allows for the teacher to know instantly if the student is concentrating. This technique is a substitute for asking a student to concentrate in class where you can see them directly.
- The easy ability to collaborate with learners after hours has allowed for elaboration of lesson concepts after the lesson has ended.
- Sharing applications and diagrams in the virtual classroom has been beneficial and enhanced teaching.
- Teachers have recommended that students 'unmute' their microphones and interject if they have a question, rather than use the 'raise hand function.'
- Ability to save all information on the laptops have been very useful for both teachers and students. Accountability and record keeping have been enhanced.
- Using PowerPoint presentations has been very useful with online teaching. Students read and discuss the electronic slides with the group. Rolodex methods to generate discussions have worked well.
- The use of videos was challenging as students battled to focus on the objectives of the lesson. However, how this was done was seen to be the difference between this strategy being successful or not.
- Teachers use a strategy to continuously pull students into the lesson with probing questions. Rather than present passively they directed questions at students.
- One teacher responded that she has developed a technique where she does a work recap at the end of every online teaching day. Lesson consolidation at the end was identified as a powerful and useful strategy.
- A challenge for one teacher was class control. She struggled to stop random questions and keep students on track. This respondent found that using the 'raise hand tool' was effective.
- Teachers use an external white-board app instead of an internal Microsoft Teams white-board app, to ensure that students could not delete work as the teacher progresses. Sometimes students disrupt the lesson by interfering with the technology.
- One respondent recommended the use of flipped classroom teaching as a useful strategy. She sends students off to research a topic offline. Students would have to collaborate offline and then present live and online, as if they were the teacher. The teacher would then encourage constructive criticism from peers. Teachers would delegate lesson topics for students to prep and deliver. However, a recap was necessary of the work covered by the students. Students were encouraged to use PowerPoints for their presentations.
- For maths, the interactive white board was identified to be the best teaching tool available on the online learning platform.
- The strategy of group work was recommended. Students make their own Teams group. Each student had to come on live and show their faces and give feedback on their group's work. There is a function in Microsoft Teams that allows for students to be placed into

groups. These are called breakaway rooms in the Teams Platform. Teachers can 'pop in' to see progress. Criticism: it was a time consuming activity. You can lose a week or two weeks with the group work. However, it is considered to be a useful strategy to get students to interact with each other.

- The fact that I already had a vast bank of PowerPoints that I already used in class for delivery certainly helped me to adjust to the new delivery method. Not having to start from scratch certainly was a bonus!
- I have embraced the online platform that has been developed and find the actual delivery of classes enjoyable.
- I have learned new skills and have fully immersed myself in this new way of delivering.

However, engaging and keeping all students engaged was reported as difficult to achieve consistently.

1.5 CHANGES IN ACCUSTOMED WAYS OF MANAGING POWER AND AUTHORITY

Techniques that teachers used to assert authority in face to face lessons did not work online. There was a decentering of power relations as the teacher moved from a central role to a facilitating role. Consequently,

- Classroom behaviour management techniques used before were no longer relevant
- Teachers lost authority over students: students had more choice about paying more attention. *The teacher cannot make students turn on the video or speak.*
- Teachers lost being able to manage and reach students through touch and body language
- Teachers lost the walls of classroom to confine students and co-opt attention
- Teachers had to use more respectful ways of engaging
- Power and authority were now shared - *Parents are in the classroom and monitoring: "Parents are there seeing what you do".*
- Some teachers had been employed after lockdown and were now teaching online to students they had never met in person before. This was a new challenge to cope with.
- Teachers felt disempowered by not being able to insist on student attendance. *'Some students have access to the internet but they use the reason of "cannot access the internet" as an excuse NOT to attend online classes'.*

1.6 SCOPE AND WEIGHT OF WORKLOAD

Teachers reported being on duty 24/7 with many additional responsibilities not only for different modes of teaching but for looking after the wellbeing of children, families and their communities. In some countries, teachers were officially designated "key or essential workers". The following statements give an indication of different workload changes:

- In the first few weeks some teachers gave extra time going into school to cook lunches for students who depended on school lunches (low, medium and high income countries!). They also felt they needed to be on call all the time to support their students and parents
- At the onset of the pandemic, teachers were required to organize study packages for students and some teachers transferred their teaching online. For the academic year 2020 - 2021, the vast majority of teachers had some training geared towards developing skills to facilitate online teaching using Microsoft Teams, Google Classroom and other platforms."
- *The bar of competences required for teachers to function was raised.*
- Teachers experienced steep learning curves as they were trying to identify, learn and manage technology.
- Physical demands changed dramatically.

“Sometimes we have to give instructions late at night, on weekends and holidays, whenever parents are available because many of them must work during the day and don’t have time to talk to teachers during the time when teachers are supposed to work. Once it was a Sunday, I was with my family at a restaurant, having lunch and giving instructions to a mother, (through the WhatsApp), as she couldn’t talk to me any other time because she works 6 days a week.”

- *How you use your body changed - now sedentary instead of walking around or standing in classroom*
- *I was carrying the emotional, psychological weight of the pandemic.*
- *Had to manage mountains of emails, messages (text messages, WhatsApp).*
- *Teachers had to reach out to students individually to help them manage new ways of learning*
- *What teachers worried about changed.*
- *A huge worry was reaching all students and catering to their students’ needs*
- *Many students never accessed online classes – some reached only 5 % - 50%, one reported reaching only 1%. It was disheartening to teachers to find their students had no electricity (high and low income countries).*
- *Markers used to gauge how one is doing the job changed*
- *The amount of student work received was far less. I lost knowing if students are learning through tracking their scores/ performance on classroom tasks.*
- *Do not know how to gauge one’s effectiveness*
- *Before Covid we worked for 6 hrs and now 24/7*
- *When the schools reopen... teachers need to ensure their students always follow social distancing and keep classrooms hygienic. The number of students in one class can reach 50. When the school reopens, this number needs to be reduced to keep social distancing. Teachers need to work extra hours when their class needs to split into two classes.*
- *I have redesigned the house physically for work. Teachers must also redesign their family and their jobs simultaneously.*

1.7 CURRICULUM AND ASSESSMENT CHANGES

1.7.1 Curriculum

Where online teaching was required, some schools required teachers and students to follow the timetable and the curriculum as though they were in school. Reports on this strategy were not positive.

- *Parents who were also teachers reported their children found this excruciatingly boring.*
- *Some schools had a policy of ‘screens off’ (for privacy for the individual pupil), others had a policy that all screens had to be on so pupils could be observed). Each approach carried problems.*

- Alternative approaches using much more independent learning are reported in the pedagogy section 1.4.
- Decisions had to be made about what to cover and what couldn't be covered: *"we add to the Curriculum more than we can chew"*.
- One respondent mentioned that sustaining teaching during a crisis is different from students adapting to a crisis. Teachers spoke about the necessity to prepare students for a 'new future' as the normal is now gone. When this crisis is over, there is the possibility that another crisis will arise. Students need to be prepared with skills for such a possible eventuality. Teaching students' new skills for the eventuality of another sustained period of isolation was seen as necessary.
- Teachers raised concerns about how you teach students to deal with an uncertain future.

1.7.2 ASSESSMENT

A major challenge with assessment came from the disruption to public high stakes examinations which acted as a filter to access to high status jobs, university courses and to accessing high school provision. Some testing regimes continued, others were in chaos. Teachers were asked at short notice to provide teacher assessments estimating students' grades. This was a massive task.

Teachers often said that running classes synchronously was a better method than asynchronous work and was appreciated by students. They also found it useful to conduct tests and examinations on-line, as well as consultations with students (individual consultations, during which it was possible to talk to the student using an application) and on-line duties, where it was possible to contact them live.

Providing students with recorded lectures, presentations and other multimedia materials was also found useful. The teachers pointed out that the students who did not want to speak during the traditional classes often spoke out during online classes. Therefore, teachers appreciated the creation of online discussions using virtual forums and bulletin boards for this purpose, which improved communication with students. Some teachers pointed out that creating tasks, quizzes, and tests online was also helpful in verifying students' knowledge.

The teachers said that they would like to change the form of conducting practical classes in various subjects, as well as the method of conducting on-line exams. There was a concern of keeping academic honesty, because during online written exams, teachers could not fully control whether students answer the questions by themselves. Teachers also claimed that they would like to change the manner of checking attendance on-line.

Another important challenge is building trust in students who have a greater possibility of dishonest online behavior. This challenge was related to the problem of building a sense of school and academic community and belonging in students, which is difficult in the times of distance learning.

Other points made about assessment included:

- Teachers found that submitting assignments online and marking assignments online had been a helpful strategy that allowed for good feedback and was expedient.
- Online/eternal competitions were a useful motivation strategy to get students involved and engaged. "They love that," was one response.
- Teaching geography without a paper map was reported to be impossible. A strategy was mentioned, where the teacher found YouTube videos of teachers using a proper map with contour lines has helped a lot.

- A teacher recommended the use of a strategy where students do ‘field research’ in their gardens at home as it gives students an opportunity to be creative and get outside and off the screen for a while.
- Students were encouraged to use their cell phones to activate Microsoft Teams and upload J-Peg files for the teacher to peruse or assess. This technique was found to be useful for the sharing of large files.
- French teachers found that the use of a structured video series with comprehension questions can be an effective technique.
- The use of Microsoft Forms to create online quizzes has been seen to be an effective strategy which can be used for peer marking and instant feedback. It was reported by the respondent that instant feedback motivates the students. At the end of every section a quiz is done. This is useful for gaining assessment grades.
- *I also find the marking of assignments and test scripts on the Teams platform both enjoyable and efficient.*
- *The fact that we have a digital copy of everything the student has done is fantastic. We can pull up a student’s work at any time and give meaningful feedback. It is easy to build up a portfolio of work for each student.*
- *I will continue to send students assignments on the platform and mark them digitally as this has proved particularly useful when building up a portfolio of evidence for sending to Cambridge for assessments when exams were cancelled in June.*

1.8 RELATIONSHIPS WITH STUDENTS AND FAMILIES WERE DIFFERENT

In general more contact with some families was reported while other families and their children ceased contact with schools altogether. Some communities rallied around schools and teachers to provide support through for example, older children teaching younger children, community leaders teaching small groups of children in the open air, shops being drop off and pick up points for students’ work and so on.

A particularly sad effect of the lack of internet access for poorer and other marginalised families is summed up by this report:

- Where families had to buy data to support online learning, particular children in families were prioritised as were particular subjects. Previously for schooling, parents just had to provide school uniforms and lunch, now they had to find money to buy data so they made choices.

Other reports mentioned:

- Mental health: some students were worried, some anxious and some were frustrated.
- Lack of physical contact changed the way relationships should, or were expected, to develop, especially with the smaller students.
- Teachers also devoted time to home visits (socially distanced) and more time to meeting students and motivating students.

1.9 ACCOUNTABILITY

Reports on how teachers were held accountable for the learning of their students varied from no monitoring at all, to excessive prescription about the form and content of remote teaching. Some schools monitored teachers’ hours on site: requiring attendance and teaching in an empty classroom.

THEME 2: Strategies Teachers Found Useful

Section 1 includes some strategies which teachers found useful. This section provides more detail of particular strategies that teachers found were useful in supporting continuity of learning

2.1 STRATEGIES FOR CONTINUING LEARNING: MEDIA AND APPROACHES USED

In LIC and HIC countries, where students had challenges with access to online teaching, teachers and administrators had to prepare, package and distribute paper packs to provide continuity of learning for students. They found creative ways to do this.

- *We realized that it wouldn't be possible to reach all students through the internet, social media or WhatsApp groups. As... is a country of huge contrasts, we always have [in the same class students with] a parent that pursues the latest technology available at home, to provide their families with, and those parents who are illiterate, don't have stable internet access, or even basic appropriate sanitarian conditions. So, the group of teachers, together with the principals and coordinators decided to provide paper based activities for those parents who are not covered by a good internet connection and those who are not familiar with the technological resources that can support learning processes.*
- *'Some families did not go to school to get the booklet activity prepared and printed by the teachers. They say they must work the whole day through, others complain they do not know how to teach the students to do the activities. Others say they do not have the time to help students at home because they will be working all the time. One of the principals decided to give some "prizes" for those who went to schools to [collect] the activities. So, the school raffled off some home utilities like some blankets and school materials. Then, the number of participants increased'.*
- Another school decided to make a partnership with an egg street vendor. The street vendor passes around the streets announcing his products and the student's activities. The parents approach the street vendor to buy eggs and get their children's activities. That was one of the ways principals found to reach students.
- Moreover, the coordinators, principals and teachers also went to children's houses to deliver the activities. Some of the families had simply moved to other parts of the country, to stay close to their relatives during the pandemic time. Others couldn't be found in their houses, some others simply refused to go out to take the booklets. Some students had to travel to the nearest town to collect their lesson materials.

In one country it was reported that the Ministry of Education provided support for teachers which was extremely helpful.

"In the lock down, teachers were given psycho-social support, locally, mental, spiritual and financial through internet courses. They worked with teachers to find ways for things to get done.

Table 1 lists the media used for remote teaching, the responsible person or organisation and comments from teachers about the approach.

TABLE 1. MEDIA/APPROACHES USED FOR WHEN SCHOOLS CLOSED, PERSON/ORGANISATION RESPONSIBLE AND COMMENTS FROM TEACHERS

Media/approach used	Person/organisation responsible
Schooling collapsed	In the same country, some students in resource rich schools and families continued their education, while at the same time, resource poor schools were not able to adapt any strategies to continue education
Face to face: teacher/pupil	Teachers taught small groups socially distanced in their villages
Face to face: community	Parents/community elders/older children took over teaching in villages
Teaching online from an empty classroom	The requirement for the teacher to be in school, teaching online from an empty classroom was felt to be an accountability measure.
radio/solar radios	governments/NGOs (Non-Governmental Organisations) (Solar radios were provided by NGOs). These were reported in use in remote areas and refugee camps.
SMS messages	Schools, teachers
Telephone tutoring and monitoring	Governments, schools, teachers
television	governments
online/Internet - free public resources*	Governments, commercial organisations (usually with strings attached eg free for a short period), NGOs, charities, professional associations
online/Internet - private to subscribers or schools in particular regions	Schools, commercial organisations, governments (e.g. Scotland's GlowConnect https://glowconnect.org.uk , European SchoolNet www.eun.org). See the lists in Table 2.
offline/Internet - free public resources	Services and tools provided by for example, eGranary (https://www.widernet.org/eGranary/).
satellite	As used for Australia's Schools of the Air

Note: In the last decade there have been many reports about government funded online resources being closed down as government priorities changed. These resources would have been invaluable to learners and teachers at this time. Trucano (2017) from the World Bank provides an overview.*

2.2 ONLINE TOOLS

The tools reported to us are listed in Table 2. Teachers reported:

- Wide use of learning management platforms and digital tools.
- Being forced to use online teaching/learning and Aps has been beneficial to students and teachers (LIC through to HIC).
- *We had to trace the number of students who did not have smart phones followed by discussions on alternative ways to reach out to them with lessons... We were busy providing questions in the google classrooms to which only few responded. Then colleagues suggested other social media forums for teaching online because google classrooms failed in our case. So, with suggestions we had to resort to any social media forums whichever is comfortable to teachers and students. This idea worked better and more students turned up for the class.*
- *We cannot allow one particular social media forum for teaching and learning to happen. It should be left to the discretion of the teachers and students.*

Table 2 lists the technology tools teachers reported using for online teaching.

TABLE 2. TOOLS TEACHERS REPORTED USING FOR ONLINE TEACHING*		
*Note: Where teaching online was a teacher's first experience, teachers reported they did not have the skills to run classes effectively or to judge their effectiveness.		
<p>School VLE (virtual learning environment) with integrated virtual classroom tools supported a seamless transition for teachers and students from the VLE content to video conferencing. Schools that had well developed VLEs were at an advantage.</p> <p>Generic tools used were: webinars, one to one tutoring online, online courses, recording lectures, video conferencing, document sharing and online chat.</p> <p>Students used emails or WhatsApp messages or called to ask teachers for some clarification. Parents also called teachers.</p> <p>WhatsApp was found useful for the collaboration between teachers, students and parents.</p> <p>Parents' WhatsApp groups were used to teach primary aged students</p> <p>Specifically mentioned as being helpful for assessments were Google forms, Kahoot, Quizzz padlet and xodo.</p>	<p>Government supported teacher knowledge repositories some of which are closed to teachers from other countries were mentioned in passing and are worth further study by governments which have no such provision. See for example:</p> <p>Australia: Scootle</p> <p>Argentina: Educ.ar</p> <p>Scotland: GlowConnect</p> <p>South Korea: KERIS (Korea Education and Research Information Services)</p> <p>New Zealand's school network hubs approach</p>	<ul style="list-style-type: none"> • BigBlueButton • Facebook • Google classroom • Google forms • Kahoot • Messenger • Padlet • Quizzz • Skype • Teams (Microsoft) • Telegram • Viber • Voice Over PPT lessons • Webex (Oracle) • WeChat • WhatsApp • World Fusion Classroom • Xodo • YouTube videos • Zoom

2.3 ONLINE CLASSROOM CHALLENGES

Here is a summary of key challenges teachers report in online teaching:

- Changing my language in a virtual classroom.
- I now address children and parents while teaching.
- Screens on or off?
- Ethics, equity, safeguarding.
- Keeping in touch with students.
- Motivation of students.

2.4 ADOPTING A NEW MINDSET AND PARADIGM SHIFT

Teachers for the most part, reported that their teaching would be different in the future even if there was a return to the old normal. There is now widespread knowledge across the profession of technology tools which teachers had to learn about very quickly and which they wish to continue to use both for personalising learning, extending the subject matter available and improving communications with students and families.

Teachers will incorporate the methods they used during the pandemic in future teaching and learning to provide varieties of learning opportunities beside the traditional chalk and talk method which they have practiced before the pandemic. The pandemic also changed their mind set and they are willing to explore other teaching methods and new applications for teaching such as padlet and xodo.

2.5 BENEFITS OF ONLINE LEARNING

While online learning was missing many of the opportunities that make schools great learning environments - social interaction, community activities and creative collaborative work across subjects, benefits which emerged from the data included:

- Seeing the home of the student through a virtual lens gave new insights to other needs impacting students.
- Some quiet students engaged more online than normally in the classroom through using the chat function to pose questions.
- Children with special needs who found school an uncomfortably challenging and competitive space found it a relief to be taught online.

Teachers have often stated that they want to continue some forms of remote work, especially those ones that allow as much direct contact with students as possible, e.g. conducting online classes through applications. Teachers and teacher educators pointed out that it was very important to maintain direct contact with students and create a space for students to contact each other. Therefore, they plan to keep on-line duties and on-line seminars in the future. Teachers and teacher educators also appreciated the possibility of providing students with lecture recordings and presentations, and sharing them. The teachers said that some of the students liked the recorded lectures very much because they could play them back repeatedly to learn more difficult material at their own pace.

THEME 3: Strategies/practices teachers want to continue using

Teachers identified a variety of specific online tools and platforms they want to keep using. They want to keep building their own capacity to do this. They see this as a means of improving instructional efficiency and sustainability of learning both in and outside the virtual classroom.

Teachers say they will continue to:

- Use online platforms and materials.
- Maintain the group connections forged during the shutdown.
- Continue improved social emotional learning and support for student learning.
- Bring their computer to school and use PowerPoint presentations in class more frequently.
- Initiate more group work to be initiated in a classroom teaching situation.
- Get students to create their own PowerPoints in class and encourage students to have their own laptops/tablets in class to participate online.
- Continue to have students submit assignments online rather than on paper. This is seen as good for recording times of submission and ease of processing. The teacher can evaluate work in stages, rather than just the final submission. This will improve constant feedback to students.
- Allow online submission to see who submitted late and to track student performance. This strategy can be used as a monitoring and organization tool in the future.
- Keep uploading files and PowerPoints to the student's profile. This will help as even if the student misses the lesson the content and concepts are still accessible.

The following quotation provides an example of a positive outcome of the pandemic which is that there has been a shift in teachers' pedagogical use of educational technologies which is likely to have long-term impact on classroom practices: "COVID-19 has been a push to get teachers to use interactive white boards and become expert users".

In one country the use of the Whiteboard was seen as revolutionary, teachers were impressed at how this improved the efficiency of receiving completed work and doing both formative and summative assessments. They loved being able to record content that is written on the interactive whiteboard for later use by the teacher or the student. This allowed them to review their teaching and share recordings with students (who love being able to listen to the lessons again). The notes from the interactive white board can be simply sent to the students who can save for later (study). The whiteboard also helped reduce time used for copying off the board and gave more time for teaching. Another feature they found helpful was they could track student performance and student participation both online and offline, tracking student performance.

Another strategy teachers want to maintain is taking ownership over their own professional learning by continuing to train themselves and improve their capacity to teach online.

“COVID has provided us with many opportunities for developing ourselves which we did not do before.”

They also want to keep building the improved relationships with parents and community and capitalize on parents’ involvement with supporting teachers’ work. They want to:

- Maintain new home and family relationships forged during the pandemic.
- Continue to ask for help from family members and students to help record the classes. That has worked for them.
- Continue to use, recognize, and nurture student interest that has improved through use of technology.
- Continue to recognize and value affectivity and increased interest on the part of some students at this time.

In my case, I intend to consider keeping the social media contact I have made with the families, in order to approach those pupils that are usually difficult to reach even before all the quarantine has been established. Some parents had never come to schools even when asked to be present in teachers/parent’s meetings. In this case I intend to keep parents’ contacts in order to inform them about their child’s difficulties and necessities during the English classes, something I had never considered before.

THEME 4: What teachers will do differently in the future

Teachers look forward to continuing to use online teaching and learning. Their ideal would be to use a blended approach even when schools reopen in person. They want to capitalize on the experience of getting past their resistance to use of technology and taking ownership of improving their professional capacity for virtual teaching and learning. The pandemic experience has motivated them to feel confident about leaving comfort zones of traditional practices.

Teachers look forward to continuing using online teaching and learning. Their ideal would be to use a blended approach even when schools reopen in person. They want to capitalize on the experience of getting past their resistance to use of technology and taking ownership of improving their professional capacity for virtual teaching and learning. The pandemic experience has motivated them to feel confident about leaving comfort zones of traditional practices.

Educators see online teaching will be the trend in the future. They need to improve themselves and learn new skills and knowledge. Students and teachers need to own their personal devices and the schools need to be equipped with technological tools. The students in rural and interior areas have a problem to own a personal device. On the other hand, there is no control of online materials and some information is not reliable. The challenges of educators are to facilitate their students 21st century skills and to ensure their students access the reliable information.

Blended learning is certainly the way to go in the future. The more capable students find this way of learning better for them with minimal distractions. They are able to set their own pace of learning.

I intend to consider keeping the social media contact I have made with the families, in order to approach those pupils who are usually difficult to reach even before all the quarantine has been established. Some parents had never come to schools even when asked to be present in teachers/parent's meetings. In this case I intend to keep parents' contacts in order to inform them about their child's difficulties and necessities during the English classes, something I had never considered before.

Teachers said that in the future they plan to:

- Use a blended approach to classroom practice
- Use online platforms to:
 - » Include parents.
 - » Increase accountability in reaching and monitoring their students.
 - » Offer differentiated instruction.
 - » Improve communications with students -keeping the online chat option open because it encourages shy students to communicate with the teacher.
 - » Cut down on paper usage.

- Search for or ask for improvements/strategies for online assessment and monitoring security (to address fears of academic honesty -making sure students are doing tests by themselves).
- Continue to use Microsoft Teams in the class in unison with classroom teaching. Blended approach to classroom practice would be useful.
- Include a multimodal approach of teaching: more video clips, PowerPoints, background of their cultures.
- Use the Teams platform to showcase students' work. Gauge the progress of work. Make the accessibility more open to all.
- Encourage more independent learning among students as part of growth and development.
- Continue with online activities on Teams and complete homework on Teams.
- Keep assignments on the online platform will save costs in terms of paper wastage. Many teachers were in favour of this. Teachers mentioned that this will increase accountability for students.
- Keep the online 'chat' option going. This encourages shy students to communicate with the teacher. Online teaching and learning is seen to really benefit some students. This should continue for them when they are in the classroom.
- Have students continue to up-load photographs on Microsoft Word. This saves paper and keeps the quality of the pictures intact.

Teachers also plan to change the ways in which they engage parents. They envisage:

- Using online platforms to include parents.
- Giving parents access to the students in class on the Teams platform which will be helpful to keep students on track. This would give them quicker access to parents/guardians for support.

It is important to note that with schools reopening whether in person, online or in blended modalities - the engagement with parents and communities is also changing dynamically.

I plan on promoting positive parent-teacher relationships by being a role model in doing so. Patience, empathy, and compassion are elements to highlight. Research encourages teachers to set high expectations for their students, so why are teachers not setting high expectations for themselves during a time of crisis? For example, teachers are annoyed that parents cannot login students into their online classes. Did anyone stop to think if the parents had the skills to do so? Or the resources? At the beginning of the pandemic, the school district made the teacher responsible for connecting students to their online classes. While some teachers became responsible in teaching the parents, some did not accept the duty.

Teachers expressed the desire to:

- Capitalize on changes in their mindset around:
 - » Teaching in more student centred ways.
 - » Seeing the value of using technology.
 - » Taking more ownership of their own learning.

Thus it seems there has been a valuable and marked transformation in that teachers have gained confidence to collaborate and are protagonists in their own professional learning—leaders of their own training. This is the scenario in the future.

THEME 5: What teachers see as challenges for sustaining education during times of crisis

The real problems that prevent poor children from learning will not be solved only with teachers' creativity. The real impediment for education, especially in ... must be solved through the promotion of equality, opportunity for everyone to learn in the same way and especially with a fair distribution of income among the society. Teachers cannot make a magical potion to make students learn. There must be real investment in education and the promotion of families fair conditions for living.

Thinking about the future with online teaching: The biggest challenge is to be able to deal with a teaching and learning process that is, in fact, effective.

CHALLENGE 1: GOVERNMENT LEADERSHIP

5.1 DECISIVE GUIDANCE IS NECESSARY

Some teachers spoke highly of their government's actions. Others reported that their governments stood in the way of providing continuity of learning. Some teachers reported they were afraid to report what was going on and that it seemed that no one knew what was going on with respect to schooling. In three countries (low and medium income) teachers specifically expressed support for the clarity of direction from their governments although this was not included in the survey questions.

- We have “very clear advice from the government about how to keep safe (LIC). Government issued Standard Operating Procedures (SOPs).”
- At all institutions, the National COVID-19 Taskforce mandates a set of protocols for operating schools. These include on campus screening stations, where temperature checks are conducted and recorded, as well as other requirements related to social-physical distancing, mask-wearing and hygienic hand cleaning. At large-sized educational institutions... The environment is one in which teachers are faced with working in a shift system. Additionally, across many schools (including private institutions), teachers and students would have to work within a bubble as part of the restrictions due to COVID-19.
- Some governments stepped in immediately to develop lessons delivered by television, packages of printed materials, radio and internet.

Decisive leadership - Low/medium income countries (LMIC)

In some small countries governments were decisive from the beginning, stating: “We will go online next semester”. This gave teachers time to plan and be trained.

Teachers were also offered courses online providing psycho-social support.

5.2 LACK OF GUIDANCE

However, teachers from a number of countries identified lack of action and confused actions by governments as hindering continuity of teaching. They felt that the government did not provide clear guidance and support for teachers at the start of the shutdown. While teachers went to considerable lengths to keep on teaching, they could not solve problems of families having little or no access to technology, families not being able to afford data, existing bandwidth not being sufficient to support the demands and there being no reliable access to electricity. The effects of social and economic disparities became even more evident as many students -from EC to tertiary missed classes. Teachers reported not reaching many students, In some cases up to 90 % of students were not able to or chose not to participate in online classes. Teachers laid the blame for this at the feet of government.

Incompetent and fickle minded decisions taken from the top levels and their inability to take charge of a new and novel situation.

Responsibility and decision-making in the organization of the didactic process fell on the headmasters of the institutions and then on the teachers, without support from the government.

We received guidelines one after another from the Ministry of Education and district on the ways to conduct online teaching. (LIC) The Prime Minister makes an announcement on Friday night and schools are expected to implement it on Saturday (HIC).

Governments' failure to provide decisive leadership led to:

- Paralysis and uncertainty at the national leadership level (LMIC<-> HIC): In many countries teachers reported paralysis in decision making at the national level. Decisions were not made, schools and teachers were left to manage as best they could. Teachers reported no training being given and unachievable expectations being set for example for schools reopening safely.
- Chaos around Assessment through public exams (LIC<-> HIC)
- Inadequacies in technology infrastructure became apparent:
 - » Online resources were lacking.
 - » Online classes were interrupted due to load shedding (interrupted electricity supply) as well less internet speed.

CHALLENGE 2: LIMITATIONS WITH ONLINE TEACHING AND LEARNING

Across all countries teachers reported that they had to train themselves in online teaching. This was not necessarily seen as negative. As time progressed, some governments have facilitated mandatory national training projects for all teachers. These are still not sufficient. There seems to be great willingness from teachers across all the countries to continue with some of the new pedagogies and assessment tools. But there are limitations with online learning:

- Teachers said that the most important challenges in times of crisis in the future would be to maintain student-teacher contact and support for students both in the educational and socio-emotional spheres. Relations within the teaching staff were also an important topic. Teachers from primary and secondary schools pointed to the problem of maintaining mutual relations between teachers during the crisis.
- Many students find it difficult to work online and sustain this way of living as people need human contact.

- For many students, the collaborative nature of classroom teaching is now missing from the teaching scenario. As a result of the crisis, it will be a long-term challenge to online teaching. Participants mentioned that in the physical classroom students feed off each-others energy, which is not possible, or as effective online.

CHALLENGE 3: TEACHING PRACTICAL SUBJECTS:

The main challenge is finding ways to successfully run a practical subject remotely. However, I have found useful videos of practical experiments to share with students. But nothing can replace the students doing hands on work in the laboratory particularly in preparing them for further studies in the sciences. Teachers have experimented with creative ways of addressing practical work online.

CHALLENGE 4: LOSS OF LEARNING AND INCREASED DROPOUT RATES

While the decision of governments in many countries to postpone the physical reopening of schools is seen as inevitable, teachers are deeply saddened by the loss of learning and increased dropout rates among students from low socio-economic backgrounds and those with learning challenges and different needs.

I see many challenges because I saw five students (girls) who were pregnant within the six months since the closing of the schools.

For students in interior areas, they will be left behind as they cannot be reached by phone. Their longhouses are a few hours boat journey from their schools. Teachers and schools cannot reach them. When the school reopens, many students won't come back to schools. The attendance of interior students is very poor.

While the majority of respondents have been giving online lessons many of their pupils were not able to afford the internet or did not own mobile or laptops.

Many problems are linked with economic issues. A continued crisis will see students 'left behind' as a result of not having equitable access to technology. Digital inequality is a challenge to sustaining education (LIC<->HIC).

Students who find data expensive, or who cannot connect, will find access to education difficult in times of crisis, as we are experiencing now.

We are privileged if we have access to a generator. People with limited resources will be disadvantaged.

CHALLENGE 5: EQUITY AND STUDENT, AND TEACHER ACCESS TO TECHNOLOGY, INTERNET AND ELECTRICITY

The closure of schools has revealed starkly, the divides in all societies (from LIC to HIC) between those with access to the internet and unlimited data (so they were able to access all forms of media to support their subject learning) and those without.

In LIC countries most teachers did not have access to internet and digital devices such as smartphones and laptops. In HIC countries some teachers did not have personal devices. In rural areas in HIC and LIC internet connection may not be available for families with the exception of Australia which uses low flying satellites to support connectivity to a virtual school ("Schools of the Air") to provide education in remote areas. These Australian virtual schools have existed since 1951 using different technologies. Equity and access were universal concerns for teachers:

'One of the biggest challenges for teachers was to "keep students on board". Children's home situations do not always allow them to participate in lessons or the other educational activities offered by schools. Even though it was possible to observe a good deal of achievement

in provision of distance education in schools, teachers noticed that some parents are not in a position to be able to support their children's learning effectively, especially those with insufficient digital skills and not having access to the Internet at home. Therefore, disadvantaged students were struggling to adapt to pandemic times reality, with less access to learning material, access to online platforms, and less parental support.'

Teachers reported:

- Lack of teacher and student competencies in ICT use in teaching and learning could be the biggest challenge in future.
- Parents' lack of ICT competencies to help their children will also be a huge challenge.
- Lack of teacher autonomy and flexibility is a problem. In other words, a rigid and inflexible system obstructs creativity and innovation.
- Another important challenge is building trust in students who have a greater possibility of dishonest online behavior. This challenge was related to the problem of building a sense of school and academic community and belonging to students, which is difficult in the times of distance learning.

TEACHERS' RECOMMENDATIONS

Teachers offered many ideas for ways of being better prepared for future crises so that teaching, learning and assessment can continue.

1. A critical factor is the need to redress inequity due to closure of schools.

Every society which neglects the poor population causes a huge damage which will take decades to be recovered. The real problems that prevent poor children from learning will not be solved only with teachers' creativity. The real impediment for education ... must be solved through the promotion of equality, opportunity for everyone to learn in the same way and especially with a fair distribution of income among the society. Teachers cannot make a magical potion to make students learn. There must be real investment in education and the promotion of families fair conditions for living.

- Countries need to establish free and open access to public broadband.
- Access to the internet should become a right not a privilege.

Connectivity must now be public policy, a right... Connectivity should be a responsibility of administrators, while teachers should take care of the quality of the classes. Teachers can't do both, it's too much! It has to be a team effort. The need for collaboration is extremely urgent.

2. Implement "Technological Literacy for all" policies: Parental support is key to education during crises. But parents are not able to support their children as a large portion of the parents are still illiterate and also technologically illiterate.
3. Create and maintain pedagogical and professional support networks:
 - » Teachers said that the most important challenges in times of crisis in the future would be to maintain student-teacher contact and support for students both in the educational and socio-emotional spheres. Teachers pointed out that the challenge would be to organize opportunities for students to maintain mutual relations, such as through online clubs which are very important for their development.
 - » Relations within the teaching staff were also an important topic. (Although teacher educators claimed that cooperation and showing support in their teams had increased, teachers from primary and secondary schools pointed to the opposite phenomenon and stressed the problem of maintaining mutual relations between teachers during the crisis).
4. Recognize that technologies are a tool; without the teachers behind it does not work.
5. Put policies in place that address better support for teachers and students (wellbeing: time management, stress level).

6. Governments and leaders need to be dynamic, flexible and prepared to support the education sector during crises. Two suggestions from teachers show how national leadership can support improved teaching:

Modify the core curriculum in such a way that it is adapted to remote teaching and that the content is adequate and in the right amount depending on the deficits of students.

Create a national or regional / local e-education platform, which would contain ready-made didactic solutions for individual curricula approved by the Ministry of Education, which would facilitate and shorten the preparation for classes.

TEACHER EDUCATOR EXPERIENCES

Teacher educators and university faculty who participated in the interviews had much in common with teachers at the primary and secondary levels. The pandemic affected them personally and professionally in similar ways as expressed above. However, there were some responses that are unique to teacher educators and university faculty. There was also great variation in type and quality of experience. These are highlighted below:

- Many were thrust into the shutdown with limited skills for online delivery. In one country, some professors were steeped in traditional ways of communicating with students through formal lectures. They had never used educational technology to reach students.
- Some teacher educators had difficulty communicating with student teachers. Although these are tertiary level students, many do not own devices. Nor can they afford to purchase data. They were accustomed to using computers and wifi on the campuses where they lived during the semester. During the shutdown they had to leave and return home - many to very rural areas with limited broadband. In some countries, the shutdowns came with curfews and armed security. This further limited their capacity to access online teaching.
- Other teacher educators however claimed that cooperation and showing support in their teams had increased. One university shut down its campus for four weeks to allow faculty to develop their online delivery skills. Support was provided in the form of workshops and webinars. They were also enjoying increased opportunities for professional collaboration and professional learning through education partnerships, webinars, research projects due to COVID. They planned to capitalize on these in the future.
- A key concern for most teacher educators was that initial teacher training placements in schools stopped suddenly, so there were (and still are) challenges in how to train teachers and how to facilitate the practicum/internship for student teachers. This led to increased workloads as faculty were expected to redesign practicum programmes and assessments with very short timelines.

LOOKING TO THE FUTURE

- Teacher educators see sustaining the values of education, relationships, and dialogue within the process of teacher education during times of crisis as challenges.

'The question regarding the understanding of the concept of "quality in teacher education" is a real one, if we would like to think about the future of education.'

- They also plan to capitalize on the increased professional collaboration they have experienced- education partnerships, webinars, research projects due to COVID.
- Teacher educators emphasized the need for greater mutual support among each other and their need to enroll themselves in courses to learn more about using new technologies better.

CONCLUSIONS

The findings of this Report offer much food for thought. Inviting teachers at all levels of education to talk about their experiences and make their voices heard opens spaces for them to share the knowledge, understanding and insight they have with respect to the changes, concerns and challenges arising due to the COVID-19 pandemic.

Several key themes have emerged from this project so far:

1. In moving forward teachers need to be able to work flexibly with local communities on solutions to ensure continuity of schooling for all, as local conditions are so variable.
2. A step change in teachers' understanding and skills in the use of educational technologies to support learning has taken place and this means that education of the future does not have to follow the pattern of the past.
3. While teachers have demonstrated remarkable commitment and resilience in trying to sustain student learning during the pandemic, this has been accomplished at great personal (emotional and psychological) and professional cost for teachers. This needs to be mitigated by decisive government leadership in regard to planning and policy for teaching, assessment and professional support for teachers in times of crisis.

Questions that need to be answered by policy makers and teachers/teacher educators to ensure continuity of learning and assessment for future crises

1. There are great examples of support for teachers from some countries to provide high quality support for teaching with technologies. Small and low income countries have much less capacity than larger countries. What would it take to open up the resources that are there already, but closed to teachers in particular countries. Might at least some of the governments with good online resources behind firewalls pull together to support teachers across the world in doing this?
2. There needs to be greater public attention and accountability for the outcomes of governments' prior investments in educational technology and the professional development for teachers and resources and systems to support online teaching. The challenges encountered by many teachers with transitioning to online teaching shines a spotlight on questioning why such investments did not deliver.
3. On the basis of teachers' experiences, and perceptions of education during the COVID-19 times, we see that one of the questions that needs to be answered is the extent to which the COVID-19 pandemic increases or weakens the challenges of teacher education and whether new fundamental challenges come up.
4. How can the huge requirement for resources to support different modes of teaching be mitigated?
5. How can the momentum for teacher and student access to the internet be maintained and might universal access to learning, via the internet (and to data to access learning materials) be seen alongside access to clean water, food, education and health care as core goals for all governments?
6. How can we ensure the goodwill shown by tech companies during the pandemic - in offering free access to digital tools and learning platforms be sustained?

APPENDIX A

Definitions

1. ALTERNATIVE MODES OF TEACHING TO FACE-TO-FACE LEARNING IN SCHOOL

- *Remote teaching* - learning with or without a teacher present: learning with paper based materials including students learning alone or in a community group
- *Teaching using online media only* - interactive learning: requiring telephone, internet;
- *Teaching using traditional media* - non-interactive using radio/TV
- *Home schooling*: education undertaken at home usually outside the mainstream schooling but during the Covid period, parents were responsible for 'homeschooling' their children normally with support from school either through paper-based packs, TV, radio or internet based resources.
- *Synchronous* online teaching means the class is all online together with the teacher but there are many different ways of teaching like this - cameras may be on or off; engagement, motivational and assessment pedagogic techniques are not necessarily the same as with face to face teaching. *Asynchronous* teaching occurs when the teacher provides the materials and the learner undertakes the activities without the teacher present - a time to suit them.
- *Hybrid teaching* - Teachers using this term seem to have varied understandings of its use. For example, for some it means alternating between online and face to face. Others use it to mean teaching some students online and some face to face at the same time.

Note: As the pandemic progressed teachers found schools were opening and closing as teachers and students tested positive so teachers were expected to switch modes of teaching overnight.

1. Pedagogy: the science of teaching. Examples of pedagogic tools which teachers make decisions about for each lesson are questioning, explanation, exposition, demonstrations, modelling, simulations, grouping, assessment, speech/use of silence, timing.
2. Teacher voice: in this report, Teacher Voice means views and experiences of teachers as expressed by them.
3. World Bank definitions of income groups by country (https://www.who.int/healthinfo/global_burden_disease/definition_regions/en/) :

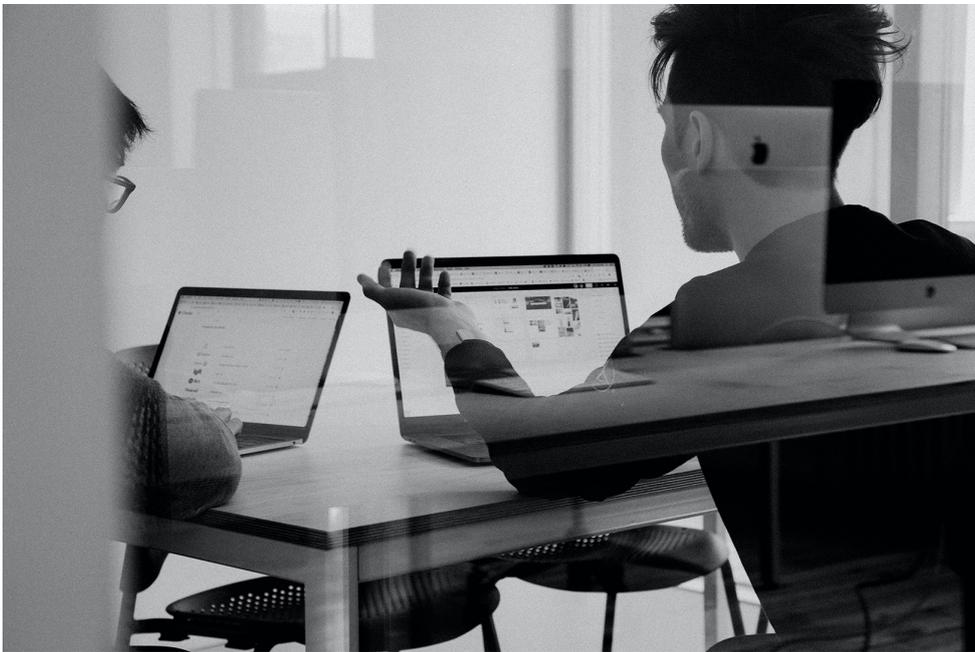
“WHO Member States are grouped into 4 income groups (low, lower-middle, upper-middle, and high) based on the World Bank list of analytical income classification of economies for the fiscal year, which is based on the Atlas gross national income per capita estimates (released July annually)”. We use the abbreviations LIC, LMIC, UMIC, and HIC). See also national income figures here on the interactive list. (https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?most_recent_value_desc=true)

APPENDIX B

Facilitators and Note Takers: Virtual Symposia, 8 and 15 October 2020

Bisi Alabi
Elizabeth Allen
Dorothy Blanks
Emily Bogus
Chris Cipolla
Mariana Coolican
Jennifer Cooper
Di Cullen
Alexandra Daub
Linda Devlin
Joseph Divala
Martine Duggan
Lori Ellwanger
Maria Cristina Ferraz Soares
Maria Assuncao Flores
Robin Griffin
Stephen Hall
Jane Hanson
Tonya Huber
David Imig
Lucas Kavlie
Linda LaVelle
Martha Prata Linhares
Joanna Madalińska-Michalak
Ben Mayfield
Matthew New
James O'Meara
Tanya Ovenden Hope
Barb Pavlick
Kristen Pedersen Erdem
Christina Preston

Richard Procter
Reyes Quezada
Amy Ricabal
Katie Richardson
Veronica Robles
Marilyn Simms
Jo Smith
Earnestyne Sullivan
Rachel Weaver
Sarah Younie



APPENDIX C

List of those contributing via the webinars

The following colleagues contributed to this report via symposia held to review the interim report of the research findings. Over 550 people signed up to attend the symposia. Symposia 1 - *Teacher Experience & Practice during Covid: ICET/MESH* was held on Thursday, October 8, 2020 (New York Time: 10 am to 1 pm) and Symposia 2 was held Thursday, October 15th, 2020 (Tokyo Time 2 pm to 5 pm).

Osama	A.	Abu-Libda	Jordan
David	Abaah Junior	University of Education,Winneba	Ghana
Obarinde	Abimbola	Ijaiye Ojokoro Junior High School	Nigeria
Ayanshola	Adeola	Lagos State Education District 1- Tomia Community Senior Secondary School, Alagbado	Nigeria
Abiola	Adeola	Ministry of Education	Nigeria
Biliamin Adekunle	ADEYEYE	Tai Solarin University of Education	Nigeria
Osama	Al Mahdi	University of Bahrain	Bahrain
Aminatu	Amadu	Ghana Education Service	Ghana
Modupeola	Amusan	Girls Senior High School, Agege, Lagos	Nigeria
Betty Ann	Blackford	St. Richard's Primary School	Jamaica
Foluke	Bosede	Federal College of Education (Technical) Omoku, Rivers State	Nigeria
Luciana	Caffesse	Independent	Argentina
Beatriz	Cebreiro López	University of Santiago de Compostela	Spain
Enyindah	Chizam Okem	Ave Maria International Academy	Nigeria
Nkemka	Christopher	Ignatius Ajulu University of Education, Port Harcourt, Rivers state.	Nigeria
Cornelia	Connolly	National University of Ireland Galway	Ireland
Maria	Czerepaniak-Walczak	University of Szczecin	Poland
Alexandra Christiane	Daub	Texas A&M International University	USA
Vileitha	Davis-Morrison	The University of the West Indies, Mona	Jamaica
Linda	Devlin	University of Wolverhampton	UK
Rattana	Duangkaew	Sukhothai Thammathirat Open University	Thailand
Mohamed	El Tahir Osman	College of Education, Sultan Qaboos University	Oman

Karuna Samuel	Finch		Poland
Keely	Flather	Petroc	United Kingdom
Kathleen	Foerster	University of Manitoba	Canada
Nicole	Green-Miller	Black River Primary and Infant School	Jamaica
Maria	Gross	Azusa Pacific University	USA
Jane	Hanson	Petroc College of Further and Higher Education	UK
Khong	Heng Yen	Universiti Teknologi Mara, Sarawak Branch	Malaysia
Flora	Hernandez-Ortolland	Unam	Mexico
Fiona	Hunt	Bath Spa University	UK
Rosalyn	Hyde	University of Southampton	UK
Olakunle	Iju senior grammar school	Lagos State University	Nigeria
Miguel	Ison	The University of the West Indies, Mona	Jamaica
Ahmad	Jammal	Lebanese University	Lebanon
Adelaja	Joel Olalekan	Abesan Comprehensive Junior College	Nigeria
Ewa	Johnsson	Adam Mickiewicz University	Poland
Marta	Krasuska-Betiuk	The Maria Grzegorzewska University	Poland
Andrene	Lattibeaudiere	St. Joseph's Teachers' College	Jamaica
Marilyn	Leask	Ed. Futures Collaboration charity/MESH-Guides	Uk
Yewande	Lewis-Fokum	The University of the West Indies, Mona	Jamaica
Sebastián	Lipina	UNA, CEMIC-CONICET	Argentina
Daniela	Lupone	Academy of Mary Immaculate	Melbourne, Australia
Joanna	Madalinska-Michalak	University of Warsaw	Poland
Stephen	Matthews	Australian Institute for Teaching and School Leadership	Australia
Collins	Meninwa	University of Benin, Benin City	Nigeria
Christianah	Monisola	Ministry of Education, Lagos State	Nigeria
Zvisinei	Moyo	University of Johannesburg	South Africa
Edmore	Mutekwe	North-West University	South Africa
Linet	Muuhati-Nyakundi	University of Johannesburg	South Africa
Maria Alexandra	Naberesny	EMEF PROFESSORA OLGA TOLEDO FARIAS	Brazil
Mairette	Newman	Commonwealth of Learning	Canada
Mungai	Njoroge	CEMASTEAM	Kenya
Paulina	Nowak	University of Warsaw	Poland
Theophile	Nsengimana	University of Rwanda	Rwanda

Lizana	Oberholzer	University of East London	United Kingdom
Ayodele Abosedede	Ogegbo	University of Johannesburg	South Africa
Olubukola	Ojo	University of Ilorin	Nigeria
SAMUEL	OKAFOR	BloomBreed High Schools	Nigeria
Ajulo	Olajumoke Victoria	Teaching Service Commission	Nigeria
Esther	Olusola	Olorunnisola Community Junior High school Olorunnisola	Nigeria
Esther	Oluwatoyin	TESCOM (District 1)	Nigeria
Esther	Onifade	Secondary school	Nigeria
Oyigoga	Onuh	Benue State Teaching Service Board, Nigeria	Nigeria
Ruksana	Osman	University of the Witwatersrand	South Africa
Tanya	Ovenden-Hope	Plymouth Marjon University	United Kingdom
Mohan	Pradeep	Jaypee Group	India
Richard	Procter	De Montfort University	United Kingdom
Kate	Reynolds	Bath spa university	United Kingdom
Maureen	Robinson	Stellenbosch University	South Africa
Sandra	Robinson	The University of the West Indies, Cave Hill	Barbados
Erin	Sage	Santa Maria College	Australia
Sarafa-Deen	Salami	Al-Hikmah University, Ilorin, Kwara State	Nigeria
Idowu	Samson Adeshola	Michael Otedola College of Primary Education, Noforija Epe, Lagos State	Nigeria
Niranat	Sangsa	Sukhothai Thammathirat Open University	Thailand
Ismail	Sanusi	Olorunnisola Community Junior High School Ayobo	Nigeria
Ling	Siew Eng	Universiti Teknologi Mara	Malaysia
Jo	Smith	University of Auckland	New Zealand
Olakunle	Solola	Iju Senior Grammar School	Nigeria
Vernon	Spence	Vere Technical High School	Jamaica
Debra	Talbot	University of Sydney	Australia
Lorna P.	Thompson	Ministry of Education, Youth, and Information	Jamaica
Tamika	Thompson	Ministry of Education-Southborough Primary School	Jamaica
Tracey	Tokuhamas-Espinosa	Harvard University Extension School	USA/ Ecuador
Milagros	Trigo Miranda	University of Santiago de Compostela	Spain

Adindu	Victor	Peace Concept International school, Portharcourt	Nigeria
Sara A.	Villanueva	Texas A&M International University	USA
Tracy	Wallis	University of Wolverhampton	UK
David	Watt	University of Glasgow	Scotland
Taweewat	Watthanakulja- roen	Sukhothai Thammathirat Open University	Thailand
Gerald	White	Flinders University	Australia
Irena	White	Flinders University	Australia
Gretel	Williams-Hinds	Hillside Primary & Infant School	Jamaica
Clavia	Williams-McBean	The University of the West Indies, Mona	Jamaica
Sarah	Younie	De Montfort University and MESHGuides	UK



REFERENCES

Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). *Thinking about pedagogy in an unfolding pandemic*. An Independent Report on Approaches to Distance Learning During COVID19 School Closures. Independent Report written to inform the work of Education International and UNESCO. Version 2.0, 29 March 2020. <https://teachertaskforce.org/knowledge-hub/thinking-about-pedagogy-unfolding-pandemic>

Education International [EI]. (2020). *International Summit on the Teaching Profession 2020: Teachers recognised as the heroes of the Covid-19 crisis in education*. <https://www.ei-ie.org/en/detail/16814/international-summit-on-the-teaching-profession-2020-teachers-recognised-as-the-heroes-of-the-covid-19-crisis-in-education>

International Teachers Task Force. (2020). *Response to the COVID-19 outbreak - Call for action on teachers*. <https://teachertaskforce.org/knowledge-hub/response-covid-19-outbreak-call-action-teachers-0>

Trucano, M., et al. (2017). *Building and sustaining national educational agencies: Lessons, models and case studies from around the world*. Washington, DC: The World Bank. <https://www.worldbank.org/en/topic/edutech/publication/building-and-sustaining-national-educational-technology-agencies-lessons-models-and-case-studies-from-around-the-world>

The World Bank. (n.d). *GNI per capita, Atlas method (current US\$)*. The World Bank. https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?most_recent_value_desc=true

UNESCO. (2020). <https://en.unesco.org/news/covid-19-learning-disruption-recovery-snapshot-unescos-work-education-2020>

A • Virtual • Symposium

TEACHER EXPERIENCES AND PRACTICES IN THE TIME OF COVID-19: VALUING TEACHERS' VOICES



Thursday, October 8, 2020

New York Time: 10am-1pm

Register at: <https://www.eventbrite.co.uk/e/115562164545>

Thursday, October 15, 2020

Tokyo Time: 2pm-5pm

Register at: <https://www.eventbrite.co.uk/e/115847181037>



Register early to reserve your space!

KEYNOTE



**Teacher
Voice in a
Global
Pandemic:
Why it is
Important**

Dr. Helen Woodley

Senior Lecturer,
Northumbria University, UK
Department of Social Work,
Education and Community Wellbeing

PROGRAMME HIGHLIGHTS

- Meeting participants from across the globe
- Presentation of Interim Report on Research into teachers' experiences across 30 countries
- Sharing your ideas in breakout discussions about teacher experiences

VIRTUAL HOST



the 1990s, the number of people with a disability in the United States has increased by 25% (U.S. Census Bureau 1997).

As a result of the increase in the number of people with disabilities, the need for accessible information has become more acute. The National Center for Accessible Information (NCAI) has estimated that the number of people with disabilities who are unable to access information is 100 million (NCAI 1998).

One of the most important areas of information access is the Internet. The Internet has become a major source of information for people with disabilities. However, the Internet is not accessible to people with disabilities. The National Center for Accessible Information (NCAI) has estimated that 100 million people with disabilities are unable to access information on the Internet (NCAI 1998).

The purpose of this study was to investigate the barriers to Internet access for people with disabilities.

The study was conducted in two phases. The first phase was a literature review.

The second phase was a survey of people with disabilities. The survey was conducted in two parts. The first part was a questionnaire that asked about the barriers to Internet access. The second part was a focus group discussion.

The results of the survey are presented in this paper. The barriers to Internet access for people with disabilities are discussed. The implications of the findings are discussed.

The study was conducted in two phases. The first phase was a literature review.

The second phase was a survey of people with disabilities. The survey was conducted in two parts. The first part was a questionnaire that asked about the barriers to Internet access. The second part was a focus group discussion.

The results of the survey are presented in this paper. The barriers to Internet access for people with disabilities are discussed. The implications of the findings are discussed.

The study was conducted in two phases. The first phase was a literature review. The second phase was a survey of people with disabilities. The survey was conducted in two parts. The first part was a questionnaire that asked about the barriers to Internet access. The second part was a focus group discussion.

The results of the survey are presented in this paper. The barriers to Internet access for people with disabilities are discussed. The implications of the findings are discussed.

The study was conducted in two phases. The first phase was a literature review. The second phase was a survey of people with disabilities. The survey was conducted in two parts. The first part was a questionnaire that asked about the barriers to Internet access. The second part was a focus group discussion.

The results of the survey are presented in this paper. The barriers to Internet access for people with disabilities are discussed. The implications of the findings are discussed.