

an Action Focused Post-COVID-19 Study for Equitable Quality Education for All

Final Bulletin and Action Plan Bulletin 6 (November 2021)

From evidence-based community-wide collaborative action to recommendations for a BETTER NEW NORMAL

Schools & teachers EdTech innovation industries For an and the services For an and the services For an and the services

Digital literacy & e-learning policies

Education researchers, schooluniversity partnerships Innovation & technology policies

Since early 2020, the prolonged period of fight against COVID-19 and school suspension has posed huge challenges to every member of the education community. The tremendous effort of schools and parents in sustaining learning online has not only overcome limits presented by social distancing, but also inspired a new chapter of educational transformation as schools resume.

The eCitizen Education 360 research team led by Prof. Nancy Law, Deputy Director of the Centre for Information Technology in Education of the Faculty of Education, the University of Hong Kong, carried out a comprehensive 360-degree survey study with widespread support from academia, parents, professionals and community organizations. By gathering information about the experiences and needs of primary and secondary schools during the periods of school suspension and resumption, we aim to enhance our comprehensive capacities to act as a community to improve the education opportunities, digital competence and well-being of students. These would also enable them to cope with various aspects of life in a fast-changing world in which digital technology plays a pervasive role.

The research team conducted a research study during June and July 2020, on the online learning experiences since the first school suspension from February last year. Study findings have been released in stages under five themes, each serving as a focal point for collective action from supporting partners in different sectors: education, parent organizations, social work, education technology, and charities. These community efforts have contributed to the learning and well-being of students during the periods of school suspension and resumption, demonstrating positive advances and new possibilities in digital learning in an age of uncertainty, along with the power of evidence-based collaborative community action. New challenges have also emerged that need to be addressed. This last issue of bulletin summarise the achieved advances, emerging challenges and opportunities in the past year and a half, and put forward action and policy recommendations for different stakeholder groups to co-construct a Better New Normal.

Organized by



Supporting Organizations

BGC











賽馬會 STEM 自主學習計劃 Jockey Club Self-directed learning in STEM

Supported by



Reviewing eCitizen Education 360 progress and achievements with supporting organisations and recommendation on policy

The research team reviewed with partner organisations in different sectors the efforts and achievements made by the community connected with the research findings released the past year and a half, anticipate further collaborations with them to co-create a better New Normal. On the afternoon of 10th July 2021, we hosted a joint symposium with supporting organisations. Professor Nancy Law summarised the research findings, including the achievements of promoting digital citizenship and the action that we can take in the future. The summary of the first to fifth findings is appended at end of this issue.

The symposium was conducted by **Professor Catherine K.K. Chan**, Professor, the Academic Unit of Social Contexts and Policies of Education of the Faculty, the University of Hong Kong, and attended by Mr. Charles Chan Kin-hung, Executive Director of The Boys' and Girls' Clubs Association of Hong Kong, Ir. Eric Chan Sze-yuen, Chief Public Mission Officer of Cyberport, Mr. Victor Cheng Pat-leung, Executive Director of Hong Kong Education City, Mr. Eugene Fong Yick-jin, Chairman of the Committee on Home-School Cooperation, Dr Esther Ho Yuk Fan, Chairperson of Hong Kong Association of Careers Masters and Guidance Masters, Mr Kam Wai Ming, Principal of HKSKH Bishop Hall Secondary School, Ms. Lau Tit Mui, Headmistress of Lok Sin Tong Leung Kau Kui Primary School (Branch) and Dr Wan Lap-man, Deputy Executive Director of Hong Kong Playground Association.



eCitizen Education 360 Project held a public symposium on July 10, 2021. Speakers were invited to share their experience and views, and make recommendations. Speakers and guests (from left to right) include: Ms Joanne Lau, Mr Stanley Kam, Mr Eugene Fong Yick-jin, Professor Catherine KK Chan, Professor Nancy Law, Ir Eric Chan Sze-yuen, Mr Charles Chan Kinhung, Dr Wan Lap-man, Dr Esther Ho Yuk-fan

The team received the HKU Faculty Knowledge Exchange Award 2021

Professor Nancy Law and her team* won the Faculty Knowledge Exchange (KE) Award 2021 for the project Cocreating a New Normal of Empowered Learning through Digital Citizenship Research. (Report 1, Report 2)

*The team members are:

Dr Pan Qiangian Mr Patrick Lam

Professor Nirmala Rao Miss Liang Qianru

Professor Nancy Law Professor Catherine Chan Professor Jimmy de la Torre Dr Min Lan Dr Frank Reichert Dr Tan Cheng Yong Mr Zhang Yuxiao

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Achievements and Challenges from different Stakeholders

Over the past year, various sectors have encountered challenges brought by school suspension due to COVID 19. Panel members from different sectors shared the achievements and challenges during this period. They are concluded into several perspectives:

⁹chievements

Student level

- Suspending classes without suspending learning
- SEN students had the chance to repeatedly access learning materials at their own pace. Their learning opportunities can be enhanced through leveraging advantages of e-learning
- Improved mastery of using online platforms and resources for online learning
- Abilities of self-directed learning have been fostered
- Treasure the time they spent with teachers and classmates on campus
- Resumption of half-day instructions made learning more compact and manageable

- Certain extent of worries
- Teachers were hardly able to handle student's learning difficulties immediately behind a screen. The learning divide had widened
- Distraction among students during online lessons
- Routine schedule at home were disrupted
- Emotional problems are increasing
- Affect students' well-being

The prolonged period of fight against COVID-19 and school suspension has posed huge challenges to every member of the education community. As reported in <u>Bulletin 1</u>, although this extensive period of online learning has brought many challenges, the tremendous effort of schools and parents in sustaining learning online paid off. Students, especially with Special Education Needs (SEN), were deemed to suffer from having seized the opportunity to learn at school face-to-face with their teachers. Surprisingly, they have benefited from the introduction of an array of online learning platforms. School leader from the primary school sector explained that these children had the chance to repeatedly access learning materials uploaded, at their own pace, which is an essential way to help them cope with SENs, but was not a support readily available before school suspension. While this does not reflect the overall experience of SEN students during the school suspension period, it does show that if appropriate preparations are in place, students' learning opportunities can be enhanced through leveraging the advantages that e-learning can offer.

Challenges

For students, a manifest accomplishment was their improved mastery of using online platforms and resources for online learning. They were having intensive online learning at home during school suspension period and learnt to solve the internet connection or technical problem. At the same time, students' abilities of self-directed learning have been fostered as they recognised the importance of self-directed learning instead of relying on their parents and schools. In addition, the resumption of half-day instructions made learning more compact and manageable; students generally treasure the time they spent with teachers and classmates on campus.

On the other hand, the prolonged period of learning behind a screen means that teachers were hardly able to handle student's learning difficulties immediately as in the face to face lesson. As a result, the learning divide had widened. This also highlights the importance of cultivating students' self-directed learning and self-regulation abilities. It was observed that students who had been more self-motivated and with better self-regulation prior to the school suspension period benefited most from online instruction whereas those who had required more teachers' intervention tended to fall behind in the same period. It is challenging to most teachers on how to increase the frequency of online learning interactions during online lessons. Teachers can only passively conduct classroom rules through monitors, resulting in distraction among students.

Students' schedules were disrupted not on their school day schedule, but also their routine schedule at home. Social workers reported that students' emotional problems are increasing. Cyberbullying became more commonplace as students prefer to ask for assistance from the internet instead of receiving timely professional advice from social workers or counselors, and some fell prey to other internet pitfalls. The reduction of students' socialization also led to the alienation of their interpersonal relationships. Besides, the lack of exercising and extra-curricular activities due to school suspension affect their well-being to certain extent.

Teacher level

e-learning tools

improved



A salient achievement on teachers' level during the pandemic is the widespread integration of e-learning into learning and teaching. They are also more adept at organising the curriculum in face-to-face or selfdirected modes according to the topics and students' needs. After two academic years of necessitated practice, most teachers are more skilled at applying appropriate tools. It is important to note that teachers' collaboration has significantly improved in some schools as they often discuss new teaching plans and devise appropriate strategies for the post-pandemic era with each other. Trust and collaboration within team members in school has been established as the communication between teachers was enhanced.

However, these achievements on teachers' level came with a cost. These constantly expanding educational softwares and e-learning platforms responded rapidly to the changing needs during the pandemic, and in turn, required a steep learning curve on teachers' part, who not only have to manage their own teaching, but also help students with technical issues, causing substantially increased workload. At the same time, teachers need to study continuously in order to deal with countless new and ever-changing information. Besides, what teachers concern the most is students' knowledge acquisition during school suspension. The reduced instruction time after the resumption of half-day on-campus teaching also put pressure on teachers on completing the prescribed curriculum. The complexity involved in tracking students' progress with new technology added to the workload of having to constantly formulate, internalise, implement and evaluate responsive and contingency plans. Some teachers reported to be much more stressed and powerless.

School level

- Noticeable growth in flexibility and decisiveness in terms of school organization
- Introduced an experimental prototype of blended learning
- New learning possibilities from different countries
- Most teachers now skillfully incorporate features of e-learning into designing their lessons
- Schools were keen on developing new working styles

School directors have to evaluate whether modifications of school policies are suitable for the post-pandemic era

Suspension of all extracurricular activities

School leaders play an indispensable role in maintaining the quality of online learning during this period. To stay responsive to pandemic-related restrictions, Hong Kong schools have been prudent and amenable. We have observed noticeable growth in flexibility and decisiveness in terms of school organization. For

Challenge

^Achievements

instance, many school leaders seized the opportunity of the resumption of half-day classes to introduce a hybrid mode, merging online and face-to-face learning at strategic grade levels as an experimental prototype of blended learning to maximise efficacy. This opens up an extensive array of new learning possibilities that schools can integrate in their course, including regular exchange courses which encourages schools from different parts of the world to communicate with each other. Teachers and school leaders also benefit from the rising popularity of online exchange programs through attending education-related symposiums and workshops from different countries.

On that basis, schools put more focus on students' proactive self-learning ability, academic aptitude and learning routines. These attitudes, skills and knowledge are imperative in the New Normal. We are also pleased by the progress of e-learning across front-line educators. Before school suspension, only a handful of teachers would regularly include e-learning activities in class and even fewer would make use of online learning for enhancement and remedial teaching. After months of daily practice, most teachers now skillfully incorporate features of e-learning into designing their lessons. Schools were keen on developing new working styles and providing professional development opportunities to teachers. The long-term development of school is also facilitated. For instance, establishing learning communities, enhancing students' positive learning attitude and motivation, and promoting positive education and career planning.

Over the past two years, new school policies have been introduced to adapt to the pandemic during this unprecedented time. School directors have to evaluate whether these modifications are suitable for the post-pandemic era. For some schools, a standard online platform has yet to be established, which can lead to discrepancies in teaching platforms, and confusion might arise amongst students. Another challenge that schools experience is the suspension of all extracurricular activities. Although they do not directly affect students' academics, they can influence their mental health and social abilities. As a result, schools will have to organise alternate online events to make up for the lack of extracurricular activities, which may expend teachers' workload.

Home-school co-operation/ Parent teacher associations level

- New platforms for home-school communication were developed
 More frequent communication between teachers and parents
 Schools' extensive work to improve parents' information literacy
- This paradigm shift of expecting parents to play an active and substantive role in their children's education
- Difficulty in reaching some parents who were not responsive to their calls
- Parents concerned about addictions or inappropriate access to digital devices
- Difficulties in organising PTA events
- Challenging for parents whose child is transitioning to a new key stage of learning (e.g. admission to P1 and S1 students)

To respond to the change in learning modes, home-school communication was essential. For example, many schools have produced a range of videos and online workshops to educate parents of the e-learning platforms deployed and problems associated with internet addiction. Some even developed new platforms to encourage home-school communication. We were glad to witness more frequent communication between teachers and parents, such as following up children's learning progress over the phone. Extensive work has been carried out to improve parents' information literacy during this period.

This paradigm shift of expecting parents to play an active and substantive role in their children's education was particularly demanding for working parents throughout the learning from home period. During the pandemic, students, especially younger children, required considerable help from their parents in order to participate in any school activities. When on-site instructions were not possible, schools' communication with students also had to be directed through parents. In addition, the supervisory role during school hours also shifted to adults at home. All these were very challenging for working parents. Schools also reflected the difficulty in reaching some parents who were not responsive to their calls. This made it even more

difficult to understand their predicament and to provide suitable help. Parents could also be concerned about addictions or inappropriate access to digital devices, which the school responds to by adjusting the duration of online learning.

Regarding Parent-Teacher Association, due to difficulties in organising events such as parent education seminars and workshops under the current circumstances, they are unable to offer in-person support to parents. It would be challenging for parents whose child is transitioning to a new key stage of learning (e.g. admission to P1 and S1 students) during this period.

Parent level

- Acquired more digital skills
- Had more opportunities to learn the progress of their children
- Instilled self-directed learning concepts
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- Learnt tolerating and caring for each other

- Confusion on identifying desirable learning standards for their children under the New Normal
- Conflicts between parents and children became more prevalent
- Growing concern for internet addiction

With students and parents spending more time at home during this period, parenting practices have become key to students' learning experience and wellbeing outcomes. Both parents and children have acquired more digital skills. This could open up possibilities for developing a wide range of online learning and teaching methods. Our research showed that, when compared with the period of learning in schools, parents who were able to support children's learning at home had more opportunities to learn the progress of their children. Some parents also managed to instill concepts such as self-directed learning and raised their children to become more self motivated. Parent-child relationships were strengthened not only by having more time to get together, but also time and opportunity for them to learn tolerating and caring for each other.

^{Ch}allenge^s

However, the transition from face-to-face learning to online learning and the changes of schools' assessment methods under the New Normal caused the confusion of parents on identifying desirable learning standards for their children.

Nonetheless, conflicts between parents and children were also more prevalent as they were confined at home over an extended period of time. For instance, when digital devices became a necessity for students throughout the pandemic, parents often found it hard to determine whether students were concentrating on online lessons or simply socializing with their friends, with growing concern for internet addiction. The competing demands of children and working-from-home parents for digital devices and working space added to the clashes. These challenges and disagreements broke into quarrels and fights, which may also lead to the emotional stress of family members.

Professional association, Community organisations and Non-profit organisations level

- The government and various non-profit organisations (NGOs) have been coordinating to provide assistance to families, especially for those with low SES status, in two aspects:

 the process of acquiring digital devices for students for online learning purposes has been sped up
 seminars on information literacy were organised for parents
 - More students were suffering from emotional problems
 - cyberbullying and privacy issues might arise

Social workers played a supporting role for students and parents throughout these challenging times, providing assistance actively to ensure a smooth transition from face-to-face to online lessons. The main concerns of social workers were parenting practices and the three major divides on students: accessibility of e-learning devices, digital literacy and family SES. The government and various non-profit organisations (NGOs) have been coordinating to provide assistance to families, especially for those with low SES status, in two aspects. First, the process of acquiring digital devices for students for online learning purposes has been sped up. They were provided with suitable learning devices in order to continue their learning during school suspension. Second, seminars on information literacy were organised for parents to learn different techniques that related to support children's learning and enhance parent-child communication.

However, under the new normal, it was noticed that more students were suffering from emotional problems. Students are more likely to communicate with netizens rather than social workers or friends. This might result in crises such as pyramid scams. Social workers also found it more challenging to investigate and solve problems occuring outside of schools, such that cyberbullying and privacy issues might arise. This shows that developing students' digital literacy is of utmost importance, including how to make good use of the internet and stay online safely.

Educational technology (EdTech) level

- A wide variety of online learning platforms and tools for teachers and Chievements schools to select from Online platforms are no longer a secondary means to assist teaching, on the contrary, a promising primary tool which dominates the future education industry Schools seek innovative and interactive teaching methods to provide different choices among the inherent teaching modes
- Inability of selecting and incorporating technology to learning and teaching effectively

Schools prefer to adopt commercialised virtual meeting platforms which are not specifically made for education purposes. By investing in products developed by EdTech companies, not only can we support them to continue updating and creating new softwares for educational use, but it can also be beneficial for students with Special Education Needs.

The surge in demand of education platforms during the pandemic stimulated a sudden advancement in the EdTech market, creating a wide variety of online learning platforms and tools for teachers and schools to select from. Not only is it effective for day-to-day teaching, but it can also be applied to other areas, for instance, STEM, art, Learning Management System (LMS) and home-school communication. Consequently, schools seek innovative and interactive teaching methods to provide different choices among the inherent teaching modes. With these gadgets, schools and teachers were able to find alternative approaches, such as interactive learning which students found intriguing to cope with the challenges the pandemic brought. Online platforms are no longer a secondary means to assist teaching, on the contrary, a promising primary tool which dominates the future education industry. However, school leaders and teachers should thoroughly understand the teaching principles of EdTech to prevent it from promoting passive learning instead of self-directed learning to students.

allenge

However, the pace of educational development of schools differs. In most schools, the goal to promote EdTech is unclear, causing the lack of understanding toward EdTech in schools and the inability of selecting and incorporating technology to learning and teaching effectively. Some cases where the current teaching schedule fell behind the curriculum, most decided to employ conventional teaching methods. Schools also prefer to adopt commercialised virtual meeting platforms which are widely used. While these platforms are filled with a plethora of functions, they are not specifically made for education purposes. They can be easily misused as a one-way lesson, therefore it has to be considered together with online teaching methods. Online Learning Management Systems (LMSs) and various digital learning tools should be connected according to different teaching methods and models. By investing in products developed by EdTech companies, not only can we support them to continue updating and creating new softwares for educational use, but it can also be beneficial for students with Special Education Needs.

Vision and Aspiration for the New Normal

The emergence of the New Normal not only poses challenges to the education sector, but also affects other sectors in the community. With the support of school leaders, teachers, parents and NGOs, students are already advancing on the co-constructed path carved out by the New Normal. This study highlights the importance of **engaging the whole society to work further on jointly building a better New Normal**.

With regards to schools, it is an opportunity for school leaders to rethink how schools can move forward the current online teaching implementation from the experience gained during the period, in order to enhance the teaching quality of schools. Panellists **Principal Joanne Lau** and **Principal Stanley Kam** added that

much more could be done at the school level, such as sustaining the established and effective forms of online teaching and learning, designing an effective blended mode of learning, creating more space for teacher professional development, more proactive use of LMSs to enhance the quality of learning and teaching, and encouraging teachers to share e-learning resources.

At the same time, improve students' digital literacy to prevent them from falling into internet scams.

Professional educational organisations addressed problems caused by the lack of face-to-face lessons, such as sciences and STEM lessons which are ineffective to conduct online. They are hoping the corresponding sectors will assist to solve or mitigate such difficulties. They also hope the academia to consider the conditions of cross-border students before choosing relevant e-learning instruments.

On the other hand, the evolving New Normal also brings new concerns. Both **Mr Charles Chan Kin-hung** and **Dr Wan Lap-man** from the social work sector

concerned about students' well-being,

partly from the challenges of transitioning from face-to-face instructions to online learning, and partly from drawn out confinement at home, leading to increased chances of internet addiction, cyber pitfalls and conflict with parents. All these add to the pressure they are facing. They wish the schools can strike a balance between students' learning needs and developmental needs by assisting students to adapt to the New Normal while taking care of their emotions and well-being.

Schools should also educate students on how to make good use of the internet and staying safe online. They wish teenagers can be engaged in more positive interaction by the cooperation of schools, families and other stakeholders, so that they can strengthen their communication skills and face the challenges of the New Normal.

The role of parents is equally pivotal in this New Normal. **Mr Eugene Fong Yick-jin**, who has been active in home-school cooperation, fully understands the challenges parents are facing during the pandemic. Parents used to entrust their children's education to schools; but after a sustained period of home-based learning, they have a better appreciation of the importance of home-school communication. We have to better equip parents for carrying out different parenting roles, and work with schools to promote the well-being of parents and children.

Dr Esther Ho Yuk-fan, who is also the convener of the Jockey Club Project Well-being, highlighted the importance of the eCitizen Education 360 project to the education community,

C I hope that in the future, the education sector could use an evidencebased approach to inform forward-looking decisions making, instead of gut feelings or emotions.

She added that a key element of digital citizenship is digital well-being, which can be summarised by three guiding principles:

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C connectedness, motivation and resilience, and future-orientation.

On the education technology level, **Ir Eric Chan Sze-yuen** of Hong Kong Cyberport is committed to promoting educational technology development that meets the actual needs of schools. In his work, he came to realise the many challenges in matching educational technology (EdTech) start-ups and schools. And even though they are successfully connected, the lengthy time taken to communicate makes it difficult to promote new projects development for educational purposes. He wishes that

there can be platforms for EdTech start-ups to interact with schools to tailor products for individual learning needs, particularly the needs of students with SEN. At the same time, due to the long sales cycle, complex procurement procedure and processing time to obtain government fundings, the development of education technology has been delayed.

Mr Victor Cheng Pat-leung, Executive Director, Hong Kong Education City, said,

66 Hong Kong has a unique environment: every student has access to a tablet for taking lessons. Therefore, I encourage the industry and academia to take part in developing a reasonable, mutually beneficial business model.

Professor Law and all panellists **urged parents to make good use of this summer vacation to consolidate the experience of learning at home and to work with schools to prepare for the new school year**. This is especially important for students transitioning from kindergarten to primary level, or from primary to secondary level, to be assisted in their move to a new stage of schooling under the New Normal.

Let's work together for a Better New Normal

Specific actions and Policy recommendations

Based on the achieved advances, emerging challenges and opportunities in the past year and a half, the research team and collaborating partners put forward the following action and policy recommendations for different stakeholder groups:

For Schools and Teachers

Schools and teachers should **prioritise students' learning motivation** rather than coverage of the curriculum. In optimising e-learning, teachers from **different subjects and departments should work together to promote e-learning and online teaching**, instead of relying solely on the IT coordination team. Diversified interactive elements should be included in lesson planning and design in order to **facilitate students' engagement** and to cultivate their 21st century skills. Schools should also **set up a unified digital platform** for online and blended learning to reduce confusing situations and the burdens of adaptation faced by students, teachers, and parents.

Schools should also review the effectiveness of various online learning methods and the potential risks to students' privacy and safety. It is advisable **to establish a set of benchmarks for technology professionals** to enhance the interoperability and safety of different technical solutions, and thus to promote the quality and competency of Hong Kong education.

It is recommended that schools **actively explore technical solutions with EdTech startups** to jointly create comprehensive smart schools that support innovative interactive pedagogical models with appropriate integration of digital technology. Further, schools should include e-learning and associated school-based innovation-focused professional development, such as acquiring new pedagogies and classroom management skills, as core strategic components in any curriculum/ pedagogical development plans to address the schools' major development concerns **to support teachers' collaborative innovation**.

The transition of students **from kindergarten to primary** and **primary to secondary** will be more challenging after the pandemic. Schools and teachers should further strengthen communication with these parents **to help students quickly and smoothly adapt to the new learning environment**.

For Parents/ Parent-teacher associations/ Home-school cooperation committee

Maintaining a good parent-child relationship establish based on care and understanding are the corner stones of effective parenting. Schools can take advantage of the summer vacation to hold activities for parents and children to assist parents to learn the modes and patterns of getting along with children learning at home. Parents can also be equipped with the knowledge and skills of managing their children's use of digital learning devices. In addition, by reaching out to parents who seldom contact schools, we can hope that this would strengthen parent-child and home-school relationships. Homeschool organisations can organise more seminars or sharing sessions for parents, as well as recommend software and/or digital games that parents and children can engage in together to promote parentchild relationship. We also encourage parents and schools to nurture a district-based mutually supportive networks.

Information literacy is equally important to parents. Home-school organisations can **introduce parents**, **particularly those with SEN children, to digital platforms/software and how these can be used to support learning**. This would provide parents with a better understanding and the necessary knowledge and skills to assist their children in adapting to the New Normal. The team recommends **the compilation of an implementation checklist for parents** to follow more easily.

For Policymakers – School digital literacy policy

A digital literacy curriculum standard that incorporates international digital literacy development trends and Hong Kong information technology policies should be established to help teachers and students effectively address cyberbullying and other cyber risks, cultivate appropriate attitudes in the use of the internet, and enhance information literacy. There should also be clear digital literacy standards, and pedagogical practice guidelines (such as hybrid and blended learning) for teachers. In addition, policymakers should consider providing teachers with professional development courses on information literacy/e-learning, delivered through different modes (online, offline, blended) of instructions, or increasing the number of professional development days in school calendars to help teachers meet the required standards.

There should be policies to **support academia in the establishment of learning communities** that incorporate innovative pedagogy and assessment to cultivate 21st century digital competence in students in conjunction with the implementation of e-learning. Further, **special attention needs to be given to students with special education needs and students with socio-emotional learning needs** in the policy formulation process to reduce possible digital divide.

For Policymakers - Innovation and technology policies

It is recommended to establish a series of measures to cope with educational development under the New Normal. For example, **new legislation is needed to protect young people from frequently occurring online fraudulent activities. Standards for EdTech products** (e.g. Al programmes giving instructions to students) **should be set** to ensure transparency and to protect students from being dominated by such products. **Policy support for a model of innovation** that connects the innovation and technology community, schools, educational research organisations, and academics to co-evolve interconnected innovative education solutions comprising technology, curriculum, teaching and learning methods, assessment and feedback will contribute much to advancing student learning. In addition to cross-sector collaboration in co-development, which includes **the launch of pilot schemes for the educational solutions** should be in place to ensure that students and teachers involved in the pilot schemes understand how the effectiveness of these products can be evaluated. At the same time, the innovation and technology community should understand and undertake the ethical standards and responsibilities involved in these pilot schemes.

For Researchers/ Academics

In order to achieve a better New Normal, sustainable and targeted research is required to monitor and guide different development strategies with data. An evidence-based approach is the foundation for better collaboration.

Acknowledgement

The research team would like to thank the school leaders, teachers, students and parents who are willing to take time out of their busy schedule to complete the surveys during the pandemic, so we can obtain valuable and timely data. At the same time, we are very grateful to the supporting organizations for providing various valuable opinions and suggestions. We look forward to the concerted efforts from different sectors to co-create an ideal New Normal for the well-being of students.





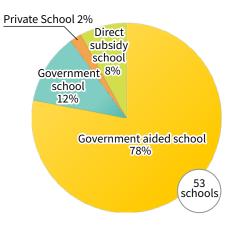
An Action Focused study, support from communitywide partners to enhance the collaborative action in a 360-degree with various aspects of learning

Research study during June and July 2020

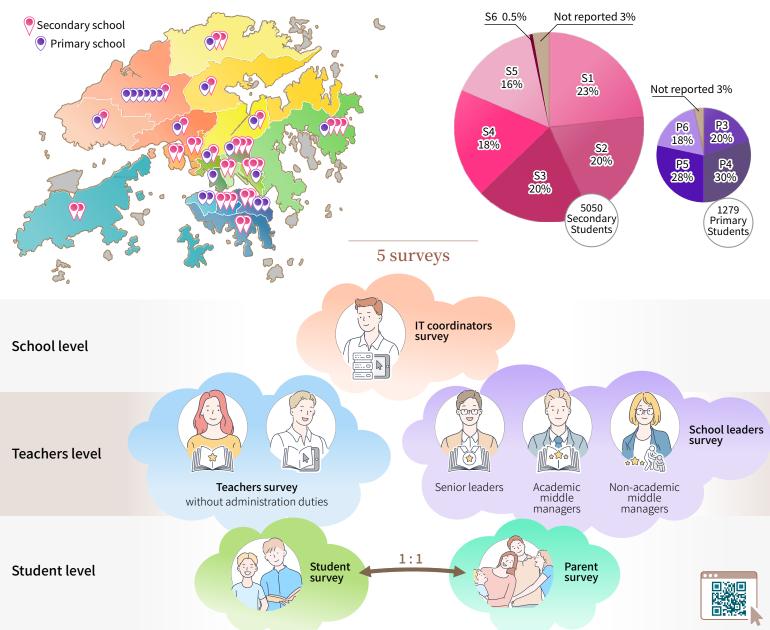
primary and secondary schools in the sample

Map showing geographic location of

Distribution of school types in participating schools



Grade level distribution of student respondents



Outcomes and challenges of online learning during school suspension

Have students been able to learn during school suspension? What are needed to enhance students' well-being?

Priorities after school resumption

Enhance school's capacity for online learning and teaching through:

suspension

preparedness

e-learning

The cumulative negative effects due to **socio-**economic and

digital divides on disadvantaged

students need attention D

Тнеме

Effort of

schools and

parents to sustain learning paid off

- developing or strengthening e-learning strategic plans for blended learning (face-to-face and online),
- providing more appropriate professional development for designing student-centered interactive online learning and authentic assessment.
- Mitigate the widened achievement gap by:
- providing remedial and supplementary teaching during summer,
- conducting assessment to find out the extent of impact on students' learning outcomes.
- Strengthen communication with parents and the provision of counselling/mentoring for students in need.

Schools should devise/ refine whole-school comprehensive plans incorporating adaptive and flexible online and offline learning and teaching arrangements by referencing and learning from the positive experiences gained before and during school suspension in schools across Hong Kong;

Recommendations

Community efforts should be in place to provide technology access and other accompanying support for those students without adequate internet access and appropriate devices for learning at home; Partnership should be fostered between schools and community organizations to provide support to needy students and their parents/families as appropriate for their specific contexts.







Key factors influencing school level online learning preparedness

What elements of e-Learning policy and implementation constitute the most important online learning preparedness at the school level?

Summary of findings

Teachers' preparedness for online teaching is positively correlated with students' online learning experience and outcomes.

A school's e-learning team composition and functions, how it organizes e-learning related teacher professional development, and the involvement of non-IT subject teachers in the planning of routine support have major impacts on teachers' online teaching preparedness, and students' experiences and outcomes of online learning. All of the positive contributing preparedness factors had more prominent beneficial effects on low SES students' online learning outcomes during the school suspension.

Build a composite e-learning team for student-centered learning

Establish a robust team of teachers with ICT expertise, IT technicians, curriculum leaders and teachers of non-IT subjects, in order to develop and implement an all-round strategic plan for both online and blended modes of learning and teaching. With members from diverse backgrounds taking part in the e-learning coordination, schools also need to develop mechanisms to ensure tight coupling and alignment among members.



2 Strengthen Learning Management System for all stakeholders

In planning the digital infrastructure of the school, technology configurations that support studentcentered pedagogies as well as peer interactions and collaboration among students should be prioritized. The role and functions of the school's Learning Management System should be strengthened to serve students, teachers, parents and school administrators in supporting student learning, peer interactions, assessment and feedback, rather than simply as a learning resources repository.

3 Provide more teaching professional development related to teaching and assessment

School-based teacher professional development (TPD) opportunities are important for fostering teacher preparedness. These TPD activities need to be practice-oriented, i.e., closely connected with blended and online modes of learning and teaching within the school curriculum. Such activities should also foster teacher collaboration and community building.





Key factors influencing online-learning preparedness for teachers

What are the characteristics of teachers well-prepared for supporting online learning? What are crucial factors predicting online teaching preparedness?

Summary of findings

Most teachers are positive towards continuing to use online learning even after face-to-face instruction resumes.

sharing and collaboration on

online pedagogy

"Progressive

Innovators

- Many teachers are unfamiliar with the use of online platforms and resources to implement interactive, student-centered learning.
- Teachers' response in the survey regarding their orientations on online L&T yielded four typical groupings: Progressive Innovators, Cautious Explorers, Conservative Explorers and Traditional Instructors.

Progressive Innovators have significantly higher Preparedness for Online L&T.

- A teacher's engagement in online L&T related collaboration in school, in particular pedagogy-oriented sharing, is the best predictor of their Online L&T preparedness.
- Professional development to foster teachers' Online L&T Preparedness should focus on using online learning platforms, digital resources and tools to design and promote interactive, self-directed learning, critical thinking and creativity, conduct e-assessment and give efeedback, as well as collecting and using data to improve teaching and learning

1 Policy and system level:

Тнеме

Encourage the use of online

learning platforms and digital resources for student-centered

interactive learning

learning provisions on fostering **highe<u>r-order thinking</u>,**

e-assessment and digital feedback

Expand the professional network among teachers and schools to foster online L&T preparedness, leveraging the use of online learning data for assessment and feedback.

Recommendations

2 School leadership level:

Strengthen e-learning teams' professional development roles and functions and deepend teachers' in-depth sharing and collaboration to help more teachers before Progressive Innovators.

3 Individual teacher level:

Enhance one's ability to design and implement student-centered, interactive, online learning that can foster students' critical thinking and creativity through collaboration and professional development.





Multi-level School Leadership for online learning preparedness

What are the leadership factors that influence school and teacher level preparedness for online learning and teaching?

Summary of findings

School-wide culture of openness to innovation and a climate of collaboration, mutual trust, and collaboration at the school level are key to fostering teacher preparedness for online L&T

Foster a culture

of trust, collaboration

and openness

to innovation

Тнеме

Participation

in joint-school

student-

centered

innovation projects

Support middle-level managers in solving

> problems encountered in

the process of innovation

- Schools' overall development priorities and strategies are the strongest predictors of positive school climate and post-suspension planning for online T&L
- Engagement in school-based and joint school pedagogical innovation projects is the most effective form of professional development for online teaching preparedness
- Senior leaders and non-academic middlelevel managers are more optimistic and confident in the face of challenges, and often see failure as "room for improvement"

Schools need to reach out for external support for teacher professional learning and leadership development to enhance their online T&L preparedness, rather than by "learning through failures" only. Participation in school-based projects that foster pedagogical innovations and promote active collaboration and mutual trust are most beneficial.

Recommendations

2 Engagement and support from both academic and non-academic leaders are equally important in ensuring quality learning outcomes from students' participation in online and other supporting learning experiences provided by the school under the New Normal. Participation in ioint-school studentcentered innovation projects that involve multiple school leadership roles will foster school-wide collaboration.

3 Senior leaders need to support middle-level managers in solving actual problems encountered in the process of innovation. This can be achieved by ensuring that they have a realistic understanding of the actual T&L practices within their schools (including online T&L), strengthening communication and consensus building across senior and middle-level leaders.





Parent-Child Communication and Relationship are Key to Students' Wellbeing at Home and in School

How do surveyed parents differ in terms of their parenting practices? How do parenting practices and SES affect students' and their parents' well-being? What school and teacher factors influence parenting and student outcomes?

Summary of findings

- Good parent-child relationship is the single most important supportive and protective factor for children's well-being.
- Parental participation in school activities predicts children's participation in online learning and perceived usefulness of online learning tools.
- Parents from lower SES backgrounds are more likely to engage in school activities and interact with teachers.
- Teachers' online teaching preparedness and their priority for student-centred pedagogy is associated with lower levels of students' worries and lower probability of encountering cyberbullying during school suspension.
- Secondary schools with more effective e-learning plans and strategies are likely to have more parent-teacher interactions.

For parents:

Тнеме

Good

participation relationship

predicts children's for a **child's** online learning **wellbeing**

> Parents from lower SES backgrounds are more likely to rely on schools for

> > parenting

support

parent-child

is the single most

important factor

Parental

in school

activities

Understanding, empathy, socioemotional support and encouragement are more important for your child's well-being than giving specific guidance or coaching on their school work.

For parent-teacher associations:

(1) Identify good practices and need areas in parenting support provisions,

(2) Solicit government and community resources for (digital) parenting education support.



Recommendations

For schools:

Communicate with parents on school e-learning arrangements and expectations, work with NGOs and community partners to provide "digital parenting" education, and reach out to parents who are in need of support.

For child/family support NGOs:

In addition to the provision of material support, such as digital devices and internet connectivity, provide guidance to parents on how to connect with their children. Parenting guidance is needed irrespective of the parents' SES, although their needs may differ.

For students:

Communicate with parents and reach out to teachers and school leaders when you encounter difficulties with different forms of online learning or cyberrisks.

* For policy makers:

Online learning at home puts a greater responsibility on parents to understand and support their children's learning. Policy support to enhance online home learning preparedness for parents through different initiatives involving schools and parent organizations, NGOs are necessary.



eCitizen Education 360 - an Action Focused Post-COVID-19 Study for Equitable Quality Education for All

The prolonged period of fight against COVID-19 and school suspension has posed huge challenges to every member of the education community. The tremendous effort of schools and parents in sustaining learning online has not only overcome limits presented by social distancing, but also inspired a new chapter of educational transformation as schools resume.

This project is a comprehensive 360-degree survey study with widespread support from academia, parents, professionals and community organizations. By gathering information about the experiences and needs of primary and secondary schools during the periods of school suspension and resumption, we aim to enhance our comprehensive capacities to act as a community to improve the education opportunities, digital competence and well-being of students. These would also enable them to cope with various aspects of life in a fast-changing world in which digital technology plays a pervasive role.

The first five issues of research findings were released on July 20, August 25, November 3, 2020, January 19 and March 30, 2021, and a joint symposium with supporting organisations was held on July 10, 2021.

Study Purpose

eCitizen Education 360 stems from the initial findings of the "Learning and Assessment for Digital Citizenship" Project, to find out what are the challenges and opportunities, wellbeing issues and status of learning outcomes during and after school suspension in primary and secondary schools, support at home, and the most urgent needs and actions after school resumption, and put forward action and recommendations for different stakeholder groups to co-create a Better New Normal.

Study Design

The study adopted a multi-level survey-based design to investigate the experiences and needs, before, during, and after the school suspension, of different stakeholders in Hong Kong, including school leaders, ICT coordinators, teachers, students and their parents in primary and secondary schools. Each school also completes a school profile form to provide basic information about the school. This study takes a broad perspective on school leadership to include all staff members having formal responsibilities to contribute towards school-level decisions, including principals, vice principals, academic masters/mistresses/ curriculum leaders, subject/KLA panel chairs, heads of e-learning, heads of STEM, moral/civic education coordinators, counselling/guidance coordinators, discipline masters/mistresses, life-wide learning coordinators, etc. School leaders contribute much to a school's decisions related to its e-learning preparedness before the school suspension, contingency plans during the suspension, and the strategies and actions as the school resumes. Teachers serve a key role in implementing these decisions and contribute directly to the learning experiences and outcomes of their students. For school leaders who have teaching roles, the survey also asked questions about their teaching practices. Together with the responses from the student and parent surveys, we can get a comprehensive 360 degree understanding of how school and family conditions contribute to the learning experiences and outcomes of students before, during and after the school suspension.

Supporting Organizations

This project is a comprehensive 360-degree survey study with widespread support from academics, The HK Jockey Club Charities Trust, parents, professional and community organisations. We aim to enhance our comprehensive capacities to act as a community to reduce the negative impact of school suspension as well as to realise the vision of eCitizen Education 360.

Supported by

rogramme

Organized by







Learning and Assessment for Digital Citizenship Project, which is funded by the Research Grants Council of the Hong Kong Special Administrative Region, China, under its Theme-based Research Scheme [Project No. T44-707/16-N] and jointly conducted by researchers from The University of Hong Kong and The Hong Kong University of Science and Technology.

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Copies of this publication can be obtained from: <u>https://www.ecitizen.hk/360/</u> <u>dcitizen@hku.hk</u>

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