

Chapter 15

Educational Continuity During the COVID-19 Pandemic at Qatar Foundation's MultiverCity



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Abstract Since 1995, the Qatar Foundation (QF) has played a key role in the development of Qatar through education, science, and community development. QF is an “umbrella” array of more than 50 entities covering the entire educational system from PreK-12 schools to doctoral higher education, in addition to a variety of related organizations supporting innovation, health, culture, and community development. This case study examines how the QF Multiverse-city (MultiverCity) model has created synergies between Higher Education and Pre-University Education, which have contributed to support educational continuity during the pandemic across the Foundation and beyond. All the programs shifted to the online delivery mode and new professional development programs and online resources were designed and delivered to teachers to support them in this sudden transition. Also, QF organized a series of virtual global conferences addressing the impact of COVID-19 on education, the responses of schools and systems, and how to reimagine education postcrisis. An electronic publication discussing the different experiences shared in the conference with policy recommendations is being released with the aims of informing policymakers and educators in Qatar and globally.

The unique ecosystem of QF has shown its advantages by witnessing a significant proliferation of initiatives devoted to supporting the continuation of elementary and secondary education both in QF schools and nationwide. One of the success factors of these initiatives is the strong links and partnerships that QF has established between its entities and all the education stakeholders nationally and internationally over the past 25 years. Community outreach and support to PreK-12 education have always been integral to QF strategy. At the same time, the pandemic has provided opportunities for further impact research, and for further learning

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about the impact of contingencies, implementation of emergency plans, and best practices for more effective connectedness between different levels of the educational system.

15.1 The Role of the Qatar Foundation (QF) in the National Education Landscape

In recent years, Qatar has experienced a remarkable transformation towards the goal of becoming a knowledge-based economy and society (Ben Hassen, 2019, 2020; Weber, 2014). Since education is seen as a key enabler of such transformation, the overall educational sector has been undergoing rapid development and reform by a top-down approach supported with significant investment (Ibnouf & Knight, 2014; Koç & Kayan Fadlelmula, 2016).

In order to achieve such an ambitious aspiration, a key player working towards advanced education has been the Qatar Foundation for Education, Science, and Community Development. More commonly referred to as the Qatar Foundation (QF), it is regarded as the primary driver of change in the country, and as the key national facilitator for building capacity to prepare the nation to become a “knowledge society” (Weber, 2014; Powell, 2014). This means that QF sees itself not simply as a provider of specific education programs at all levels, but also as the enabler of innovation in society at large, as the country evolves into an education and research hub (Alraouf, 2018).

Founded in 1995, QF is a publicly supported nonprofit organization established by His Highness Sheikh Hamad bin Khalifa Al-Thani and Her Highness Sheikha Moza bint Nasser to realize their vision for the future of Qatar by investing in human capital and unlocking human potential. Unlike a typical university, QF is the “umbrella” organization comprising more than 50 entities covering the entire education range, from PreK-12 schools to graduate and postgraduate higher education programs, including programs at masters and doctoral levels. In addition, a variety of related QF entities support innovation, health, cultural, and community development.

The unique education and innovation ecosystem established at QF brings together education institutions with different missions, methodological approaches, and areas of interest. Leveraging the unique relationship with the government – its autonomous status, its role as a national driver for education and innovation, and its decentralized approach – QF has developed and established internal mechanisms to foster connectedness and collaboration between its different education institutions. In addition, QF collaborates with public and private schools that are not part of the “umbrella” and with related government entities, most notably the Ministry of Education and Higher Education.

The flagship initiative of the Qatar Foundation is a 3000-acre state of the art campus, known as “Education City.” Education City is host to seven elementary and

secondary schools and has brought under its umbrella branch campuses of eight of the world's leading universities,¹ along with a homegrown university.² There are also research and policy institutes, community development centers, and, additionally, six schools located in different parts of the country. The combined enrollment of the education institutions housed at Qatar Foundation is approximately 10,000 students comprising more than 90 nationalities. Credited with being perhaps “the largest single educational project undertaken anywhere in the world,” QF's Education City is an unprecedented development in the field of International Branch Campus (IBC) and global higher education (Alraouf, 2018; Crist, 2015).

15.2 Enabling Synergies Between Different Levels of Education

There are manifest benefits from strengthening collaboration between higher education institutions and elementary and secondary schools. For instance, the disconnect between high schools and universities is mostly an artifact of significant disparity between high school exit requirements and college entry expectations (Blackboard Institute, 2011). This could be addressed with more effective coordination and cooperation between these education levels. Likewise, school satisfaction is an important predictor of elementary school students' aspirations for higher education (Sabic & Jokic, 2019), and this can be enhanced by effective collaboration with secondary schools. Nevertheless, globally, communication and collaboration between higher education and elementary and secondary schools tend to be limited. The COVID-19 pandemic laid bare such shortcomings in collaboration and simultaneously, demonstrated the advantages in cases where such synergies between different levels of education were present.

The operational model adopted by QF has been established under the principle of multilevel collaboration. Referred to as “MultiverCity,” QF's model offers a globally unique experience for its different stakeholders, with diverse and personalized pathways. To do this, QF brings together world-class education institutions at all stages of education, research entities, incubators, and supporting infrastructure in a highly integrated and flexible ecosystem. The model is aimed at enabling multiple synergies between the different parts of its ecosystem, for the benefit of the learner and with the aim of enhancing the student experience. To do this, QF's higher education institutions play a key role (see Fig. 15.1).

The MultiverCity model explicitly seeks to create linkages between QF's domains of work: Pre-University Education, Higher Education, Community

¹Partner higher education established at QF's Education City include Texas A&M University (TAMU-Q), Carnegie Mellon University (CMU-Q), Northwestern University (NW-Q), Georgetown University (GU-Q), Weill Cornell Medicine (WCU-Q), Virginia Commonwealth University (VCU-Q), University College of London (UCL) and HEC-Paris.

²Hamad bin Khalifa University (HBKU).

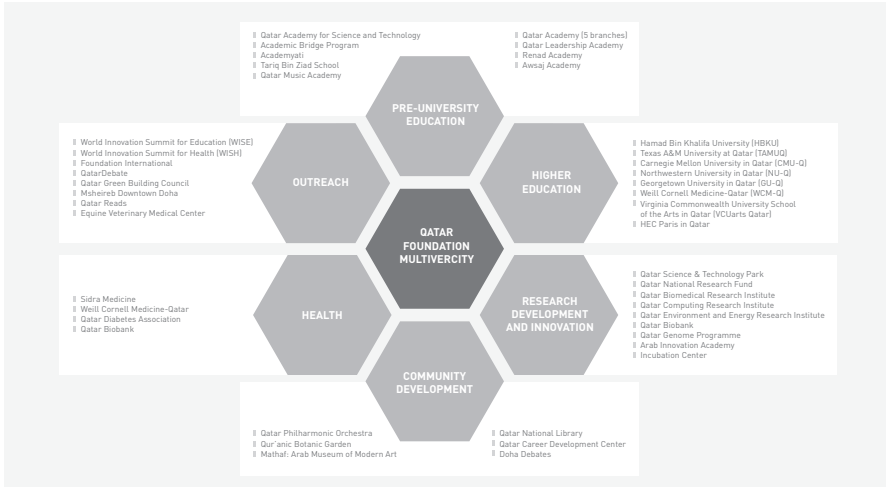


Fig. 15.1 MultiverCity approach at Qatar Foundation

Development, Research Development, and Innovation, Health, and Outreach. Students are at the center of the concept, and the community at large is the beneficiary. This model provides students greater flexibility towards a more personalized learning experience and provides them with opportunities to explore different learning modalities in a way that supports maximum learning outcomes, and for their development to become impactful to society.

15.3 Addressing the COVID-19 Pandemic Educational Challenges: A Multilevel and Multipurpose Response

This case study focuses on showcasing how the QF MultiverCity model has created synergies between its higher education institutions amongst themselves and between Higher Education and Pre-University Education, which have supported educational continuity during the pandemic across the Foundation and beyond (see Table 15.1).

Considering the varied assortment of institutions comprising QF, and the complexities associated with the simultaneous operations of many entities, it was expected that the COVID-19 pandemic could create a significant disruption after the closure of schools as mandated by the Government of Qatar, with effect from 10 March 2020. Evidently, each institution put in place an emergency action plan aimed at transitioning the delivery of courses into a virtual environment for their own students. At the same time, due to the number of collaborations already in place among QF institutions and the need to use available resources more wisely, several collaborative activities aimed at supporting students at all levels of education, as

Table 15.1 Typology of QF activities in support of elementary and secondary education during the pandemic

ACTIVITY	INSTITUTION	KEY BENEFICIARY TARGET GROUP				EDUCATIONAL LEVEL		TIMING		TYPE OF ACTIVITY					
		Students	Teachers	Parents	Educators and Policy Makers	Elementary Education	Secondary Education	New	Existing and Adapted	Online Delivery of Teaching	Online Resources	Professional Development	Research	Supporting Policy	
Mobile app for mental health	HBKU	✓		✓		✓	✓	✓					✓		✓
Platform for autistic kids	HBKU	✓	✓	✓		✓		✓					✓		✓
Online Spring Language Course	HBKU	✓				✓	✓		✓	✓					
Designing post-COVID Summer Program	HBKU	✓						✓	✓		✓				
IDEA Program	TAMUG	✓						✓	✓	✓	✓				
Creative Fusion	TAMUG	✓						✓	✓	✓	✓				
Online Robotics Program	TAMUG	✓						✓	✓	✓	✓				
MindCraft Virtual	CMUG	✓						✓	✓	✓	✓				
Game Developer Academy	CMUG	✓						✓	✓	✓	✓				
Summer College Preview Program	CMUG	✓						✓	✓	✓	✓				
Homocastion: student-led tutoring	GU-Q	✓				✓		✓	✓	✓	✓				
Global Leadership Summer Program	GU-Q	✓						✓	✓	✓	✓				
Pre-College Summer Program	GU-Q	✓						✓	✓	✓	✓				
Global Challengers GC	GU-Q	✓						✓	✓	✓	✓				
Virtual Studies Program	VCU-Q	✓				✓		✓	✓	✓	✓				
Summer Program	VCU-Q	✓				✓		✓	✓	✓	✓				
VCUarts Qatar Gallery	VCU-Q	✓				✓		✓	✓	✓	✓				
Online training on digital platforms	EDI		✓			✓		✓	✓	✓	✓		✓		✓
E-Learning Platform	EDI		✓			✓		✓	✓	✓	✓		✓		✓
Induction Program for Teachers	EDI		✓			✓		✓	✓	✓	✓		✓		✓
LEAPS Summit	PUJ		✓		✓	✓	✓	✓	✓	✓	✓		✓		✓
WISE Disruptive Education Conference	WISE		✓		✓	✓	✓	✓	✓	✓	✓		✓		✓

well as other institutions within and outside QF, and even outreach to the general public in support of the continuation of education, started to emerge.

Naturally, some of the collaborative initiatives described in this case study were already in place and have transitioned into remote delivery models to facilitate their continuation during the pandemic crisis. In addition, several new collaborative activities were rapidly designed and ready to be implemented for the following summer session.

In general, the varied assortment of activities conducted in QF, in support of school education during the pandemic, can be classified into the following categories:

15.3.1 Online Delivery of Teaching-Learning

As expected, an immediate priority addressed by universities was to assure the continuation of delivery of education to their own students, by transitioning to remote delivery using different technological platforms. The institutional leadership of QF also expressed the intention to implement a continuation transition not only in regular programs but also in those initiatives supporting other levels of education. Similarly, partner universities housed at QF rapidly evaluated the feasibility of offering in an online format the different initiatives already in place in connection with the pre-university engagement. Interestingly, new programs being designed before the pandemic for delivery using a traditional face-to-face approach were rapidly adapted to an online format. This is the case of the Robotics Program offered

by Texas A&M University-Qatar, which in its original format would bring together secondary school students to work in teams to assemble robots. Another innovation is the MindCraft Virtual offered by Carnegie Mellon University-Qatar, which rapidly transitioned to an online format in order to offer a series of six workshops during the summer, targeting a total of 200 students from more than 30 local schools. A pilot has been successfully completed, and there are plans to investigate ways by which the program can be scaled to reach a larger number of students during the Fall semester.

15.3.2 Development and Deployment of Online Resources

Universities at QF used their technological capacity to make available online resources in support of education. For instance, Hamad bin Khalifa University, the homegrown higher education institution at QF, quickly developed a mobile app to assess the mental health of students at home. Similarly, a platform to support the education of students with autism has been developed and launched. Also, QF set up the Pre-University Education E-Learning Platform with the goal of supporting teachers and parents by making available online pedagogical resources.

15.3.3 Professional Development

Despite regular efforts to keep teachers up to date and familiar with cutting-edge pedagogical methodologies and technology, the magnitude of the sudden closure required a rapid response to assure that all teachers would be able to transition successfully and effectively to online learning. Initiatives at QF, originally designed to support its own elementary and secondary schools, were identified by the Ministry of Education and Higher Education of Qatar as an efficient way to expand the scope of online learning to the entire country. As a result, structured online training on digital platforms was offered to elementary and secondary school teachers at the national level. Similarly, the typical Induction Program being designed for QF teachers was also made available to all teachers in the country.

15.3.4 Research

Considering the sudden closure of universities, most research efforts also were placed on hold. However, the pandemic offered an opportunity to align some related activities in support of elementary and secondary education. This is the case for a team at HBKU, which has worked on a mixed-reality (real-time teaching and virtual teaching) interactive educational platform, designed with the purpose of supporting

remote learning for children with autism. QF's Education Development Institute (EDI) has been conducting research on the teaching-learning process during the pandemic by collecting data from parents, teachers, and students; observing "classroom" interactions; and analyzing school logs and academic performance reports. Preliminary findings have been shared with schools and reports have been published afterward. In addition, the learning track at the QF-based World Innovation Summit on Education (WISE) has conducted research on skills gaps of learners in Qatar in connection with the pandemic.

15.3.5 Supporting Policy and General Outreach

The efforts conducted by universities and other education entities affiliated with QF are supporting the government of Qatar as it copes with the pandemic. Experts from different fields of work are regularly being called by government entities to provide technical advice, often with respect to education. Activities such as the training of teachers on the use of technological tools and digital pedagogies were designed and offered both to those teaching in QF elementary and secondary schools, and to teachers from all schools in the country. Policy discussions, for example, about the reopening of schools in the country are usually informed with perspectives from QF experts. In addition, QF-based entities, including the World Innovation Summit on Education (WISE), organized a series of virtual global conferences addressing the impact of COVID-19 on education, the responses of schools and systems, and how to reimagine education postcrisis. An electronic publication discussing the different experiences shared in the conference with policy recommendations is being released with the aims of informing policymakers and educators in Qatar and globally.

15.4 Institutional Actions in Support of Continuation of Elementary and Secondary Education

A more detailed explanation of the different activities conducted by QF-related universities and other relevant educational entities is included below.

15.4.1 Connecting Research with Educational Support: Hamad Bin Khalifa University (HBKU)

HBKU is a homegrown research and graduate studies university founded by QF in 2010. It aims to be a catalyst for positive transformation in Qatar, as well as having a global impact.

The involvement of HBKU in support of the continuation of education in pre-university institutions includes the development of apps and the delivery of courses remotely.

A good example is a mobile application quickly developed in the College of Science and Engineering that can analyze children's drawings using an Artificial Intelligence algorithm to assess the current state of a child's mental health. The mobile app was developed during the COVID-19 crisis to help parents engage with their children about their mental health during this especially worrying period. The app has been adopted by over 1000 local schools. Online drawings are classified into two categories representing positive or negative emotions, assessed, and categorized by a professionally trained art therapist. The platform was developed by considering the feedback of psychologists and school counselors from a number of QF schools. Using the app, parents can observe a historical trend of their child's state of mind, organized weekly or monthly, and are encouraged to discuss the emotional readings of the app with school counselors.

The Qatar National Research Fund (QNRF), another member of the Qatar Foundation, launched a fast-track research program to support Qatar in mitigating the impact of the pandemic on various sectors. HBKU was awarded a grant for a mixed-reality (real-time teaching and virtual teaching) interactive educational platform to support remote learning for children with autism. This project aims to develop, evaluate, and launch an interactive educational platform using mixed-reality to enable remote learning for children with Autism Spectrum Disorder (ASD), which is particularly challenging during the COVID-19 period. The concept is a product of HBKU's continuous collaboration with Shafallah, a center for people with disabilities, and Mada, an assistive technology center, which has previously developed an augmented reality (AR) vocabulary learning application in English and Arabic for children with ASD. The app supports learning the alphabet and words in an interactive environment. It is planned to extend this app to a full-educational platform using mixed-reality. The child will be learning in a real-time environment when a teacher, child, and parents are all online together at a given time; however, in the absence of a teacher, a 3D humanoid talkative avatar will support a child and its parents in a virtual environment. The platform will encourage teachers to create tailored content and individualized online learning plans. Teachers will also have the capability to communicate with the children and their parents through the platform. It will allow teachers, specialists, and parents to monitor the child's performance. The platform, which can be used via tablet devices, will be deployed at the centers and special education schools. It is currently in the development phase; prototypes will be ready soon for trial with teachers and children.

Regarding efforts towards transitioning from face-to-face to remote delivery of education, the Language Center at the College of Humanities and Social Sciences at HBKU transitioned their Spring language courses and workshops online. Over 400 students aged 5–15 years were enrolled in 34 courses.

More recently, HBKU launched the "Design Post COVID-19 Normal" summer program, which was created for "the new normal," to be designed fairly and effectively by youth. It comprised 4 weeks of human-centered design thinking workshops and inspirational talks with high-level speakers. Approximately, one hundred

students have participated in this course. The purpose is to develop products, services, and system (solution) ideas on a prototype scale that are effective and applicable to a defined problem related to the Sustainable Development Goals (SDGs). Teams developed action plans to address the problems they are working on.

15.4.2 Nurturing STEM Activities: Texas A&M University at Qatar (TAMUQ)

Texas A&M University at Qatar's STEM outreach activities continued in a virtual environment. More than 400 students in Qatar registered for a five-week program called IDEA (Innovate, Design and Engineer an App) in April–May 2020. This program taught the fundamentals of mobile app programming, and students developed apps within thematic areas each week.

A second program, Creative Fusion: Introduction to 3D Modeling, had more than 300 participants in grades 8–12 in a four-week sequence to learn about 3D modeling, CAD design, and rapid prototyping using 3D printers. This program was also linked to curricular requirements for students at QF's Qatar Academy for Science and Technology.

An online robotics program developed prior to the pandemic has been adapted considering the limitations of physical interaction of teams of students working towards the designing, building, and programming of robots for automated tasks. The redesign of the program required transferring the methodology into a simulated environment being used by virtual teams of participating students. This experience is extensible because students can transfer their designs and programming projects to real-life robots when it becomes safe to gather in groups.

15.4.3 Supporting Interest in Computer Science: Carnegie Mellon University in Qatar (CMUQ)

CMUQ has engaged in an online outreach effort with the creation and introduction of MindCraft Virtual. This event is a new online series of workshops designed for high school students to help them get exposed to computational thinking and Computer Science. During the first 3 months of the lockdown, a CMUQ's team worked remotely to develop these workshops offered as a series of six sessions during the summer, targeting a total of 200 students from more than 30 local high schools. After successful completion of a pilot, and based on the experience during the virtual offering during the summer, plans were made to investigate ways by which the program can be scaled to reach a larger number of students during the Fall semester.

Also, the HBJ Center at CMUQ has developed a "Game Developer Academy" aimed at students in Grade 8–12. This in-depth workshop, held over a two-week period, attracted 80 applicants from a wide range of schools in Qatar.

Additionally, a Summer College Preview Program has been designed to help secondary school students strengthen their academic profile, prepare for standardized tests (SAT/ACT), and understand the college admission process. The program was moved to a virtual environment and received over 250 applications for a class of 70 students from 30 different secondary schools in Doha.

15.4.4 A Focus on Civil Service: Georgetown University in Qatar (GU-Q)

Hoyacation is a voluntary program where GU-Q students are offering a range of classes to elementary and secondary school students. This was a new online program launched in 2020 to keep kids engaged through the summer while learning new skills. It also provided an opportunity for GU-Q students to offer a service to the community. This program has kept GU-Q students motivated, connected, and supportive of each other. The range of topics included in the program are creative writing, eco-learning, guitar classes, creative writing (poetry), Persian, German, MUN, events planning, Canva, and even cake baking and decorating.

Additionally, GU-Q recently offered a two-week Global Leadership Summer program focusing on leadership skills to grades 9–12 students. This program was created in direct response to students being home for the summer and was held entirely online. The program was free of cost and involved two cohorts, one in the morning and one in the afternoon, for 2 weeks in June 2020.

Also, the Georgetown Precollege Summer program (GPS) helps prepare students for the challenges of university life. The three-week program introduces Georgetown Qatar's curriculum, provides SAT/ACT preparation sessions, includes preparatory courses in English and math, and offers study skills workshops. This is a long-running program, offered in July every year. For summer 2020, it was offered in an online format.

Similarly, the Georgetown Global Challengers (GGC), which was launched in Fall 2019, is a monthly workshop where high school students (Grade 11 and 12) get the unique opportunity to delve deeper into world issues through a series of workshops and learning exercises. Due to the pandemic, the program transitioned into online delivery.

15.4.5 Creative Outlets: Virginia Commonwealth University, School of the Arts in Qatar (VCUQ)

VCUQ's mission is to cultivate a dynamic intercultural environment of diverse research, learning, and community engagement that propels the holistic development of exemplary artists, designers, and scholars to build vibrant communities and diversified economies.

In alignment with the aforementioned mission, VCUQ's Community and Continuing Education department acted quickly to transfer its outreach activities and community programs to the virtual classroom environment. The Community and Continuing Education department reached out and assessed the needs of elementary and secondary (K-12) students and were able to provide virtual programs to the community to support them in times of crisis:

In the midst of the pandemic, the Virtual Studios program offered six online courses. These short courses were designed for online platforms. They offered creative outlets to the public and helped them to be connected to VCUarts Qatar. The programs were designed for different age groups:

- Set up your Creative Home Office (16+ years)
- Design Thinking in Design and Entrepreneurship (16+ years)
- Art & Collective Conversations in Crisis (16+ years)
- Art in Support of our Heroes
- Encouraging your Child's Creativity at Home (for parents)
- 2D Animation for Kids (Age 10–13)

The program, offered during the months of April and May 2020, was well-received by the local community with 600 registrations. Involvement came from all age groups, and many provided positive feedback that showcased the professionalism of the instructors (a majority are of VCUarts Qatar Alumni), the depth of the curriculum, and most importantly, the value learned that they were able to transfer directly to help them cope with the pressure of the pandemic.

The second program that was offered in July 2020 was originally an annual program that offered 25 art and design classes for children and high school students (4–18 years). This year, the Summer Program was modified to an intensive three-week online course for high school students only, with an optional 1 week of portfolio development classes. The program's curriculum is designed to build the students' art and design skills and to assist them with developing their portfolios for applying to study at an art and design school. The students can design the program based on their interests and needs, which is one of the goals that the Community and Continuing Education department keeps in mind during the development of its programs. They are always student-centric and follow current trends.

The program is focused on offering student-centric and focused modules, based on the age group, to develop critical thinking through art and introducing participants to different types of creativity. This modified focus became a substitution for the traditional 25 classes that used to be offered. This strategic change was brought forward by the department as an answer to the ongoing understanding of their student's needs and wants, and to provide the best fit for the virtual classroom environment. In addition to the above four courses, the department is developing several other programs that are aimed at K-12 students.

Finally, the VCUarts Qatar Gallery has launched an interactive online learning guide for its exhibitions. The project is geared toward elementary school students, ages 6–9, who will be able to virtually engage with content exhibited in the VCUQ art and design gallery (e.g., color studies from the Spring exhibition). In

collaboration with VCUQ's Community Education program, this project engages alumni who will act as virtual docents.

15.4.6 Support Capacity Building: The Education Development Institute

The Education Development Institute (EDI) was established at QF in 2014 with the vision of advancing teaching and learning through quality professional development programs for educators, nationally and internationally. In addition to its in-house training programs, EDI offers programs in collaboration with leading educational organizations like the International Baccalaureate Organization, the Institute of Education of University College London, and the University of Bath. EDI supports continuity of education during the pandemic by providing training and professional development to elementary and secondary school teachers throughout the country. One means by which it does this is a series of three annual conferences:

The Teaching and Learning Forum: Attended by more than 1500 educators annually. It is a platform for teachers to share their best practices, exchange expertise, and network. The 2020 edition was held online in October and discussed the topic of Education for Resilience.

iSTEMed: A conference dedicated to Science, Technology, Engineering, and Mathematics (STEM) education, which brings together private and public entities in Qatar, as well as teachers and students, to learn more about the latest developments in this field and enhance STEM offerings in schools. It attracts around 250 participants annually.

The Heritage and Culture Forum: A platform for dialogue on learning initiatives around culture, heritage, and language. It brings together practitioners annually to discuss challenges and find innovative solutions.

- When COVID-19 interrupted education, and schools closed and transitioned to online learning, EDI promptly took action to support the continuity of teaching and learning.
- **EDI training on the use of MS teams for e-learning and online collaboration:** Training was delivered to more than 1800 teachers in the country (of which 205 are affiliated to QF pre-university schools) for “e-learning” and “e-collaboration” using MS-Teams, and for “distance learning” using GoTo Meeting. Instruction to teachers was offered both in English and Arabic. Satisfaction surveys conducted show a high level of impact across all participating teachers. Some initial findings from the survey indicate that in addition to the received training, teachers also want to receive training on: a higher level of MS Teams training with a special focus using apps such as Sway and interactive PowerPoint; exploring other online learning platforms such as Seesaw, Zoom, and Google Classroom; online teaching-learning tools for assessment, motivat-

ing students, certificates, and grade books; using tools related to student participation such as feedback online, communication with students and parents, and student engagement; and understanding tools related to parents' participation, including training for parents on how to use MS Teams to help their children.

- **E-learning platform:** One week after schools were closed due to the pandemic, EDI took the initiative to develop a bilingual platform through which resources can be shared with educators in and outside QF. The PU eLearning Site has since developed into a repository of resources for K-12 educators, where each posting is suggested by an educator and reviewed according to the following criteria: compatibility with the technology available in most schools in Qatar, relevance (alignment with the curriculum guidelines and pedagogical principles adopted in QF schools), display and formatting, intellectual property (assuring the respect of copyright and Creative Commons rights), and justification (by describing an adequate recommendation of its usefulness).
- **A new approach to induction:** EDI has gathered a considerable amount of data on the needs of elementary and secondary school educators in professional learning, specifically to address the challenges of distance learning and the pedagogical shifts that have become a mandate for a sustainable post-COVID-19 educational model. To respond to this need, EDI has planned for a series of professional learning experiences in the following four areas:
 - Building a supportive and collaborative online learning community.
 - Fostering engagement through synchronous and asynchronous learning.
 - Online assessment of students' learning.
 - Digital citizenship: International Society for Technology in Education (ISTE) Standards and effective practices.

Online sessions were offered in August to provide educators with the pedagogical tools and methodologies to be as prepared as possible for the new academic year. Initially targeted at staff working in the pre-university schools of QF, the opportunity was later extended to other schools in Qatar.

15.4.7 Leading Educational Advancement Through Progressive Schools Summit (LEAPS Summit)

LEAPS is a first-of-its-kind international summit organized by Qatar Foundation Pre-University Education (PUE) to bring together leading global progressive schools to discuss issues and find solutions through partnerships and collaboration. Progressive schools around the world share a vision to build the future of education through innovation and disruption of the traditional models of teaching and learning. The pedagogical goals and approach of these schools also often differ from the traditional schools in their countries. Consequently, the challenges and opportunities faced by these schools during the COVID-19 situation are also different.

The first summit was conducted in November 2019 as a preconference to the WISE Summit. Recognizing a need and an opportunity to feature the work of its newest progressive school, Academyati, and the other LEAPS partner schools share lessons learned and support each other through some of the unique challenges they face during the current crisis. Therefore, QF hosted the first LEAPS webinar in May 2020. Six leaders of progressive schools from five different countries came together to discuss some of the effects of the pandemic on their schools. The webinar was conducted on Microsoft Teams Live and offered the opportunity for the audience to ask questions and interact with the speakers. The LEAPS Webinar had 250+ participants from Qatar and abroad and received strongly positive feedback. Academyati and other participating progressive schools discussed several topics relevant for progressive schools, as well as others, ranging from maintaining and/or even furthering “Learning through Play,” “Student Agency,” and “Relationships between parent, children, and school” during the pandemic.

The LEAPS Summit aims at creating an ecosystem for progressive schools to support each other, share their learnings, and advocate for progressive education policy.

15.4.8 Access to Knowledge and Best Practices: The World Innovation Summit for Education (WISE)

During the pandemic, QF-based WISE has curated and organized two virtual convenings titled “Education Disrupted, Education Reimagined” addressing the impact of COVID-19 on education, the responses of schools and systems, and how to reimagine education postcrisis. The first virtual forum took place in April 2020 and was organized in partnership with Salzburg Global Seminar, with the participation of local and global policymakers, leaders, practitioners, and academics. This convening featured five sessions with 35 speakers from 21 countries. The second part of this convening was held in June 2020 in partnership with Salzburg Global Seminar and Holoh IQ. It ran over the course of 3 days and featured 30 sessions with more than 80 local and international speakers. Each forum was attended by more than 3000 participants from more than 90 countries.

Additionally, to help share knowledge about the school and system responses to the COVID-19 crisis, WISE has developed an electronic publication based on the sessions featured in its virtual convenings in April and June. This publication features articles from local and international speakers who contributed to the virtual events. The articles are focused on responses to the crisis and how to build back better in the near future. Also, the learning ecosystem track of WISE is curating a research report that investigates the skills gaps among learners in school and higher education settings in Qatar, while also looking at the recent implications of COVID-19. The report will inform how local formal and nonformal learning institutions can enhance inclusive, accessible, and effective learning opportunities that help build resilient individuals and communities.

15.5 Looking Ahead: A Unique Learning Opportunity for Educational Institutions Coping with Contingencies

Qatar Foundation, with its various entities, has supported PreK-12 education continuity during COVID-19 in every possible way. Related online support programs were built or inspired by existing outreach initiatives that have been running and refined for years. Others were new and designed specifically to address the needs of the students during the pandemic. These newly established programs have been fast-tracked into immediate implementation with limited time for a detailed conceptualization framework, and, in many cases, literally are a “work in progress” while being implemented.

In-person and online outreach programs have been and are being monitored and evaluated through several indicators, like the number of participants, levels of engagement, satisfaction surveys, and articulation. A comparison between the effectiveness of in-person vs. online outreach programs will be carried out to determine the best way forward. An important aspect to examine closely would be the nature of academic disciplines and how they adapt to online teaching and learning; while the humanities lend themselves easily to online learning, other applied fields such as arts and engineering might be affected by being on a digital medium.

In summary, the unique ecosystem of QF has shown its advantages by demonstrating a proliferation of initiatives devoted to supporting the continuation of elementary and secondary education, both in QF schools and nationwide.

At the same time, the pandemic has provided opportunities for impact research and for further learning about the impact of contingencies, implementation of emergency plans, and best practices for more effective connectedness between different levels of the educational system.

To have a sense of the magnitude and variety of activities supporting continuity of education during the pandemic, the Education Development Institute (EDI) at QF set up a mechanism to study the QF education institutions' responses towards COVID-19 and to evaluate its impact on learning and the well-being of students and staff members, as well as the relationships between staff, leadership, parents, and students. The approach used by EDI in its analysis (see Fig. 15.2) is useful to illustrate the different collaborative interventions adopted by each of the universities and pre-university institutions affiliated with QF in response to the COVID-19 pandemic.

To achieve meaningful results, a wide variety of sources have been used to triangulate the findings, including staff, students, and parents' surveys, as well as institutional leadership reports, school logs, and leadership round table discussions. The report was published at the end of the year and was a key resource that assisted schools to reflect on the impact of the pandemic on teaching and learning and how to address it.

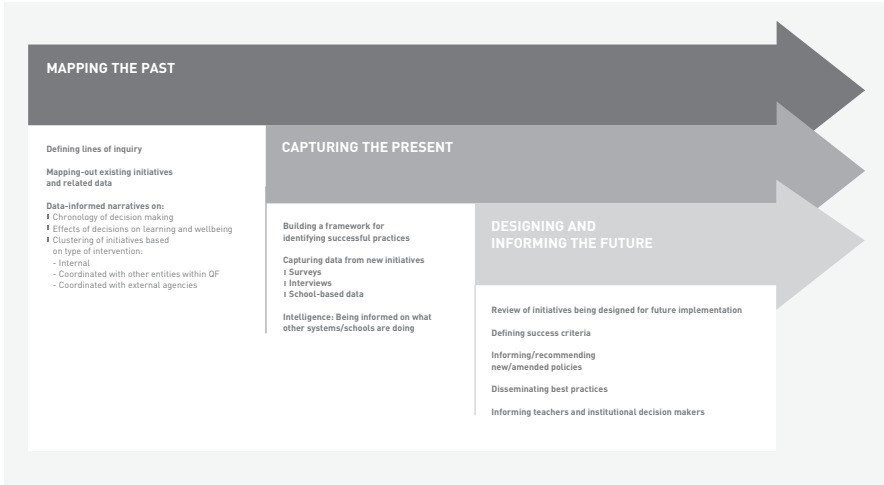


Fig. 15.2 Framework of analysis of actions at institutional level in response to COVID-19

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