The United Arab Emirates Continues Education, at Home, During the COVID-19 Health Crisis
"Learning from Afar", for grades 5 to 12, is the new model adopted in the United Arab Emirates (UAE), to ensure student continue their learning in high risk, health related crisis situations. With a population of 9.89 million (UAEPS, 2020) and a capital city of Abu Dhabi, Technical and Vocational Education (TVET) school system, consisting of 28 public schools with a registered 7,921 students, two Polytechnics, five Further Education Colleges and four Health Science Colleges with a registered 5,782 students (PSSN, 2020) went into crisis mode initiated by the current health crisis as directed by the regulator of the school system, Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET).

BACKGROUND

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Grades: 5-12
Entities: 28
Students: 11,703
Face to face schooling has been the norm in UAE schools, supported by e-learning platforms, flipped classrooms and distance learning. However, on the 5th March 2020, as a preventative measure, the regulator decided to physically close down schools but continue schooling for the students in their homes and so ‘Learning from Afar’ was initiated. Having already planned for high risk situations, there was in existence a Schools Business Continuity Plan developed for such instances that considered the risk and mitigation of crisis situations. As a result, it was planned that an Operation Room be set up to coordinate the management of the delivery of the ‘Learning from Afar’ school system should the need occur.

The ‘Learning from Afar’ school system would require many components to ensure all aspects of the ‘Learning from Afar’ School System could function. It was planned that the School System would be controlled from an Operation Room that would provide the technical requirements of school administration for remote class teaching. Additional support to the Operations Room would be supplied by an IT Support Centre, a Call Centre, and a Social Media Communication Centre. Additionally, staff would need to be tech savvy to deliver class teaching on line, flexible enough to teach the curriculum and prepare teaching materials for online teaching as the need arose.

It was planned that the Operation Room would use online screens to communicate with school administration in real time. Administration staff would ensure that class teachers were available and able to use the technology to teach and more importantly students were able to receive their education. Banks of screens were needed to view the live streaming of the class delivery from the school system to the students. Each school needed to set up classrooms with computers for live streaming. For teaching staff, because they had experience of teaching online and at a distance, very little training was required. Curriculums were already designed for flexible use.

It was planned that an IT Support Centre would be available to assist in any technical issues associated with connectivity between the Operation Room, school,
students and parents. Planning included a direct line for school and pupils to phone for technical support. A Call Centre was planned for general information to assist teachers, students and parent to navigate the ‘Learning from Afar’ schooling. Additionally, Call Centre staff were to be supplied with Frequently Asked Question sheets to assist in giving a consistent message to callers.

It was planned that social media would be central to the Operational Room strategy to ensure all parties were informed about the ‘Learning from Afar’ approach. The school system and ACTVET the regulator, already used the most widely used social media sites in the UAE, Twitter and Instagram, to communicate. Therefore, it was decided that Twitter and Instagram would be the method of communication with teachers, students and parents. Similarly, the government, it was planned would continue to use the state communication entity WAM to monitor progress and communicate using Twitter for full reach into the community.
It was also planned that live streaming of class room teaching would be available in real time. Teachers were already familiar with the online teaching and distance teaching materials and the technology to deliver. Therefore, it was anticipated that very little training would be required and there would be minimum disruption. It was anticipated that the curriculum could be delivered online and at a distance because the school system had been developing e-books and using online learning management system for attendance and delivery of course work and marking over the previous 5 years. It was anticipated that very little disruption to classes would be because of teachers or materials.

On March 5th by social media, the regulator of the school system, ACTVET informed, at 19:30 on the evening before that the school system would be delivered online from 07:30 the next morning. School Administration, teacher, students and parents were given 12 hours’ notice that the Business Continuity Plan was to be implemented and ‘Learning from Afar’ would be applied. All plans for the event of a crisis were immediately activated. School Administrators, teachers, students and parent were informed by Twitter and Instagram, as shown in Figure 1, that the ‘Learning from Afar’ would be applied the next day.

The implication was that students were not to attend school and teaching would be streamed from schools to the student’s home as of 07:30 the next morning.
ACTVET, the regulator, immediately swung into action. Technicians were contacted that night to come to ACTVET to erect the Operation Room consisting of an IT Support Centre and Call Centre. Staff that had been identified in the Business Continuity Risk Management plan for the IT support and Call Centre were called to set up.
IT staff arrived the ACTVET with their own computing equipment that had been issued previously, as standard, to all staff. The computing equipment used in schools was compatible throughout the whole school system allowing the set up the IT Centre, as shown in Figure 2. IT staff then offered support to schools requiring assistance with technical issues and connections.
Staff consisting of school Student Services staff, operated the Call Centre. Staff, as shown in Figure 3, were issued with headphones and were immediately giving out information with the assistance of pre-scripted Frequently Asked Questions. Support was given to parents and students on the requirements for the ‘Learning from Afar’ initiative.

To establish the Operation Room, computer equipment was set up for communication with the schools, parents and students.

From the evening before, right through the night, a large multi-purpose training room was converted into the main Operation Room. Training furnishings was moved out and banks of computers and TV screens brought in.

The Operation Room, as shown in Figure 4, consisted of work desks for the controlling staff that included a temporary ‘Head Master’ to coordinate technology and communications.
The Director General of the regulator, ACTVET was directing operations and the Director of the Schools was in attendance communicating with schools to ensure that live streaming was set up in every classroom, teachers were in attendance and students were online. The Operation Room was able to communicate with School Administrators in a two-way screen, as shown in Figure 5. School Administrators could see the Operation Room and the Operation Room could see the School Administration live in real time.

Additionally, each individual school was monitored for connectivity to see the teachers teaching classes online, as shown in Figure 6.
All communication was followed by the UAE government on the official media outlet WAM, to monitor the effect on the community of the ‘LEARNING FROM AFAR’ initiative. The government were especially concerned because of the importance placed on learning within the UAE. The UAE population are used to receiving communication through Twitter, as shown in Figure 7, as it is His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces and Shaikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates (UAE), preferred way of reaching the population.
On the morning of the ‘Learning from Afar’ operation the connectivity and reach of the schooling was monitored by the temporary Head Master. By 07:30 the next morning 18 online School Administration connections were live, by 09:00 am 22 were live, by 10:00 am 24 were live and by 11:15 25 were live. Within four hours all School Administrators had established contact with the Operation Room. Student online engagement was measured at 80% by 09:00 am and 90% by 11:15 am. Within four hours 90% of students were online receiving education.

Feedback from teachers indicated that they were fully prepared with their curriculum and teaching materials and only had to adapt to ‘teaching to a monitor’. Some teachers sat at their desk and taught while some stood at their blackboard and taught. Student feedback said they thought it was fun and even when the classes finished they continued to communicate with their classmates online. Therefore, social interaction was maintained.
It was this realisation of the Director General that there were learning from the ‘Learning from Afar’ initiative that demonstrated:

- A Business Continuity Plan is of top importance for the assessment of risk and the application of mitigation for crisis situations.

- An Operation Room could be set up and operational within 12 hours. Should further crisis emerge then the ACTVET school system will be able to fully function provided the internet connectivity is available.

- The technology in schools was sufficient to support the ‘Learning from Afar’ initiative.

- Regulatory staff had skills and experience required to step into temporary positions as the need arose.

- Teaching and support staff were flexible enough to be able to function in a remote location with little disturbance.

- Teachers were able to use the online learning, live streaming system and technology without any challenges. This applied to both digital natives and digital immigrants.

- The previous use of online, distance and flipped classroom learning was necessary for staff to perform at short notice.

- Standards or guidelines for online streamed teaching was not available for teachers to follow to indicate what best practice or excellence looked like. Standards are now being developed for ‘Learning from Afar’.

- The quality of teaching could be quality assured from the Operation Room, by fewer Inspectors, with consistency of judgement, at less cost. Therefore, providing the ‘Learning from Afar’ initiative created unexpected monetary saving.

- Students needed to continue to have social contact with other when they are learning at home and chat time needed to be built into the timetable to avoid isolation.
In conclusion, teaching systems around the world need to be prepared for a crisis situation with a Business Continuity Plan, a Risk Management and a Mitigation Plan to ensure that when a crisis arises, such as, schools are closed, education continues. In the case of the UAE, those plans were in place and proved that the mitigation plan for the crisis functioned efficiently and effectively. The operation showed that 90% of students were able to receive continuity of education within a four-hour period with 12 hours’ notice of the change of plan. Further, school administration, teaching staff, students and parents adapted to fulfil the plan for the continuity of the education system. Additionally, the school system will be able to continue for an indefinite period of time until the current health crisis is resolved. Therefore, instead of sending children home to contain a health crisis, the UAE was able to do so with minimal disruption to the education system.

References
POSSN (2020) Post Student and Staff Numbers Report, ACTVET, Abu Dhabi, United Arab Emirates.

The operation showed that 90% OF STUDENTS were able to receive continuity of education within a four-hour period with 12 HOURS’ NOTICE of the change of plan. As a result, LEARNING FROM AFAR will continue online until the crises is over. Further, school administration, teaching staff, students and parents adapted to fulfil the plan for the continuity of the education system.