



## An Interim Evaluation of Online Teaching for Senior Secondary Students Under COVID19 Lockdown

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**Abstract:** COVID19 outbreak took the school community by surprise, as no one was prepared for what has already been delivered and achieved in the last 4 months in the United Arab Emirates (UAE); and around the world alike. It was comparatively easier for teachers and students to connect with each other in UAE, with over 98% of the population connected to high-quality internet. This study is an attempt to evaluate the online experience of both teachers and the students; during the emergency switch amid COVID19 lockdown; compared to the traditional physical classes. A quantitative rating survey was used to collect data from teachers and students of only current Grade XII at 3 private schools delivering the Central Board of Secondary Education (CBSE) curriculum in the UAE. A total of 110 subjects responded and registered their feedback. The study found that while both teachers and students rated the overall physical class experience substantially higher than online. The online teaching successfully delivered and achieved the core academic objectives. Teachers rated online classes marginally higher than students, indicating a high level of commitment and readiness to learn and adapt. Though there was a clear concern on students' engagement during online classes and their physical wellbeing during the period.

**Keywords:** COVID-19, online teaching, emergency switch, senior secondary school, CBSE

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### INTRODUCTION

UAE, with a dominant 27.5% Indian expat population ([Global Media Insights, 2020](#)) has about 78 schools affiliated under the CBSE with an average of around 6000 students enrolled at just grade XII; over its 7 Emirates. These Indian schools follow an academic year of April-March as in India.

Wuhan city of China reported the outbreak of COVID-19 in December 2019 ([Chahrour et al., 2020](#); [Qalati, Ahmed, Mei, Thu, & Sohu, 2020](#)). UAE announced its first confirmed COVID-19 case on January 29, 2020; as the schools continued to operate normally. By February 29, 2020 all schools were directed to cancel all kinds of meetings, trips and events. Schools were approaching the annual exams at this time; and started considering alternatives of the physical exams.

Finally on March 3, 2020; all schools in the UAE were directed to close for 4 weeks as a precautionary measure for COVID-19; which on March 11, 2020 was extended until the end of June. The promoted grade XI students; along with teachers, were now set to start their grade XII course work, completely online.

This was an unprecedented event for both teachers and students alike. To bridge the gap as much as possible; schools decided to run synchronous classes with teacher and students meeting over an online platform (such as Zoom,

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Microsoft Teams, etc.), following the same strict timetable as they would in regular school hours, with 10 minutes breaks after every period. The original 40-45 minutes duration of each period also aligned well with free tools such as Zoom.

With over 98% of its population having access to very good quality internet access and UAEs world ranking of 5 in internet users% of adult population (World Economic Forum, 2019); teachers and students did not face any significant issues in connecting with each other. Some of the leading tools that were used for online teaching were Zoom, Microsoft Teams, Cisco WebEx and Google Meets; coupled with Learning Management System (LMS) such as Google Classroom and Microsoft 365.

The online teaching started on March 22, 2020 and continued till July 2, 2020. With over 3 months of continuous synchronous online classes; following a strict weekly timetable; it was essential to collect meaningful feedback from both sides of the participants (teachers and students) of the online teaching; and examine it. The survey for this study was shared and responses collected during mid of July, 2020.

Online courses and qualifications do not enjoy the same reverence and equivalency; as the traditional physical ones, despite evidence of online learning being just about as effectively as traditional onsite learning (Ashaari, 2017; Vivolo, 2016). While the researchers appreciate the switch to online teaching as pure emergency management; nevertheless a comparison between the traditional physical classes and online teaching was worth taking note of. The study aimed to compare the overall online teaching experience by the teachers and online learning experience by the students; both individually as well as juxtaposed to each other, over several identified factors.

## LITERATURE REVIEW

School teachers, though used to professional local and international conference meetings over Skype or Cisco, never really had the need to connect with students online. School education in the UAE follows a full time physical school format where teachers and students interact 5 days a week in the classrooms. As a matter of fact, the UAE has never recognized or encouraged online and distance education under acceptable formal qualifications. Even though; with a strong internet connectivity and living in a country like UAE; while it can be assumed that both teachers and student are well aware of the existence and potential of platforms like Coursera, EdEx, LinkedIn Learning, etc.; it is equally certain that it was never considered or used in the context of a regular physical class. Access to these online platforms was considered to be more learners centered, where the student can independently explore alternative structures and contents beyond the classroom (Milrad et al., 2013).

Patrick (2011) has suggested that online learning for K-12 can be renovated with substantial technological interventions, by providing structures and training in Virtual Learning Environment (VLE), internet connectivity and devices; student centered training programs for faculty in online and blended mode, etc. Sevillano-Garcia and Vázquez-Cano (2015) found in their study that “institutions need to orientate methodologies toward the use of new mobile devices, from the possibilities offered primarily through Open Educational Resources (OERs) distributed on wikis, blogs, mash-ups, podcasts, social software, virtual worlds, Personal Learning Environments (PLEs), Massive Open Online Courses (MOOCs), and other emerging online practices”.

Kong et al. (2014) outlines 3 primary factors to promote and encourage learning opportunities desirable to the 21st century learners skills development namely, blending formal and informal learning, balancing individualized and collaborative learning; and collecting evidence of improvement and building awareness of progress. He goes on to recommend that facilitating digital connectivity and devices for both teachers and students; coupled with robust structures and technical supports; are highly favorable in realizing the 21st century learning goals inside and outside the classrooms.

Miller (2014) implies that online learning is and will continue to be relevant; and it is worth investing time and resources to learn and train in by individuals and organizations.

However its worth noting how Bozkurt and Sharma (2020) suggest terming the recent online switch and delivery of online classes as Emergency Remote Teaching (ERT). With a substantial existing stigma around online learning being substandard to face-to-face learning; unplanned and partially-understood switch, as amidst current pandemic, may actually reinforce it.

Daniel (2020) has reflected on how the traditional school systems will eventually return to normal; but not without evaluating the positive aspects of assimilation of technology in the traditional education. He argues that all institutions will and should try to derive benefits from the efforts and mechanisms put in place during the crisis.

Also notable is how some studies warn of the adverse effects of long terms of home confinement and closure of schools on childrens mental and physical health (Brazendale et al., 2017). This calls for a systematic as well objective approach in reviewing the potential and limitations of online teaching.

## RESEARCH OBJECTIVES

The research objectives were as follows:

1. To find out how the teachers and students collectively compared online teaching/learning to the traditional physical classes.
2. To find out if any of the two found online teaching/learning as effective or may be more effective than traditional physical classes.
3. To search for any contradiction between teachers and students experiences with online classes.
4. To identify the aspects of online teaching/learning that worked in favor of teachers and/or students.
5. To identify the most challenging aspects of online teaching/learning.

## RESEARCH METHODOLOGY

### *Research Design*

By the month of July 2020; Indian teachers and students in the UAE had experienced over 3 months of regular online teaching/learning. A quantitative study in the form of a rating survey was planned to collect their feedback on both traditional physical classes and the online ones. An identical survey was used for both teachers and students to facilitate juxtapositioning and comparison of their experience and feedback.

Grade XII was selected for the survey assuming the commitment and preparation on both teachers and students parts to learning is higher in context of the upcoming CBSE board exams for the cohort. Also since only theory portions were covered before the survey; it was assumed the feedback will be free of other complexities such as practical and lab works. The online experience of teaching and learning was systematically divided over 8 factors; further expounded into 3-4 elements namely:

1. Class discipline
  - Classes being conducted regularly, following a scheduled timetable.
  - Classes being disciplined; starting and finishing on time; using full period slots.
  - Frequency of unwanted breaks or distraction during classes.
2. Course discipline
  - Amount of portions covered in a term.
  - Quality of lessons delivered and explained in classes.
  - Speed of portion coverage.
3. Students presence
  - Students behaving responsibly during classes.
  - Students being attentive to teachers and lessons during classes.
  - Students engagement with queries and doubts during classes.
4. Teachers presence
  - Teachers behaving professionally during classes.
  - Teacher's focus on lessons during classes.
  - Teachers engagement with answering queries and clarifying doubts during classes.
5. Teacher-student interaction outside the classes
  - Teacher-student interactions (outside classes) being organized, disciplined and well archived.

- Easy for students to contact teachers OR teachers to contact students; outside the classes.
- Teachers-students interactions (outside classes) being useful and helping.

#### 6. Peer-peer interactions outside the classes

- Peer-peer interactions (outside classes) being organized, disciplined and well archived.
- Easy for peers to contact other peers; outside classes.
- Peer-peer interactions (outside classes) being useful and helping.

#### 7. Course management

- Course material being well arranged and archived.
- Quality of course material.
- Access to the course material.
- Extent of additional resources for the course.

#### 8. Health

- General academic productivity.
- Physical health: Level of energy and physical fitness.
- Mental health: Level of mental stress.
- Personal health: Quality time with self and family.

A rating survey for these 8 factors and 26 elements was created; where the participants were required to rate their experience on each individual element on a scale of 1- 5 (1 being minimum and 5 being maximum); for both traditional physical classes as well as online adjacently.

#### **Participants**

3 leading Indian schools offering CBSE curriculum were contacted for sampling, namely:

- The Indian High School, Dubai
- Global Indian School, Ajman
- GEMS Our Own English High School, Dubai

Convenience sampling method was used to select and approach the participating schools for the study. teachers and students were contacted through both official channels as well as social media, inviting them to participate in the survey.

#### **Data Collection**

A Google Form was created for the survey. Participants were forwarded the link to the survey through whatsapp and responses were registered.

A total of 110 participants responded to the survey; comprising of 28 teachers and 82 students of Grade XII only.

Table 1 *Demographic Details of the Collected Sample*

Role	Respondent Number	Respondent Percentage
Teachers	28	25.5%
Students	82	74.5%

## **RESULTS AND DISCUSSION**

Descriptive statistical techniques were used for data analysis. Mean values were calculated and based to arrive at conclusions.

The collective response of 110, including all teachers and students alike, gave the following figures:

With an overall mean rating of 3.56, online teaching was clearly successful at meeting academic needs and expectations of both teachers and students. This means the platform did not deprive students of the basic academic

Table 2 *Collective Ratings for Physical and Online Classes*

Respondents	Physical Classes	Online Classes
All 110	4.27	3.56 (-0.71)
Teachers only	4.32	3.82 (-0.50)
Students only	4.25	3.46 (-0.79)

inputs in continuing their education under the crisis. In Fact both teachers (3.82) and students (3.46) independently substantially rated the platform successful at delivering the academic objectives. This is promising in evaluating the impact and assimilation of online contact with students even post-crisis.

There was a clear and unanimous preference for traditional physical classes over the online ones. This is understandable as online teaching, especially under quick switch during a crisis, can not be compared or replace regular physical education.

While both teachers and students have individually rated and preferred physical classes higher than online ones; it is interesting to note how teachers rating for online classes was higher than the students. This is an indication of how teachers felt the academic objectives were substantially met; while students felt and expecting better experience.

Table 3 *Collective Ratings for Physical Online Classes; at Individual Factors*

Factors	Physical Classes	Online Classes
1: Class discipline	3.82	3.72 (-0.10)
2: Course discipline	4.35	3.70 (-0.65)
3: Students presence	4.38	3.16 (-1.22)
4: Teachers presence	4.66	4.30 (-0.36)
5: Teacher-student interaction outside the classes	4.42	3.66 (-0.76)
6: Peer-peer interactions outside the classes	4.32	3.17 (-1.15)
7: Course management	4.41	4.05 (-0.36)
8: Health	3.98	3.34 (-0.64)

With the factor of (2) Class Discipline for online classes scoring almost equal to physical ones (-0.10); it can be promising to note how online classes can be at least quantitatively delivered just as regular as physical ones.

While the traditional physical classes continue to score higher than online classes at each of the factors; it is worth noting how 2 factors of (7) Course Management (4) Teachers Presence for online classes scored substantially close to the physical ones. Notable is how (3) Students Presence has been significantly rated lower (-1.22) for online classes as compared to physical ones. This aligns well with the general concern over students' engagement and attention during online sessions.

The (6) Peer-Peer interactions outside the classroom too has been rated lower (-1.15) which is again understandable with teachers and students not being able to interact in person.

Also while teachers marginally believed more (7.4) Additional Resources were available for online classes (+0.07); students do not agree (-0.49).

Following are the detailed and separated ratings by teachers and students, for the individual factors as well their individual elements covered in the study.

Table 4 Teachers and Students Ratings for Individual Factors &amp; Elements

Factors & Elements	Mean			
	Teachers		Students	
	Physical Classes	Online Classes	Physical Classes	Online Classes
1. Class discipline	3.90	3.85	3.74	3.59
1.1 Classes being conducted regularly, following a scheduled timetable.	4.43	4.14	4.35	3.72
1.2 Classes being disciplined; starting & finishing on time; using full period slots.	4.11	4.32	4.24	3.85
1.3 Frequency of unwanted breaks or distraction during classes.	3.18	3.07	2.61	3.18
2. Course discipline	4.29	4.05	4.41	3.36
2.1 Amount of portions covered in a term.	4.07	4.14	4.40	3.38
2.2 Quality of lessons delivered & explained in classes.	4.71	3.98	4.52	3.24
2.3 Speed of portion coverage	4.07	4.04	4.31	3.44
3. Students presence	4.32	3.27	4.44	3.06
3.1 Students behaving responsibly during classes.	4.15	3.15	4.48	3.02
3.2 Students being attentive to teachers and lessons.	4.33	3.04	4.41	3.06
3.3 Students engagement with queries and doubts.	4.48	3.63	4.43	3.09
4. Teachers presence	4.75	4.55	4.57	4.05
4.1 Teachers behaving professionally.	4.79	4.57	4.46	4.04
4.2 Teacher's focus on lessons during classes.	4.75	4.64	4.60	4.06
4.3 Teachers engagement with answering queries and clarifying doubts during classes.	4.71	4.43	4.64	4.04
5. Teacher-student interaction outside the classes	4.51	3.74	4.32	3.59
5.1 Teacher-student interactions (outside classes) being organized, disciplined and well archived.	4.32	3.46	4.40	3.26
5.2 Easy for students to contact teachers OR teachers to contact students; outside the classes.	4.61	3.79	4.23	3.83
5.3 Teachers-students interactions (outside classes) being useful and helping.	4.61	3.96	4.35	3.69
6. Peer-peer interactions outside the classes	4.25	3.15	4.39	3.19
6.1 Peer-peer interactions (outside classes) being organized, disciplined and well archived.	4.14	3.00	4.41	2.91
6.2 Easy for peers to contact other peers; outside classes.	4.25	3.21	4.42	3.39
6.3 Peer-peer interactions (outside classes) being useful and helping.	4.36	3.25	4.35	3.26
7. Course management	4.47	4.43	4.35	3.67
7.1 Course material being well arranged and archived.	4.50	4.43	4.44	3.57
7.2 Quality of course material.	4.57	4.39	4.35	3.60
7.3 Access to the course material.	4.50	4.54	4.43	3.78
7.4 Extent of additional resources for the course.	4.30	4.37	4.20	3.71
8. Health	4.10	3.45	3.85	3.23
8.1 General academic productivity.	4.29	3.50	4.37	3.14
8.2 Physical health: Level of energy and physical fitness.	4.39	3.07	4.42	2.54
8.3 Mental health: Level of mental stress.	3.79	3.71	3.36	3.52
8.4 Personal health: Quality time with self and family.	3.93	3.52	3.26	3.73

## CONCLUSION

It was indeed quite an achievement for the schools and teachers to have stood up to the emergency under COVID-19 lockdown; exploring and learning new technologies, facing cameras, and delivering regular school education in a way never before.

The study reveals that this bold challenge was successfully achieved by teachers with; with an overall rating of 3.56 given to online teaching, indicating it to be a clear success. This is evident from several key markers that both teachers and students have unanimously agreed upon including the following:

- Online classes were as regular as physical ones, efficiently utilizing period duration; with little disturbance and breaks: This can be concluded with teachers mean rating of 3.85 and students mean rating of 3.59 for this factor. This was possible and achieved with schools promptness to make sure the online classes followed a similar timetable as in regular school; supported by the strong internet connectivity in UAE. Also several suitable methods were used to strictly record students attendance.
- Good amounts of portions were covered over online classes at good pace and good quality delivery: Since both teachers and students have given a rating of above 3.36 to this factor; it can be concluded that online classes indeed did cover and deliver lessons to a good quantity as well as quality.
- Other factors like interactions, course management and health too have revealed healthy ratings: All of the 8 factors covered in the study have been given a mean above 3.16 by teachers and students; helping to conclude that the online classes were generally successful.

But it was also found in the study that both teachers and students unanimously rated and preferred physical classroom education upon the online one.

The researchers reason this could be because of the following:

- Lifelong habit of physical classes: Teachers in schools have taught, students have learned and both have interacted with each other only physically for all of their academic life. It is understandable for them to feel marginally dissatisfied with, and even unwelcoming; the new mode of delivery. This could be more relevant from the teacher's perspective, who might have felt doing the job incomplete without seeing the students physically in class.
- Lack of relevant past online exposure: While MOOCS and other learning platforms have been around for years; it is still questionable if teachers and students have ever explored and experienced any of these in the past.
- Lack of self-discipline and motivation on students behalf: Researchers believe that any kind of teaching, whether online or physical will not work; even with the best of teachers input, course management and support structure; without student's self-discipline and self-motivation.

There is a notable contradiction in the study that needs further investigation. While the teachers believed marginally more (2.1) Portions were covered over online classes (+0.07) than physical classes; the students thought very strongly otherwise (-1.02). No information collected in the study points to any possible reason for this contradiction.

The lowest rating throughout the study was reported by the students for (8.2) Physical Health with a mean of just 2.54. This is an indicator of serious toll on physical wellbeing due to continuously sitting ideal in front of the computer for hours of online synchronous classes. It will be interesting to see if a period of asynchronous online teaching could maintain or produce better experience for students, both in context of academics and personal health.

Finally; its respectable to note how teachers have reported lesser (8.4) Quality time with Family with online classes (-0.41) compared to physical; while students have reported more (+0.47) time with self and family. This is an indicator of how teachers have put additional hours in learning, mastering, preparing and delivering the challenge. Again, a qualitative study in this matter would be useful to estimate the extent of IT support and training required for teachers in general.

## LIMITATIONS AND RECOMMENDATIONS

While the study successfully covered a substantial sample of 110 responses from over 3 leading schools in the UAE; it is indeed desirable to run the study across a larger number of schools with a bigger sample size to arrive at conclusive results.

Also a qualitative study with teachers and students is highly recommended which will definitely help unearth detailed insights into the unanimous support and experience of the physical classes being academically more effective than online ones. This is important in order to make use of the technological mechanism tried and tested during the

crisis; and also to consider assimilation and role of online instructions with long term traditional teaching.

## REFERENCES

- Ashaari, M. F. (2017). The adoption and adaptation of online learning models in the framework of online dawah. *International Journal of Humanities, Arts and Social Sciences*, 3(1), 1-8. doi:<https://dx.doi.org/10.20469/ijhss.3.20001-1>
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to corona virus pandemic. *Asian Journal of Distance Education*, 15(1), 1-7. doi:<https://doi.org/10.5281/zenodo.3778083>
- Brazendale, K., Beets, M. W., Weaver, R. G., Pate, R. R., Turner-McGrievy, G. M., Kaczynski, A. T., ... von Hippel, P. T. (2017). Understanding differences between summer vs. school obesogenic behaviors of children: The structured days hypothesis. *International Journal of Behavioral Nutrition and Physical Activity*, 14(1), 100-105. doi:<https://doi.org/10.1186/s12966-017-0555-2>
- Chahrour, M., Assia, S., Bejjani, M., Nasrallah, A. A., Salhab, H., Fares, M., & Khachfe, H. H. (2020). A bibliometric analysis of COVID-19 research activity: A call for increased output. *Cureus*, 12(3), 73-77. doi:<https://doi.org/10.7759/cureus.7357>
- Daniel, S. J. (2020). Education and the covid-19 pandemic. *Prospects*, 20, 1-6.
- Global Media Insights. (2020). *United Arab Emirates population statistics*. Retrieved from <https://bit.ly/3mh6Xh>
- Kong, S. C., Chan, T.-W., Griffin, P., Hoppe, U., Huang, R., Kinshuk, ... others (2014). E-learning in school education in the coming 10 years for developing 21st century skills: Critical research issues and policy implications. *Journal of Educational Technology & Society*, 17(1), 70-78.
- Miller, M. (2014). Is online learning here to stay? In *Minds online: Teaching effectively with technology*. London, UK: Harvard University Press.
- Milrad, M., Wong, L.-H., Sharples, M., Hwang, G.-J., Looi, C.-K., & Ogata, H. (2013). Seamless learning. In *Handbook of mobile learning*. Abingdon, UK: Routledge.
- Patrick, S. (2011). New learning models: The evolution of online learning into innovative K-12 blended programs. *Educational Technology*, 51(26), 19-26.
- Qalati, S. A., Ahmed, N., Mei, J., Thu, T. T. H., & Sohu, J. M. (2020). Stay home stay safe: General public knowledge, attitude and behavior regarding COVID-19 during the lockdown in developing countries. *International Journal of Humanities, Arts and Social Sciences*, 6(2), 69-77. doi:<https://doi.org/10.20469/ijhss.6.20002-2>
- Sevillano-Garcia, M. L., & Vázquez-Cano, E. (2015). The impact of digital mobile devices in higher education. *Journal of Educational Technology & Society*, 18(1), 106-118. doi:<https://doi.org/10.2307/jeductechsoci.18.1.106>
- Vivolo, J. (2016). Understanding and combating resistance to online learning. *Science Progress*, 99(4), 399-412. doi:<https://doi.org/10.2307/26406355>
- World Economic Forum. (2019). *Global competitiveness report*. Retrieved from <https://bit.ly/2ZvQj1I>