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### THE CONSEQUENCES OF E-LEARNING WITH COVID-19 PANDEMIC TO ACHIEVE OBE

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**Basetty Mallikarjuna, Munish Sabharwal<sup>2</sup>Dayananda P, Niranjanamurthy M, The Consequences of E-Learning with Covid-19 Pandemic to achieve OBE-Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(9), ISSN 1567-214x**

**Abstract:** In Galgotias University, It has been taught online through the Microsoft teams (MsTeams). MsTeam provides the flexible communication over to students and faculty. Once the faculty creates the channel in MsTeams, it can be used interact with the audio, video, and textual messages through the chat box. The assessments can also be posted through the assignment section. They also provide facility to download the attendance list through the MsTeams and post it into the Galgotias university renowned software "guICloudEMS". The guICloudEMS software takes the attendance of the students and sends the SMS to those who are absent in the class; it is a platform to post the marks and performance of the students to achieve the outcome-based education (OBE).

**Keywords:** Galgotias University, Microsoft Teams, guICloudEMS, LMS, OBE.

#### I. Impact of online education under COVID-19 break

In COVID-19 pandemic period all the universities are shutdown. During this period 1.2 billion graduate students are out of their education [1]. Education policies have changed dramatically everywhere, there is a huge demand for e-learning, and it had brought a paradigm shift on the e-learning through digital platforms [2].

Worldwide 1.2 billion graduates, among 186 countries have shut down their interactions through universities [7]. Before COVID-19 pandemic, global education technology invested US\$18.66 billion in 2019 online education platform [10]. They will be investing US \$350 billion by 2025; it has been a significant surge in usage since COVID-19 [3]. Plenty of online tools were available before COVID-19 to teach computer science subjects, programming language subjects and to handle laboratories such as virtual tutorials [8]. Video conferencing tools made it easy to handle laboratories, or online learning software in aid for handling many subjects in computer science and engineering [9]. There has been a significant surge in usage since COVID-19 [4].

## II. Galgotias University established Online Learning Platforms

Galgotias University previously established a plenty of tools for online learning such as GUMastersoft, RFCampus and GUQBMS (Question Bank Management System) to create an environment in which CoE (Controller of Examinations), School of Computer Science and Engineering predicted the quality bar in the processes of examination as well as the academic management system 'GU Master Soft RF Campus' [5]. They help the university to create course material transactions, duration, length of syllabus, academic transactions, reports on faculty substations, and lecture plan etc. This management system is a high-performance, user-friendly, and scalable for faculty to manage the learners [8]. This is also used for student registration, attendance management, as per the syllabus definition, prepared by the course breakups to upload. It is simple to access Learning management system (LMS) providing a key role in higher education system and huge amount of information sharing like class lectures, video content, course files and submission of the assessments through online. Especially in computer Science the corresponding practical session of video or images would be released before the practical session through the LMS or GUMasterSoftRF campus [6]. Presently, GuMastersoft RFCampus is updated to guICloudEMS. The guICloudEMS optimizes the RFCampus software and it creates the new platform where students and faculty can post the attendance, marks etc.. The guICloudEMS platform is as shown in Figure 1.

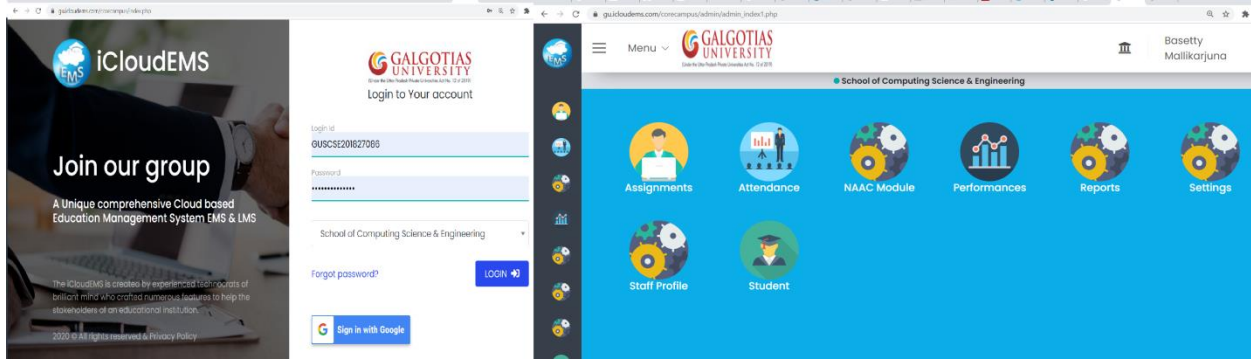


Figure 1:guICloudEMS for academic process management.

### III. Galgotias University functioning process under COVID-19 Pandemic

University process and functions through the well-designed online education platform the MS teams. In the sudden lockdown situation, the university, with well qualified faculty caters during this sudden change and invests their complete effort on online education.

MsTeams provides decent interface with students and faculty, it is a flexible environment where students can learn and faculty can post the video lectures through the chat box. Each faculty creates a separate channel for their course to discuss the subject and maintain the classes through flipped class room sessions. It is a big data processing interface where faculty can achieve the course objectives and outcomes. The following Figure 2 describes the MsTeams platform.

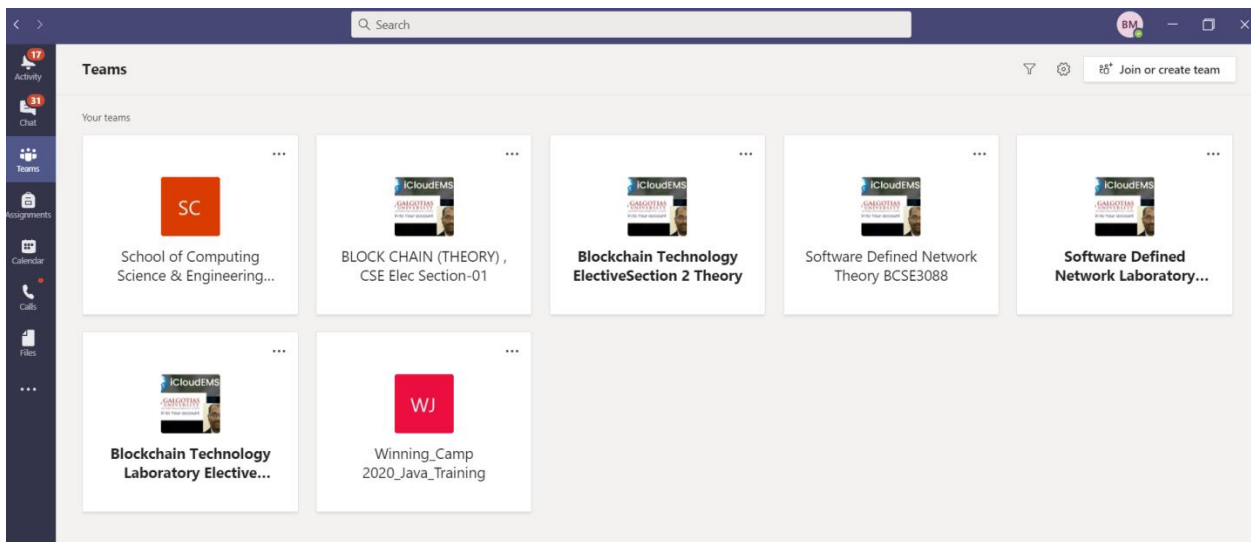
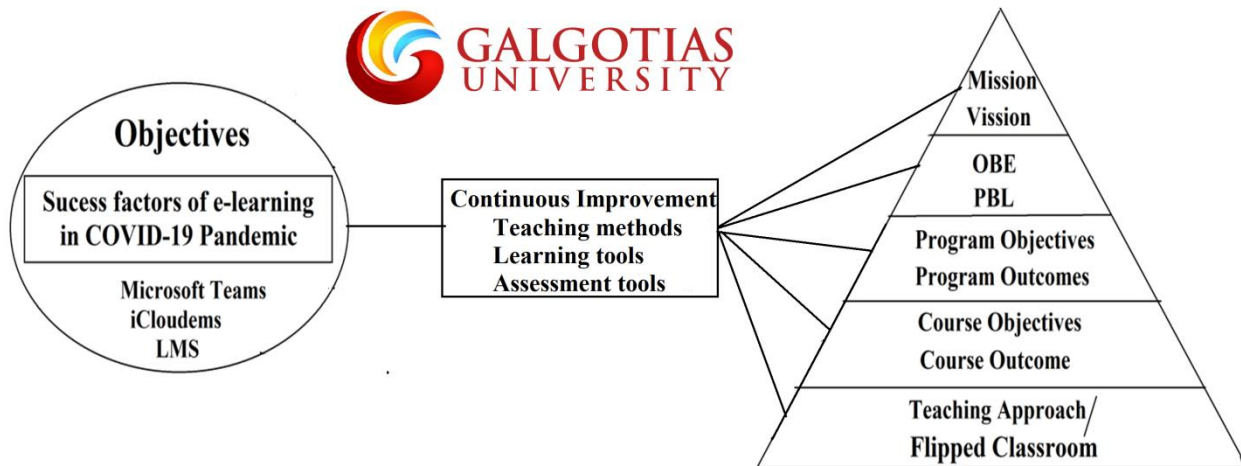


Figure 2: Well established platform of MsTeams

University achieved the OBE and established a student friendly environment. The students would also make contact with faculty and keep in touch during the mundane hours too. The students would usually be asking the doubts and faculty would conduct assessments during the class hours/through LMS. Also they communicate via email or through an online chat system. The CAT examination was conducted through the LMS and graded the students through homogenous platform. University continuously improves the teaching methods, learning tools, and assessment methods. All faculties in Galgotias University started to teach the courses in online they targeted the course objectives (COs), program objectives POs, and program specific outcomes (PSOs) as per defined, the faculty set the COs for each course at the beginning of the course in guICloudEMS platform. Once faculty can define the COs it generates automatically in guICloudEMS platform. The relation established between COs and POs as follows, the value of 1-Low, the 2-Medium and 3-High. The university achieves it through the OBE as shown in Figure 3.



**Figure 3: University achieved through the OBE**

Finally, to achieve the CO-PO mapping matrix for every course, the overall attainment automatically generated by the guICloudEMS. The finally CO-PO mapping attainment is performed through guICloudEMS. The faculty can update CO-PO mapping through the continuous assessment process and improves it. This rightfully fulfills the vision and mission of the university. This is continuous improvement of teaching methods, learning tools and assessment tools to achieve the OBE.

#### IV. Conclusions:

Galgotias Univesity adapts OBE in COVID-19 pandemic situation also achieves the standards-based education through the online education mode. Galgotias established OBE in each part of curriculum to achieve the outcomes. At the end of the course the should have achieve the goal as per aforementioned pedagogy. And also Galgotias University implemented dynamic education system and faculty adapts different style of teaching or assessmentsto achieve the OBE. The faculty members of Galgotias University have commitment to implement OBE for taking online classes, and bringbright opportunities to studentsto achieve the specified outcomes.

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