



## Chapter 4

# Integrated Systems in Distance Education: Comparison of Popular Systems

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### ABSTRACT

*During the COVID-19 pandemic, platforms that support remote working and distance education have gained great importance. Video conferencing features became crucial. In these platforms, it is possible to hold meetings and do collaborations without having to go to a physical milieu. These platforms include various features such as online meetings, group conferences, file sharing, and office integration. Systems such as Google Classroom and Microsoft Teams, which include both a learning management system and a video conference application in distance education, have gained equal importance. Video conference applications have become important tools for students to feel themselves in a social environment, as they were isolated at homes for a long time due to pandemic. In this chapter, features of integrated systems in distance education will be investigated with related literature, and the popular integrated systems will be introduced and compared.*

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## INTRODUCTION

It could be stated that the concept of distance education has been used intensively in almost all areas of life since 2020, when the pandemic began. Distance education, which is a discipline on its own, has been in close interaction with all other disciplines in this process. Educational activities, which were mostly carried out on asynchronous platforms at the beginning of the pandemic, later began to be preferred synchronously, especially with the use of live course software. Many educational institutions from K-12 level to higher education have started to use live course software to take advantage of synchronous education opportunities. Many educational institutions from K-12 level to higher education have started to use live course software to take advantage of synchronous education opportunities. The separate use of asynchronous and synchronous platforms has brought about some difficulties as well (Çankaya & Durak, 2020). It is possible to say that integrated systems are becoming increasingly common in order to benefit from the advantageous aspects of both platforms together. Among these systems, Google Classroom, Microsoft Teams, Advancity, Adobe Connect with an LMS, Zoom with an LMS, Big Blue Button with an LMS stand out. Software such as Adobe Connect, Zoom and Big Blue Button are basically video conferencing software. Therefore, it is appropriate to use these software in integration with a Learning Management System in order to be used for educational purposes. For example, when Moodle LMS and Big Blue Button video conferencing software are used together, it can easily be considered as an integrated system. The number of users of systems that include both live lesson applications and a learning management system like Google Classroom and Microsoft Teams has increased (Çankaya & Durak, 2020). According to Kaçan and Gelen (2020), the systems used most by 75 universities providing distance education in Turkey include Adobe Connect with an LMS with a ratio of 26.76% and Advancity's ALMS and Perculus software with a ratio of 15.49%. ALMS is an LMS, and Perculus is video conferencing software. Advancity is a Turkey-based company and has its servers in Turkey. According to Çankaya and Durak (2020), among the reasons why ALMS and Perculus software are preferred by universities in Turkey is the obligation to store data in national cloud systems within the scope of Personal Data Protection Law No. 6698. In one study in which student satisfaction was measured with the general structure of the Google Classroom system, Yılmaz (2020) stated that the students who used the system were partially satisfied in general. A significant number of universities prefer Microsoft Teams with simultaneous virtual classroom software (Çankaya & Durak, 2020). Microsoft Teams has some shortcomings, yet it has many features that can be found in an LMS software. Işık et al. (2010) reported that it would be more appropriate to use Adobe Connect with an LMS system when distance education was given to large masses in public institutions. Figure 1 presents the number of studies on the use of live lesson tools in higher education in the Web of Science Database.

When Figure 1 is examined, it is seen that there has been a significant increase in the number of studies on the use of live lesson tools in higher education in the WOS database in the period from 2016 to the present. In this regard, it could be stated that there has been an almost double increase in the number of studies, especially in 2020, when the pandemic started. This situation could be interpreted as the fact that this subject has an important place in the academic community.

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