

## Supporting dynamic, bi-directional presentation management in real-time

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Nowadays university students grow up in a world where they receive via internet real-time information using their smart devices. The subscribed services are sending notifications continuously! Other necessary information are also only within one click distance! So, a traditional lecture is outdated! Therefore, we need a more dynamic way of teaching as well. The modernization of university teaching methods is inescapable. For example, lectures should become more interactive in order to avoid emptying auditoriums. The dynamic, bi-directional conversation between the lecturer and a large number of students gives chance to utilize the available time the best in an effective way. For this purpose, the need is obvious for a real-time presentation management system and of course client units for the participants. Client units are given: the students bring their personal devices (phones, tablets laptops). (BYOD (bring your own device)) It is time to turn on this and to use it in our teaching practice as it has already been used by several leading universities. According to our surveys taken during the autumn of 2015, at about 95% of students of ELTE have personal smart devices so we are ready to use these facilities. We have created a prototype of a web-based real-time system, which could change a traditional talk into a dynamic, bi-directional one. In this system that teachers may ask questions during the lecture by sending it directly to attendee devices and then they receive the answers just in time, the same way as in case of a voting system. A more interesting point of view is that students may also ask questions during the presentation at any time but the decision whether to proceed or to stop remains at the lecturer without disturbing the presentation. The base idea of the application can be used for simpler tasks too, like to create an electronic attendance register for lectures.

## References

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