UAEGEAN innovative pedagogical approaches: The bring your own device approach

Paraskevi-Chrysovalantou Zangogianni^{*a} [0000-0001-6080-4009], Angeliki Kitsiou^a[0000-0003-4809-2429], Evangelia Kavakli^a[0000-0003-2743-5146]

^aDepartment of Cultural Technology and Communication, University of the Aegean, Mytilene, 81100, Greece

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EXTENDED ABSTRACT

1. INTRODUCTION

In the 21st century, where the goal of education is to cultivate critical thinking and active citizenship, and where information is available at any time and place through mobile devices, expecting generation Z students to attend a traditional, sterile lecture in a lecture theater—one they could easily watch from the comfort of their homes with a single click—is unlikely to capture their attention and motivation. Traditional lectures, when conducted in their conventional form, are no longer sufficient. Today's students, shaped by active and experiential learning during their school years, demand more engaging and participatory approaches. To address these emerging needs, university pedagogy can evolve beyond the traditional model, where instructors primarily transmit knowledge, by adapting to new demands and exploring methodological strategies that foster meaningful interactions and active learning during sessions.

This paper explores the application of the Bring Your Own Device (BYOD) approach in higher education, showcasing its potential to transform lecture theaters into dynamic spaces for interaction and engagement. The BYOD approach is not considered as a teaching method per se, but rather a model of integrating technology into the teaching practice and learning process when the classrooms are not equipped with computers, enabling students to use their personal mobile devices during lectures, turning traditional lecture settings into interactive and engaging learning environments.

2. METHODOLOGY

Our implementation of the BYOD (Bring Your Own Device) is grounded in social constructivist theories, which emphasize the importance of collaboration in learning, and connectivist principles that integrate the vast resources of the digital world into educational practices, positioning learning as a collaborative, networked experience shaped by digital tools and peer interactions. Students used personal devices for a variety of tasks aimed at fostering active engagement and co-creation. Techniques such as small-group brainstorming, snowballing, and De Bono's Six Thinking Hats were employed to encourage critical thinking and multifaceted problem-solving. Digital platforms, including Padlet, Canva, and Google Docs, facilitated collaborative activities and enabled students to actively construct and share knowledge. The students themselves developed the evaluation questionnaire, adding a reflective dimension to our action research and providing unique insights into their experiences with BYOD while expressing their own views on the approach and its impact on their learning experience.

3. RESULTS AND CONCLUSIONS

Our findings reveal that the BYOD approach significantly enhanced both student engagement and satisfaction. Every student in the course (100%) felt the course met their expectations, with 98% describing the teaching methods as "engaging" and 70% as "absolutely satisfactory." Enthusiasm for BYOD was high, with 64% of students expressing interest in expanding BYOD to other courses, and many remarking that the experience felt "different from usual school

approaches" due to the freedom to use their devices to explore and express their ideas. Additionally, students reported that collaborative activities enhanced their understanding, with one student noting, "we didn't just learn facts; we developed our ideas together." Although a small percentage (14%) indicated a preference for using computer labs, the feedback overall underscores the adaptability and inclusiveness of BYOD as a learning model.

This study confirms that BYOD, integrated with active and collaborative learning strategies, has the potential to revitalize university education by aligning academic settings with the technological realities of students' lives. More than just a cost-effective alternative, BYOD nurtures an open learning environment where students are encouraged to share perspectives and build knowledge together. In this model, learning is no longer confined to passive information absorption but is reimagined as an interactive, student-centered process. By expanding the BYOD approach, universities can create inclusive, engaging, and flexible educational experiences that meet both academic and social needs of students. Moving forward, further research could explore BYOD's impact on final performance across diverse disciplines and investigate how such approaches influence students' long-term professional skills.

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