

TRANSFORMING HIGHER EDUCATION: RESPONDING TO THE SHIFT IN STUDENT DEMANDS IN THE POST-COVID ERA

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Abstract: *The COVID-19 pandemic reshaped student demands and transformed higher education fundamentally. To underline that development, this study analyses the rapid digital transformation occurring within universities, highlighting the increasing trend towards hybrid learning models that combine online and face-to-face components. This study consolidates research on the influence of the pandemic on student demands. It highlights the call for flexibility, personalisation and better access to technology, and further analyses the challenges that universities face in adapting to changing technological infrastructure and communication needs. Moreover, it highlights the crucial importance of student well-being and concludes with a series of recommendations for universities to prioritise flexibility, technological advancements and robust support systems for students in future educational models, thereby ensuring a more inclusive and sustainable learning environment.*

Keywords: *COVID-19; higher education; student demands; digital transformation*

INTRODUCTION

The COVID-19 pandemic has significantly changed higher education, leading to an abrupt shift from conventional in-person instruction to digital and hybrid learning models. The recent shift has resulted in a notable change in student expectations, characterised by increased demands for enhanced flexibility, personalised learning experiences, and better access to digital tools and infrastructure. Prior to the pandemic, face-to-face learning was the most common format. However, students have shown a growing preference for hybrid models that facilitate a more effective balance between academic responsibilities and personal or professional commitments.

This study analyses the impact of the pandemic on student expectations regarding higher education. It analyses current research and data to understand these changes and discusses how universities can respond. The focus lies on flexibility, digital learning, and student support as key elements of future higher education.

RESEARCH METHODOLOGY

This paper is based on a structured literature review and examines how the COVID-19 pandemic has influenced student expectations and the integration of digital learning in higher education. Rather than conducting new empirical research, the study draws upon a diverse range of academic publications, institutional reports, and survey data.

The literature review highlights three interconnected topics. First, the shift in

student demands from traditional face-to-face learning to more flexible and hybrid models. The integration of technology, particularly through Learning Management Systems (LMS) and artificial intelligence-driven tools, which plays a significant role in shaping learning environments and enhancing engagement as second topic. The increasing significance of student well-being, particularly in relation to mental health and accessibility support within online education environments as third topic.

By way of synthesis of various resources, the study aims to identify long-term trends in how students approach higher education and how universities could respond to these changes. Particular focus is on how institutions are altering their structures and support systems to meet a more flexible, digitally enhanced, and student-centred educational environment.

LITERATURE REVIEW

The shift in student demands to more flexible learning models

The COVID-19 pandemic triggered a profound transformation in the landscape of higher education, reshaping student demands and expectations. Prior to the pandemic, students were generally used to face-to-face learning environments and reported higher levels of engagement, comprehension, and perceived learning outcomes in traditional settings. A study conducted by Photopoulos et al. (2023) confirmed that, before the pandemic, face-to-face instruction was widely regarded by students as more effective. Participants indicated greater participation, improved focus, and more profound understanding during in-person classes. These findings highlight that, before the shift to digital formats, traditional teaching methods were perceived by students as both more engaging and more effective.

However, the enforced transition to remote learning due to the pandemic highlighted a growing need for flexibility in higher education and its educational delivery. The study by Photopoulos et al. (2023) proves this shift. It showed that more senior students were able to maintain social interactions and academic progress through online platforms, and they valued the flexibility. According to the findings, remote learning allowed students to balance their studies with other life responsibilities. They also identified a significant increase in the demand for hybrid learning models that integrate both face-to-face and online elements. This format allows students to manage their academic schedules flexibly while still providing opportunities for in-person interactions.

Breitenbach (2021) states that students currently expect greater control over the timing and location of their studies, as well as flexibility in choosing between in-person and digital formats according to their individual needs. These preferences highlight a shift toward a more self-directed approach to learning, where students increasingly expect personalised educational experiences (Stifterverband 2024).

The role of technological integration

The pandemic has also highlighted the necessity for universities to invest in robust digital infrastructures. Research has demonstrated that a significant proportion of students have encountered technical barriers. This included inadequate access to digital tools and unreliable internet connections (Owusu-Fordjour et al. 2020).

Moreover, the pandemic has accelerated the adoption of digital learning platforms such as Learning Management Systems (LMS). Using these platforms, universities can supply content, handle assessments, and maintain communication with students remotely. Research suggests, the integration of advanced technologies, including Artificial Intelligence (AI), into these platforms could enhance the personalisation of education (Luckin et al. 2016).

Finally, the pandemic has highlighted the need for universities to rethink their administrative processes and communication strategies. Many institutions have encountered difficulties in adapting their administrative workflows to support the transition to online education. Clear and consistent communication among students, faculty, and administration is essential for maintaining an effective learning environment. In regard to universities future development, they should refine their communication strategies and leverage digital tools to ensure the efficient fulfilment of students' needs (Selwyn 2019).

The growing importance of student well-being

The study-demands-resources (SDR) theory offers an insight into student well-being. It explains how the evolving educational landscape can balance the competing needs of academic rigour and student support. Within the field of psychological research on student well-being it offers valuable insights into the complex interaction between the demands of studying and the resources available to students. SD-R theory posits that students' experiences can be divided into two primary components. One is study demands and second study resources. The cognitive, emotional, and physical challenges associated with academic tasks such as exams, deadlines, and complex assignments constitute the demands of study. These demands can lead to mental and emotional challenges (Bakker and Mostert 2024). On the other hand, study resources promote motivation and engagement. It helps students manage the demands and include assistance from instructors, social connections, and chances for personal and career advancement (Salmela-Aro et al. 2022).

The theory differentiates two core processes that influence student well-being. One is the health impairment process and the second the motivational process. A high level of study demands can lead to exhaustion and burnout and negatively impact the academic performance and the psychological well-being (Bakker and Mostert 2024). In contrast, study resources promote student engagement by supporting a sense of competence and autonomy. Such an attitude has positive effects on academic outcomes and long-term study motivation (Salmela-Aro et al. 2022).

It is essential for institutions of higher education to develop a study environ-

ment that promotes student engagement and mental well-being. Support from teachers, feedback from peers, and a conducive academic environment can act as protective factors against stress and burnout. In addition, universities can benefit from study-related measures. In that way they can enable students to better manage their study requirements and utilise their resources (Körner et al. 2023).

RESULTS

The findings from the literature review reveal several significant shifts in student demands and the integration of digital tools in higher education: Increased demand for flexibility, value of social interaction, technological barriers, importance of student well-being.

The paper indicates that students show a clear desire for flexible learning alternatives. The pandemic and the shift towards hybrid and online learning methods led to these demands. Furthermore, students have reported that this flexibility has been extremely beneficial in respect of their personal and academic commitments (Photopoulos et al. 2023).

Students continue to express the value of face-to-face interactions with their peers and teachers, that even applies in the face of an increasing demand for digital learning methods. Consequently, the findings underscore the significance of social interactions in promoting motivation, engagement, and a sense of community within the classroom setting (Photopoulos et al. (2023).

It is important to note that a considerable number of students encountered technological challenges during the pandemic. Studies indicate that a significant number of students experienced technological challenges during the pandemic and that inadequate internet access is a common issue (Owusu-Fordjour et al. 2020). Students reported difficulties in navigating online learning systems. The findings further highlight the significant necessity for universities to invest in their technological infrastructure (Selwyn 2019).

The results further indicate the importance of student well-being in post-pandemic higher education. Addressing mental health, access to support, and balanced study conditions has become essential for sustaining student engagement and academic success (Körner et al. 2023).

These findings highlight the need for higher education institutions to adopt a flexible approach, offer personalised learning experiences, and strengthen support systems for students in response to the evolving demands of students in the post-pandemic era. These changes are of crucial importance for maintaining accessibility, engagement, and responsiveness in higher education to meet the diverse needs of contemporary students.

DISCUSSION

The COVID-19 pandemic has significantly altered higher education by hastening the shift towards more flexible and personalized learning environments. Initially, students preferred in-person learning. However, the pandemic underscored

a substantial need for hybrid learning models that effectively combine online and face-to-face interactions. This study's findings indicate that flexibility, technology integration, and student well-being are central to contemporary student expectations. Universities must continue to adapt by investing in technology, enhancing mental health and accessibility services, and promoting a student-centred educational approach. The evolution of higher education is strongly influenced by the technological progress and the shifting student demands which enables institutions to reconfigure and improve their educational frameworks for the post-pandemic context.

CONCLUSION

The findings of this paper show strong implications for the future of higher education. The shift to hybrid learning formats represents a long-term change in student engagement with education and not only a temporary modification. Due to the changes, universities encounter the challenge of balancing the flexibility and convenience of digital learning with the essential social interactions and community-building that characterise face-to-face teaching. Furthermore, it is incumbent upon universities to address the technical challenges faced by many students to ensure equitable access to the necessary digital tools and infrastructure. The future of higher education depends on institutions' ability to adapt and innovate and integrating digital learning technologies, while also maintaining the high-quality educational experiences valued by students will be groundbreaking. This combined with prioritising student well-being will be essential for establishing a successful and sustainable learning environment.

REFERENCES

- BAKKER, A. B. & MOSTERT, K., 2024. *Study Demands – Resources Theory: Understanding student well-being in higher education*. Educational Psychology Review, 36(3), Article 92. <https://doi.org/10.1007/s10648-024-09940-8>
- BREITENBACH, R., 2021. *Digitale Lehre in Zeiten von Corona: Erwartungen und Erfahrungen von Studierenden*. [viewed 28 May 2025]. Available from: https://www.pedocs.de/volltexte/2021/21274/pdf/Breitenbach_2021_Digitale_Lehre_in_Zeiten.pdf
- KÖRNER, L. S., MÜLDER, L. M., BRUNO, L., JANNECK, M., DETTMERS, J. & RIGOTTI, T., 2023. *Fostering study crafting to increase engagement and reduce exhaustion among higher education students: A randomized controlled trial of the STUDYCoach online intervention*. Applied Psychology: Health and Well-Being, 15(2), pp. 776–802. <https://doi.org/10.1111/aphw.12410>
- LUCKIN, R., HOLMES, W., GRIFFITHS, M., & FORCIER, L. B., 2016. *Intelligence Unleashed: An Argument for AI in Education*. London: Pearson. [viewed 28 May 2025]. Available from: https://www.researchgate.net/publication/299561597_Intelligence_Unleashed_An_argument_for_AI_in_Education
- OWUSU-FORDJOUR, C., KORANTENG, F. & KWAKU, M. A., 2020. *The impact of COVID-19 on learning – the perspective of the Ghanaian student*. [online]. <https://doi.org/10.5281/zenodo.3753586>

PHOTOPOULOS, P., TSONOS, C., STAVRAKAS, I. & ZAFEIRIOU, S., 2023. *Remote and in-person learning: utility versus social experience*. SN Computer Science, 4, Article 116. <https://doi.org/10.1007/s42979-022-01539-6>

SALMELA-ARO, K., UPADYAYA, K., RONKAINEN, I. et al., 2022. *Study burn-out and engagement during COVID-19 among university students: The role of demands, resources, and psychological needs*. Journal of Happiness Studies, 23, pp. 2685–2702. [online]. doi: <https://doi.org/10.1007/s10902-022-00518-1>

SELWYN, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.

STIFTERVERBAND, 2024. *New forms of tertiary education: Exploratory study on future-ready higher education*. [viewed 28 May 2025]. Available from: https://www.stifterverband.org/sites/default/files/2024-08/new_forms_of_tertiary_education_exploratory_study.pdf

ТРАНСФОРМАЦИЯ НА ВИСШЕТО ОБРАЗОВАНИЕ: ОТГОВОР НА МЕНЯЩИТЕ СЕ ИЗИСКВАНИЯ НА СТУДЕНТИТЕ В ПОСТ-COVID ЕРАТА

Резюме: Пандемията от COVID-19 преоформи изискванията на студентите и фундаментално трансформира висшето образование. За да подчертае това развитие, настоящото изследване анализира бързата дигитална трансформация в университетите, като акцентира върху нарастващата тенденция към хибридни модели на обучение, които съчетават онлайн и присъствени елементи. Изследването обобщава научни данни за влиянието на пандемията върху предпочитанията на студентите. То подчертава нарастващото търсене на гъвкавост, персонализиране и по-добър достъп до технологии, както и анализира предизвикателствата, пред които са изправени университетите при адаптацията към променящата се технологична инфраструктура и нуждите от комуникация. Освен това се акцентира върху ключовото значение на благосъстоянието на студентите и се завършва с поредица от препоръки към университетите да дадат приоритет на гъвкавостта, технологичния напредък и стабилните системи за подкрепа на студентите в бъдещите образователни модели, като по този начин се гарантира по-инклузивна и устойчива учебна среда.

Ключови думи: COVID-19; висше образование; изисквания на студентите; цифрова трансформация

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