

Mega Trends Informing the Teaching - Learning Process in Higher Education

***Katumba Faisal**

Faculty of Education, Department of Education Administration & Management, Uganda

*Email: katumbafaizal@gmail.com

Received: 15 March 2024

Accepted for publication: 3 June 2024

Published: 30 June 2024

Abstract

Higher Education Institutions are experiencing increasing pressure to undergo transformation since education is becoming a conceptual necessity of our time to improve the student learning and demonstrate program effectiveness. The aim of this article is to describe the teaching-learning process as it takes place in higher institutions of learning using the various new expertise so as to improve on higher education application around the world. The article will also consider various inter-related concepts that are associated with student learning in higher education after a review of subsequent studies that illustrate the most important developments in the teaching-learning process. It's my hope that this article will be a guide for higher education managers, administrators, policy makers, and technocrats to take informed decisions about the technology to improve, support, or extend teaching-learning process, through a creative inquiry in higher education across the globe. Also, the study aimed at comparing knowledge management between universities and intermediate colleges in the educational sector.

Key Words: Higher Education, Institutions, Learning process, Components of Learning, educational sector

Introduction

Higher education in the early 21st Century has become a competitive enterprise where students compete for admissions in top popular universities and colleges in the world. Institutions of higher learning also compete for status, ranking as well as funding from either government or private sponsors. The term 'mega trends' is used to describe a series of changes apparently taking place in higher education. Entwistle and Peterson (2004), precisely described the concept of 'learning' as the moderately stable change in behavior and thinking that does not take account of the different activities applied in the teaching process across a variety of tasks and situations. This article provides an analysis of the global transformation in the field of education. O'Brien, (1989) asserts that each person has a different learning style through which to approach a task and remember the information as well as retrieving it during a test. It is observed that, the learning style must match with the appropriate training implying that both the instructor and the student must comprehend what style works better for the individual student. Instructors must cope with information overload, acquire new skills, and reshape students' lives and organization by developing new strategies of thinking, learning and self-directed change as an integral lifestyle. Graduates must be in position to shift from learning to work with only occasional returns to learning because we learn throughout our lives.

Theoretical foundations of Learning

It gives me an impetus to state that the connectivism learning theory by Siemens (2005) is a key educational strategy concerned with diversity of opinions in the learning process that connect specialized nodes and other sources of information. In this era, internet technologies have created new opportunities for people to learn and share information across the World

Wide Web and among themselves. Seaborn and Fels (2015) looks at gamification as a concept that motivates learners. Transforming regular educative activities into games transforms a traditional card loyalty program into something much more complex. The Gamification theory according to Biro (2014) looks at the learning process from two different points of view at the same time, which makes it quite difficult to define the learning process in the theory. Skuta and Kostolonyova (2018) argued that the current trends in the development of lifelong and online education in universities should be flexible without limitations of distance research time. Lifelong learning is the lifeblood of higher education to make it more accessible especially to adult learners. Due to the advancement of web technologies, education has become open, global, and highly collaborative.

Yen, et al. (2018), observed that as soon as the student accesses the internet, he/she gains a lot of self-regulated learning skills. Niinikoski (2019) argues that even though the real-world life requires good knowledge about the competences and skills needed in working life, it is as important to notice and hear the experiences of current students as well as getting informative feedback from them. It should be noted that a transition from a traditional teacher-student relationship to a two-way model of interaction where both have a meaningful participation in the teaching and learning process is pivotal in the 21st Century.

Taylor (2017) forwards a transformative learning theory that explains the learning process of accommodating new and revised interpretations of the meanings of experiences in the world. It is imperative for educationists to develop a more critical worldview that involves learning and understanding this universe through negotiations, respect of values, feelings or meanings rather than assimilating others. Bastardo-Cedeño, Rodríguez-Conde, and Seoane-Pardo (2019) investigated the virtual modality in higher education to find out the main challenges faced and its ability to adapt the students' demands in accordance to a knowledgeable society, in an era of modern information and communication technologies for all the social activities. Therefore, Higher education institutions should adapt the teaching-learning process where the component of cyber space resources is fundamental. Virtual training has become the new paradigm of instruction in higher education around the world. Herrera-Limonés, Rey-Pérez, Hernández-Valencia, and Roa-Fernández (2020) argued that teaching in higher education is undergoing a significant transformation through a transdisciplinary approach, code-named integrated curriculum. Transforming the teaching network of the departmental structures in a university exposes students to new, broader and more holistic capabilities and skills.

Learning Styles in Higher Education

Newton (2015) defines a learning style as a preferential way in which the student absorbs, processes, comprehends and retains information as a result of instruction. Learning styles describe how learns gather, sift through, interpret, organize, conclude and store information for further use. Learning styles can also be described as a set of values, factors, behaviors and attitudes that facilitate an individual in the teaching-learning process leading to life and energy, creativity and development. Smith and Tarantino (2019), argues that learning is an important experience for people of all ages. People retain and process information in different ways. He quotes Howard Gardner's theory of multiple intelligences which help students to learn new skills, ideas, language, or concept – no matter the study material. In another development, Choudaha, and Van Rest (2018) proposed a 2030 plan in which they analyzed that technological and societal changes that push higher education institutions towards offering more relevant, affordable and flexible academic programs using lifelong as well as online learning to manage recruitment of international students through transnational education as one way of transforming the future of global higher education. Therefore, higher education institutions are encouraged to reflect, assess and discover alternative pathways for the future.

Johnson et al. (2016), reported that experts agreed on two long-term impact trends: advancing cultures of innovation, as well as fundamentally rethinking of how universities and colleges work. For example, integrating students' previous work and life experience into their curriculum designs, adopt technological developments that could support innovation and change along with adaptive learning, use of mobile learning and student data that can be gathered through online learning environments. Duckworth (2016) noted carefully that, learners currently demand greater opportunities for play, purpose, passion, and freedom to learn when, where, and how they prefer. The role of the instructor has been transformed as well.

Similarly, Bonk (2016) observed that human learning is changing in various ways such as; fostering greater learner involvement and concerted effort in the learning process by use of mobile devices that make learning more mobile and accessible at any moment. Higher education is undergoing a long-term transformation.

This is an era of smartphones, laptops, tablet computers, and now smartwatches, through which students can access more visual Learning, and learners can often touch or swipe a screen to access content for they are living in an age of pervasive video. In addition to video-enabled learning, Legault (2015) encouraged education managers to design learning activities that explore how games can impact the learning process in a positive manner. The continued advancement of technology has the learning process more collaborative. Today, students use Google Docs, Pirate Pad, Meeting Words, Google Hangouts, Skype,

Zoom, wikis, and other forms of document and social exchange. Meyer (2016) recommends an inquiry-based learning where schools and universities should make learning more hands-on today than ever before. Learners want to tinker, design, and make something tangible.

Components of the Learning Process

The future of higher education lies in the recent significant changes. Bíró (2014) advocates for gamification which is also interpreted as one of the unique and innovative theoretical basis to address and handle the new generation of learners and interpret the components of the learning process. The increasing number of inter- and multidisciplinary programs and the grown scale of participation in international mobility programs cause specific learning situations which can be handled more effectively based on gamification theory.

Entwistle and Peterson (2004) emphasized that experiences in higher education indicate that the learning environment influences developments in the students' conceptions of knowledge and learning. Students describe stability the most effective methods of lecturing that influences of the teaching-learning environment *vis a vis* the differences in study behavior of students in contrasting learning environments. Seel et al. (2017) assert that the learning environments provide an essential cognitive resource to attain information assimilated to the well-designed teaching materials and the social conditions of the intended learning process. It is observed that, learning environments do not only motivate the learners but also supports the development of self-organized learning process and continuous feedback about the learning outcome. DeWit and Van Dompsele (2017), argued that many institutions of higher learning must strive to provide education that matches the learning needs and requirements of each individual student and the modular approach can be the best choice especially in the digital learning environment.

Van Merriënboer and Kirschner (2017), argued that learning should involve the integration of knowledge, skills and attitudes as well as transferring what is learnt to the day-to-day life. This calls for the manifestation of popular educational approaches such as inquiry, guided discovery, case method, project based, problem based, design based, team based, among others. Learning is cognitive, and must be punctuated with learning by doing. Currently, instructors can take advantage of the new technologies to perform the routine complex cognitive tasks that must be performed by the learners. Knauf, (2016), identified feedback as another important component of learning in higher education. The students argue that audio feedback is easy to assimilate, more personal and appreciative than the written feedback.

Naser, Al-Shobaki, and Amuna (2016), advocated for Knowledge Management in Higher Institutions of learning to be their major aim. This is the process of converting information and intellectual assets to a continuing value that connects individuals with the knowledge they need to take action when they need it. This would help to build a dynamic learning environment, knowledge sharing and hence leading to improved overall performance of the organization. Seel et al. (2017), encourages immediate feedback on the learners' performance for it facilitates learning as well as testing, evaluating and assessing the learning outcomes so as to enhance the learners' retention and transfer of knowledge and expertise. El-Hussein and Cronje (2010) urged educators to aim at using technology to enhance individual learning and instruction. The recent rapid growth of mobile technologies has strongly boosted e-learning in the 21st century through the various mobile devices that have become more powerful, portable and convenient to students and their instructors anytime, anywhere in their day today life of educational institutions. Cigdem, and Ozturk, (2016), argue that students are highly motivated by online learning for it orients self-directed learning. Ramdhani and Muhammadiyah (2015), recommends the use of instructional learning media that optimizes human senses utilization to capture a variety of learning materials/content in the subjects that include character education. Rahamat, Shah, Din, and Abd Aziz (2017) call for the appropriate use of materials and tools in teaching-learning process as one of the global developments upon which educationists design and implement ICT-based lessons.

Implications for Higher Educational Managers

There is an urgent need for higher education institutions to re-design the goals of higher education, review each program offered and emphasize on learning how to think through rewarding instructors and students. Universities/Collages should create avenues and opportunities for students and instructors to set their own learning and thinking goals, to acquire learning and thinking skills hence producing significant products from their learning process. This will explore opportunities and resources for life long thinking development by significantly increasing on allocations to suitable institutions, agencies and programs.

Universities/Colleges should bolster entrepreneurship courses to attract and accommodate more students while nurturing their faculties that can measure up to high-quality teaching standards and Instructors in these programs should use interactive learning styles. Universities and colleges should frequently invite relevant guest speakers from the industries to strengthen

the link between coursework and real-world settings through their lectures. This transformational change requires policies and legislative procedures that are flexible.

As digital learning environments capture data, more work is needed to structure appropriate policies to protect student privacy. There is need to develop educational practices, policies, and technologies to substantially improve learning outcomes; that propose a global, cross-sector taskforce, commissioned to specify ideas that relevant legal bodies can adopt to protect individuals' data privacy. There is need for the academic staff to integrate the new generations of rich media technologies appropriately in teaching.

References

- Bastardo-Cedeño, M., Rodríguez-Conde, M. J., & Seoane-Pardo, A. M. (2019, October). The virtual modality in Higher Education of the Dominican Republic: Current situation, needs and challenges. In *Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality* (pp. 1034-1038). ACM.
- Biró, G. I. (2014). Didactics 2.0: A pedagogical analysis of gamification theory from a comparative perspective with a special view to the components of learning. *Procedia-Social and Behavioral Sciences*, 141, 148-151.
- Bonk, C. (2016). Keynote: What is the state of e-learning? Reflections on 30 ways learning is changing. *Journal of Open, Flexible, and Distance Learning*, 20(2), 6-20.
- Bonk, C. J., & Khoo, E. (2014). Adding some TEC-VARIETY: 100+ activities for motivating and retaining learners online. OpenWorldBooks.com and Amazon CreateSpace.
- Choudaha, R., & van Rest, E. (2018). Envisioning Pathways to 2030: Megatrends Shaping the Future of Global Higher Education and International Student Mobility. *Online Submission*.
- Cigdem, H., & Ozturk, M. (2016). Critical components of online learning readiness and their relationships with learner achievement. *Turkish Online Journal of Distance Education*, 17(2).
- De Wit, M., & van Dompsele, H. (2017). How to create a digital learning environment consisting of various components and acting as a whole?
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. New York, NY: Scribner.
- El-Hussein, M. O. M., & Cronje, J. C. (2010). Defining mobile learning in the higher education landscape. *Journal of Educational Technology & Society*, 13(3), 12-21.
- Entwistle, N. J., & Peterson, E. R. (2004). Conceptions of learning and knowledge in higher education: Relationships with study behaviour and influences of learning environments. *International journal of educational research*, 41(6), 407-428.
- Herrera-Limones, R., Rey-Pérez, J., Hernández-Valencia, M., & Roa-Fernández, J. (2020). Student Competitions as a Learning Method with A Sustainable Focus in Higher Education: The University of Seville "Aura Projects" in the "Solar Decathlon 2019". *Sustainability*, 12(4), 1634.
- Johnson, L., Becker, S. A., Cummins, M., Estrada, V., Freeman, A., & Hall, C. (2016). *NMC horizon report: 2016 higher education edition* (pp. 1-50). The New Media Consortium.
- Knauf, H. (2016). Reading, listening and feeling: audio feedback as a component of an inclusive learning culture at universities. *Assessment & Evaluation in Higher Education*, 41(3), 442-449.
- Meyer, L. (2016, June 15). Behind the scenes of a makerspace. Campus technology. Retrieved from <https://campustechnology.com/Articles/2016/06/15/Behind-the-Scenes-of-aMakerspace.aspx?p=1>
- Naser, S. S. A., Al Shobaki, M. J., & Amuna, Y. M. A. (2016). Promoting Knowledge Management Components in the Palestinian Higher Education Institutions-A Comparative Study. *International Letters of Social and Humanistic Sciences*, 73, 42-53.
- Niinikoski, S. (2019). Co-Creating Legal Design Curriculum for Master's Degree: Further-Developing Curriculum Based on Future Megatrends and Student Learning Experience. *ICERI2019 Proceedings*.
- O'Brien, L. (1989). Learning styles: Make the student aware. *NASSP Bulletin*, 73(519), 85-89.
- Ramdhani, M. A., & Muhammadiyah, H. (2015). The criteria of learning media selection for character education in higher education.
- Rahamat, R. B., Shah, P. M., Din, R. B., & Abd Aziz, J. B. (2017). Students' readiness and perceptions towards using mobile technologies for learning the English language literature component. *The English teacher*, 16.
- Sandkuhl, K., & Lehmann, H. (2017). Digital transformation in higher education—The role of enterprise architectures and portals. *Digital Enterprise Computing (DEC 2017)*.
- Seel, N. M., Lehmann, T., Blumschein, P., & Podolskiy, O. A. (2017). *Instructional design for learning: Theoretical foundations*. Springer.
- Škuta, P., & Kostolányová, K. (2018). Adaptive approach to the gamification in education. *DIVAI 2018*.

- Smith, M. J. & Tarantino, K. L. (2019). *Generally Speaking: The impact of General Education on Student Learning in the 21st Century*. Gorham, Maine: Myers Education Press.
- Taylor, E. W. (2017). Transformative learning theory. In *Transformative learning meets bildung* (pp. 17-29). Brill Sense.
- Van Merriënboer, J. J., & Kirschner, P. A. (2017). *Ten steps to complex learning: A systematic approach to four-component instructional design*. Routledge.
- Wu, Y. (2016). Factors impacting students' online learning experience in a learner-centred course. *Journal of Computer Assisted Learning*, 32(5), 416-429.
- Yen, M. H., Chen, S., Wang, C. Y., Chen, H. L., Hsu, Y. S., & Liu, T. C. (2018). A framework for self-regulated digital learning (SRDL). *Journal of Computer Assisted Learning*, 34(5), 580-589.