

NEW TRENDS IN TECHNOLOGY APPLICATION IN EDUCATION AND CAPACITIES OF UNIVERSITIES LECTURERS DURING THE COVID-19 PANDEMIC

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ABSTRACT

Information technology has been changing basic education in a basic and comprehensive, systematic and highly integrated way at the beginning of the 21st century. The explosion and development of educational technology will create non-traditional methods of education, strongly promoting the development of deeply transformative education for people. Teaching students, increasing knowledge and sharing are more important than ever. This process leads to the need to revisit the value and significance of teaching in general, in terms of the relationship between the development of technology and changes in the nature of the implementation process of educational programs. However, besides information technology, people still play a leading role in teaching. Therefore, the role and capacity of university lecturers also need to be changed to fit the trend of the world, especially during the Covid-19 pandemic. In this paper, the competencies of university lecturers as well as the importance of applying information technology in teaching are mentioned and analysed in detail.

KEYWORDS: Lecturers, Competencies, Education, Information Technology & Covid-19 Epidemic Period

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INTRODUCTION

As the strategic direction of education becomes more urgent, we need to train, shape and develop people for the development of society. There are a number of disruptors that will appear in the near future, including the emergence of technology everywhere such as artificial intelligence and robots. In fact, education is the leading national policy in Vietnam and therefore investment in education is the investment for development [1]. To be consistent with the general development trend of society in the period of industrialization and modernization of the country, it is necessary to fundamentally renovate educational processes towards the application of new technologies, promoting positive proactive learners to improve the quality of education, especially in the current pandemic period.

TECHNOLOGY TRENDS IN EDUCATION TODAY

Smart teaching is mentioned in the early years of the 21st century and is increasingly being researched and developed. In particular, we often emphasize the transition from traditional teaching to a new way of approaching technology with non-traditional teaching models [2]. Overall, smart education is understood as a comprehensive integration of technology, accessibility and connecting everything via the Internet anytime and anywhere. It is necessary to synchronize and comprehend all aspects based on information technology application platform, including smart classroom, smart environment, smart teacher, smart campus, smart school.

With the help of new technology, smart education needs to create a completely different way from mass education. The system of connecting people - information - objects and machines forms a link in training, researching and transferring technology, promoting the process of transforming educational institutions into an innovative and creative ecosystem. Thus, instead of providing knowledge, teaching content, training human resources under rigid programs, schools should train skills for learners such as information application, knowledge creation and make decisions with the goal of developing talents, broadening the horizons for learners. In this context, education can be seen as a technological process, technology products can be packaged, transferred and as an application process, absorbing the achievements of other technological fields [3].

RELATIONS BETWEEN DIGITAL LEARNERS AND DIGITAL LECTURERS

The current educational trend is reaching a lifelong education space, creating equity and opportunities to access education for everyone. This approach has paved the way for a range of new forms of education, placed in a broad category of digital education [4].

Along with opportunities to access new technology in education, learners are becoming more and more central to their own learning, more free to orient and select content according to their needs and learning process. On the other hand, technology also supports and allows any learner to search, contribute, share, and process data, making them a co-creator of new knowledge to contribute to the mind. intelligence of the masses [2].

In the process of self-directed learning, selecting the appropriate content according to the needs, learning style, interests and career orientation of individuals, digital learners will choose portable wearable and suitable devices which are capable of multi-faceted, multi-dimensional and multi-object interaction. Learners can use educational apps to easily connect to large databases [5].

Applying new technologies today, learners can connect with diverse information resources in the field, rich in formats, beyond the physical campus of the school. This adds new requirements to the system of functions and duties of the instructor who will be connected, in order to improve the quality, efficiency and authenticate the educational process by digital solutions. This is also an opportunity and challenge for new generation teacher training institutions, who will have to master the technology of education [1].

The trend of using learning support Apps using artificial intelligence technologies, Big Data, Internet of Things (IoT), machine learning, deep learning, Robot teaching, etc. These solutions not only expand space, opportunities, increase learning quality for learners but also strongly support for digital teachers in the following aspects of the teaching process.

THE NECESSITY TO VARY DIGITAL LEARNING RESOURCES

Data sources of information, content of educational knowledge input are digitized (design, production, publication, storage, etc.) and transfer through digital tools to meet the increasing needs of learners. Developed on the basis of digital tools on the principle of content-rich, multi-format, strong interaction, reuse, accessibility, lookup, sharing and contribution of digital learning gradually becomes the goal, effective means in educational processes. The application of gamification, creating videos, lectures with artificial intelligence, interactive E-books, etc. has helped digital learning not only purely provide information and learning content but also create strong interaction ability with those content for learners [6].

THE NECESSITY TO IMPROVE THE ABILITY OF LECTURERS

Requirements for improving the quality of education require a change in the role of lecturers from traditional knowledge transferers to instructors and designers of advanced learning environment, helping learners to direct their own work and learning. Therefore, lecturers need to improve their qualifications and capacity by training methods using technology for teaching, in addition to applying advanced forms and online models in training teachers. towards researching and improving foreign language skills [7]. The current urgent issue is to update and develop the lecturers' competence evaluation system, from which to design, build appropriate strategies and measures to improve lecturers' capacity and meet the needs. of society, requirements of education 4.0.

Lecturers are senior intellectuals, a key force that determines the quality of training through the direct transmission of ideas, orientation, knowledge and good living values to learners - the younger generation, the future of the country. Although each school has specific objectives and training requirements for different professions, the development of faculty members is important for meeting the requirements of improving the quality of education in educational era 4.0. That is also the premise to motivate enthusiasts to work hard and bring positive energy to students, contributing to bringing a profound change to the quality of the school's training in particular and the background education of the country in general [8].

Most of Vietnam's universities have completed their own self-assessment of the quality of grassroots education and there are more than 60 accredited training programs that meet the educational quality standards of the region and the world such as quality assurance network of Southeast Asian universities system (ASEAN University Network - Quality Assurance, AUN-QA), French and European engineer testing standards (CTI-ENAAE), accreditation standards programs in engineering, technology, computing, applied science (Accreditation Board for Engineering and Technology, ABET).

This educational quality assessment process often requires a lot of effort to collect data, analyze and evaluate so the development of KPIs criteria set is an indispensable need to support management and test quality control effectively. However, most schools do not have a complete set of KPIs and are in the process of developing or piloting a set of KPIs.

Universities in Vietnam have been performing the task of lecturing management, including teaching, scientific research and other tasks. The set of criteria for evaluating common capacity at universities in Vietnam often focuses on three important criteria. The number of jobs in each criterion and the percentage allocated to each job in the criteria may vary depending on the strategic development orientation of each school [9].

SOME HINTS TO IMPROVE THE TEACHER'S INFORMATION TECHNOLOGY ABILITY

Facing the speedy development of modern technologies, many products are replaced by smart and superior products like never before. Even information technology has had a great impact on the way people communicate. In this context, Vietnamese education is also under a lot of pressure and requires effort in reforming teaching and learning activities to keep up with the new trends of the world [5]. This does not encourage students to actively and openly explore knowledge. Today, students have other options to access the online knowledge store. Therefore, the role of lecturers needs to change from knowledge transferers to motivators for students to actively explore knowledge exploration.

Positive forecasts about the trend of the strong development of digital technologies in Industry 4.0 will serve as good prerequisites and data for educators to reorient and implement their views properly. In this context, schools, educational institutions (operating in the field of educational technology) in general, teacher training establishments in particular need to be prepared to exploit and adapt the benefits of technology. The State needs to have a basic investment

policy, a policy to mobilize socialization, create a mechanism for private enterprises to invest and deploy educational technology to participate with the school in educational activities regarding education as a part of the knowledge economy, apply flexibly, scientifically some principles and approach activities of shared economic form [10].

Schools need to invest in upgrading information technology infrastructure to meet personalized learning needs, connecting all subjects and subjects in the process of education and learning anywhere and anytime [11]. In addition, we also need to develop and develop human resource training programs on educational technology and governance of new educational technologies; integration of information technology and education in interdisciplinary programs, innovating teacher training programs towards educators-home users and technology development.

CONCLUSIONS

The development of a capacity management system for teachers in particular and a teaching and learning support system will be an inevitable development. At the same time, the management system will be digitized and connected in real time to ensure flexibility, autonomy and timely interaction. After all, our ultimate goal is to maximize the capacity of university lecturers to lead and train a generation of progressive, civilized students and to keep up to date with trends university of education 4.0. The application of science and technology not only during the Covid-19 pandemic took place, but through this epidemic period, we became more and more aware of the importance of information technology in life, especially in the field of education and training.

CONFLICT OF INTEREST

There is no conflict of interest in the paper

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