



## Editorial

### **Competencies of Distance Tutors in the Era of Blockchain and Artificial Intelligence**

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Open and distance learning system has evolved over decades from its rudimentary correspondence form to artificial intelligence based systems. With the development of new technological applications, learners are offered services which could be more personalized. Distance educators have vital significance to the viability of distance instruction, particularly with regard to specialized abilities identified with the utilization of modern technology applications. Fourth Industrial Revolution is fuelling this setting as new technologies are fast transforming the way we interact. Distance education teachers need to get training inside and outside of the university and develop competencies necessary for teaching learning to happen effectively in this age when artificial intelligence, internet of things and blockchain etc are being applied to our daily life products and processes. Distance Tutors perform different tasks, for example, encouraging learning of topic content, surveying assignments, giving inspiration, and managing research projects. Every one of these tasks requires particular abilities to empower them to perform acceptably.

Competencies required for distance tutors includes specific knowledge, skills and attitude, a way different from conventional face-to-face approach, to better facilitate learners in this mode of education.

The role of tutor in distance education is entirely different from conventional face-to-face approach because the setting and requirements of distance mode of education is completely diverse. Distance tutors have to perform many roles at the same time and developing such competencies in tutors to perform these roles effectively is very important to for quality education and breaking misconceptions about distance education.

With the advancements, new innovations and trend in ICTs, the life style and person's activity faces changes. This is very challenging in the field of teaching and learning as well as research and development. Instructional patterns have been changed by the ramifications of the innovation. In this way; these progressions influence the teaching and learning styles, duration and techniques for learners. Innovations in ICTs has significant impact on distance education. Distance education is an approach of teaching and learning that has been emerging as an effective mode of education worldwide. Technological innovations and development in teaching methodologies has always been a challenge for distance education to make it as effective and parallel to the traditional face-to-face education.

Blockchain and artificial intelligence are among the most important trends in technology in 21<sup>st</sup> century. Bitcoin and cryptocurrency have come into the public eye over the past year, and many major technology companies are now using Artificial Intelligence to impact our daily lives. The Blockchain and artificial intelligence (AI) are cornerstones of the new computing movement. The Blockchain offers a secure yet transparent way of handling big data. Moreover, the Blockchain points the way toward a decentralized computing future, where power is held in the hands of the masses rather than a few ultra-powerful computing elites. AI, on the other hand, seeks to replace traditional human intervention or clumsy handwritten algorithms with smart coding that can learn and adapt from the information it collects. Blockchain, the technology behind the much talked about Bitcoin, is acclaimed as having the potential to transform the global economy due to its ability to increase transparency and trust.

As the development of Distance courses is every now and again isolated from the delivery of learning opportunities, mentors are regularly utilized on low maintenance, transitory contracts which may have long haul impacts on their expert status and standing. The outsourcing of coaching to easygoing staff, which might not have had any contribution to course configuration could effect on the tutors' feeling of professional identity. Distance tutors differ from the traditional classroom instructors in terms of the role they are supposed to play, the manners by which they are associated with learners, and the characteristics and aptitude expected of them. Every one of these measurements have changed and will keep on changing because of the innovation, the improvement of learning situations, and in accordance with political and institutional factors, for example, the accessibility of subsidizing and quality control methodology.

By putting emphasis on tutors in this manner, the perceived effectiveness of distance education will improve. There must be some basic competencies that need to be fulfilled to be an effective teacher in ODL mode. But there are some role based competencies as well that changes according to the changing role of teacher in a specific particular educational setting, and these changing roles need to be recognized to identify the role specific competencies to be developed. And that is the real challenge for a distance tutors and distance mode of education in the era of Blockchain and artificial Intelligence.

This articles in this issue touches upon the concerns as discussed above. The first paper analyses learner's profile, learning behaviour and performance of distance learners through learning analytics and data mining of admission records and examination performance records. On the basis of analysis, Pankaj Khare in his paper, recommends the need for a strong hand-holding during the entire academic lifetime of student in the institution so that they are able to complete their studies in given time duration. High dropout of learners also needs to be checked.

Second paper deals with perception of distance learners of their involvement in assessment decisions. Frank QUANSAH, Vera Rosemary ANKOMA-SEY, & Simon- Peter Kafui AHETO identify the significance of it in making informed decisions regarding students' learning abilities, their placement in appropriate levels and their achievement and they point out that sadly teachers pay little attention to students' involvement in assessment. Their recommendation is to educate the students and providing quick feedback from assessment to students.

Raja Rao in next paper points our various divisions and sub-divisions of student support services in distance education and makes an analysis of view of distance education scholars and practitioners.

Discussing characteristics of distance learners, he identifies problems faced by them and components of student support system which need to be paid attention to for effective services to learners. He argues that the role of administration is very crucial to the success of learners and recommends measures to put in place a pro-active, pastoral, caring, simple and learner oriented administration for providing student support services in distance education.

J S Dorothy presents a unique case of facilitating education of armed forces in India which assists them in later life when these personnel are not in uniform. She explains India Army - Indira Gandhi National Open University Educational Project namely Gyandeeep Scheme. She is hopeful that this scheme will remove compartmentalization of education and create an avenue for preparing the service sector for a civilian life.

Sanjeev KUMAR reports about ICT @ School Scheme as implemented in Himachal Pradesh of India which is a hilly region and has unique problems and opportunities for providing access to learning methods to the learners. He points out the challenges such as cost, internet access, training and policy issue and hopes that the ongoing National Mission on Education through ICT (NMEICT) will prove beneficial for improving school system in the state.

Keerthana BASKARAN, & Magesh RAJARATHINAM in their paper examine the influence of psychological

capital on innovative behaviour like optimism, resiliency and self-efficacy among online teachers which has an impact the performance of an individual on the job. Psychological capital has created a new way to approach and understand the problems associated with managing the human resources in an organization. They call upon the management to recognize the innovative tasks performed by the faculty, provide necessary environment, equipment, resources and offer creativity training that encourages the faculty to exhibit innovative behaviour.

R. Madhumathi explains the development of an artificial intelligence based agriculture distance education model which can be used for prediction of crop price and yield levels in India. She claims that this model can help to ensure poverty alleviation goals besides enhancing the livelihood security and sustainable productivity to change the quality of life, especially in rural areas. She proposes a method for enabling ubiquitous learning for farmers to get the best price for their crops, to predict the crop yields, and to get other relevant information to attain the phenomenal success in their occupations. She explains building a cloud application through which farmers can easily get to know all the right and relevant details in order to plan and execute the farming in a clear and confident fashion.

We hope you will find these researches useful to your work. Enjoy reading the papers.