

Artificial Intelligence, social changes and impact on the world of education (Keynote)

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Abstract

The way in which humans acquire and share knowledge has been under constant evolution throughout times. Since the appearance of the first computers, education has changed dramatically. Now, as disruptive technologies are in full development, new opportunities arise for taking education to levels that have never been seen before.

Ever since the coronavirus pandemic, the use of online teaching modalities has become widespread all over the world and the situation has caused the development of robust digital learning solutions an urgent need. At present, primary, secondary, third-level teaching and all sorts of courses may be delivered online, either in real-time or recorded for later viewing. Classes can be complemented with videos, documents or even interactive exercises. However, the institutions that used little or no technology prior to Covid-19 have found this situation overwhelming. The lack of knowledge regarding the digital teaching/learning tools available on the market and/or lack of knowledge regarding their use, means that educational institutions will not be able to take full advantage of the opportunities offered; poor use of technology in online classrooms may hinder the students' progress.

Moreover, the pandemic has created a shift in the educational paradigm, and new technologies are now viewed not only as necessary during pandemics or other emergencies but also as the future of standard education, as they make it possible to fully adapt to the needs of individual learners, in terms of their learning abilities, personal preferences, goals and time. Thus, many educational institutions, educators and professionals are seeking new, comprehensive digital tools that will satisfy those needs while being easy and reliable to use.

Noixon.tv is an online television platform that has been equipped with a comprehensive set of features and tools that make the development of customised learning much more rapid and effective. It is available in multi-device, multi-platform versions: Web, Android and iOS. Moreover, the educational content created on Noixon is stored on a distributed network and served through a distributed Content Delivery Network, this means that creators can save their storage space while keeping their content secure. The platform makes it possible to develop:

- Synchronous learning: classes may be held in real-time through the video-conference options, enabling teachers and students to interact. Nevertheless, meetings may also be recorded and used later as a resource for revision.
- Asynchronous learning: this type of learning offers students greater flexibility. Educational videos can be recorded within the Noixon platform and uploaded so that students may view them in their free time.
- Digital learning pills: this is a new learning model that delivers educational content in a short video format and focuses on a specific learning object. This makes learning more interesting and flexible; depending on the context and needs of each learner, different combinations of learning pills may

be reused and selected for viewing. Digital learning pills are ideal for enterprises who wish to help their employees acquire specific skills.

- Discovery learning models: By enabling the use of multiple media, Noixon facilitates the development of discovery learning models, which the students and their teacher explore a topic through problem-solving, collaboration and dialogue.
- Interactive tutorials: Noixon makes it easy to use multimedia material, such as videos, documents, images and self-test questions, for the creation of interactive tutorials.

Thus, Noixon surpasses the capabilities of traditional videoconferencing technologies. The platform also facilitates interaction between experts, teachers and students, as all of them can participate from anywhere in the world.

Massive Online Open Courses (MOOCs) are organized by universities, educational institutions or enterprises, they are free of charge and attract large amounts of students looking for educational opportunities or means of complementing their knowledge. E4you.org is a platform for the delivery of officially certified MOOCs and online, university-certified degrees. Any institution can use e4you to create their own MOOC or degree.

Social media also play an important role in the dissemination of knowledge. Social-media driven platforms, such as news-365.press are being used to summarize course content from the MOOCs available on the e4you platform, to inform students of new courses and to remind them of upcoming educational events. This not only improves the students' learning but also helps spread news of the available courses to other people.

Furthermore, tools such as Deepint.net may be used by institutions to ingest, collect and analyse all sorts of data regarding education. The intuitive Big Data analysis process on the Deepint.net platform means that any educator/ institution will be able to use it without any prior training.

Information may be extracted from multiple sources such as social networks, databases, plain text files, URL sources etc. which broadens the analysis possibilities and enables institutions to extract more accurate information regarding the state of education. Deepint.net can help institutions learn about the impact their courses have on their students, about the students' and teachers' experiences, about possible issues and point for improvement, about needs for new courses or topics based on job market analysis or student demand analysis. Moreover, a data analysis can show what educational models work best and monitor the students' progress.

In summary, new technologies offer greater possibilities for achieving high-quality education tailored to every student's needs while facilitating access, lowering costs and overcoming geographical distance.

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