

## **Perception of 21<sup>st</sup> Century Teachers' on the Use of Educational Apps for Teaching Economics at Abia State.**

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### **Abstract**

This study focused on perception of 21<sup>st</sup> century teachers on the use of educational apps for teaching economics at Abia state. The study adopted a descriptive survey design which is mainly an investigative study. The study has an aim and was guided by one specific objective. This study focused on SS2 teachers of Marist Brothers Juniorate uturu based on they are teaching the penultimate class and level with no stress of the daily academic routines and lectures of the school since they just returned from holiday with the vast knowledge, experience and exposure they have gotten, hence they were best suited for this article. Marist brothers juniorate is the host school. Perception goes with the mind, thought, reasoning and brain. The above postulations depicted great influence to study environments, information and its channels have on the students' performances in every course of studying and teaching economics in the academic domains. Therefore, great care needs to be exercised in the events of teaching activities to ensure that teachers perceptions are captivated in order to actualize the ideal course or subject matter objectives. It is believed that when the objectives of any course of study is achieved, the situation will intrinsically restructure the mind sets of the scholars and cause them to act or behave in line with the new imbibed information or concepts.

**Keywords: Perception, 21<sup>st</sup> Century Teachers, Educational Apps, Economics.**

### **Introduction**

Perception is the way that someone thinks and feels about a company, product, service, etc. (Pepe, 2016). Singh (2013) described perception as the tendency to react favourably (positively) or unfavourably (negatively) towards something, stating that there is favourable perception of teacher trainees on learning through ICT. Perception refers to a belief resulting

from the level of awareness and interest. Aminu and Samah (2019) described teachers' perceptions of technology as their views of the use of technology in the classroom

In 1963, Marist Brothers' Juniorate was established by the Marist Brothers as a formation center for candidates aspiring to become Marist Brothers. They started with a few young aspirants. Student Brothers like Rev. Bro. Fabian Okeke and a few others helped to teach these young boys during the holidays and long vacation periods

This building was used as the warehouse during the war for the relief materials sent by UNICEF while MBJ as a whole was used as a refugee camp.

Before then, they were paying very minimally. By that time, Science subjects, as well as Arts were all taught, and there were teachers for all of them. Like other Catholic schools within and around the area, MBJ students did quite well academically.

The Brothers ensured that adequate teaching and learning, as met the standard of the time, was given to the students. The present laboratory building was used as Chemistry and Physics laboratories around 1973. While Brother Lucious Palmer taught Mathematics and Physics, Brother Andrew Iwuagwu taught Biology the brothers taught most of the subjects. In all, the staff strength was not more than ten.

When Bro. Richard Ajaelu came on board in 1974, he worked tirelessly to get the Juniorate registered for WAEC examinations. The 1974 set of Brothers Joseph Udejah, Chima, Onwujuru, Basil Nwude, and the rest did not write WAEC in MBJ. They wrote in the College of the Immaculate Conception (C.I.C.) Enugu, because MBJ was yet unregistered. However, in 1975, the first set of Juniors took the G.C.E., It is not worthy that Br. Richard Ajaelu fought to get the Junior registered by WAEC. He went to the WAEC Lagos office by himself to it that they sent inspectors came to inspect the Juniorate, and finally, in 1978, the Juniorate received an official letter of recognition from the Imo State Ministry of Education for West African School Certificate/G.C. E Examinations. Br Richard Ajaelu left the MBJ in 1980, He handed over to Bro. Isaac Elusiah, who worked as the Director from 1980 to 1982. It was in fact, at this time that the Juniorate was thrown open to the public as a full secondary school.

From 1982, when Rev. Bro. Joachim Okoye-Ezetulugo took over as the Director of MBJ, there followed a rapid infrastructural expansion to meet the requirements of WAEC, this led to the demolition of the five bungalows that were in existence at the inception of the Juniorate. They were immediately replaced with modern buildings to facilitate teaching and learning.

Other Directors that piloted the affairs of MBJ from 1975 to 2023 include

Br. Isaac Elusiah (1980 – 1982),

Br. Joachim Okoye-Ezetulugo (1982 – 1998),

Br. Christian Mbam (1998 – 1999),

Br. Fabian Okeke (1999 – 2005),

Br. Vincent Abadom (2005 – 2009),

Br. Christopher Onwuasoanya (2009 – 2011).

Br. Ifeanyi Mbaegbu (2011- 2017)

Br. Emmanuel Ogo (2017 – 2021)

Br. Henry Uzor (2021- till date)

Economics is a social science that focuses on the production, distribution, and consumption of goods and services. The study of economics is primarily concerned with analysing the choices that individuals, businesses, governments, and nations make to allocate limited resources. Economics has ramifications on a wide range of other fields, including politics, psychology, business, and law.

Economics is the study of how people allocate scarce resources for production, distribution, and consumption, both individually and collectively. The field of economics is connected with and has ramifications on many others, such as politics, government, law, and business. The two branches of economics are microeconomics and macroeconomics. Economics focuses on efficiency in production and exchange. Gross Domestic Product (GDP) and the Consumer Price Index (CPI) are two of the most widely used economic indicators.

### **Justification of the Study**

The decaying educational system has become a big issue to worry about in Nigeria. Gamification has taken over the fast abilities of digital natives than migrants and most teachers are not digitally inclined and friendly thereby still on the analogue method

Maybe, teaching personnel or the approaches adopted during lesson delivery may be an impediment to student learning faster, understanding accurately and attaining the desired knowledge expected of them.

Could it be a problem of low horizons and exposures on their intelligent quotient, emotional quotient, social quotient and adversity quotient.

Perhaps, lack of alignment between technology, curriculum and instruction, pile of changing trends, perhaps viable exposures on the use of 21<sup>st</sup> century technological tools and gadgets or laxity among students, maybe low self-esteem amongst students, low communication and interaction or maybe low communication and interaction among students.

Could it be the fall back to adopting conventional expository lecture method which most times may be dull or mainly teacher centered which makes students passive in learning.

### **Aim and Objective of the study**

The aim of this study is to Ascertain perception of 21<sup>st</sup> century teachers on the use of educational apps for teaching economics at Abia state.

The objective of this study:

Examine the PERCEPTION OF 21<sup>ST</sup> CENTURY TEACHERS' ON THE USE OF EDUCATIONAL APPS FOR TEACHING ECONOMICS AT ABIA STATE.

### **Concept of Perception**

Perception is the way that someone thinks and feels about a company, product, service, etc. (Pepe, 2016). Singh (2013) described perception as the tendency to react favourably (positively) or unfavourably (negatively) towards something, stating that there is favourable perception of teacher trainees on learning through ICT. Perception refers to a belief resulting from the level of awareness and interest. Aminu and Samah (2019) described teachers' perceptions of technology as their views of the use of technology in the classroom. The level of utilization of technological tools for instructional purposes will be greatly influenced by the awareness, interest and perception of trainee teachers. Effective integration of technology in the classroom may be hampered by teachers' perceptions, particularly if those perceptions are negative (Pepe, 2016).

### **Perception of teachers on utilizing technological tools**

Learning organizations need teachers who can bridge the gap between human and technological cultures (Dominici, 2018). Meanwhile, changing from a teacher-cantered approach to a student-cantered approach to instruction and learning may be difficult, and requiring the use of technology may seem too impersonal for teachers to accept (Hartman, 2019). The teacher s' values, beliefs and level of confidence are factors in the adoption of new technologies and pedagogies. A positive attitude toward using technology was found to be a significant factor in the intention to use educational technology. Positive attitudes have a major influence on the acceptance or rejection of the new technology integration (Hartman, 2019). The change may come in the form of an educational change initiated by the college or university. An educator's beliefs about using technology become a factor in the ability to adopt the new technology into their pedagogy. If the transition was smooth and the process was positive, educators may be more open to accepting the change. If the change was not positive, the announcement may produce negative feelings and doubt related to any new initiative (Hartman, 2019). The change may produce resistance, self-doubt and uncertainties

(Kilinc et al., 2017; Reid, 2017). The doubt causes them to question the change and their belief system.

Past experiences may also influence educators' ability to be successful with the implementation of a new innovation, such as technology (Demirbağ & Kılınç, 2018; Reid, 2017). If the focus of the change contradicts the current belief system, teachers are less likely to put the reforms into practice; therefore, they become resistant to the change. Changes that align with core beliefs are more likely to be successful (Demirbağ & Kılınç, 2018). The alignment allows teachers to feel confident about the change process and more likely to be a user of technology. Educators produce resistance by using the technology superficially or not at all. The resistance builds when the educational technology seemingly does not contribute to their traditional teaching (Demirbağ & Kılınç, 2018). Teachers may perceive learning to use the newly adopted technology as a burden (Cheung et al., 2018). The educational technology may be meaningful, but the resistance prevents them from exploring further opportunities for using the technology.

Resistance to technology can also be in association with an educator's efficacy. Self-efficacy is the belief in one's own ability to succeed in a context-specific task or behavior (Hartman, 2019; Alenezi, 2017). Confidence and knowledge with using technology and computers is known as computer self-efficacy (CSE). CSE refers to the ability and the application of skills to achieve a result (Alshammari et al., 2016). The importance of CSE increased since the implementation of computer-based learning at all educational levels (Bhatiasavi & Naglis, 2016). Educators with limited exposure to technology in their everyday and personal lives or with limited or non-existent support will be resistant to using technology (Kilinc et al., 2017). An educator who demonstrates higher levels of CSE will have less frustration and will increase their use of technology in the future (Cheung et al., 2018). Users of technology tend to believe in the value of technology if it is easy to use and makes completing tasks simpler (Bhatiasavi and Naglis, 2016). Lower levels of CSE coincide with low motivation and the perception of the technology as difficult and useless (Alshammari et al., 2016). CSE is a major factor in the resistance of the change, but it is a barrier which is difficult to detect. However, when combining CSE with an educator's background experiences, one may have the ability to determine an educator's resistance to technology. Educators who are comfortable with traditional teaching methods may feel more comfortable with a colleague or mentor easing them into the process of integrating technology. This mentor or colleague would be the change agent. The change agent would provide reassurance and support. It would not only require a change in an educators' knowledge of pedagogy and technology but

also in their self-efficacy (Reid, 2014). These mentors can provide just-in-time support and help ease the educator into increasing the use of technology (Hartman, 2019).

Mundy et al. (2012) revealed that teachers perceived a significant increase in the areas of student engagement, student excitement, student acceleration of learning, and student proficiency with computer technology usage in education. The authors recommended that teachers should not only learn how to use technology at a basic level but should also learn how to integrate that technology into their curricula. Additionally, newer teachers from digital native generations must be taught how their acquired skills can be used to integrate technology into the classroom curriculum to provide complex cognitive engagement for their students. Etiubon and Akpan (2017) reported that Science teachers' perception of ICT capacity building workshop was low as most Science teachers lacked clear understanding of what benefits ICT capacity building workshop may afford them. Also, the ICT facilities were grossly inadequate to effectively equip Science teachers with knowledge of ICTs during capacity building workshops. The frequency of use of ICT capacity building workshop was a once-in-a-year event and this was too short a duration for any meaningful utilization of ICT technologies in instructional delivery to adequately enhance ICT knowledge among learners (Etiubon & Akpan, 2017)

Despite the growing popularity and acceptance of technology integration in education, some reservations exist regarding its full acceptance in curricula. Some barriers to effective integration of technology into education are teachers' perceptions and lack of teacher training which is often linked with inadequate time to learn how to use the equipment and the need to adjust the traditional curriculum to fit the use of the new medium (Khukalenko et al., 2022). Traditionally, teachers' perceptions of instructional technologies determine how effectively these technologies are incorporated into instruction (Khukalenko et al., 2022). This claim goes along with the Diffusion of Innovations theory which contends that people's attitudes toward technology are essential for its diffusion (Rogers, 2010). Likewise, Alfalah (2018) elucidates the necessary factors impacting the likelihood of technology integration. These factors include: (1) perceptions of students and teaching staff, (2) institutional support, (3) integration barriers, (4) rationale for integration, (5) prior technology experience. All this implies that the attitudes of end users are essential to explore during the early phase of virtual reality technology integration.

### **Concept of 21<sup>st</sup> Century Technology**

Technology increases and improves students' interest in learning. Every learner learns faster with the use of these listed mobile technological tools and gadgets. Learning is an everyday

activity; those tools help in giving broader views and vast definitions of everything on the surface of the earth. These tools are referred to as mobile technologies because they are moveable and portable, they can be easily carried to any destination. They aid and support the brain work of man's initiative. Use of these technological tools to teach, example **YOUTUBE and GOOGLE** makes teaching and learning interesting and gives a clearer view for teachers to impact positively with aided visual examples and broader meanings. Mobile technologies have indeed made work easier for students and teachers. Research works are now simple because in view of the findings, the internet gives one more than 100 views differently, but all leading and directing to same thing. Indeed, the use of mobile technologies and tools is an awesome experience and makes teaching and learning more interesting.

The fastest of all internet search engines "**Google**" is indeed of great use and importance for verification, research findings, observations, et cetera. YouTube was created out from google. It is a well-developed search engine just like chrome, Mozilla Firefox, opera mini, UC browser, chrome canary, Askme.com, Baidu, Yahoo, Bing, AOL, etc. All these sites aid search and finding with the help of technological devices.

However, majority of National Open University of Nigeria students are seen as people who either are old, advanced, people with busy work schedules, working and schooling students and above all some with disabilities who could not pass through the normal everyday stress of the conventional university and the hectic environment. In Open University, students definitely need to research and study every time to actualize one's views, vision, dreams and aspiration. Inability of NOUN students to often see a teacher before them in the classroom leads them to collaborative work and unity in studying amongst students. National Open University of Nigeria as a fully known ODL or ODeL (Open Distance Electronic Learning) institution that operates digitally not in an analogue way.

YouTube provides many services including upload, downloading, watching and sharing video. YouTube allows exchange of views and proposals about videos, also allocating channels for transfer of lectures and conferences; and channels for courses which displays a series of videos to explain the skills and educational experiences. Due to dense use of YouTube in educational purposes, Google launched the service "YouTube for school" which includes video clips of educational materials and courses (Mohammed, et al, 2016).

### **Google and its Affordance**

Google was officially launched in 1998 by Larry page and Sergey brin to market google search, which has become the most used web-based search engine. Larry Page and Sergey Brin, students at Stanford University in California, developed a search algorithm at first

known as "Backrub" in 1996, with the help of Scott Hassan and Alan Sterrenberg. The search engine soon proved successful and the expanding company moved several times, finally settling at mountain view in 2003. This marked a phase of rapid growth, with the company making its initial public offering in 2004 and quickly becoming one of the world's largest media companies. The company launched google news in 2002, Gmail in 2004, Google Maps in 2005, Google Chrome in 2008, and the social network known as Google+ in 2011 (which was shut down in April 2019), in addition to other many products. In 2015, Google became the main subsidiary of the holding company Alphabet Inc. The search engine went through many updates in attempts to eradicate search engine Optimization.

### **YouTube and its Affordances**

The advent of new web technology with high-speed broadband and mobile application has made video streaming via Internet more accessible to the general population. A social website like YouTube provides users the opportunity for endless creativity and innovative learning due to its freedom of creation and storytelling functionality, as well as to a vast database of videos and other resources. The fast-paced evolution of technology continually creates tools and applications for researchers in online education While traditional web-based learning lacks the intense fact-to-face attribute of learning, "YouTube, the product of Web 2.0 technology, provides both learner and instructor a bridge to engage through video and text (Bloom and Johnson, 2010).

The integration of social media in teaching and learning has evolved greatly in the past decade. Online learning has already become a popular trend hence, YouTube, a social media website that was created for homemade videos, has become the single largest video database in a short amount of time. Standford and universities all around the world have been developing websites based on new technology to provide education to anybody who has internet access. Additionally, web 2.0, a technology that allows massive online user engagements, opens a gate to fill the gap between technology and learning experiences One aspect of the benefits of video use in teaching and learning is the area of facilitating thinking and problem solving. In the connection between visual clues, the memory process, and the recall of new knowledge, made by University of Queensland (2017), University of Queensland (2017), observed. that "the creative challenge of using moving images and sound to communicate a topic is indeed engaging and insightful, adding that it also enables students to acquire a range of transferable skills" in addition to filmmaking itself. These include research skills, collaborative working, problem solving, technology and organizational skills. observation indicates that moving images and sound as characterized by video, do create



impression and stimulate students' understanding of the topic taught, thereby bringing about good performance in academics.

### **Concept of Lecture Method**

The lecture method of teaching involves the oral presentation of facts/concepts by a teacher/instructor before audience/students? It is also called the “talk-chalk” teaching method. It is the most common method of teaching as it gives the teacher the opportunity to teach a large class at once. This method of teaching is teacher-centered because the teacher controls the entire classroom activities, giving the students all the information needed. This makes the students passive and encourages rote memorization of facts. In most cases, this method of teaching goes alongside with some visual illustrations on a board by the teacher or some images, charts, video clips, etc. all these serve as instructional materials to facilitate understanding and retention. From the ongoing, it may be deduced that lecture method may not be a good way of teaching, but this method also has its strength.

### **Advantages of Lecture Teaching Method**

1. In this teaching method, a large number of topics can be covered in a single class period.
2. Using this method exclude the using of any equipment or laboratory.
3. Learning material is not required.
4. Students' listening skills are developed.

### **Concept of E-Learning and the Internet**

Vikoo and Anikpo (2016) defined Internet as combination of hardware and software, signed to enable information to be passed and shared between two or more autonomous computers. A computer is said to have Internet network when it is configured (software) to share information with two or more computers irrespective of the geographical location with the use of and other hardware. The internet is a telecommunications network that uses telephone lines, cables, satellites and wireless connections to connect computers and other devices to the World Wide Web. All modern computers can connect to the internet, as can many mobile phones and some televisions, video game consoles and other devices. The global network of computer networks is what is been referred as Internet. When computers are connected with Internet facility, information can be passed across as many computers that are connected with similar facilities network and concept of their inter-connecting groups of computer systems for sharing information (Vikoo & Anikpo 2016).

(Vikoo & Anikpo 2016) defined it as a global network of computers and network. The internet system is the boards or center of all computer-mediated communication. It includes

of numerous of unified computers networks whose coverage is wide-reaching also which make available a massive and unbelievable group of simply available information.

The Internet is a group of computers which are interconnected to share information. Mini users normally connect to internet using smart phone modem, cable modem. Or DSL. An Internet Service Provider (ISP) links the home user to other computers. Files that are moved over the internet are called Web pages. Computers that store these Web pages are called Web servers or a Web server to function efficiently, internet connectivity is required.

### **Internet Usage/Usefulness in the Classroom**

1. Ferdi, (2018) itemized ten main reasons why teachers use the Internet: The use of Internet in learning gives the students more opportunity to associate with other learners across the globe. Share and learn from different point of view.
2. When students are given a project-base work, they process it to accomplishing the task through internet research, by so doing students learn on their own
3. Using Internet to teach helps teacher to manage time, by learning materials that can be shared via email and other form of interactive tools.
4. Teaching and learning through the cloud-base tool motivate students to learn at their pace through individualize learning.
5. Some learning materials can be sourced from different open access at low or no cost
6. To expand opportunities for “tele-mentoring”
7. To help teachers communicate and share experience and ideas with other teachers
8. To help bring the school and the community closer together.
9. To help teachers spread good news about what is happening in their classrooms.
10. Teachers’ profession is being invigorated when they blend the method of teaching through the use of internet.

E-learning involves the use of information and communication technologies in education. It plies the application of numerous types of media that deliver text, audio, video, pictures and animation. E-learning is highly suitable for Open and Distance Learning Institutions due to its flexibility (the learners decide when, where and how to learn). E-learning integration has brought about a new paradigm shift in education. The application of the various media increases attention, concentration and motivation of the students. It also allows remote teaching and learning as well as collaboration among learners and instructors. In the fast-paced world of e-learning the available technologies to make a course new and exciting are

always changing, and course content can and should be updated quickly to give students the very latest information.

### **Disadvantages of E-Learning**

- i. Lack of availability of proper infrastructure facilities
- ii. Lack of awareness of upcoming technologies towards c-learning based adult education
- iii. Security risk in adopting c-learning
- iv. There is an urgent need to upgrade the infrastructure facilities. Many educational institutions lack proper infrastructure facilities for the adoption of c-learning based adult education.

### **Google and YouTube Application in the Classroom**

Kristen (2015) noted that, "YouTube is one of the most popular websites on the planet and a vast resource for educational content", adding that, "the site is home to over 10 million videos tagged as educational, many of them are submitted by our fellow teachers". The postulation of Kristen (2015) indicates that YouTube is a reliable social media that can contribute maximally to the education of learners, as well as their respective positive end performance.

However, ways of using YouTube in the classroom has been identified by Kristen (2015) viz:

- a. **Bring** in videos that show students a more fun side of lesson: This point shows that, many lessons can be enhanced with the right video. Something visual and entertaining that speaks to the subject one is teaching breaks up the monotony of a lecture, brings some fun into the lesson, and keeps your students more engaged and interested in the subject or course.
- b. **Create** YouTube playlists as student assignments or as recommended extra resources: Since it is obvious that "some people learn better by watching than reading, therefore providing video alternatives to the reading homework one assigns could pay off for some students. You can create playlists, either to supplement the other work you assign or as an alternative, and simply send the link to the students for viewing. A playlist puts it all into an easy, well-organized format for consumption" (Kristen, 2015).
- c. **Record** class lessons or lecture and save them for future viewing: Kristen (2015), still holds that, "YouTube can become a repository for saving and sharing any lectures you recorded". She maintained that, "our guide on flipped classroom discusses some of the best technologies to use for recording a class, if you need help with that part" (Kristen, 2015). "Once the video is created, YouTube makes it easy to send the link to any student

that missed class, or keep track of the different videos you have in case you want to review them before giving the same lesson next year".

- d. **Take** it to the next level: Kristen (2015), still submitted that, "if one wants to do a little more with the video assignments you give, you can use Ed puzzle to:
1. Crop the videos so you are only showing the most important parts.
  2. Add your own audio voice over commentary to them
  3. Include quizzes to assess student understanding of the video.

Therefore, this gives the teacher more control over what his students view and what they get out of it, and allows the teacher to keep track of who has viewed the assigned videos and how well they understand the concepts covered.

"Ed puzzle is a site that allows users to select a video and customize it by editing, cropping, recording audio, and adding questions to make an engaging presentation or lesson" (David, 2014). However, Azeez (2019) in his work noted that social media has revolutionize our world and has enabled humans to create content, share them and bookmarked there., etc.\_

### **Learning Educational technology with YouTube and Google as Educational Apps**

#### ***(The way forward)***

The Educational benefit of Google Apps is equipped with all necessary tools for communication, collaboration, documentation, storage, sharing, learning and high security. Google Apps for Education includes Gmail, Calendar, Contacts, Drive (Docs, Sheets, Slides, Forms, Drawing), Sites, Groups and many more.

The utilization of YouTube videos in the classroom may be beneficial for instructors and entertaining students. Students are more interested in exciting activities and they're more likely to pay attention when they watch videos instead of having read walls of text in books and notes. Both educational apps aid and support educational technology learning and teaching for easy understanding and comprehension.

### **10 Benefits of YouTube and Google as an educational apps for learning**

1. Reduces the Expenses of Online Education
2. YouTube and Google serve as a Wealth of Educational Resources Available to Users
3. Microlearning and mobile technology
4. Providing Assistance with the Admissions Process as well as Other Procedures
5. To get access to free and high-quality lecture material
6. To improve communication, participation. Critical thinking. Creativity and collaboration
7. To make your material helpful with transcription
8. To reinforce the material

9. To encourage participation from all forms of students
10. To display laboratories and experiments

### **The 4c s' of Learning**

The 4c s' of Learning are;

1. Communication: There must be constant communication.
2. Collaboration: There must be full participation and collaboration.
3. Critical thinking: The intelligent quotient opens the critical thinking abilities.
4. Creativity: creativity sets in to improve comprehension, understanding and learning.

**However, below are google and YouTube logo, teachers collaborating students using google and YouTube to learn and NOUN building.**



### **Conclusion**

As noted earlier, the emergence of digital tools with the view to enhancing effective teaching and learning has come to stay and is part of the global migration in educational inventions. This educational enhancement tool involves applications like Google classroom, YouTube etc. one of the challenges in Education probably is lack of comprehension and availability of applications for teaching and learning especially by students and teachers to learn effectively.

### **Findings**

Teachers are not fully using these educational enhancement tools as a medium for teaching and learning

Teachers of economics from assessment in Abia state are not digital natives neither are they digital friendly

### **Recommendations**

Homework Assignment, term paper, conference paper should be presented online using any of the ICT tools to create user friendliness

Government should bring about more orientation and modalities to make teachers more technology friendly and teach them smart best ways to use these tools for teaching and learning.

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