







An Innovative Approach to Future Online Education in Myanmar

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8.9.2020

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### Introduction

- It is known that some emergencies from the past decade and the Covid-19 outbreak have had a major impact on people's education. Thus, Online Education trend is only increasing.
- Online education reduces many boundaries seen in traditional education. In addition, it encourages individual learners or students to expand their self-study habits.
- As a reason of Myanmar is encountering many challenges in the distance education, it becomes to develop an innovative approach to utilize it in the future for Myanmar Online Education System.



### **Process of Report Writing**



#### Having a look at Myanmar distance education system

Ne	Commen	No. of Students		
110.	Courses	Male	Female	Total
1.	Undergraduate Degree	58469	109748	168217
2.	Honors Degree	981	5573	6554
3.	MA/MSc Qualifying	148	897	1045
4. Postgraduate Diploma		459	1266	1725
5.	Master	1291	5333	6624
6.	Master of Research	64	386	450
7.	Master of Research	394	1659	2053
	Total	61806	124862	186668
8.	Distance Education (Undergraduate Degree)	125,986	158,258	284,244
	Grand Total	187,792	283,120	470,912

Table : Number of undergraduate and postgraduate students at Universities and Degree Colleges in 2012 , Source: Department of Higher Education (Lower Myanmar), MOE, 31st May, 2012

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## **Myanmar Digital Infrastructure**

- > In 2013, Telecommunications infrastructure opened the market to competition
- Telecommunication Providers Telenor, Ooredoo, MPT, MecTel, MyTel
  - international private sector companies (Telenor & Ooredoo)
- SIM cards cost 1.5 million kyats (approx. £750), dropping rapidly in price to 1500 kyat (approx. £0.76) by 2013 (Htun Khaing, 2016).
- Fiber Broadband Internet

(5BB broadband, MPT FTTH, Myanmar Speednet, Myanmarnet, Mytel, Ooredoo Supernet Fiber, Telenor Fiber, TrueNet, Yatanarpon Teleport, Unilink, Welink)





- > In 2019, there is widespread coverage and 3G and 4G access, supporting mobile broadband, available in most parts of the country.
- $\succ$  It was announced in early 2019 that 5G is anticipated to be rolled out within

the next 2-3 years.

Key Indicators for Myanmar(2017)	Myanmar	Asia&Pacific	World
Fixed-telephone sub.per 100 inhab	1	9.5	13
Mobile-cellular sub.per 100 inhab	89.8	104	103.6
Active mobile-broadband sub.per 100 inhab	75.1	60.3	61.9
3G coverage (% of population)	90.5	91.3	87.9
LTE/WiMAX voverage (% of population)	29.5	86.9	76.3
Individuals using the internet (%)	30.7	44.3	48.6
Households with a computer (%)	16.6	38.9	47.1
Households with Internet access (%)	28.3	49	54.7
nternational bandwidth per Internet user (kbit/s)	6.9	61.7	76.6
Fixed-broadband sub.per 100 inhab	0.2	13	13.6
Fixed-broadband sub.by speed tiers,% distribution			
256 kbit/s to 2 Mbit/s	7.9	2.4	4.2
2 to 10 Mbit/s	5	7.6	13.2
equal to or above 10 mbit/s	87.2	90	82.6





## Mobile Internet Users

- In Yangon\_ the commercial hub in Myanmar, signal availability was higher, with Telenor and MPT both receiving an LTE signal over 81% of the time.
- As of May 2018 Ooredoo had the most 4G connections, followed by Telenor and then MPT with 6.6M, 1.5M and 800,000 users, respectively.





### Internet Users in Myanmar



The number of internet users in Myanmar increased by 1.0 million (+4.8%) between 2019 and 2020. Internet penetration in Myanmar stood at 41% in January 2020.



## **Mobile Connections in Myanmar**

- There were 68.24 million mobile connections in Myanmar in January 2020.
- The number of mobile connections in Myanmar increased by 10 million (+18%) between January 2019 and January 2020.
- The number of mobile connections in Myanmar in January 2020 was equivalent to 126% of the total population



## **Managing Online Education**

The ways of managing online education are listed as five as follows;

- Content production and collaborative writing
   (Google Classroom, Zoho, Dropbox Paper )
- **O** Multimedia presentations

(Beautiful.ai, Slides.com, Piktochart.com)

• Quizzes, polls and surveys

(Easypolls, SurveyMonkey, Typeform )

**o** Games and simulations

(PhET interactive simulations, National Geographic Kids, The World's Future)

• Video chatting and conferencing (depending on bandwidth and access) (FaceTime, Microsoft Teams, Zoom, Tecent Meeting, Webinar)









# Mobile Learning Strategies (4C)

 Content: the provision of media (e.g. documents, audio, video, etc) to the learner/performer

• *Compute*: taking in data from the learner and processing it

- Communicate: connecting learners/performers with others
- **Capture:** taking in data from sensors including camera, GPS, etc, and saving for sharing or reflection



# **Use of Social Media for Learning and Teaching**

- It is possible to use social media for some communications or media sharing with parents, guardians, or learners who are over 13 years old.
- There are also some closed social media sites that are moderated and that younger learners can sign into



Using social media does not protect the privacy of users adequately enough for the depth of sharing and discussion required for learning and teaching.

### **Online Learning Approaches**

a) Self-paced or Web based online learning approachb) Facilitated or Instructor led online learning approach



consider the two separately.





Self-paced learners are alone and completely independent, while facilitated and instructor-led online learning courses provide different levels of support from tutors and instructors and collaboration among learners
 online learning courses combine both approaches, but for simplicity it is easy to

# **Online Learning Components**

- Online learning approaches can combine different types of e-learning components: e-learning content, e-tutoring, e-coaching, e-mentoring, collaborative learning and virtual classrooms
- a) E-learning content; includes simple learning resources, interactive e-lessons, electronic simulations and job aids.
- It is like non-interactive resource such as documents, powerpoint presentation, video or audio files.
  - In this method, learners can only read or watch content without performing any other action.



### **Online Learning Components Cont.**

b) E-tutoring, e-coaching, e-mentoring; provide individual support and feedback to learners through online tools and facilitation techniques. So learners can support themselves through the learning experience.



#### **E-TUTOR RESPONSIBILITIES**

## **Online Learning Components Cont.**

C) Collaborative Learning; activities range from discussions and knowledge-sharing to working together on a common project.

- Social software (chats, discussion forums and blogs) are used for online collaboration among learners.
- ✓ Learners can comment and exchange ideas about course activities or contribute to group learning by sharing their knowledge.
- Collaborative project work implies collaboration among learners to perform a task. Collaborative activities can include project work and scenario-based assignments.



### **Online Learning Components Cont.**

D) **Virtual Classroom**; A virtual classroom is an e- learning event where an instructor teaches remotely and in real time to a group of learners using a combination of materials (e.g. PowerPoint slides, audio or video materials). It is also called synchronous learning. Appropriate technology must be in place for both the learners and providers (e.g. software for the virtual classroom and good connectivity).







### Synchronous and Asynchronous Online Learning

a) Synchronous events take place in real time. Synchronous communication between two people requires them to both be present at a given time.



b) Asynchronous events are time-independent. A self-paced course is an example of asynchronous online learning because online learning takes place at any time.



## Methodology for Online Education (ADDLE Model)

- Well-developed online learning courses can be delivered many times to different learners using the same materials.
- The most effective and common methodology for online education is known as ADDIE (Analysis, Design, Development, Implementation and Evaluation) process.



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# AI used in Education: A peek into the Future

- Nowadays, the academic world is becoming more convenient and personalized. So, thanks to the numerous applications of AI for education.
- This has changed the way people learn since educational materials are becoming accessible to all through smart devices and computers.
- Today, students do not need to attend physical classes to study as long as they have computers and internet connection.
- ➢AI technology can automate the expedition of administrative duties for teachers and academic institutions.





## **Role of AI in Education Industry**

The role of AI in education industry is many more such as smart content, intelligent tutoring systems, intelligent tutoring





## **Benefits of Innovative Online Education Approach**



Digitalizing the courses (Eg. ILBC in Myanmar)



Monitor the children's performance



Education to poor children in rural areas





## **Benefits of Innovative Online Education Approach**



Online Learning at Home



Reduced costs for education



A schedule of online learning



Staying connected



Keeping up to date





### Accreditation & Quality Assurance in Online Education

- Accreditation is a form of external quality assurance process under which services and operations of educational institutions or programs are evaluated by an external body to determine if applicable standards are met.
- In all the countries, faculty members across the world are very busy with accreditation and quality assurance activities.
- Institutions are investing large amount on consultation and documentation. Faculty members invest lot of time and energy because accreditation is both a status and a process.





### Prospective Plan of Our Online Approach to Myanmar Distance Education System

Education for people should not be only degree certificate but for knowledge and developing their ideas as well.



# **Individual Work Down**

Sr.	Name & Responsibility	Individual Work Down
1	Aung Tun Lin Group Leader PhD student, NCEPU	Despite engaging with own research work, & current work a lot, Group leader organized members to first choose general topic through discussing each other. He then laid down the respective outlines regarding the topic. In addition, he made members search relevant journal papers, books, latest some information from webpages to become references. Besides, he made them focus on the current Myanmar education comparing with international issues. Then, he built conceptual frame work to develop " an innovative online approach for distance education in Myanmar". He frequently edited some information collected by members. However, honestly, Group leader and members didn't feel fulfilled in this project work to reach their target since few published papers are available regarding Myanmar education and the online- education system has not developed yet in Myanmar.

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Sr	Name & Responsibility	Individual Work Down
2	Khin Myo Myint Soe Member MBA Student, NCEPU	First of all, she thought this project work was not easy to work with others in this group to develop ideas to fulfill the whole project outlines which the group leader laid down. However, She enjoyed the project work because it tested each member's ability to certain extent. Regarding online education, She studied the relevant topics on various websites, collected some information, data of policy work of online education, created some diagram of process of innovative online education approach. Besides, she read a lot of reference papers, books and so on. She joined every meeting through online. She made the valuable suggestion to the group regarding with the idea or process of innovative online education system to introduce it in Myanmar. At last, she was very happy to know about working together in the group as a team. She got lots of experiences which improve her team work skills, but also challenges in relation with online distance education project.

Sr.	Name & Responsibility	Individual Work Down
3	Zin Aung Member MBA Student, BUCT	Being a project team member, he was able to do research project with the team leader guidance such as collecting the relevant information about the specific topic of the project, writing and adding the required information for the particular aspects of the project, making sure that all the information in this project is really based on the reliable sources and discussion about the project with the designated group participants. To be specific, he first studied a lot of resources, collected some information from Education web pages, chose some journal papers and books and shared them to the group. In addition, he had very good advices to develop education methodologies and shared his knowledge to the group according Myanmar Distance education System whether the project work will be applied in Myanmar or not. Finally, he felt so happy with working together as a team work and had got some experience for his own research work.

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Sr.	Name & Responsibility	Individual Work Down
4	Nay Min Aung Member ME Student, NCEPU	Under team leader's guidance, he was also a key and active member to work well with others as a team. First, he was a very good listener and then became such a good adviser to complete the project work for good. Second, he frequently got some ideas through discussion among team members to search very specific and updated information. Then, he started writing some work about the Benefits of Innovative Online System and how to do business by the innovative approach included in this project work. Adding that he collected very useful information and data for this project such as Education system in Myanmar, Mobile Internet user in Myanmar, mobile internet market and data speed in Myanmar, Internet penetration rates in Myanmar and so on. Besides, he occasionally made some diagrams, tables and looked for some charts and photos to be used in this project work. At last, he became a reliable person to do further project work with some experiences from this project work.

Sr.	Name & Responsibility	Individual Work Down
5	Zue Zue Win Myint Member MSc Student, BUCT	Accreditation and quality assurance and making some policies was not easy tasks for online education envelopment. However, she managed to write some information about accreditation and quality assurance of online education system as the second last portion of this project. She attended every single meeting in the Wechat group as well as the Zoom meeting hold by the team leader. Occasionally she discussed about the information like social media users of Myanmar and some activities of Myanmar Digital Infrastructure. She also had some experiences through working, meeting, discussion with others whether the collected information was useful or relevant to the team leader's target. Finally, under the supervision of team leader, she used to know about what data team members added in the project work by doing the so-called research work.

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