Characteristics and Challenges of Chinese E-Learning Platforms in Indonesia

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Abstract. The digital and internet era have made technology integrated with education, which has encouraged the renewal of learning models, including the availability of learning platforms that can be accessed free or paid. The availability of the Mandarin language platform as the largest foreign language after English has also become more diverse, starting with free modules available on the web/blog, as well as online course learning models. This paper collects various kinds of Mandarin language learning platforms in Indonesia, researchers qualify their types into several sections: web content based, mobile app based, video streaming based and e-learning courses-based learning platforms. This paper compares the characteristics, advantages and disadvantages of each type of Chinese e-learning platform. The results of this study indicate that the challenges of the Mandarin language learning platform in Indonesia will have to prioritize functional, structural, varied and content management aspects, with the expectation of creating a massive, open and integrated learning management ecosystem.

1. Introduction
Learning Mandarin in Indonesia gained popularity in the early 21st century, after the reformation era in 1998. Mandarin is not only the language of choice but has become a mandatory language in universities. Some study programs also provide Mandarin for students as a provision to be able to compete in the world of work. [1] The beginning of the 21st century is also the beginning of the industrial revolution 4.0, where all aspects of people's lives are digitized. Although the industrial revolution 4.0 is relatively slow in Indonesia, its development over the past few years has been quite rapid. According to data from the Survey of Penetration and Profiles of Internet Users in Indonesia in 2018 by the Association of Internet Service Providers, internet user penetration in Indonesia is 64.8%, or 171.17 million of the 264.16 million population of Indonesia. Internet users from education such as teachers, school students and college students are 100%, 92.1% and 71.8% (5900 probability and multistage random sampling, with a margin of error of 1.28%, a level of confidence of 95%). It is clear that the growth of internet users has grown by 10.21% during the year, and the profile of users in the education sector dominates, especially from the user profile range of 10-

29 years old. This can prove that, if access to learning content through the internet can be very possible, and could be one of the primary choices of millennial generation for learning foreign languages.

In every Education institution in Indonesia, learning Mandarin is carried out as a foreign language learning, making Mandarin as the second largest foreign language after English [2]. Mandarin learning is generally done in the classroom, the teacher and the textbook take an important role. The millennial generation is one generation that grew up in the early industry 4.0, and educators come from the Z and Alpha generations. This requires language educators to use technology to create greater and varied learning opportunities in language learning [3].

2. Chinese Language E-learning Platform

Chinese Language e-learning platform building and its use can be viewed in terms of rich content, varied types of learning content and feature sets [4]. In addition, e-learning platforms must also pay attention to interactions between teachers and students, so multi-level and multi-method communication needs to be made in e-learning platforms, so as to improve the quality of learning and also stimulate students' curiosity and confidence in the content learning [5]. Thus, an internet-based learning platform provides convenience in learning second language and second language acquisition [6]. In addition, E-Learning is not only intended for foreign language learners in China, but is also applied in universities in China. E-Learning Awareness provides easiness and flexibility in learning to encourage teachers to also support E-Learning [7]. E-Learning Platform is also considered effective in learning Mandarin. A quasi-experimental pretest-posttest nonequivalent was conducted to test the effectiveness of the e-learning platform, with 129 Chinese-American CFL students as participants (69 people in the experimental group and 60 people in the comparison group). After a three-week course, the experimental group had higher scores in the introduction of Chinese Character than the non-experimental group [8]. Students also consider E Learning to be more effective in learning Mandarin and learning time is also more flexible [9].

3. Type and Characteristic of Chinese E-learning platforms

This paper uses the Google search engine to search for various types of Chinese learning channels, classifies types of Chinese e-learning platforms based on how content and resources are presented, divides them into 4 types, namely web content based platforms, mobile app based platforms, video streaming based platforms and e-learning courses based on platforms. The characteristics of each platform will be reviewed from four sides, namely content, content presentation, learning interactions and assessment. Finally, it will compare each platform to find out the advantages and disadvantages of each.

Web content based platform is a learning platform based on web content, where content is presented in the form of certain websites, such as blogs, facebook or personal websites. Content is identical to the text containing explanations and supporting images, and not a few also include video links from other streaming web videos such as YouTube. Learning material in content is usually fragmentation, one content with other content is not interrelated, or difficult to see the progress of learning through content. Learning interactions that occur are usually one-way. Learners only read content and do self-learning. The comment column available is one place to interact with the content creator, as well as other user (learner) content, even this depends on how active the response is in the comment column. Evaluation of learning is almost non-existent, due to limited space of interaction in this type of platform, so it can be concluded that web content based platform users, can only do self-learning through shared content, quality assurance of learning cannot be done because there is no assessment.

A mobile app based platform is a learning platform in the form of a mobile application, content is presented in the form of integrated text, images, audio and video that are run in a mobile application. Ordinary mobile applications can be easily downloaded and installed via the Google Playstore or Apple Store, paid or free. Content is usually sustainable and grouped by theme / topic. Learning interactions that

occur are one-way, where learners only learn content themselves and fill in some interactive quizzes that may be available, so the assessment available on this platform is usually in the form of interactive quizzes. Evaluation of learning is usually in the form of points obtained from the interactive quiz, can be accumulated to open the next content, or in the form of a badge / medal as a form of appreciation, which can stimulate users to continue learning through the mobile app.

Streaming video based platform is a learning platform in the form of a Chinese learning video series. Content is presented in the form of digital video-based tutorial content. The most commonly accessed streaming video is YouTube, where content creators and content users can upload and stream online for free. Typical of video content is usually diverse, so that there are learning contents that are fragmented or structured. Learning interactions that occur are usually one-way, ie learners do self-learning through streaming video tutorials, and the comments column on the video streaming website is the only channel for interacting with content creators and the other learners. Because the tutorial video contains only an explanation, assessment will be difficult to do through this platform.

E-learning courses based on platforms are a combination of web content, mobile apps and video streaming-based platforms with online courses (for example bahaso.com, cakap.com etc.). Content is structural, divided according to the level of language ability of the user. Content is presented in various forms, including text, audio, and video. Since the previous learning platform interaction is done in one direction, or just rely on the comments column to interact, tutoring is done face to face between tutors and learners through video conferencing. Assessment is also carried out in a variety of ways, including interactive quizzes and assignments from tutors that must be done. This platform-based e-learning courses, also called hybrid e-learning platforms and face-to-face digitalization of learning, have other Chinese e-platform characteristics, but this does not rule out face-to-face learning.

Table 1. Advantages and Disadvantages of four types Chinese E-Learning Platform

	Web content	Mobile app	Video Streaming	E-learning course
Structured content	(+)	(+)	(+)	+
Presentation / media with varied content	-	(+)	-	+
Two ways interaction	(+)	-	(+)	+
Clear assessment	-	(+)	-	+

The 4 types of Chinese e-learning platforms discussed in this paper have their respective advantages and disadvantages, and it does not exclude the possibility that one type of platform will adopt the advantages of other types of platforms. In terms of content, content in e-learning platforms should be structured, i.e. dividing content content based on themes or according to a certain level of ability (beginner, intermediate, expert). It aims to make learning access more directed. Web content, mobile apps and video-based streaming may not necessarily have these advantages, due to the limited presentation method and minimal two-way communication. On e-learning course based platform learners, usually just before learning begins, learners will be asked to choose the level of mastery of Mandarin, some platforms even provide a free trial of several sessions, so learners can find out what courses will be taken.

In terms of content presentation, because it is limited by the presentation of content by each platform, the mobile app can at least integrate text, video and audio with a little more than the web content and video-based streaming platform. An e-learning course based platform can properly integrate text, video and audio in a learning, maximizing learning audio and visual. The comments column on the web content and video streaming platform allows interaction between content creators and learners, but it also depends on the active

interaction in the comments column. Whereas e-learning course based platform with online tutoring features, can realize two-way interaction between tutors and learners, bringing interaction in the classroom into the digital world. To guarantee the quality of learning, a good assessment system is needed in learning.

Platform-based e-learning courses have a clear assessment system, namely through interactive quizzes and assignments given during online tutoring. The assessment given will also get feedback systemically and through an online tutor. This is also supported by structured and varied content. Mobile apps with interactive quizzes have a fairly clear assessment, but minimal feedback.

4. Conclusion

Chinese e-learning platform becomes the main choice for Chinese learners to be able to learn wherever and wherever. The emergence of 4 types of Chinese e-learning platforms is a good development and a process towards improving e-learning platforms in Indonesia. Every advantage possessed by each platform can be used as a reference in making a better Chinese e-learning platform management system and it is not impossible to combine the characteristics of several platforms to enhance a new platform that will be created, as well as an existing platform.

Based on the results of a comparison of 4 types of Chinese e-learning platforms in Indonesia, it can be concluded that the learning platform includes functional, structural, variant and content management aspects. However, it should be emphasized that, the development of Chinese e-learning platforms, especially e-learning courses based platforms can maximize the advantages of functional, structural, varied and content management aspects. With the development and continuous improvement of existing platforms, it can create a massive, open and integrated learning management ecosystem for Chinese as foreign language learning in Indonesia. In addition, it is necessary to carry out a continuous evaluation of E-Learning to ensure higher quality teaching and learning.

References

[1] Ying Y, Mursitama T N, Novianti N 2018 *Pertanika J. Soc. Sci. & Hum* **26 (3)** 1241 – 1252.
[2] Jureynolds, Yinghu W 2018 The Legal Status of Chinese Language in Indonesia and Its Influence on Chinese Language   Teaching. *Southeast Asian Affairs* **4** 82-84.
[3] Godwin Jones R 2005 Messaging, Gaming, Peer-to-Peer Sharing: Language Learning Strategies & Tools for the Millennial Generation. *Language Learning & Technology* **9** 20-25.
[4] Pinghong Z, Qiang L and Qi Z 2007 Investigation on Building of Visualised Web-based Teaching Platform on Chinese Language Learning for Foreign Students. *Open Education Research* **13** 65-70.
[5] Tongtao Z 2006 Technology and Application of Network Teaching Platform for Chinese as A Foreign Language **38** 63-73.
[6] Hong W 2006 Application and Analysis of Network Teaching Platform in Second Language Teaching **40** 25-32.
[7] Zhao, J., McConnell, D. and Jiang, Y 2009) Teachers' Conceptions of E-learning in Chinese Higher Education *Campus-Wide Information Systems* **26 (2)** 90-97.
[8] Chen, H.-C., Hsu, C.-C., Chang, L.-Y., Lin, Y.-C., Chang, K.-E., & Sung, Y.-T 2013 Using a radical-derived character e-learning platform to increase learner knowledge of Chinese characters *Language Learning & Technology*, **17 (1)** 89–106.
[9] Zhang, W., & Cheng, Y. L 2012 Quality assurance in e-learning: PDPP evaluation model and its application *The International Review of Research in Open and Distributed Learning* **13 (3)** 66-82.