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**ATTRIBUTES FOR THE FUNDAMENTAL
REQUIREMENTS OF A GOOD PRACTICE OF ONLINE
COURSE: A REFLECTIVE STUDY ON THE 1ST
INDONESIAN MASSIVE OPEN ONLINE COURSE
(IMOOC)**

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Abstract Technology advancement has allowed our education to make innovations, and massive open online courses (MOOCs) has become one of the promising programs that facilitate fruitful learning outcomes for many fields of study especially English language learning. This reflective study evaluated the first iteration of Indonesian Massive Open Online Course (IMOOC), in 2017, perceived from both facilitator and participant point of view, taking the IMOOC IAIN Salatiga camp as the sample subject of the study. Our reflections started with vignettes on challenges and opportunities for online learning and some attributes generally referred to as the basic requirements of successful open online course, such as, curiosity and richness in ways of the learning materials, preferences in learning and flexibility for the aspects of learning style and facilitation, and user-friendliness for the aspects of information and communication technology. Finally, our reflections as a facilitator and a participant to the first IMOOC discovered assorted technical and module-related issues faced by facilitator and participants respectively but both assured of opportunities prospective to develop professionalism in English language teaching in the future. In a more serious note, this study has formulated 3 attributes for the basic requirements of successful open online course namely providing multimodal contents in accordance with participant critical thinking level, accommodating different learning styles with stimulating facilitation, and utilizing current and user-friendly digital tools applicable and

INTRODUCTION

The growing trend of the pedagogical practices of using technology in English classroom have left us with the questions of how to start it off, manage with lack of technical and technological support, deal with the challenges of integrating it with the school/university syllabus, and so forth. However, studies seem to have never questioned moreover opposed to the premise of its effectiveness and benefits. Mokhtari (2013: 1630) reported that a great number of institutions in the world have integrated computer-assisted language learning (CALL) into their courses and have benefited from its advantages and utilities to speed up the process of language learning. His study also found that students are generally positive about the use of computer technology in language learning and are willing to accept the integration of computer technology resources into their language learning courses. (Mokhtari, 2013: 1634). In another study conducted by Farivar, A. & Rahimi, A. (2015: 648) who tested its impact toward students, an indication was drawn that the experimental group of students, whose learning was CALL-based, performed better than the control group on posttest with an observable notion of an increase of students' learning autonomy. The application of CALL in the classroom is also proven significant in developing teacher's competencies, as in the study conducted by Liu (2015: 131) that highlighted teacher's positive attitude toward the practice and better confidence about improving students' learning motivation by means of Internet technology, even though they also admitted to have found challenges when it came to matching students' language levels, evaluating students' project performance, or creating an online cooperative learning environment among students.

A rather new innovation aiming at spreading the positive impacts of this technology enhanced learning was initiated through the development and running of Massive Open Online Courses (MOOCs), a kind of distance and open education and their objective is the promotion of learning among a huge number of people, with common interests (Daniel, 2012: 18) which represents a promising area for learning technology growth (Kennedy, 2014: 11). By allowing

supposedly unlimited number of interested participants in a particular MOOC, the impact is expected to be huge and wide. Even though MOOCs are meant to be implemented in all fields of study, researchers have confirmed that the area of education has taken the most advantage by far followed by engineering and computer science, and information and communication technology related disciplines (Bozkurt, A., et al., 2016: 214). For the case of Indonesian English language teaching, a similar course named Indonesian Massive Open Online Course (abbreviated as IMOOC or more well-known as Indonesian MOOC) was initiated and launched by The Regional English Language Office, U.S. Embassy Jakarta in 2017. As the authors themselves were a facilitator and a participant in its first iteration, we have been reflecting about to what extent the course has brought an impact in the academic society. Questions about what constitutes a good online learning and what challenges deemed to be found as well as the resolutions to be recommended are the two major issues we would like to address by writing this article.

METHOD

As this is a reflective study, through this paper, we will share our knowledge on the 1st Indonesian Massive Open Online Course (1st IMOOC). We will use our experiences as a facilitator and a participant of this 1st IMOOC as the starting points of our discussion because we realize that in order to gain much benefits on each of our professional development projects, we must be able to first learn a lot from our experiences. This is in line to what Richard and Lockhart (1995) say that experience is the starting point for teacher development, but in order for experience to play a productive role, it is necessary to examine such experience. This paper uses vignettes to present our experiences and reflections and discussion to generate the common threads and lessons learned.

DATA PRESENTATION: VIGNETTES

1. Challenges and opportunities for online teaching and learning through imooc

Facilitator Vignette: Hanung Triyoko

It was in 2016 when I said yes to an offer from RELO to involve in its initiative to launch the first massive open online course in Indonesia called as IMOOC or Indonesian MOOC. With 14 other ELT Practitioners around Indonesia, I was recruited to develop and to serve as the facilitators for the 1st iteration of IMOOC launched in January 13, 2017. Thanks to the facilitation by RELO and Mrs. Debra Lee, an online course specialist from the Vanderbilt University USA who trained us quite lots about the development and the practice of facilitating MOOC, that we, the 15 developers of IMOOC, finally managed to create our own 5 modules, with our best efforts to accommodate our local contexts of teaching learning, the Indonesian ELT context, into the syllabus, as the Pilot project for the IMOOC. I was really enthusiastic knowing that IMOOC would certainly allow teachers learn online about the concept and the practice of autonomous learning and upgrade their teaching skills through the use of technology from their computers at home or at schools with their own preferred schedules or timing of learning. Therefore, the 1st IMOOC was a very good initiative from RELO to provide an access to an alternative professional development since this 1st IMOOC is a full online course accessible for ELT educators and practitioners in Indonesia. This is a new era of professional development project by which more participants can be enrolled without difficulties related to accommodations and expenses as the normal consequences of organizing traditional face to face professional development. The 1st IMOOC can be said to serve the main goal of online distance education as suggested by Pawan, et.al (2016) which is to create access.

Participant Vignette: Muhamad Hasbi

Technology has reached most people in all corners of the world and thus there is a high demand for English teachers to be able to incorporate it in classroom teaching and learning not only for the sake of innovation itself but also of presenting effective learning experiences which accommodate target students' socio-cultural values. Participating in IMOOC in 2017 was like breathing a fresh air and gave new insight to me as a rather new English educator that time. As it is promoted in the course tagline namely 'technology for autonomous learning', I did learn about many technology related contents such as digital literacy and

online applications usable for English language teaching and learning presented in material readings, discussions, and quizzes activities. This construction has allowed me to garner up-to-date skills and competences necessary for English teaching and inspired to create engaging classroom learning activities that promote students' learning autonomy. On the other side, it was the first time to all if not most of us to take such online course and therefore when we first came to know about how the course worked such as the amount and contents of modules, the tasks demands, the time frame, etc, we experienced some degree of shock and anxiety apart from excitement and curiosity.

2. Curiosity and Richness in Ways of the Learning Materials

Facilitator Vignette: Hanung Triyoko

Just like previously mentioned, as the developers of the IMOOC we did our best to produce multimedia learning materials in the forms of texts, voices or MP3, Videos or MP4, graphics, to ensure that participants would find the 1st IMOOC as the representation of two aspects, first the aspect of the use of technology to enrich the learning experiences of the participants and second the aspect of the accommodation or the catering to different learning styles of the participants. Among many technicalities in the use of the technology, most of participants in my camp really found it challenging to know how and to produce their own rubrics, infographics, storyboards, and trimmed videos as well as to make and to edit their own video recording. The participants also developed their autonomous learning because they are trained on how to evaluate mobile devices and mobile apps themselves so they earned the skills to select appropriate mobile apps to promote autonomous learning in their own contexts. The theme of 1st IMOOC *Technology for Autonomous Learning* was indeed a good choice considering that most participants, representing the characteristics of the people of Indonesia, were generally enthusiastic and eager to learn new skills related to the use of their mobile phones and all the advancements the mobile phones producers offer to them. As the facilitator, I often felt amazed with the pace of learning of the participants related to the use of variety of mobile apps for education. That really served as the evidence that the participants as the digital natives own the

digital technology whereas I as a digital immigrant need to adapt really hard to digital technology.

Participant Vignette: Muhamad Hasbi

The course contains introduction to Canvas and IMOOC (pre-module) followed by 5 modules namely autonomous learning, digital literacy, mobile devices for autonomous teaching and learning, promoting autonomous learning using videos, and autonomy through video creation. Seeing the list of the module titles for the first time attracted me at ease as the major themes, i.e., technological skills as well as learning autonomy were not only two concerns I was interested to learn but also represented two most important aspects teachers must take account for while teaching at class for nowadays context. Each module, by the way, was to be accomplished in two weeks and broken down to four or five activities. It shocked me initially as in our Indonesian academic culture having that number of activities in two weeks seemed rather too much, let alone this was the first online class attendance ever to most of us, but the fact that the activities were presented variedly in the form of material reading, discussion, quiz, product creation, closed submission, and even peer-review raised interest and turned down boredom despite the challenge and demands it offered. Another good point to be noted is that the material contents are rich, comprehensive, and mostly new thus worth-reading and following. In conclusion, even though the amount of activities looked a bit excessive, the diversity of activity presentations and the interesting contents elevated curiosity consistently and this helped me personally to not only remain in the course but to also enjoyed it along.

3. Preferences in learning and flexibility for the aspects of learning style and facilitation

Facilitator Vignette: Hanung Triyoko

Others developers and I agreed to balance the course content and the delivery of the modules to ensure that all participants would in various degree satisfy their learning styles and get flexibilities in doing all tasks prescribed in IMOOC and thus we produced some multimedia learning materials and set up varieties of assignments, i.e. *discussion, lesson plan writing, video making, educational apps implementation and evaluation, rubric creation, etc.*, which

were spread into 5 modules delivered in 11 weeks altogether to ensure that participants would not have to spend more than 7 hours per week to successfully complete the course. For the 1st IMOOC or the Pilot Project of the IMOOC, IAIN Salatiga Camp enrolled 8 pre-service teachers from the Faculty of Education and Teacher Training of IAIN Salatiga, 8 in-service teachers or English lecturers from the same faculty, and the rest, 9 of them were in-service English teachers from various districts in the province of Jawa Tengah such as Salatiga, Surakarta, Rembang, Temanggung, Demak, Tegal, Kartasura, Pemalang, and Jember. During the course, I lost 8 participants, 1 participant due to an unidentified reason, I couldn't even contact him by phone or email, 1 because of losing interest to finish the course, 3 because of poor time management or unable to submit all the required assignments, 1 because of bad internet connection, 1 because of illness, and 1 because of another very serious agenda he had to do, to get married before the course is finished. I was really amazed by the fact that despite the flexibilities in doing the tasks required by the IMOOC. There were still so many situations that prevented the particular participants to successfully finish the course.

Participant Vignette: Muhamad Hasbi

To begin with, the materials in each page were presented in only one not multiple formats such as only in the form of text reading, so there was no room for participants to choose to learn either from textual, audio, or video material; post IMOOC 2017 I took other massive open online courses and few of them provided different forms of materials to module packets containing contents to learn in a whole module in order to accommodate participants' different learning style and resolve technological barriers. However, having diverse kinds of activities like has been explained in the above section definitely served us the experience to learn with multimodal literacy, such as through article reading, reading one topic of material from multiple sources given, video watching, material creation using online application, and so on. This is also a good point because it could rehearse participant's ample skills rather than exploring the course only with their dominant learning style. The course made it possible for us to interact with our facilitator in the discussion pages and grade's comments and with fellow participants in the discussion and peer review activities so good

exchanges of opinions and feedbacks took place. And the fact that several tasks were designed with first-revised-submission technicality allowed us to improve the quality of our work as well as our final score for certain assignments.

4. User-friendliness for the aspects of information and communication technology

Facilitator Vignette: Hanung Triyoko

Thanks to designers of the Canvas that I did not have many difficulties working with the app in designing the IMOOC. Canvas is also a very user-friendly app for me to develop as well as to facilitate an online course. I cannot say whether this is a strength or a weakness but Canvas works best if the users log in with the gmail account because then Canvas can also connect smoothly with other communications tools provided by google such as *google drive, google forms, youtube*, etc. As a designer and a facilitator I can also swift from teacher's view to the Canvas (Figure 1) to students' view of the Canvas (figure 2) so it helps me predict what may happen with students learning experiences when the course is launched or the learning materials are published. I can check whether the links to youtube video, for example, is easily accessible by the participants.

Figure 1. (Teachers' view to the Canvas)

Figure 2. (Students' view to the Canvas)



During the course, I had not had any complaints from participants especially related to the use of Canvas as the platform for the IMOOC, many of them questioned why should they used gmail account to log in to canvas but soon they were there with me on Canvas, they got busy with the learning activities and learnt well on how Canvas worked in facilitating the IMOOC. Participants common problems with the technicalities were those related to skills in working online such as how to embed pictures, videos, how to convert and resize files, etc. and those problems solved through peer to peer assistance and sharing made possible by the use of WA Group.

Participant Vignette: Muhamad Hasbi

The IMOOC class took place in an online application site namely canvas.instructure.com where the regularity to access the site is similar to other major applications available online so there was neither an exclusivity nor a complicated requirement in accessing the course. The app worked fine when accessed through smartphone using several popular browsers although for completing few IMOOC activities using computer or laptop would be necessary, especially when we need to upload media files such as documents, images, videos are supported or opening a discussion page where the number of chats got

numerous. In general, it required participants to go online to do the whole course so having internet connectivity for around 5 to 6 hours a week would be needed. Thankfully, I worked in a place where computer facilities were frequently available to be used and internet connection was provided for free; without these two, it would be rather challenging and costly to do the course. In consequence, we need to be smart dealing with the issue of time management in general. I admit technical and technological barriers could be faced by any of the participants at any stage of the course, so having WhatsApp group as an external community platform that gathered all participants with the facilitator played an important role in helping us out dealing with them because participant problem or doubt reports and clarification from facilitator as well as exchanges of resolution ideas from other participants could happen immediately.

5. Technical and module-related issues faced by facilitator and participants

Facilitator Vignette: Hanung Triyoko

My experiences in facilitating the first iteration of IMOOC in 2017 taught me that the common technical problems shared was on how we could successfully embed pictures or videos from outside the Canvas so we did not have to save the files of the pictures and the videos to the Canvas because when we did that, we would consume much storage capacity provided by the Canvas which was 2 GB limit for the individual files uploaded on Canvas, 500 MB limit when participants use the media tools in canvas to create that files, and 50 MB as the limit for personal storage in Canvas by default. I agree to the idea that it is necessary to train participants to embed or to put links to their files for pictures, videos, etc from outside the Canvas because that kind of skills are very necessary for them to survive in the world of online teaching and learning.

The module-related issues with the 1st iteration of the IMOOC were the distribution of the assignments per module which was not balanced, with most assignments given in the early phase of the course, and the datelines of the assignments which were quite difficult for many of my participants to catch up because we, the developers of the IMOOC, paid more attention to the time

predicted to be spent to do the assignment but less to the level and the variety of skills required to do the assignments as well as the different background of the participants related to their skills working with internet and their internet connections. I learnt that many of my participants worked on their assignments mostly on weekends and at nights on the weekdays so they depended much on their internet connections during that periods. With many of the datelines were on the weekdays, most of my participants tended to work hard on the weekends preceding the datelines but then when their internet connections were not good they could not perform their tasks well.

Participant Vignette: Muhamad Hasbi

The first hardest challenge I dealt with was about timing. Having to accomplish two to three (mostly) activities in a week in the middle of doing other works/activities and to do all of those activities online was demanding already, and the fact that each activity was able to be accessed one after another instead of making them available in one go, such as weekly or per module, often gave an element of shock to me and others as sometimes tasks requiring more times appeared to be scheduled on the same day(s) we had planned agenda(s). This issue had been notified by the IMOOC program developer and it is good to know that current presentation of IMOOC has friendlier policy, i.e., publishing the whole contents of a module one day before it starts. Secondly, the amount of tasks itself is rather plenty considering such learning is new to most of us and we took it while multitasking of other matters thus some reductions of material could be wiser so as to let us enjoy the course with ideal speed and produce quality works and involve in engaging interaction in the discussions. Next, several tasks required participants to produce some video and visual teaching materials using previously unknown online and offline applications and upload them on certain websites and at first it was rather complex and demanding as it required multimedia skills that we might not have before; I presume this could really be difficult especially for senior in-service teachers/non-digital natives or those having internet access difficulties.

DISCUSSION

Having presented our vignettes of experiences to be involved in the 1st IMOOC in the point of views of a facilitator and a participant, we will then discuss three attributes for the fundamental requirements of a good practice of online course in the following paragraphs:

1. Providing multimodal contents in accordance with participant critical thinking level

In the 1st IMOOC, the content of the course, especially in the way learning materials are presented for the course must help achieve the instructional goals of the course. In the vast amounts of online materials already there in the internet about the use of technology to promote autonomous learning the learning materials shall be the ones appropriate for the participants considering the participants' various different backgrounds of educational and experiential history related to the online learning itself and their previous knowledge on the use of technology to promote autonomous learning. More importantly, the learning materials are set as appropriate with the participants' level of English and critical thinking level. As it is not easy to measure the level of the critical thinking of the participants, thus the 1st IMOOC used our own creation of learning materials and materials available on the internet which are appropriate for those participants with the minimum level English mastery of B2 or the *independent user* of the CEFR (Common European Framework of Reference for Languages; Learning, Teaching, Assessment). In that level, the potential participants for the 1st IMOOC were expected to understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization and that they would be able to use their English flexibly and effectively for social, academic and professional purposes.

The 1st IMOOC was launched in the hope that after learning from the learning materials or the content of the course, the participants, equipped with their different level of critical thinking skills, could develop their own knowledge based on their application of their understanding of concepts of autonomous learning and the real situations of their teaching and learning activities with the help of technology and that the participants, based on the opportunities they

themselves created through their local as well as global interactions with other ELT practitioners, could have the continuous learning inside and outside classroom. These set goals are in accordance with what Huffaker and Calvert (2003) say as the goals of curriculum and material design.

2. Accommodating different learning styles with stimulating facilitation

In the 1st IMOOC, the tasks the participants needed to do were varied in term of the skills required and the ways to submit or present the assignments. In total there were 26 assignments for the participants to do to complete the course of 1st IMOOC. The participants were involved in discussions, lesson planning, video trimming and video creation, internet surfing, and making storyboard, rubric, and infographic. These assignments allowed the participant develop multiple skills and exercise various learning styles simultaneously since all kinds of presentations of learning materials such as audio, text, visual, graphics, were used. Besides, the participants were required to do the assignments in groups, in peers, and individually.

Doing the jobs, a facilitator of an online course will know that the participants can contact him/her for any reasons, related or not to the course or the assignments. Throughout the course, the presence of teachers or facilitators will not immediately or automatically help the participants coping with their problems in their efforts to complete the course. With the easiness of communication, a facilitator tries to establish with the participants, some participants may not be brought back to their tracks on the course. Some participants seem to just disappear, leaving no clues whether they will complete the course or not. The important of instilling the spirit of autonomous learning can help participants survive with all the challenges of online learning.

To be a better facilitator of online learning from time to time, one needs to consider this advice from Bonk and Khoo (2014) who propose guidelines to sustain student motivation and investment in online learning following the principles as follow: goal setting autonomy and curiosity, disequilibrium and variety, responsive feedback-and-encouragement cycle, and community and relevance. No matter how convincing a facilitator for the participants can be in motivating them to successfully complete the course, when the participants

themselves are not clear with the objectives of their involvement in the course, the participants can always be discouraged by the challenges they face during the course and eventually give up from an online course. The designers and facilitators of online course like IMOOC shall always work together to avoid boredom felt by the participants during the course due to the lack of variations in presenting learning materials and assessing the learning results since an online learning is lack of social interaction that generally ease the boredom of learning.

Through adding the way of facilitation that enable participants to engage with one another as well as with the facilitator by utilizing a WA group in which all can immediately seek helps and get responses from others, the facilitator can implement what is called by Brown (1996) as an *atelier* model. Through this model of facilitation, a facilitator can show herself or himself as an expert in a particular field but at the same time allow the participants to pay more attention to their own innovations and success by observing, commenting, or indeed analyzing on each other works so the participants can learn not only from their facilitator but also from other participants.

3. Utilizing current and user-friendly digital tools applicable and integrative in Indonesian teaching context

The IMOOC 2017 was structured to equip teacher participants with English teaching skills which promote learning autonomy through giving the experience of creating teaching video, visual, textual materials, creating rubrics, and creating a lesson plan after learning deeper about the theory and practices of autonomous learning and digital literacy through article readings, discussions, and quizzes in the first two modules. As online resources are the dominant part of any computer assisted language teaching course (Blake & Delforge, 2004), the creations of those teaching products were accomplished using online applications which were completely new to the majority of participants, such as Rubistar for creating the rubric and EDpuzzle for creating a trimmed video-based teaching material. Apart from Canvas.instructure, which was the main online platform of the course, WhatsApp was also used together by both facilitator and participants to build the community of inquiry which played a very significant role in triggering the successfulness of the program, of any online classes in general especially in

encouraging students to speak their minds and engage in discussions (Shih, 2011). Therefore, online applications were utilized not only within participants' learning process but also as an external tool for both parties to communicate.

The online applications explored during the course such as those mentioned above were user-friendly and integrative to support preparing English language materials in Indonesian context. However, they are all browsed applications, and to maximize the achievement of learning autonomy, making use of several mobile applications could also have been integrated since the trend shows that more and more users used mobile apps more frequently than browsing the web on their mobile devices (Perez, 2012) and Mobile Assisted Language Learning (MALL) can be an ideal solution to language learning barriers in terms of time and place (Miangah & Nezarat, 2012). Last but not least, technological tools both mobile-installed and web-browsed can be used in educational purposes (Çelik & Aytin, 2014; Hunt-Barron, Tracy, Howell & Kaminski, 2015; Samah, Putih & Hussin, 2016 in Chmura, 2017) and whatever applications to be picked for learning, it is suggestible to be rather picky and to make sure they fulfill the criteria of a good online English resources such as stimulating interaction and generative, having appropriate instructions, and looking attractive and flexible (Howard and Major, 2004).

CONCLUSION

The facilitator and participant vignettes have given a close-to-reality testimony of how the Indonesian MOOC run in its first batch in 2017 which in general mirrors a success despite several aspects which needed evaluation or improvement as noted by the participants. The reflection highlights three most important elements of an online course namely accommodating different learning styles with stimulating facilitation, providing multimodal contents in accordance with participant critical thinking level, and utilizing current and user-friendly digital tools applicable and integrative in Indonesian institutional context. Special notes on the number of tasks in a week, course contents publishing policy, and may be resourceful for the developers and facilitators to take account in carrying out the upcoming practice of Indonesian MOOC. The success of learning through

the course may inspire many other Indonesian English teachers to also participate as it gives good promises for their professional teaching development as well as inspires teachers in presenting effective English language classroom teaching and learning.

REFERENCE

- Blake, R. J., & Delforge, A. M. (2004). Language learning at a distance: Spanish without walls. NFLRC Symposium.
- Bonk, C., & Khoo, E. (2014). Adding some TEC-VARIETY: 100+ activities for motivating and retaining learners online. Bloomington, IN: Open World Books.
- Bozkurt, A., et al. (2016). Research trends in massive open online course (MOOC) theses and dissertations: surfing the tsunami wave. *Open Praxis*, Vol. 8, Issue 3, pp. 203–221.
- Brown, J.S. (2006). Learning in the digital age (21st Century). Paper presented at the 7th Annual Ohio Digital Commons for Education (ODCE) Conference, Columbus, Ohio.
- Chmura, A., & Borrud Z. (2017). Digital tools through a K-3 teacher's perspective. Malmö University.
- Daniel, J., (2012). Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility. *Journal of Interactive Media in Education*. 2012 (3).
- Farivar, A. & Rahimi, A. (2015). The Impact of CALL on Iranian EFL Learners' Autonomy. *Procedia – Social and Behavioral Sciences*, 192, 644-649.
- Howard, J. & J. Major. (2004). Guidelines for designing effective English language teaching materials. Retrieved from <http://www.paaljapan.org/resources/proceedings/PAAL9/pdf/Howard.pdf>.

- Huffaker, D. A., & Calvert, S.L. (2003). The new science of learning: Active learning, metacognition, and transfer of knowledge in e-learning applications. *Journal Educational Computing Research*, 29(3), 325 – 334
- Kennedy, J. (2014). Characteristics of Massive Open Online Courses (MOOCs): A Research Review, 2009-2012. *Journal of Interactive Online Learning*, Vol. 13, No. 1.
- Miangah, T.M. & Nezarat, A. (2012). Mobile-Assisted Language Learning. *International Journal of Distributed and Parallel Systems*, vol. 3, no. 1, pp. 309-319.
- Mokhtari, H. (2013). Iranian EFL Learner's attitude towards CALL. *Procedia – Social and Behavioral Sciences*, 70, 1630-1635.
- Liu, M. & Kleinsasser, R. C. (2015). Exploring EFL Teachers' CALL Knowledge And Competencies: In-Service Program Perspectives. *Language Learning & Technology*. Vol. 19, Number 1, pp. 119–138.
- Pawan, F., Wiechart, K.A., Warren, A.N, & Park, J. (2016). *Pedagogy and Practice for Online English Language Teacher Education* Virginia: TESOL International Association
- Perez, Sarah. July 2, 2012. comScore: In U.S. Mobile Market, Samsung, Android Top The Charts; Apps Overtake Web Browsing. techcrunch.com.
- Richards, J. C., & Lockhart, C. (1994). *Reflective teaching in second language classroom*. Cambridge, UK: Cambridge University Press.
- Shih, R. C. (2011). Can Web 2.0 technology assist college students in learning English writing? Integrating Facebook and peer assessment with blended learning. *Australasian Journal of Educational Technology*, vol. 27, no. 5, pp. 829-845.