Developing a MOOC for Communicative English: A Battle of Instructional Designs

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The Communicative English (CE) of workers is still worrying for employers. Many employers carry out face-to-face English for workplace training to curb the problem, but it is outdated, time-consuming and expensive. One of the solutions is to resort to online training in open online learning platforms such as a Massive Open Online Course (MOOC). This paper aims to discuss the different instructional design (ID) models that can be used to develop a MOOC. The models are ADDIE and ASSURE, which serve as a guide in creating an online course and the winning model for developing MOOC is ADDIE. The discussion from this paper is sought to provide an overview for educators before developing MOOC for CE training and implied the importance of having suitable ID models as a guideline in designing a course. Future research can focus on combining ID models to create more comprehensive course content.

Key words: *MOOC, communicative English, education, instructional design, online learning, technology.*

Introduction

A 21st-century worker must be proficient in speaking, especially in the English language to carry out their duties efficiently (Arumugam, Xavier, Dass, & Maniam, 2014; Jebunnesa & Abdullah, 2013; Mustafa, Nordin, & Embi, 2017). Face-to-face training for workers takes time, energy and money. Plus, certain training is short and could not cater to the needs of the support staffs to improve their Communicative English (CE) (Mustafa et al., 2017; Qing & Adamson, 2015). One of the solutions for this problem is to provide online training to cater to the needs of each individual and allow them to learn at their own pace. Learning virtually is

said to be able to provide more benefits and could adhere to various contexts and learners, as the internet is no longer an alienated tool (Hashim, 2018; Mawan, Mohamed, Othman, & Yusof, 2017).

There are many online technologies out there, which cater to IR 4.0 and one of them is the open learning platform (McGreal, 2017; Yunus, 2018). An open learning platform with the aim to provide accessible education to an array of learners is known as a MOOC or Massive Open Online Course (Anders, 2015; Godwin-Jones, 2014). As the advancement of technology is rapidly growing, courses in MOOC are designed with reference to different learning theories and pedagogies, which could cater to the needs of many learners and benefit them massively (Hashim & Yunus, 2019). Hence, this paper aims to discuss the ADDIE and ASSURE designs in developing modules in MOOC to improve employees' CE.

Types of Instructional Designs (IDs)

Instructional Design or ID is "known as instructional theory" (Aldoobie 2015, p. 68). An instructional design helps an instructor to design appropriate materials and contents, which can provide fruitful learning for learners (Aldoobie, 2015; Ghani & Daud, 2018). There are various IDs available to be used in creating instructions, such as the ADDIE model (Ghani & Daud, 2018) and the ASSURE model (Reyes & Oreste, 2017; OLAOYE & ATILOLA 2018).

The Addie Model

The ADDIE model is an acronym for Analysis, Design, Develop, Implement and Evaluate (Cheung, 2016). It is the most common ID and frequently used in designing instruction (Aldoobie, 2015; Budoya, Kissaka, & Mtebe, 2019; Hess & Greer, 2016). The ADDIE model is a non-linear model, whereby the stages in the acronym do not follow a strict step-by-step procedure (Ghani & Daud, 2018; Jasa, Harahap, & Medan, 2018) and each stage contributes to the other in a non-linear way.

The first stage is analysis whereby the learners' needs are identified (Cheung, 2016) before designing the objectives for the overall course, which is the second stage in the ADDIE model (Cheung, 2016; Ghani & Daud, 2018; Jasa et al., 2018). The third stage is development whereby suitable tools to deliver the contents are chosen to maximise the learning outcome (Budoya et al., 2019). The contents are then delivered to learners in the implementation stage, where it is crucial that proper delivery is necessary for an effective outcome of instructions (Ghani & Daud, 2018). Finally, in the evaluation stage, the performance and tools required to analyse the overall course content are carried out to ensure that modifications can be done for improvement (Cheung, 2016; Croxton & Chow, 2015). Thus, the ADDIE model is a cyclic model as shown in figure 1.

The ASSURE Model

The ASSURE model is an acronym which stands for the six stages in instructional design which are "analyse the learner, state objectives, select media, utilize, require students' participation, evaluate and revise" (Reyes & Oreste, 2017). This model was developed in 1999 by Heinich, Molenda, Russell and Smaldino and it is a straightforward design, whereby the steps suggest the approaches and principles when designing a course or program (Rahman, 2017).

The ASSURE model begins with analysing the learners by obtaining information on the learners' age, education level, proficiency and other related information. Then, the objectives of the course are stated (Goode, 2018; Rahman, 2017; Reyes & Oreste, 2017). After the objectives have been identified, appropriate media will be chosen suited to the learners' backgrounds, such as using videos or textbooks (Goode, 2018). Next, the media will be utilised, which means that the materials are reviewed and the media are implemented in the course. This utilisation step is important because it allows the instructor to evaluate the media's suitability and effectiveness (Reyes & Oreste, 2017).

While the media is being utilised, the students need to participate in the course, such as giving feedback or comments by completing the tasks given (Olayinka, Jumoke, & Oyebamiji, 2018). Finally, the evaluation and revision stage is carried out by the instructor based on the feedback given by learners. The ASSURE model is mostly used by teachers in the classroom, whereby it is similar to school-based lesson plans (Rahman, 2017) and can be used as a guide in designing instruction as it is a linear model (shown in figure 2).

ADDIE vs ASSURE
Visual Representation

The two main models, which are ADDIE and ASSURE are similar in nature, as both provide guidelines for designing and developing an instruction (Ibrahim, 2015; Ohimain & Izah 2015). Looking at the stages in the ID models, the ADDIE model has five stages, while ASSURE has six. ADDIE is a cyclic process. All the stages are interconnected through the evaluation stage, whereby each stage plays its own significant role based on the evaluation stage, or feedback received (Jasa et al., 2018). Compared to the ADDIE model, the ASSURE model is more towards a linear model and places more emphasis on the sequence (Ibrahim, 2015). In addition, the ASSURE model provides more detailed guidelines and steps for educators to follow as each stage is well-explained. This is further demonstrated through the visual representation (see figure 2), which provides educators with more information even if they are not an expert (Okon, 2017; Goode, 2018).

Structure and Assessment

The structure in the ADDIE model shows the importance of the evaluation stage, whereby ongoing assessments are conducted in each stage. These assessments are known as the formative assessment. With the aid of formative assessments conducted at each stage, educators or designers are required to go back and make improvements before conducting the other stages (Ghani & Daud, 2018). ADDIE also has a summative assessment, which is conducted at the end of instructional design. In the ADDIE model, summative assessment is at the evaluation (E) stage. Although evaluation is carried out at each stage through formative assessment, the final stage evaluates the whole product, through summative assessment (Vejvodová, 2015; Okon, 2016).

In ASSURE, the six stages also represent a similar structure to the ADDIE model as all the six stages are related to the five stages in ADDIE. The ASSURE model has two stages in the design (D) stage as stated in the ADDIE model, whereby the two stages are stating objectives (S) and selecting media (S) (Rosa & Vital, 2016). It is more detailed and allows educators to properly plan the development of instruction. Similar to the ADDIE model in terms of assessment, the ASSURE model also has the formative assessment, whereby the assessment or evaluation is carried out during designing the instruction (Ibrahim, 2015).

Pros and Cons

The ADDIE model is a widely used ID model (Budoya et al., 2019) as it offers universal stages in designing instruction (Chen, 2016). The cyclic nature of ADDIE provides a good structure and allows educators or designers to be creative in designing instruction because the model is non-linear (Vejvodová, 2015). Plus, the ADDIE model has embedded evaluation after each stage, ensuring continual evaluation is carried out in practice in instructional design (Ilyas, Effendi, Gistituati, & Ananda, 2018).

ADDIE has its drawbacks too as the model is rigid, not flexible and too general (Chen, 2016), whereby it will cause difficulties for new educators or designers. The analysis (A) stage is too broad because the analysis can mean many different types of analysis, such as content analysis, technical analysis, learner analysis and online environment analysis (Durak & Ataizi, 2016). Additionally, the first stage can also include analysing learners' achievement (Asad, Hassan, & Sherwani, 2014). This shows that the ADDIE model is too general to be used by novice educators or designers.

The ASSURE is a model familiar to classroom contexts (Baran, 2010; Rahman, 2017). It is more detailed and similar to lesson plans in the classroom (Asad et al., 2014), which is useful and more understandable for educators to design instruction. The ASSURE model has a

thorough explanation of the stages because ASSURE is said to be the enriched version of the ADDIE model (Nurpandi, Langi, & Bandung, 2013). Plus, recent research mentioned that ASSURE's comprehensive stages provide a desirable outcome because the contents are more well-developed (Kristianti, Prabawanto, & Suhendra, 2017).

Regardless of that, the ASSURE model is only suitable to be used in classroom contexts and does not cover a wide range of situations like the ADDIE model (Nurpandi et al., 2013). This is because the ASSURE model's implementation stage depends on the educators' choice of implementation. This model provides a face-to-face implementation method, although technology is used in the implementation stage (Ibrahim, 2015). Although the ASSURE model is more geared towards classroom-oriented instruction designs, it is deemed to be very practical for educators as the stages include the media element (Rosa & Vital, 2016; Okoroma, 2018).

The Winning ID for Developing a Mooc

Each ID model has its pros and cons depending on the context of the instructional design. A MOOC, an open online platform, allows a diverse range of learners across the globe to learn together. Due to that, from the two ID models discussed, the most common ID used to develop MOOC is the ADDIE model as it is a non-linear process and each stage in the model allows feedback (Croxton & Chow, 2015). Many researchers have designed and developed MOOCs using the ADDIE model as it is comprehensive (Croxton & Chow, 2015; Garcia, Barbosa, & Magoulas, 2017; Ismail, Utami, Ismail, Hamzah, & Harun, 2018). Various studies have shown that the ADDIE model is preferred in designing a MOOC for a variety of courses ranging from non-science based courses such as the catering course (Ismail et al., 2018) to science-based courses like the web-design course (Croxton & Chow, 2015).

MOOC Throughout The Years

A researcher developed a MOOC using the ADDIE model as a guide whereby in each stage, feedbacks were gathered from experts and learners to improve the overall course's contents (Parra, 2016). Another study mentioned that the most crucial stage in developing a MOOC is the first stage in the ADDIE model, analysing the learner (A). This is because online learning is accessible to everyone from a diverse range of backgrounds, thus analysing the learner (A) and knowing their needs will ensure that the course can be utilised by learners across the globe (Karim, Perumal, & Zaidi, 2016). It was also mentioned that MOOCs which can be used internationally will meet the goals of education 4.0.

A study on the pedagogical design of a MOOC was carried out and the important points highlighted mentioned the importance of the evaluation stage, whereby proper evaluation will

give a broader view of the problems faced by learners and provide suggestions for improvement to educators (Ziegenfuss, 2016). This shows that using ID models as a guide in developing a MOOC will be more beneficial for both educators and learners.

The Potential of MOOC for Future Education in Ir 4.0

The emergence of online technology allows a MOOC to be a platform, which could cater to the lifelong learning of adult learners (Hashim, Yunus, & Hashim, 2018; Nobre et al., 2018), where they can apply the knowledge from the courses in real-life contexts, especially for working adults. A MOOC provides a wider potential for every individual to continuously equip themselves with new knowledge and skills (Nordin, Norman, & Embi, 2015). Hence, the openness element in MOOC is able to bring a new light to education in this digital era.

Conclusion

This paper has discussed the different ID models that can be used as a guide before developing a course in a MOOC and implied the significance of having suitable ID models as a guideline in creating and designing a course. Future research can look into designing and developing a CE for a workplace course in MOOC and look into combining the ID models to create a comprehensive course content. Overall, a well-designed MOOC will be able to provide an alternative training platform for workers.

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Figure 1. The ADDIE model (Adapted from Vejvodová, 2015)
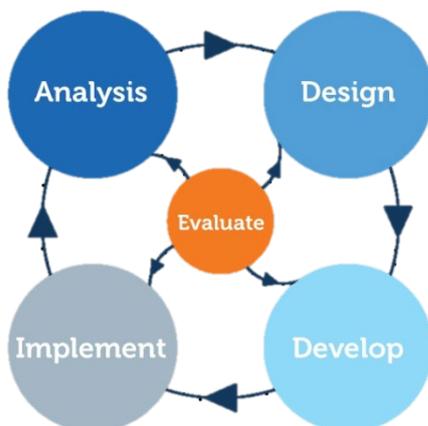
Figure 2. The ASSURE model (Adapted from Ibrahim, 2015)

A	Analyze Learner
S	State Objectives
S	Select Methods, Media, Materials
U	Utilize Media and Materials
R	Require Learner Participation
E	Evaluate and Revise