Reflections on a research pilot study

Abeer Alshwiah

University of Damman, Saudi Arabia.

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ABSTRACT

This article is a reflection on a pilot study representing an important phase of the author’s PhD research. The study was carried out to test the suitability of research tools for a project aimed at developing the communicative competence of foreign language learners (FFLs). The main project was designed using an e-learning design model known as Laurillard’s Conversational Framework (LCF), for the creation of a blended learning (BL) unit. The learners in this study were tested to examine the development in their skills. They were also interviewed to gather their perceptions of the project. The corresponding reflections of the researcher presented in this article are intended to assist other researchers, as a perspective on the application of Kolb’s four-stage Experiential Learning Cycle. The first of these stages involves presenting the experiment. In the second stage, there is reflection on the experience, with the third stage narrating what is learned in the process. Finally, the procedures for the main data collection are described. The findings of this reflection were that more preparation should be carried out in terms of the students, technology and teaching material. For example, the students must be trained in the use of any technology used in the study. Furthermore, the Internet and other technical resources should be tested before beginning the experiment. Finally, the teaching material should be suitable for the timeframe allocated by the gatekeepers. In short, the importance of conducting a pilot study and subsequent reflection on its outcomes is highlighted.

Keywords: Pilot study, reflections, Laurillard's conversational framework, communicative competence, Kolb's experiential learning cycle.

E-mail: aalshwiah@uod.edu.sa.

INTRODUCTION

The aim of this article is to present reflections on a pilot study that constitutes a phase of the author’s PhD research. These reflections should shed light on the various issues faced, as a means of avoiding them in the main data collection. They are also intended to provide insights for other researchers. Reflection is a process that enables researchers to think about their experiences and learn from them (Kinsella, 2001). Although reflection can be difficult, as Procee (2006) emphasises, there are three important principles which should be taken into account to facilitate the process and ensure it is a meaningful one. These will determine: (1) the purpose of the reflection, (2) the process applied to the reflection, and (3) our focus on the experience we want to reflect on. In this study, Kolb’s Experiential Learning Cycle is implemented as a reflection model, since it exemplifies the three principles mentioned above (Kolb, 2014) (Figure 1).

This process of reflection in this instance is based on Kolb’s four stages. The first stage consists of ‘concrete experiencing’, where the experiment itself is explained. In the second stage, ‘reflective observation’, there is reflection on the experience and in the third stage, ‘abstract conceptualising’, what is learned from the experience is reported. Finally, in the ‘active experimentation’ stage, the plans for the main data collection are stated.

When carrying out research, the researcher should expect different kinds of problems to arise, which might affect data collection. This anticipation will enhance the importance of the pilot study, especially in experimental research. A pilot study, or ‘prototyping’, means trying out the material before its operational use in field-testing (Nissan and Schedl, 2013). The purpose of this phase of the research is to focus on the functionality and reliability of the tools applied, as well as the suitability of the timing (Nissan and Schedl, 2013). As mentioned earlier, this pilot study forms part of a PhD research. The research aims to develop the communicative competence of
foreign language learners (FLLs) of English on a Saudi university foundation course, using Laurillard’s Conversational Framework (LCF). This is based on providing learners with different opportunities to talk about the rules of the foreign language being learned and practicing it with their teacher and peers. The latter is applied to the designing of a unit, to be delivered to learners in face-to-face (F2F) and blended learning (BL) environments. Here, the term ‘blended’ refers to a ‘blend’ of online and classroom-based activities. It was decided to deliver the unit in different learning environments, in order to find out how the affordances of these two environments would affect the learners’ communicative competence.

Context of the study

To start with, communicative competence in this study refers to the learners’ ability to communicate effectively, as appropriate to the context. Moreover, due to the importance of writing in the academic lives of the FLLs - given that they will be required to write reports, assignments, etc. - and due to the limitations of the syllabus on the respective foundation course, communicative competence is related to the FLLs’ writing ability (Bacha, 2002). For instance, it is related to their ability to introduce themselves, write a letter of complaint and respond to such letters, using the past tense to describe events which have happened in the past, asking wh-questions and using anaphoric references and conjunctions, thus rendering their text more organised and connected. LCF is the framework used to design the teaching material for the unit in this study.

The reason for designing a unit is therefore to develop FLLs’ communicative competence in response to the surrounding factors which impact on their communicative competence in the respective context. Firstly, they lack exposure to the target language (Rabab’ah, 2005; Alsena, 2005; Abbuhl and Mackey, 2008). Secondly, as with many other FLLs around the world, they fail to express themselves correctly because they lack foreign language sociolinguistic competence, have limited grammatical ability, or have been disadvantaged by teaching methods and materials (Ishihara and Cohen, 2014; Rabab’ah, 2005). Finally, those designing materials in most of the countries where English is taught as a foreign language do not always have a sound theoretical basis for designing high quality online, blended, or even face-to-face courses (Woo and Reeves, 2007).

LAURILLARD’S CONVERSATIONAL FRAMEWORK

LCF is a design framework with six iterative learning cycles (Figure 2). The first cycle is the ‘teacher communication cycle’, where the teacher has a discussion with the learners to introduce a concept. Then, in the second cycle, the ‘teacher practice cycle’ - based on the first cycle - the teacher sets an individual task suitable for the learners’ level. In the third cycle, the ‘teacher modelling cycle’, the learners perform an individual task to practice the concept they have discussed individually with the teacher. After this, in the
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Figure 2. Laurillard's conversational framework (Laurillard, 2013: 92).

'peer communication cycle', the learners have the opportunity to discuss the same concept with their peers as was discussed with their teacher. In the fifth cycle, the 'peer practice cycle', the learners are required to define their concepts for the next collaborative task. Finally in the 'peer modelling cycle', the learners have an opportunity to apply the concepts in group work (Laurillard, 2013).

In the literature, it can be seen that LCF has been used to design a variety of different courses. In this report, there is a summary of several of the studies which are most similar to this one. Neo et al. (2013) adapted LCF to investigate the effects of teacher and learner interaction and communication on developing learners' understanding, when designing an interactive, multimedia magazine website over a period of 14 weeks. Moreover, learners' perceptions of the course design were also measured. The course was designed using online tools for discussion, keeping notes and diaries, and designing the website. The face-to-face aspect of the course consisted of teacher-learner discussion and the participants comprised 42 undergraduate students in their second year from a Faculty of Management.

The above study showed that the learners experienced deep and meaningful learning through their peer communication and collaboration. The similarities of Neo et al.'s (2013) study with the present one are that they both offer blended lessons (as explained earlier, the term 'blended' refers to the use of both classroom and online activities), use asynchronous online discussion and examine learners' perceptions of the effect of LCF on their understanding. The differences are that Neo et al. (2013) used a Facebook page and blog for posting comments and as a means of examining the learners' perceptions and understanding.

Moreover, Fotouhi-Ghazvini et al. (2011) carried out a study to test the effect of a new approach using a conversational framework for educational games on students' reporting skills, cognitive processes and achievement. The study sample consisted of 13 students in their third year of Computing Engineering in an Iranian university. The game provided the learners with rich instructions and continuous assessment. The above design consisted of an adapted LCF, which gave the players the opportunity to converse with real and virtual characters throughout the game. All the students experienced increased achievement. The similarities between this study and Fotouhi-Ghazvini et al.'s (2011) are that both involve a pre- and post-test to investigate students’ knowledge and both use experimental and control groups to compare test results.

In addition to the above-mentioned studies, LCF was applied to second language teaching skills by Mesh (2009), in a study which aimed to measure the effectiveness of constructive collaboration in a blended method at the University of Siena. This university offers English courses for professional adults, where the adults are actively engaged in learning. The three-level English courses were delivered in nine weeks. Every week, there was a one-hour lesson in the classroom and a two-hour online lesson. The students collaborated through asynchronous activities, such as forums, wikis, blogs and chat, for synchronous communication that extended the classroom conversation. The results of this study indicate that learners who actively participate, both in the classroom and online, make progress in all four language skills. The blended learning improved the learners' communicative abilities. However, the students were dissatisfied with the lack of time for actual speaking practice.

The similarity of the above to this study is that both concern English teaching and measure learners' development in a blended environment. Moreover, both studies use tests to determine the learners' progress,
although Mesh (2009) used a placement test at the beginning of the study. Mesh (2009) also used a questionnaire to identify the advantages and disadvantages of online elements of the course in comparison with face-to-face components, while the current study uses interviews with students as a means of discovering their level of perceptions with the design.

The above studies and others applying LCF have witnessed a positive impact on learners in their respective contexts. Therefore, the main question addressed here is whether this positive impact is due to the ‘iterative’ (repeated) cycles of the framework, or to the use of technology. For this reason, this study aimed to evaluate a unit designed by adopting LCF, with the objective of developing Saudi learners’ communicative competence in writing. The unit was to be delivered in both F2F and BL environments, in order to compare the effect of each affordance of the environment, i.e. whether it was the presence of the teacher and their peers in F2F, or the flexibility of online interaction that affected them.

The effect of the unit design on these writing competences was measured here using quantitative written pre- and post-tests. The rationale for the choice of written assessment to measure the development in their writing competences is supported by many studies using written pre- and post-tests (Agbatogun, 2014; Ayyanathan et al., 2012; Bardovi-Harlig and Vellenga, 2012; Ishihara, 2007). Further to the above, the learners’ perceptions of and reactions to the lessons designed were to be examined in a qualitative interview and through observation, in order to discover their different perspectives of the intervention.

THE REFLECTION

Based on Procees’s (2006) principles for what should be included in a reflective report, the purpose of the reflection itself is to identify the common problems facing a researcher in experimental data collection, particularly those related to this study, in order to solve them before the main data collection. The process of reflection is informed by Kolb’s Experiential Learning Cycle. Moreover, the focus is on the pilot study for this research, hoping to help other researchers.

Kolb’s experiential learning model as a reflection model

Concrete experience

The pilot study was carried out to test whether the research instruments (the written test, interview guide and observation scheme) would really test what they are intended to. It is a good opportunity to, (1) test the validity and reliability of the research instruments (the test-scoring scale, test, interview guides and observation form); (2) test the resources at the university; (3) test the suitability of the time allocated for teaching the unit, and (4) amend the teaching material, based on the learners’ suggestions in the interviews.

This part of the research started by obtaining approval from the gatekeepers to carry out the research and a meeting with the course teacher to arrange to deliver the unit had been designed using an LCF. The unit was delivered to a group of 49 FLLs on a university foundation course. The teaching material was delivered in three sessions (each lasting two and a half hours). These sessions were held once a week, out of five sessions dedicated to the English language course. During the intervention period, two of the tasks were carried out online using Blackboard (an online learning environment). As it was hard to observe a group of students while also trying to teach them, an external observer was asked to attend the sessions. However, it was difficult to find an available observer with the suitable English language level. As a result, an external observer was found, who would just attend for half an hour of each of the first two sessions. She observed the way the students engaged with each other and whether they benefited from LCF in this way and in response, filled out a systematic observation scheme while sitting with a group of five students. The test was administered at the end of the period and interviews were carried out with two volunteer students from the class. The students’ busy schedules made it difficult to find more volunteers available to be interviewed.

Reflective observation

After the end of the pilot study, reflection took place on the pros and cons of the pilot test procedure and instruments. However, there needs to be reflection on the problems faced, so they can be abstracted and managed in the main data collection. In such studies, which aim to test the impact of a particular intervention on students, the researcher might face a whole range of obstacles. In this study, the researcher encountered issues related to learners and to the settings where the data was collected.

One of the major problems associated with learners is the variation in their skill and language levels. For example, the learners had varying levels of skill in using Blackboard. Some were more experienced because they had used this tool in secondary school, while others had no experience with it at all. Moreover, the learners’ English language levels and particularly their writing skills were at different levels. Some were able to write paragraphs and even whole essays, while others were unable to even write sentences and had never been called upon to do so. The reason for variation in the level of English proficiency amongst the students is that in some universities, where English is a foreign language
and is never the medium for studying a main subject, there is no placement test at the beginning of the academic year. This inadequate level of proficiency amongst learners supports Zughoul (1987), who found that only a few university freshmen in the context under study achieved a placement test score that actually qualified them for admission to university (as cited in Rabab'ah, 2005).

The second type of problem involved in carrying out the pilot study related to the time allocated for it. Due to the fact that the learners had differing skills and language levels, there was a need for more time to train them in how to use Blackboard and to explain some basic grammatical rules. In general, carrying out an intervention requires more time than planned, because unexpected issues can arise, resulting in a shortage of time. Moreover, some of the participants in this study might have underestimated the value of participation and failed to take it seriously, especially when doing the tests. This could explain why they did not answer all the test questions. Finally, there were many barriers related to the resources in the research settings e.g. technical problems, such as no available Internet connection, no speakers, and no air conditioning in the classes.

Abstract conceptualising phase

From the previous reflection and to avoid facing such issues in the main data collection, two points should be considered. Firstly, as is clear from the above, a great deal was revealed by the pilot study. For instance, the amount of teaching material should be reduced to suit the time allocated and to enable more time to be spent on developing learners with a low level of English language ability, while also training them in how to use Blackboard. Secondly, there needs to be better planning and preparation for the main data collection. This can be achieved by contacting the IT deanship to request the necessary technical resources, through extensive negotiation with the course teacher, and through clarification of the research objectives and expected significance of the research to the course teacher and participants. This preparation could have resulted here in more time being allocated for the study and may have enhanced the researcher’s profile and the perceptions of the participants, thus avoiding the value of the research and participation in it being underestimated.

Active experimentation phase

Following the abstract conceptualisation of the reflection and after summarising the steps to be taken to avoid such problems in the main data collection, certain amendments should be made before the data collection. It is therefore planned to reduce the amount of teaching, in order to focus purely on developing the learners’ sociolinguistic competence, by concentrating solely on how to make an official complaint and on developing their grammatical competence, namely using the past tense to write a passage and asking wh-questions about past events. Moreover, the plan is to travel two weeks in advance to the university where the data will be collected. This will be further negotiated with the course teacher and arranged with those responsible for technical matters.

In conclusion, following the end of this research phase and before entering a further phase, this step was evaluated. The pilot study achieved its aim of testing the research instruments and discovering the kind of issues which might be faced during data collection. A plan was then set out to manage them.

REFERENCES
