

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

The mixed method research design was applied in this study to investigate students' perceptions of both public and private universities in Kabul Afghanistan on the use of online tools to enhance their approach to learning. In relation to this, this study also looked at how the online tools are able to develop thinking skills. This study further examined students' perceptions on the barriers faced when online tools are used for teaching and learning purposes. In this chapter, the research design, research context, sampling, research instrument, research procedure, data processing and analysis as well as the pilot test are discussed in detailed.

3.2 RESEARCH DESIGN

This study employed the mixed method design which is the combination of qualitative and quantitative approach to collect and analyze data (Creswell & Tashakkori, 2007). In recent years, integrating qualitative and quantitative methods becomes common in research (Bryman, 2006) because mixed method design can provide detailed and comprehensive data in order to achieve the research objectives and answer the research questions. According to Teddlie and Tashakkori (2009), there are four types of mixed method research designs: 1) triangulation, 2) embedded, 3) explanatory and 4) exploratory. This study most appropriately employed the explanatory model, which contains first quantitative data collection followed by

qualitative data collection. This method was used in order to obtain a clearer picture from the quantitative data, and then to use the qualitative data to provide better understanding and explanation of the study in question. Creswell and Clark (2007) stated that the explanatory design (also called sequential design) is a two-stage mixed method design. This design first begins with the collection and analysis of quantitative data and followed by the collection and analysis of qualitative data. In the explanatory design, the researcher recognizes particular quantitative findings that need further explanation.

In order to be able to explore in depth the quantitative data, the researcher then gathered qualitative data from participants who could assist explain these results. In the current study, the main focus is on the quantitative aspects. The explanatory design is recognized as the most easy and straightforward of the mixed method designs (Creswell & Clark, 2007). They further explained the benefits of the explanatory research design as follows:

- The two-stage structure makes it easy to execute because the researcher applies the two methods in separate stage and gathers only one type of data at a time.
- The final report can be explained in two stages, making it easy for the reader to get a clear picture from the findings.

Therefore, using both methods can provide detailed and comprehensive data and interpretation of data. The current study is based on the perceptions of the participants, and there are a number of perception studies which used mixed method design. For instance, Guillot (2003) designed and used the mixed method design to measure teacher and student perceptions of online instructional methodology in higher education. Ismail and his colleagues (2010) used qualitative and quantitative methods to examine the perceptions of both teachers of Arabic and English language courses about the use of technology in their classes in the United Arab Emirates' schools. Similar to this, Almekhlafi and Almeqdadi (2010) used mixed method design to research about teachers' perception of technology integration in the United Arab Emirates school classroom. They used these methods in order to obtain valid results, and detailed and

reliable data. In particular, the details of research design for the current study is illustrated in Figure 3.1.

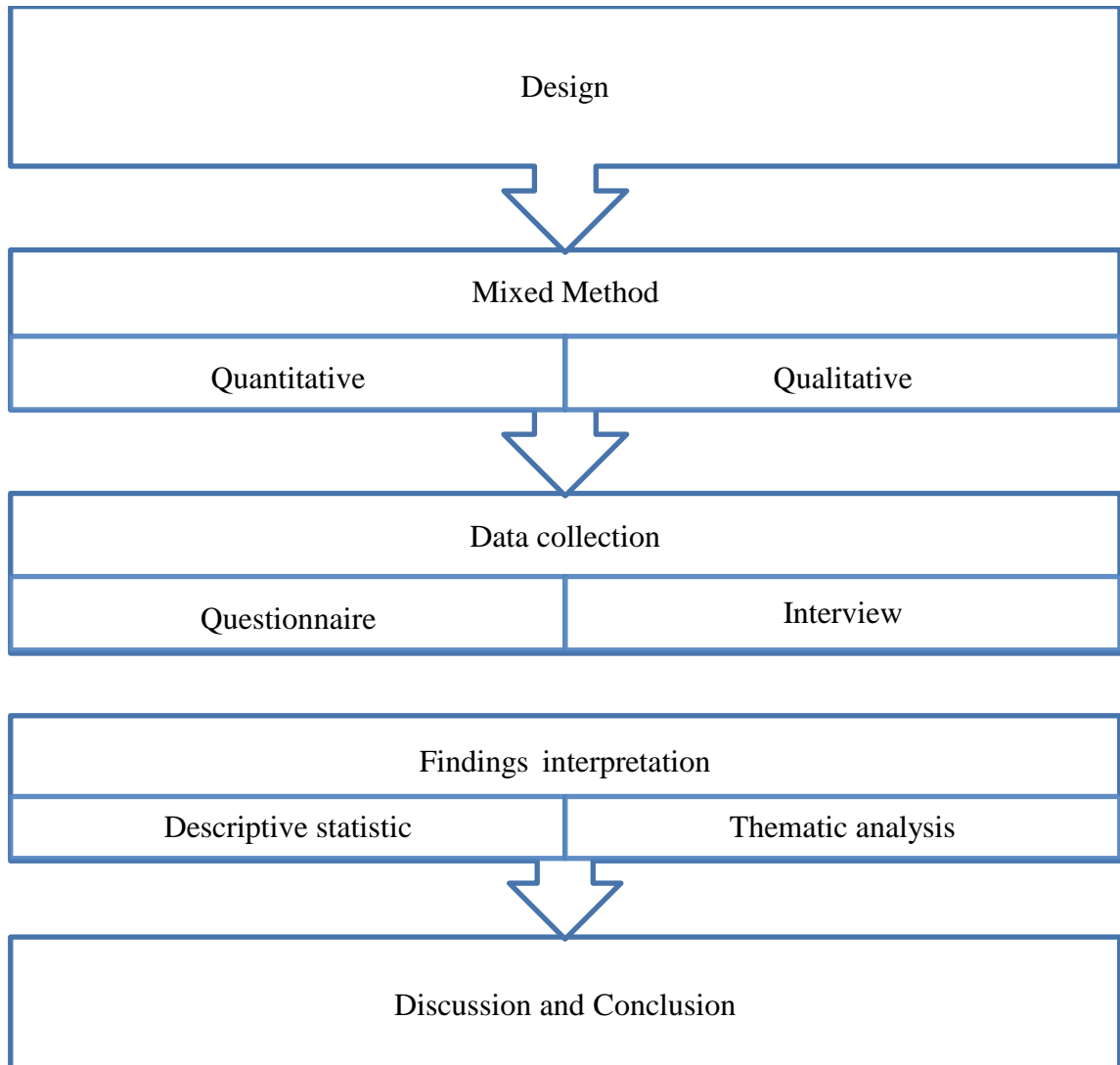


Figure 3.1: Research Design

Figure 3.1 shows the research design of this study. The mixed method was used by administering a questionnaire and semi-structured interview as research instruments in order to collect quantitative and qualitative data respectively. The data from the questionnaire were analyzed using descriptive statistics, and the interview findings were coded and analyzed to support the findings of the questionnaire.