

Usage of Digital Resources in Chinese for Specific Purposes (CSP)

Blended Classroom — Study 2

Introduction

To know the usage of digital resources in Chinese for Specific Purposes (CSP) blended classroom. There are three angles to explore for this study: digital resources, practitioners' views as well as learners' ideas. The second study will be specifically introduced in this paper. The main research questions are: How do practitioners use digital resources, what impact do the resources have in CSP blended classrooms and what are their views? The study aims to figure out the effects of digital resources involved in CSP blended classrooms from practitioners' perspectives, such as their motivation, teaching performance and views. For this question, the chosen method is the case study method which will use some quantitative, qualitative mixed methods approach. Then, the selection of sampling includes size, representativeness, strategies will be specifically introduced. Followed by some crucial ethical considerations during the study process will be analyzed. Finally, it shows the usage of three research tools questionnaires, observations, and semi-structured interviews approach, as well as their data analysis methods respectively.

Chosen method

Before choosing a method, it depends on the research questions and types of data in this case. Firstly, it is the research content, the objective is to know the effectiveness of digital resources in CSP blended classrooms such as motivation, and actual performance in classrooms. Besides, the research sites will be a set of Chinese universities, vocational colleges, and Confucius institutions overseas with CSP programs. Then the main question put forward can consist of three levels of questions. 1) Level 1: What factors motivate practitioners to seek support with digital resources? What is the relationship between these motivations? It talks more about teachers' motivation, reasons, and time to use the materials. 2) Level 2: What digital resources do practitioners utilise to assist CSP blended classrooms? What priority do practitioners give to the resources available? How frequently do CSP practitioners use digital resources in their teaching practices? Do practitioners create digital

resources by themselves? At this level, it is related to the practitioners' individual teaching experience as well as actual performance in the class. 3) Level 3: How are digital resources viewed and/or valued by practitioners? It will be discussed according to practitioners' ideas. In general, the study will divide into two parts with a macro perspective to know the practitioners' opinions all over the world to find out some classical types of CSP learning scenarios, also, several case studies in an authentic hybrid classroom to investigate the teaching practice involved technical element materials. Thereby, these data will be collected in a quantitative way such as by spreading questionnaires everywhere conducted in CSP projects, correspondingly, some quantitative data analysis methods will be used. In addition, several case studies will be taken, and go to schools to observe and gain more data so there will be some qualitative data. All in all, the study will conduct a mixed research method with some quantitative and qualitative data collection and data analysis approaches.

According to Cohen, Manion, and Morrison (2017), mixed methods with quantitative and qualitative methods have a lot of advantages and disadvantages. For example, in this case, compared to single qualitative and quantitative methods which may be affected by researchers' ideas, the mixed method will produce a large amount of data with diverse types, which can help researchers to comprehensively analyze these data on a wider horizon. Furthermore, it can also help to resolve multiple questions when using mixed methods. Nevertheless, the weakness of mixed methods should also be highlighted. For instance, in this case with two parts of the investigation and three levels of research questions. It is much more complicated than a single method, and needs will take a lot of time to get or analyze the different data from many channels. These limitations of a mixed method bring a great challenge for the researcher. Therefore, when conducting the mixed method, researchers should have higher and more comprehensive quality.

Sampling

For sampling, according to Cohen, Manion, and Morrison (2017), several key factors should be considered: sampling size, representativeness of sample, methods of obtaining samples, strategies, and methodology. For the question of study 2, to get the practitioners' various opinions on digital resources, a more extensive survey and a small number of individual depth interviews are both necessary. For the extensive survey, a larger size of the sample will help to collect more data to

analyze the correlation of elements based on the amount of data, especially through quantitative methods, such as conducting cross-analysis from questionnaire results. Therefore, in this study, practitioners will be investigated into two kinds of sample sizes, the first sample database of practitioners ($N > 100$) will come from a more widespread CSP educational environment, through the quantitative method to acquire more data. In qualitative research. The second sample of participants ($N > 10$) will be purposely selected to conduct deeper semi-structured interviews.

Besides, the representativeness of the sample in this case also is a crucial point. Due to the Implementation status of CSP programs, in this case, practitioners mainly come from three typical groups based on their positions and CSP conducting places. The first group of practitioners in these language programs are professional Chinese language practitioners with related language educational backgrounds. They may be interning Mandarin teachers, official lecturers, professors working in universities, vocational colleges, Confucius institutes or other language institutes. The second group of practitioners are the professional lecturers who have a cooperative relationship with language teachers in some programs. The third group of practitioners are managers or administrators of related programs. These intended respondents vary in age, sex, position, and teaching experience but have some representativeness to some extent. Moreover, access to the sample in this study is also an important factor. Based on individual experience in CSP teaching in Confucius institutes, language institutes, and academic experience in domestic universities where conducting CSP programs, access to some of the samples will be possibly feasible. However, there is an issue that should not be ignored, for the other typical participants from other schools, it is significant to pursue cooperation relationships in an appropriate way as well as avoid sensitive ethical issues (Cohen, Manion, and Morrison, 2017).

In addition, the sampling strategy in this study will use a non-probability sample approach. Because of the mixed method conducted in this study, I will use a combination or mixed purposeful sampling method to identify CSP practitioners (Suri, 2011). Firstly, I will utilize extensive sampling by probability way among the large of CSP practitioners who work in domestic state universities, vocational colleges, and Confucius institutions overseas or other language institutes. According to the results, summarize some typical cases and research objectives. Then, employ a typical case

sampling method to describe and compare some typical phenomena in three groups.

Ethics

Ethical issues related to a person should be seriously considered before conducting research. According to the British Educational Research Association (2018), ethical considerations are essential for educational research, which helps to ensure that research is conducted responsibly and respectfully, to minimize harm and maximize benefits to participants and society. By upholding ethical principles, educational researchers can conduct their work in a manner that is both scientifically rigorous and socially responsible. In this part, relative potential ethical issues, and preparations for the second study facing practitioners will be considered and introduced referring to some regulations of the British Educational Research Association (2018). The first step is integrating ethical considerations from related institutes such as reviewing the public information in my universities and intended language institutes about ethical considerations and consulting the specific regulations and materials from related individuals so that I can prepare some documents in advance. These information sheets may include the research topic, objectives, participants, investigating content, recording way, and the approach to data collection and reporting. Then, get in touch with the institutes through some appropriate and legal channels with no bribery or other illegal ways.

Secondly, obtaining informed consent from participants, ensuring they are fully informed about the research's purpose, risks, and their rights. In this study, some classroom observation will be conducted, therefore, it needs to contact the directors to get approval for the research at local places meanwhile prepare some paper consent forms to signed indicate their understanding and agreement to participate. These participants include administrators, teachers, and students. It is also worth noting that the students, in this case, are mostly adult learners attending CSP courses, therefore their rights and treatment can be similar to teachers here. More significantly, pay attention to anonymity and confidentiality. For instance, when starting the survey through questionnaires in border ranges, the notice about anonymity and confidentiality should be shown with a clear position in the introduction part at the beginning. It allows practitioners to withdraw from the study at any time

without facing any negative consequences, and these will also be told to participants in advance. Additionally, some recording methods such as using a recorder pen and camera and data storage function should also be told and get approval.

Thirdly, during the process of data collection, keeping a respectful manner and tones to all the people, and using non-intrusive methods to gather data, such as observing the classroom from a distance. Be sure of communication among different groups exists no power inequality between myself and potential study participants. Besides, during the process of the semi-structured interviews when inside schools, make sure to fully respect participants' autonomy and ensure that they are not threatened or pressured to participate in the study. Moreover, this study will collect data from questionnaires, these questionnaires will be divided into two forms: online and offline. Make sure that the designed questions are legal with no bias and avoid privacy issues as much as possible, especially if there are local language teachers with different nationalities, international culture is another important factor that should be considered when having interviews or questions design. Besides, whatever forms, preventing information leakage is another crucial point. Particularly, in the study, some digital resources will be used by teachers in blended classrooms, so there are much number of resources that will be downloaded or used online. For these diverse approaches access to data from technical materials such as videos, audio, and digital coursebooks, seriously consider that the legality of resource content, resource acquisition channels, digital platforms and other details may be easily ignored. Even for some internal materials created by individuals or cooperated with some enterprises, it is necessary to protect the copyright based on laws.

Then, there is another ethical point about the storage of data, clearly communicate to participants how their data will be stored and make sure that all data is securely stored with only authorized persons having access to it. When analyzing the data, some codes for the authentic participants' names can be used to protect their privacy. At the same time, provide a clear point of contact information for the researcher for the staff of related institutes, practitioners, and learners to ask questions or raise concerns about the study. For myself, constantly consider the process and reflect on the potential impact of the study on the practitioners, learners, and the educational communities in an international context. Last but not least, being flexible and preparing some anticipated risks

and strategies with Plan A and Plan B.

Research Tools

Questionnaires

To gather more opinions from different CSP practitioners' opinions on digital materials, a questionnaire will be designed for a range of CSP practitioners. The respondents worked for different Mandarin language institutes in China and other countries. The following stages of the study were inspired by Cohen, Manion, and Morrison (2017). The intended data collection information from the questionnaires includes the following key parts: the special disciplines of CSP in the local area; sorts of digital resources; usage of the resources, barriers of applications, suggestions, etc., therefore, the questions on the questionnaires should be designed to achieve collecting these data of answers. Furthermore, these data are generated from closed questions and open-ended questions and the collected data will be analyzed by mixed quantitative and qualitative analysis methods. Meanwhile, the length of the questionnaire, structures, orders, logic, various dimensionality, Likert scale tools, format, ethical issues, and other details need to be concentrated. Most importantly, make sure about the reliability and validity of questionnaires. The reliability of practitioners' questionnaires will be estimated through Cronbach's alpha coefficient by using SPSS, and the validity will be tested through CFA using Mplus. After designing the questionnaires, a pilot test in a small-scale sample to refine the questions such as some contradictory or repetitive questions, and unclear questions. Then, distribute the questionnaire through some online Google Forms Online Survey platforms, and if necessary, print some questionnaires when meeting some special conditions for offline questionnaires. Another significant point is to make sure the range of respondents selected are CSP practitioners who are engaging in the program or have teaching experience in CSP before, so it is better to use online recruiting or recommendations by official language departments or organizations to improve the efficiency of the questionnaire. After gathering the data for a while, regularly check the answers' quantity and quality of data collection through the background platforms, such as filling time, answer types and other factors, which helps to improve the validity of the data. Finally, analyze the data and form a report.

Observation

Classroom observation is a popular method in educational study such as in evaluating teaching practices, estimating teachers' teaching skills, and students' performance. In this study, the objective of classroom observation is to collect more detailed data on teaching and learning in CSP blended classrooms and observe the influence of digital resources. Specifically, the stages are as follows. Firstly, choose participants and prepare for the classroom observation. The participants in this study will be the language or professional teachers who are responsible for CSP courses. Before observing, identify the classical sites such as universities, vocational colleges, Confucius institutes, and other language institutes. 6-10 teachers will be observed in their classrooms, and with similar numbers of people from typical groups. Program directors will be first approached before recruiting participants from teachers. After information sheets are read and consent forms are signed, teachers will be surveyed on their motivation and personal and contextual factors. Meanwhile, prepare a classroom observation scale with specific information about the research questions, and some potential issues such as observations being stopped by some emergencies. Then, these teachers will be asked to deliver one lesson to achieve a certain teaching objective (e.g., training students to write to prospective customers) through some digital resources in the class. Then, the lesson will be observed and recorded about digital resource usage status such as resource types, usage frequency, and class interaction through digital resources. To be more specific, the observer's position and role in the class can be not too obvious or interrupt the class process. The observation objects do not only include teachers' behaviours but learners' performances as well, and the features and relationships of these participants can be considered. For example, for some CSP programs, the teacher may be the staff of the language institute while their learners are the colleagues even directors. There is another special condition in this study, due to some CSP courses being far away from China or having classes online in a hybrid teaching method, for me, some typical CSP blended classrooms may not be observed offline. Therefore, to deeply know the status of this study, a remote classroom observation online is also necessary to prepare, some technologies, recording techniques, and observing content need to be adjusted. Finally, teachers' actual treatment of digital resources will be analyzed and compared with their self-reports.

Semi-Structured Interview

Semi-structured interview approach will be used in the second study with practitioners, which aims to gather more detailed and individual opinions from practitioners based on classroom observation. According to Adams (2015), under semi-structured interviews, the researcher will communicate with one participant at a time, and the questions will be about “What” and “Why” questions. For the conducting process, he presented five stages of semi-structured interviews: identify the participants and arrange interviews; prepare outlines of interviews; start the interview; complete interview skills; compile and analyze data then deliver a report. For the first step, the interviewees are not only teachers who are involved in classroom observation but also some administrators in these institutes. For those CSP classroom teachers, there will be two times of interviews including a pre-interview and a post-interview arranged before and after class respectively. As for the outline, the pre-interview will be conducted in terms of teachers’ understanding of digital resources, their motivations about why chose these digital resources and how teachers will use these resources in classrooms to achieve teaching objectives. After the class, another post-interview will be about self-evaluation, feedback, and learners’ performance. During the procedure, some details should also be paid attention to such as the question types, language, private issues, interviewer's tone, and research equipment usage. In addition, a semi-structured interview is better to be processed in a relaxed and comfortable environment, therefore, the interviewer will guide a pace of communication to deepen or horizon the questions in an appropriate way (Adams, 2015). Finally, combine and analyze the data, especially the similarities, and differences among the answers given by CSP teachers and other key points in the final report.

Data analysis methods

For this study question, mixed data analysis methods will be used. According to Cohen, Manion, and Morrison (2017) introduction to data analysis, some methods may be considered to use integrated this study. Because the collected data have both quantitative data mostly from questionnaires and qualitative data from observation and interview, both data analysis methods should be used. For one thing, the questionnaires include some scale questions such as “satisfaction” from the Five-levels Likert Scale, these data need to be calculated and ranked. For another, this

study aims to know the practitioners' opinions and performance so that there will be much of the “comment” data. There are some qualitative analysis methods such as content analysis, narrative analysis, discourse analysis, thematic analysis, and grounded theory. According to the features of the data, the content analysis and theme analysis are more appropriate.

Specifically, first of all, for the data from questionnaires, some tools such as Excel and SPSS tools can be used to generate some graphs, charts, and tables. Based on the large of data collected through online questionnaires, some data analysis methods can be used. For example, descriptive statistics will be conducted to estimate the categories and characteristics of digital resources visually, and cross-analysis and regression analysis will be used to figure out the relationships, causality and connections between variables, such as distinguishing the usage status of digital resources the in different respondents with different occupations (e.g. language teachers, professional teachers, administrators), organizations, sex, ages, countries, or districts. Also, it can get a specific percentage of the satisfaction and frequency of current CSP digital resources in the market etc. Moreover, some open-ended questions such as “What is your opinion?”, “What are your suggestions” can acquire some specific and real thoughts anonymously filled by respondents. In addition, some qualitative data obtained through observation can give more information for the study, such as content analysis. It is used to analyze not only texts but also visual materials, it can code words by using the tool software VIVO, and then calculate the frequency of groups of words, which helps to know the frequency and concept of Mandarin words or phrases in the visual materials in this case. Meanwhile, the thematic analysis method helps to demonstrate the various themes by analyzing and concluding practitioners’ individual opinions about digital materials used in CSP blended classrooms according to their experiences with digital resources in blended classrooms.

Conclusion

In conclusion, the questions in this study aim to figure out the effectiveness of digital resources used in current CSP programs. The mixed method with both quantitative and qualitative methods will be used during the whole process of studying some useful research tools. However, the measure has positive and negative impacts on the research, therefore, being flexible according to the actual

conditions.

References

Adams, W.C., (2015) 'Conducting semi-structured interviews. *Handbook of practical program evaluation*, pp.492-505. Available at: URL: https://www.researchgate.net/publication/301738442_Conducting_Semi-Structured_Interviews (Accessed: 13 January 2024).

Cohen, L., Manion, L., and Morrison, K. (2017) *Research Methods in Education* (8th ed.). Routledge. Available at: <https://doi.org/10.4324/9781315456539>

Suri, H., 2011. Purposeful sampling in qualitative research synthesis. *Qualitative research journal*, 11(2), pp.63-75. Available at: <https://www.emerald.com/insight/content/doi/10.3316/QRJ1102063/full/html>

British Educational Research Association. Available at: <https://www.bera.ac.uk/> (Accessed: 11 January 2024).