

# The Teaching Research not Research Methods: a Summer School with a difference

## Abstract

This paper presents and discusses a different approach to the traditional teaching of research methods to postgraduate students. The best practice presented, discussed and analyzed in the paper is based on a Sun Yat-sen University funded project that aimed at creating a Summer School to develop awareness of research, research methods and methodologies as well as research outputs. Rather than taking the traditional approach of focusing on the teaching of methods or methodologies, the paper describes and analyses an intensive two week Summer Course that focused on the underlying understanding of ontological and epistemological aspects of research, the choices that should be done in order to define research questions and expected research outcomes. This awareness is fundamental as the basis for the choice and deployment of research methodologies and methods.

## 1. Existing Problems and Current Practice

Postgraduate students and staff in Chinese iSchools are under great pressure to publish high quality research papers on reputable Chinese (CSSCI) and International (SSCI) Journals. Chinese Journals can be more tolerant on ill-defined research designs, but SSCI publications usually require a sound understating of methodological approaches and a rigorous demonstration of their application. The desire of Chinese universities to compete with the best of their Western counterparts is putting increasing pressure on postgraduate students (both masters (3 years in China) and PhD) to target publications that contribute to the ESI (Essential Science Indicators). For the Library and Science (LIS) discipline this means in essence targeting SSCI publications.

However, more than 5 decades of focus on and dominance by ‘science and technology’ in Chinese academy has left a large gap of understanding of non-objectivist ontologies and non-positivist epistemologies. The “if it does not have statistics then it is not research” syndrome is still predominant and determines that much of the funding, even in social sciences, is still channeled to positivist research. However, this trend is slowly changing and there is a need to start

educating and training Chinese LIS students on the use of subjectivist ontological views and post-positivist epistemological stances that result in inductive and qualitative research designs. Without this awareness, a careful design, and a rigorous demonstration of the process that led to its findings, publication of qualitative research in SSCI publications is virtually impossible.

To compound this problem, most of the research books and existing research courses focus on the research methods, not on research itself. This does not contribute to the cognitive conflict necessary to depart from the main stream positivist view of research and contributes to reductionist views of qualitative research that are dangerous in terms of analysis and interpretation of findings.

Having faced this problem for a number of years, the School of Information Management at Sun Yat-sen University (SYSU) decided to take advantage from a university wide call for Summer School organization. The base idea was to try and organize a foundation course on research with a focus on research, rather than on research methods.

This paper describes the basic approach adopted, the course design, the pedagogical approach and the evaluation results of a questionnaire based summative evaluation.

## **2. Summer Course Design**

The Summer course project has now run twice in 2016 and 2017. The course was sponsored by a two separate university teaching grants and complemented with School funds. Each year the School needs to apply to a new teaching grant. Application to the 2018 grant was already submitted.

## **3. Aims and Objectives:**

This project aims at creating a Summer School to develop awareness of adequate research ontological and epistemological stances in the Library and Information Science (LIS) Discipline, appropriate research questions in the field as well as methods and methodologies that suitably interpret and address those questions. The general aims of the project were to:

- 1) Help students to remediate previous gaps in their studies on research in LIS.
- 2) Equip them with the base knowledge of research that will enable them to design and implement their research projects adequately;
- 3) Equip students with essential understanding research methodology in LIS discipline.
- 4) Create the seeds for future leaders in LIS research to thrive and produce world class research.

Building on these general aims, the following objectives were set to provide these postgraduate and advanced undergraduate students with:

- 1) Understanding of essential ontological and epistemological propositions of interest to social sciences in general and LIS in particular;
- 2) Understanding of basic differences between inductive and deductive approaches;
- 3) Understanding of basic differences between qualities and quantities research processes and outputs;
- 4) Ability to develop appropriate research questions for the LIS discipline;
- 5) Understanding of the relation of research questions and different ontological, epistemological and methodological approaches;
- 6) Understanding of research design according to different methodological approaches;
- 7) Experience of designing a research proposal on identified research questions.

#### **4.Target Student Audience**

In terms of target student population, the Summer School aimed at attracting high quality last year undergraduate or masters students in LIS from all over China. The principal requirement was that they were interested in pursuing a PhD program in the Information field in the near future. Additionally, the School is interested in attracting high quality students to our PhD program and was hoping that some of these students would enroll in either our masters or our PhD program.



Students were sponsored up to a limit of 30. A national call was launched and students selected according to their application. Sponsoring consisted of travel expenses (by train), student accommodation and meals at the student canteens of the University. and travel expenses.

#### **5.Pedagogical Design**

The Summer School was designed to last 10 days and to be taught in English.

Experts in research in the different areas of LIS were invited from all over the world (e.g. in 2017 we had academics from China, USA, Finland, UK, Korea, and Australia). Expenses and a very modest fee were paid from the project budget. The objective was to give a world perspective on the discipline that could open young researcher minds and encourage cutting edge aspirations.

The Summer School started with three days devoted to the discussion of ontological and epistemological stances in research, research approaches and general methods. This were taught in the morning by the experts mentioned above. In the afternoons, practical sessions focused on application of the theoretical principles discussed in the morning session led by selected post-doctorate researchers and advanced PhD students. These practical sessions focus on the application of theoretical concepts discussed in the morning and their application to different types of research through examples of practice. At the end of the afternoon, a debriefing session with all the experts present allowed frank discussion with students and response to questions that arisen in the afternoon session.

The subsequent 6 sessions focused on specific methodologies that are representative of modern information research (e.g. statistics driven research, grounded theory, thematic analysis, action research, design research, etc). Students attended theoretical sessions in the morning and workshop sessions in the afternoon. The last during these workshop sessions students were requested to create research questions, produce a research proposal and prepare a presentation of their work. It was intended that the foundation sessions in the first two days and the morning topics would inform their research designs that enable their thinking on the proposals.

On the last day, student were asked to present their research designs (10 minutes presentations). These were marked and assessed by the experts, with long periods of time devoted to feedback. The closing session included the award of certificates to all student participants and best research design to a very small selection.

## **6. Summer School Assessment**

The Summer School was deemed a success in both years. In both years student created a social media (Wechat) forum. The 2016 is still active today more than 26 months after the completion of the course. Anecdotal and informal student feedback was excellent and their feeling at the end of both courses was one of

excitement with research and motivation to actually starting doing their own investigations.



Figure 2 – The inevitable end of course selfie for the 2016 Summer Course

Nonetheless, for the purpose of formal evaluation both courses were evaluated using a summative and questionnaire approach. The results in this paper reflect the feedback from the 2016 Summer Course. The results of the 2017 one are still being analyzed, since the course ended only a few summer months before the writing of this paper.

In the Summer Course 2016 27 valid questionnaires were received from the students that attended the last day of this course. As shown in Appendix 1, students' feedback was sought on course contents, teaching methods, practical session's value and final proposal preparation. The questionnaire comprised four sections. A first one to assess student's background, a second to evaluate the pedagogical design, a third about content and materials and finally a fourth one composed of open questions and aiming at collecting qualitative feedback about positive and negative aspects of the course. A 5 point Likert scale was used on sections 2 and 3. And descriptive statistical analysis was done through SPSS. A very basic thematic analysis approach was adopted to analyze open questions, which generated the themes and concept maps to show the students' negative and positive perceptions and opinions summer school.

Surprisingly 44% of the students had no experience of using research methodologies in a formal and explicit manner. This is an important realization, as most were masters and PhD students engaged in research projects. This also reinforced the *raison d'être* of the course and the need for more initiative such as this to raise awareness of research approaches, processes, methodologies and methods. It also highlights the risks of having postgraduates engaged in their supervisors projects without understanding fully the research designs embedded in their work. Publication in such cases is virtually impossible.

All students agree that the flexible learning approaches adopted in the course are better than the traditional way of teaching and more than 50% students fully agree

this point. More than 80% students confirmed that the teaching approaches adopted are suitable for learning about research, with 66% students fully agreeing this points. 74% students reflect that course learning environment created for the course is effective in supporting students' learning needs. Students were able to successfully and effectively thorough the Summer School WeChat Group (with 74% students fully agreeing). The afternoon practical session were highly appreciated and seemed to have helped students to further understand the theory taught in morning session. It also seemed to have helped in putting this theory into context and practice (84% students agree).

The majority of the students shows positive attitude concerning the course content and learning experiences. More than 70 % students believe that the new teaching materials provided by the Summer Schools to students is sufficient, whilst more than 70 % students believe that the course content is interesting.

However, predictably 59.3% students believed that the teaching materials were difficult or very difficult. This was to be expected due to the high level of conceptual issues discussed in the course. This aspect may be connected to the fact that 93% of the students felt that they experienced a very high level of learning in the course.

In terms of the qualitative feedback, students provided a number of criticisms, which can be summarized in the following main themes:

1. Inconvenient Campus Infrastructure and Services
  - a. Poor campus internet connection;
  - b. Poor dorm air conditioner;
  - c. Dorm allocation is not ideal;
  - d. Inconvenient shower;
  - e. Uncomfortable Summer School shirt.
2. Problems with Course Design
  - a. Intensive courses and no time for afternoon nap;
  - b. Too much knowledge taught in short time;
  - c. Too much pressure and lack of time to finish the final presentation proposal;
3. Problems with Teaching and Learning:
  - a. Teachers speak English too fast;
  - b. No time for preparation before practical sessions;
  - c. Lack of previous of academic knowledge and basic concepts of research;
  - d. Difficulties with the design the final research proposal;
  - e. Difficulties in group discussion with other students.

These comments were to a certain extent predictable. The course was designed to be intensive and challenging. Students clearly felt that pressure and had difficulties in internalizing and using the difficult theoretical knowledge offered in the morning lectures. The English language is in China a normal issue. Students often overestimate their capacity to learn in English and despite their difficulties apply to courses in the hope that miraculously they will survive. This is a problem that the authors of this paper encountered frequently during their academic practice in China.

In terms of positive qualitative feedback, students provided a number of praising comments which can be summarized in the following main themes:

1. Good learning experience and communication environment:
  - a. Good for students from different backgrounds were able to communicate with each other;
  - b. Group work was very effective in stimulating the communication among students.
2. Useful Contents on research Issues:
  - a. Acquisition of rich and interesting knowledge about research methodologies;
  - b. Learning about useful research techniques;
  - c. Developing critical thinking ;
3. Good Teaching Staff.
  - a. Good teaching staff has the following characteristics:
  - b. Nice , patient, responsible and dedicated teaching staff;
  - c. Good in communications;
4. Good Course
  - a. Very well prepared and taught;
  - b. Helpful in developing students' logical thinking;
  - c. Providing rich and new knowledge.
  - d. Good teaching approaches reflect on the following aspects:
  - e. Providing many opportunities for individuals' practice.
5. Unique experiences
  - a. Studying in the beautiful campus;
  - b. Taught by dean;
  - c. Had a unique one day trip.
  - d. Good atmosphere, a real academic study;
  - e. Combination of theories and practices;
  - f. Teaching in English is unique.

## **7. Conclusions and Lessons Learned**

According to students' feedback the Summer School provided a very useful

environment for the acquisition of rich understandings of research, research skills as well as very good platform for students exchange ideas and experiences. The course also enabled an active communication and academic discussion between academics and students that for some was deemed to be unique.

Initial fears by the course designers that students would not cope with a content that was highly theoretical and conceptually difficult seem to be unfounded. Students raised up to the challenge and engaged with many concepts that were alien to them before. It was also rewarding that the intensity and depth of the course was actually appreciated and resulted in students from all over China to remain in contact in a flourishing network that may bring fruit in the future.

# Appendix 1 – Evaluation Questionnaire



## IRM 2016 Student Evaluation Final Questionnaire

This questionnaire has been designed to monitor your reaction and feelings to the IRM 2016 Summer School and the flexible learning approach adopted. We would also like to assess your response to the lectures, practical sessions and the final exercise.

### Section 1

- a) Have you ever completed a research project using a similar research design approach as the ones proposed in this course?  Yes  No
- b) Did you have any previous knowledge of research methodology Issues?  Yes  No

### Section 2

- a) This flexible approach to learning is better than the traditional approach (just lecture based).  
I fully agree 5 4 3 2 1 I totally disagree
- b) This flexible approach is a good way to learn such a complex subject.  
I fully agree 5 4 3 2 1 I totally disagree
- c) The way the flexible learning approach was designed for this course is appropriate.  
I fully agree 5 4 3 2 1 I totally disagree
- d) The course environment is effective to support student's learning.  
I fully agree 5 4 3 2 1 I totally disagree
- e) The Wechat group created for the course appropriately supports the communication needs with the students.  
I fully agree 5 4 3 2 1 I totally disagree
- f) The lectures are useful and provide an appropriate forum for discussion and sharing of ideas.  
I fully agree 5 4 3 2 1 I totally disagree
- h) The practical sessions are useful and enable a better understanding of the theoretical issues discussed in the lectures..  
I fully agree 5 4 3 2 1 I totally disagree

## Summer School - Final Questionnaire

### Section 3

- a) The amount of material/content presented was:  
too much 5 4 3 2 1 very little
- b) The amount of material/content (theoretical) which was new to the students was:  
nearly all 5 4 3 2 1 very little
- c) The interest of the material/content was:  
very interesting 5 4 3 2 1 very uninteresting
- d) The difficulty of the material/content overall was:  
very difficult 5 4 3 2 1 very easy
- e) The amount of learning I feel I experienced was:  
very much 5 4 3 2 1 very little

### Section 4

- a) What are your main negative criticisms about this course?

- b) What are your main positive comments about this course?