

CHINESE WAY TO MEDIA EDUCATION: AN EXPERIMENTAL PROJECT*

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Abstract italiano

Questo articolo si propone di presentare i risultati di un progetto sperimentale realizzato in Cina nel campo della media education. Con il supporto dell'Associazione Italiana di Educazione ai Media e alla Comunicazione (MED), gli autori dello studio hanno sviluppato un progetto online dal titolo "Exploring environmental issues in the media: Media education in Chinese K-12 schools". Complessivamente sono stati progettati e implementati cinque moduli didattici sui seguenti media: fumetti, pubblicità, quotidiani, Internet e prodotti multimediali. Durante la primavera del 2011, 458 studenti di tre scuole primarie, situate in Hangzhou, sono stati invitati a partecipare al progetto sotto la guida dei loro insegnanti e di due ricercatori. Per la raccolta dei dati sono state utilizzate sia metodologie quantitative che qualitative. I risultati del pre- e del post-test hanno mostrato che i livelli di auto-efficacia nell'uso di Internet da parte dei partecipanti sono notevolmente migliorati dopo l'esperienza del corso. Sia gli insegnanti che gli studenti hanno espresso in generale apprezzamenti positivi verso il progetto. Tuttavia, lo studio ha individuato anche alcune limitazioni per il pieno sviluppo del progetto e fornisce alcuni suggerimenti

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per il suo miglioramento futuro.

Parole chiave

Media education, media literacy, competenza mediale, auto-efficacia in Internet, adolescenti, progetto di apprendimento online

English Abstract

The purpose of the study is to present and discuss the results of an experimental project carried out in China in the field of media education. With the help of the Italian Association of Media Education (MED), the researchers designed and implemented a web-based project named "Exploring environmental issues in the media: Media education in Chinese K-12 schools". Totally, five modules were created, covering such media as comics, advertisement, newspaper, Internet, and multimedia products. During the Spring Semester of 2011, 458 teenagers from three primary schools, which are located in Hangzhou, were invited to attend the project under the guidance of their ICT educators and two researchers. Both quantitative and qualitative methodologies were used to collect data. Results of pre- and post-test found that participating students' Internet self-efficacy was significantly improved after attending the project. Participating teachers and students had generally positive perceptions toward the project. However, the study still detected some limitations impeding the full implementation of the project. Based on the findings, suggestions for improvement were proposed in the last part.

Keywords

Media education (ME), media literacy, media competence, Internet self-efficacy, teenagers, web-based learning project

1. Introduction

Over the last ten years, the emergence and rapid diffusion of the digital media, such as computer, Internet, PDA, mobile phone, etc., has been one of the most outstanding phenomena in the history of media development. These new media are increasingly penetrating our daily lives, including working patterns and life styles, especially in the area of communication and media consumption. In this context, media skills become more important for personal professional development and the concepts of media literacy, media competence and media education become more familiar to the public, especially among educational researchers, policy makers and school teachers (OECD, 2011).

Media education (ME) is defined as the educational process that takes place inside and outside formal educational institutions, through which media literacy is developed (Buckingham, 2003). Around the world, ME has more than eighty years' history. Generally speaking, ME in western countries experienced three stages. In the first stage (1930-1960), also known as the inoculation phase, ME was seen as an antidote to prevent the young people from media influence (Masterman, 1985). In the second stage (1960-1970), it was viewed as a «Popular Art Form». Cultural Studies was adopted as the theoretical base for ME practice in this stage. In the third stage (1970-1990), ME was understood as «Representational/Symbolic System» and Semiotics was utilized as theoretical base (Sagayaraj, 2006). At present, media education as preparation of children toward acquiring a critical understanding becomes a widely acceptable viewpoint among media education researchers and it aims to develop young generation's understanding of and participation in the media culture (Buckingham, 2003; Hobbs, 2010; Parola and Ranieri, 2010).

World widely, the history of ME could be traced back to the 1930s and it is now part of the agenda of many international organizations, from UNESCO to the European Union. These organizations consider media education and the development of media competencies a necessary requisite to fully exercise citizenship in the 21st century (UNESCO, 2008). However, compared with western countries, China is just at its beginning stage in this area. The current study focuses on the introduction of ME in China by presenting and discussing the results of an experimental study involving a group of Chinese teenagers.

Prior to describing the research study, we shall provide a brief review of the literature about media education in China.

2. Media education in China

China, as the most populous country in the world, embraced the digital age simultaneously with the rest of the globe. China now has the world's largest number of Internet users and therefore become the largest consumer of the digital media (CNNIC, 2012). However, media education is still at its beginning stage in China. In 1997, the concept of media education was firstly introduced in Chinese literature. In her paper titled *The significance, content and method of media education*, Dr. Wei Bu, who is a researcher working at Chinese Academy of Social Science, systematically introduced the concept of media education, its history in western countries and the major methodologies utilized to do media education activities (Bu, 1997). After that, more and more Chinese researchers and educators threw attention to media education practice.

The first decade of 21st Century has witnessed rapid development in Chinese media education practice and research (Peng and Wang, 2010; Shao, 2006; Zhang, 2006; Zhang, 2009). In October 2004, the *First International Conference on Media Literacy* was held in Beijing and the theme of the conference was "Media Literacy Education in the Information Society." Many renowned international scholars in the area of media education were invited to attend the conference. Participants agreed that China was just at its beginning stage in this field and international experiences were precious to develop a Chinese model of media education. Five years later, the *Second International Conference on Media Literacy* was carried out in 2009 and its theme was "Media Literacy and Citizen Development".

In August 2012, *The Third International Conference on Media Literacy* was held in Lanzhou and the major theme of the conference was "Inclusive Social Development." Four sub-themes were proposed and discussed in the conference: 1. media literacy and an inclusive society: focusing on discussing media literacy and many aspects of social development (social inequity, minorities' development, community construction, citizenship identity, gender issues, teenagers' development, and cultural consumption); 2. media education and disciplinary development: focusing on media education theoretical development, instructional systematic design, teacher training and media education practice; 3. media literacy and the social responsibility of the media: focusing on media producers behavior, core values and social responsibility; and 4. media literacy and government: focusing on government officers' media behavior, government's public management through the media, Chinese image in the media and local construction.

In 2004, Institute of Media Literacy of Communication University of China was founded and it was the first Chinese academic organization focusing on studies related to media education. After that, some other

media literacy education-related institutes were established in other representative universities in China, such as Media Literacy Center at the Fudan University (2006), Institute of Media Literacy at the Zhejiang University of Communication (2007), and Center for Media Literacy Curriculum Research at the Northeast Normal University (2007).

With the help of scholars from these academic institutes, more and more media education-related exploratory projects were carried out in China in past years. For example, in 2006, a project named “Media Literacy Educational Practice” was carried out in Zhabei District of Shanghai city. The purpose of the project was to disseminate the concept and the practice of media education toward teenagers, parents, teachers as well as immigrant workers (Shao, 2006). In 2008, a project named “Children Media Participation” was carried out in Beijing and the project was funded by The United Nations International Children’s Emergency Fund (UNICEF) and China Children Press & Publication Group. Within the project, scholars from Communication University of China put forward series of training programs to help Chinese children better understand and utilize all types of media. Some children’s guidelines and handbooks were produced and, at the same time, a website¹ was created to support the project’s activities as well as to make records about the news related to the project.

Propelled by research projects, school-based media education practices were also carried out in some Chinese cities. For example, in 2005, Shenzhen city, which is located in Guangdong Province, put forward the first Chinese media education training program for 80 K-12 school principals. In Autumn Semester 2008, Dr. Jie Zhang from Communication University of China carried out a 15-weeks’ project named “Experimental study on Media Education in Beijing Heizhima Hutong Primary school”. The target group of the project was made up of 10-13 years old teenagers and the major learning content covered advertisement, television, music, Internet and etc. In the same year, scholars from Zhejiang University of Communication launched another experimental media education project in selected primary and middle schools located in Zhejiang Province and its instructional contents covered advertisement, audio, animation, music, game, the Internet and etc. Based on these projects, a series of academic papers and books were published.

Obviously, China has made big steps in the area of media education in recent years, however, systematic studies and instructional developments are still needed in this field. More investigations should be carried out to get to know the status of young generation’s media competence as well as their habits of media consumption. At the same time, although some Chinese scholars have put forward some media education-related guidelines/handbook for Chinese teenagers (Yan and Yuan, 2008; Zhang, 2007), up to now, there are no systematic instructional materials for

¹ URL: http://www.zxj.com.cn/List_EduTrain.aspx?id=100.

Chinese K-12 teachers. With such background, also with the help of the Italian Association of Media Education (MED), a web-based project named “Exploring environmental issues in the media: Media education in Chinese K-12 schools” was proposed by the authors of the study to propel media education practice and research in China. The instructional contents created in the project have been used as the foundation of a teacher’s handbook (Li et al, 2012).

3. The Study

3.1. Context and participants

This study is part of a larger project, “The Chinese Way to Media Literacy Education”, whose aim was to improve Chinese teenagers’ digital media literacy through the delivery of a ME project. 458 teenagers from three primary schools, which are located in Hangzhou (named School A, School B, School C in the study), were invited to attend the project under the guidance of their ICT educators (1-3 teachers from each school) and two researchers. Among these three schools, both School A and School B were typical urban public schools with long history, while School C was a migrant children school, whose students were all migrant workers’ kids. It is worth to mention that all the three schools had computer labs for their ICT education courses. However, the infrastructure in School A and School B was better than that in School C. All the participating teachers and students were reported that they had never attended any formal web-based learning projects.

3.2. Aims and structure

The study intended to design and implement a web-based ME project in the selected schools, and to assess the effectiveness of the web-based ME project. In particular, it aimed at investigating:

- Whether an improvement in students’ media competence occurred after attending the web-based ME project, especially referring to their Internet self-efficacy;
- Students’ perceptions of the benefits and shortcomings of the web-based learning project;
- Teachers’ perceptions about the impact of the web-based learning project on their teaching as well as the possible barriers to continuing adoption of such kind of project.

3.3. Designing web-based ME project

During October, 2010 – December, 2011, based on learning needs’ analysis, the researchers designed five interactive learning modules for the

target population (primary school students from Grade 5 or Grade 6). The five modules introduced knowledge about media, such as comics, advertisement, newspaper, Internet, and audio/video (multimedia products), which can be considered main topics in current ME practice. To foster students' learning interests as well as to connect their learning activities with real problems of daily life, the researchers selected environmental issues as main topics of the project. Contents of each module relate to environmental problems or environmental protection activities. By focusing on exploring environmental issues inside the media, the researchers tried to engage students with learning by doing and problem-solving.

The topics of the five modules included: 1. Module One: Comics on environmental issues; 2. Module Two: Advertisement and environment; 3. Module Three: Newspaper on environmental issues; 4. Module Four: Webquest on saving energy; and 5. Module Five: Digital storytelling about renewable energies. In each module, students were asked to engage with a series of activities related to media analysis or media production. Take Module one for example. To successfully complete module one, students need to do the following activities:

- recalling their experience with comics;
- listening to teachers' introduction about comics, including its history, main features, main steps to produce a comic;
- searching for comics on environmental issues on the Internet;
- using comics analyzing tool to examine selected comics and then publish their analysis on the web;
- making environmental protection issues-related comics and then publish comics on the web;
- using evaluation tool to evaluate their own and other students' comics and then publish their evaluating results on the web;
- using weblog and web-based discussion area to reflect on their learning experience and communicate with others.

An online learning platform was designed to support the ME project. Based on constructivism and collaborative learning theory, the online learning platform has some featured contents, including 1. a presentation area, which was designed to access instructional contents (in .ppt or .flv), 2. a deepening area, aimed at providing students with extra multimedia materials or Internet resources; 3. a dialogue area, i.e. a discussion forum supporting synchronous or asynchronous communication; 4. an online experimentation area, which was intended to allow students to engage with learning activities and also to publish students' learning products; and 5. a transformative reflection area, which was created to support reflection and evaluation of students' learning process and outcomes.

4. Implementation of the project

Considering that the target population was made up of teenagers who were dependent learners used to traditional classroom teaching, the study adopted a blended learning approach, taking advantages of both face-to-face instruction and web-based distance learning. The educational contents were mainly taught by ICT educators in their ICT Education courses.

In each module, students were engaged in multiple online learning activities, such as reviewing module presentations or other resources, downloading some evaluation tools or newspaper models, searching information to accomplish assignments, uploading their assignments to the desired places, writing blogs, chatting with others, etc. At the same time, due to time limits in ICT Education course, students were also asked to accomplish several offline activities besides the ones carried out within the platform.

Since both media education and web-based learning project are unfamiliar to Chinese K-12 school teachers, before implementing the project, the researchers visited each involved school twice in March, 2011, carrying out teachers training activities addressed to all teachers. Therefore, before the start of the project, each teacher received two sections' training activities: one section was about media education and the other was about orientation on the module contents and the online learning platform. The total time for teacher training was about 5 hours.

5. Methodology

The following methods were adopted in the study:

1. Students' survey. The survey was administrated to all participants. Pre- and post-test were used to measure participants' media competence improvement, particularly referring to Internet self-efficacy. The concept of Internet self-efficacy was based on Bandura's (1977, 1986) famous concept of self-efficacy and it refers to an individual judgment of his/her capability to use the Internet (Torkzadeh and Dyke, 2001). Since it was firstly introduced in 2001, Internet self-efficacy was widely used as a tool to investigate the effects of Internet use or Internet-related adoption (Hsu e Chiu, 2004; Torkzadeh and Dyke, 2002; Torkzadeh et al, 2006). Internet self-efficacy was measured by 18 items adapted from Hsu and Chiu (2004). The sample statement was «I feel confident navigating the WWW by following hyperlinks». All the items were assessed through a 7-point Likert scale ranging from «strongly disagree» to «strongly agree».

2. Focus group interviews. To get the feedback from participants about their attitudes towards the web-based ME project, 20-minutes focus group interviews were conducted by researchers (without the presence of the

teachers). In each school, 5-10 students were invited to attend the focus group interview. Students' participation was on a random selection and volunteer base.

3. Teachers' interviews. Semi-structured interviews were utilized to investigate the five participating teachers' viewpoint about the effectiveness of the web-based project, the students' changes, and the limitations of the project. The interviews were audio recorded, transcribed and analyzed.

6. Results

6.1. Students' survey data

Pre- and post-test were used to collect data about the changes of participants' media competence. Pre-test was carried out before the implementation of the web-based project (February - March, 2011) and the post-test was carried out at the end of the project (December, 2011). Table 1 summarizes the results of the comparison of participating students' Internet self-efficacy in pre- and post-test. Results of t-test indicated that participating students' Internet self-efficacy was promoted significantly after attending the web-based interactive learning project, $t(912) = 7.96$, $p < 0.01$.

TABLE 1. Comparison of Participating Students' Internet Self-efficacy in Pre- and Post-Test (N=458)

		N	M	SD	DF	T	P
Internet Self-efficacy	Pre-test	458	5.34	1.44	912	7.96**	0.00
	Post-test	456	6.03	1.15			

Note: 1=Strongly Disagree; 4=Neutral; 7=Strongly Agree; * means $p < 0.05$; ** means $p < 0.01$

The results of students' survey partly indicate the effectiveness of the web-based learning project. After attending the project, participating students' Internet self-efficacy were generally improved significantly. It, therefore, could be concluded that the project achieved success in improving participating students' media competence, particularly referring to the Internet skills.

6.2. Students' focus group data

The interview questions for the students' focus groups mainly concentrated on participants' personal feelings and/or reflections about the web-based ME project, especially about such aspects as learning content, interactivity, media competence, and possible limitations of the

project. In each school, 5-10 students were randomly invited to attend the focus group interview. Below is a summary of the students' focus group interview.

Generally speaking, all students indicated a very positive attitude toward the web-based learning project. They loved the blended learning environment, which included traditional classroom lectures and guidance by their teachers and online learning materials and learning activities. Researchers' classroom observations in School B confirmed that students and their teachers enjoyed the blended learning mode.

When asked why they liked the web-based learning project, the most frequently mentioned aspect was related to the learning contents. Students indicated that the five modules were engaging because they were life-related and presented in a multimedia format. Although this was their first experience with digital learning environment, students didn't feel disoriented and appreciated the openness of the provided resources. In students' eyes, the second biggest strength of the project was its emphasis on interaction and peer learning.

Students were also excited about their experiences with the media contents. They felt that the project let them understand better about such media as comics, advertisement, newspaper, and video products. They appreciated the activity of media content analysis. Many students indicated that, after attending the ME project, they had a more rational attitude toward media contents and they could read more out from those media.

Although students indicated a generally positive attitude toward the project, they reported that there were still some limitations and/or weaknesses in the implementation process. The most obvious limitation was related to the Internet connection. Students from all of the three schools indicated that the Internet connection at school was not as good as that at home. When students needed to access the multimedia materials, sometimes it took a long time for them to open or to download the files. Many students commented that, if the speed of the Internet were faster, their learning experience would have been better. This problem was more obvious in School C than in School A and School B.

At the same time, time limit was another obvious issue in the project. Participating teachers from the three schools were all ICT educators responsible for ICT education course in their schools. In Chinese primary school system, there is only one lesson per week (forty-five minutes) for ICT education. Therefore, students needed to take many weeks to achieve the required learning activities in the five modules.

6.3. Teachers' interview

An analysis of the transcripts of the interviews with the ICT educators also revealed a generally positive perception about the impact of the web-based project. All teachers mentioned such strengths as extra educational

resources, extended learning environment, multi-level interaction, and focus on learning by doing methodology and personal reflections. Teacher Lu, an ICT educator from School B, indicated various reasons that made the experience successful. Firstly, students' learning interest increased for the use of multimedia resources and web-based activities. Secondly, the use of platform extended the traditional classroom by providing teachers and students with more time to interact with contents and the relating activities. Thirdly, the platform facilitated multiple levels of interactions and communication. Students from different groups, different classes, or even different schools, had the opportunity to see each other's product. Fourthly, learning became more meaningful for students. Indeed they indicated that, from the web-based project, they could not only learn some Internet skills, but also learn how to use these skills to solve the authentic problems of everyday life. Finally, teacher Lu observed: «Personally I learnt a lot from the platform about how to be a better ICT educator. This is a “live” textbook for our ICT educators».

7. Limits and recommendations

To conclude, the project achieved success in improving participating students' media competence. However, due to time and resources' limits, the study just explored the project with a small group of people in a limited time period. Considering the huge population of Chinese teenagers and diversity of K-12 schools' conditions, the findings of the study could only represent part of schools' reaction to such innovative project. Besides, although the results of pre- and post-test indicated that participating students' Internet self-efficacy was significantly improved after attending the web-based ME project, there might be some other factors (maturation of the teens or other Internet activities at school or at home during the period) that could explain such improvement. Since researchers can't exclude the impact of these unexpected factors, further studies are recommended in the following areas: 1. testing the web-based ME project with a larger population of teenagers with a well-controlled experimental environment; 2. designing more suitable measurement tools to measure the effectiveness of the project; and 3. designing and implementing special projects for migrant children's school to improve migrant children's media competence.

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References

- Bandura A. (1977), *Self-efficacy: toward a unifying theory of behavioral change*, «Psychological Review», vol. 84, n. 2, pp. 191–215.
- Bandura A. (1986), *Social Foundations of Thought and Action*, Englewood Cliffs, NJ, Prentice Hall
- Bu W. (1997), *The significance, content and method of media education*, «Modern Communication», vol. 1, pp. 29-33.
- Buckingham D. (2003), *Media Education, Literacy, Learning and Contemporary Culture*, London, Polity Press-Blackwell Publishing.
- CNNIC (2012), *The 29th statistical survey report on the Internet development in China*. Retrieved 07.08.13 from: <http://www1.cnnic.cn/IDR/ReportDownloads/201209/P020120904421720687608.pdf>.
- Hobbs R. (2010), *Digital and Media Literacy: A Plan of Action*. Knight Commission on the Information Needs of Communities in a Democracy, Aspen Institute, Washington DC. Retrieved 07.08.13 from: http://www.knightcomm.org/wpcontent/uploads/2010/12/Digital_and_Media_Literacy_A_Plan_of_Action.pdf.
- Hsu M. H. and Chiu C. M. (2004), *Internet self-efficacy and electronic service acceptance*, «Decision Support System», vol. 38, n. 3, pp. 369-381.
- Li Y., Chen E. and Ranieri M. (2012), *Experimental Textbook for Media Education in Primary Schools*, Hangzhou (RPC), Zhejiang University Press.
- Masterman L. (1985), *Teaching the Media*, London, Routledge.
- OECD (2011), *PISA 2009 Results: Students on Line: Digital Technologies and Performance (Volume VI)*, Paris, OECD.
- Parola A. and Ranieri M. (2010), *Media Education in Action: A Research Study in Six European Countries*, Firenze, Florence University Press.
- Peng S. and Wang T. (2010), *2010 Reports on Chinese Media Literacy Studies*, Beijing, China International Broadcasting Press.
- Sagayaraj D. J. (2006), *Media Education: Key Concepts, Perspectives, Difficulties and Main Paradigms*, Kilpauk, Chennai, Arumbu Publications.
- Shao R. (2006), *Media Education in China*, Beijing, Communication University of China Press.
- Torkzadeh G. and Dyke T. P. V. (2001), *Development and validation of an internet self-efficacy scale*, «Behaviour & Information Technology», vol. 20, n. 4, pp. 275–280.
- Torkzadeh G. and Dyke T. P. V. (2002), *Effects of training on internet self-efficacy and computer user attitudes*, «Computers in Human Behavior», vol. 18, n. 5, pp. 479–494.
- Torkzadeh G., Chang J. C.-J. and Demirhan D. (2006), *A contingency model of computer and internet self-efficacy*, «Information & Management», vol. 43, n. 4, pp. 541–550.
- UNESCO (2008), *Media literacy*. Retrieved 07.08.13 from: http://portal.unesco.org/ci/en/ev.php-URL_ID=27056&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- Yan H. and Yuan L. (2008), *Experimental Textbook for Media Education in Primary Schools (Students' Guidebook)*, Changchun, Northeast Normal University Press.

- Zhang J. (2007), *Media Literacy Education: Magic Mirrors (Four Volumes)*, Fuzhou, Fujian Renmin Press.
- Zhang K. (2006), *Fundamentals of Media Literacy*, Beijing, Communication University of China.
- Zhang X. (2009), *Curriculum Development on Media Literacy Education: International Perspectives*, Guangzhou, Jinan University Press.