

College English Teachers' Performances against the Mediated Teaching Environment

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Abstract—In face of the increasingly mediated teaching environment, there are quite a lot of academic publications made by the scholars in the fields of mediated teaching environment and language teaching from a diversity of perspectives. The adopted study methodology, however, is more qualitative than quantitative. Therefore, an empirical study on how English teachers perform in this paper is undertaken in terms of technological literacy, cross-disciplinary awareness, and the teachers' roles, through a case study of all the College English teachers in BJTU (Beijing Jiaotong University). A survey of 55 respondents shows that there is a positive co-relation between the respondents' media technology training and their teaching performances in the online course, and their lack of cross-disciplinary awareness impeded their cross-cultural English teaching performance. Besides, the respondents play more traditional roles as they used to do under the changed teaching environment.

Index Terms—college english teachers' performances, technology literacy, cross-disciplinary awareness, teachers' roles

I. INTRODUCTION

The past few years have witnessed how the human society is growing mediated with the updating technology and its application. Education, like many other social domains, is significantly affected by media technology in senses of teaching and learning styles. Such new programs motivated by media technology as MOOCs, the Flip-Classroom, social media application, on-line learning, distance education, etc. are growing popular in the educational application. The extensive application of new technology, as a result, not only breaks the traditional education principles and philosophy, but is fundamentally altering the roles that teachers conventionally play in their professional accomplishment. This is particularly true for the language teachers in the increasingly mediated language teaching surroundings.

Thus, this study endeavors to examine how English teachers in the science & technology universities perform against the torrent of internet-based technology and how they can survive the challenges through a case study carried out among the English teachers for non-English major students in Beijing Jiaotong University. With the survey to 55 English teachers through questionnaire and

interviews, it was found that English teachers are facing serious challenges in media technological literacy, cross-disciplinary awareness and knowledge, and lack of sense to change or modify their roles as English teachers. They exhibit much anxiety when dealing with technical difficulties occurring in the on-line courses and language labs, and reveal their insufficiency in acquiring important theories and knowledge in media and communication discipline, which is becoming increasingly essential for language instructors to adapt to the mediated teaching environment. Besides, despite the pressure and challenges brought by the mediated education, many surveyed language teachers are still playing the roles that the traditional education prefers them to, to be an actor performing before the students on the stage of classroom, rather than to be a director organizing activities, assisting students in navigating various learning sources available on the hundreds of millions of sites crowding the Internet.

II. LITERATURE REVIEW

A. Technology Literacy

As Robert Raiser, a Professor from the University of Florida, was quoted as being interviewed that the history of the technological development demonstrated that with the advent of each new medium such as radio, film, television, Internet, etc. people would hopefully await a teaching innovation inspired by the media. [1] Consequently, ground-breaking teaching models and methodologies have been introduced into classrooms when the teaching tools develop from black/white board, to multi-media screen, then to videos of Micro-course, MOOCs and so on and so forth.

If a decade ago saw the numerous studies made about college English teachers' status quo, professional development, teaching ideas & teaching activities, distribution & structure, etc., the past few years, however, have witnessed the shifting of the study trend. As it is, more and more scholars start to explore how information and technology are exerting great influences upon language teaching and the instructors. [2]-[5] Numerous studies and research have been made to reveal what influences brought by the innovation such as MOOCs, Flipped-classroom, Micro-courses growingly applied in the modern education. [6]-[9] Granted that increasing language teachers have engaged in the practices and studies on how social media like Face-book, Twitter,

Wechat can be effectively adopted in language teaching and learning, [10]-[12] fewer empirical studies, nevertheless, are carried out about how the English teachers perform when facing the innovative changes, and particularly what they should do to adapt themselves to and eventually survive the increasing challenges. Actually, some researchers have pointed out in their studies that college English teachers are supposed to improve their technology and information literacy in face of the mediated language teaching and learning environment. [13] Therefore, questions on the language teachers perform in terms of their technology literacy are designed to acquire the information:

Q1: How often do you attend trainings to improve your technology literacy?

Q2: Do you feel anxious or worried when applying and operating new media in the on-line English teaching or Language laboratories?

Besides, other related questions in teachers' technology literacy are made in order to uncover what overt factors are co-related to the subjects' technology literacy such as gender, degree, students' language level, expertise, etc.

B. Cross-Disciplinary Awareness

Cross-disciplinary awareness is highly preferred in academic research and advancement in the past years, and scholars or talents, therefore, are supposed to qualify themselves with cross-disciplinary perspectives, knowledge and theories in their academic and teaching careers. [14] As to language teachers, the introduced media technology greatly helps to enrich the teaching content and improve the teaching effectiveness on the one hand, [10], [12] while on the other hand, it increasingly requires the teachers to qualify themselves with the knowledge of the cross-disciplinary of language teaching and media. For language faculties, the profession knowledge and theories in linguistics and literature, teaching psychology, teaching methodology are gradually insufficient to cope with the mediated teaching environment. Hence, language teachers should develop them with some critical theories and knowledge about the media communication effects such as Cultivation, Uses and Gratifications, Reception etc. Additionally, with more and more videos of news, documentary, films, press etc. introduced into language teaching, media literacy, another essential ability, is supposed to have so as to judge, differ, and identify the content media have played, which more or less relates the training of students' cross-cultural abilities. Consequently, whether or not the language teachers have qualified themselves with the related media knowledge and theories will be surveyed, and as well as whether or not the teachers guide or explain the implied cultural, historical information embodied in the media content adopted in their language teaching.

Q1: Do you know or understand any media theories about communication effects such as Use and Gratification, Cultivation, etc.?

Q2: Do you know cross cultural theories such as Constructivist, Face-Negotiation, Cultural Schema, etc.?

Q3: which of the following teaching content do you fail to focus on in your language teaching?

Q4: In what ways, can you better develop your language teaching profession?

C. Teachers' Roles

Higher education Information and Internet-based language teaching have thrown a significance influence upon language faculties in universities and colleges, which forces teachers to make critical speculations upon their accustomed methods, roles, and styles against the mediated teaching environment. [15]-[17] Besides, reforms in teaching and learning of Chinese higher education have put stress on the student-centered education philosophy rather than the teacher/textbook-centered one. As a result, confronted with the changing teaching philosophy, College teachers have to shift their traditional role as an "actor" or "actress" to perform in the front of a classroom to a new one as a "director" or "directress" to effectively organize or propose teaching activities. So how the teachers perform their roles against the internet based teaching style will be studied in this survey. Specifically, how the surveyed subjects play their roles in the language audio-visual class through the following questions:

Q1: Have you built up an on-line course or platform to facilitate your class-room teaching? If so, what kind of teaching contents do you upload to the platform?

Q2: How much of your teaching materials are obtained from internet-based resources?

Q3: How often do you organize the students to share, discuss the topics that you require them to prepare through on-line searching?

III. METHOD.

A. Reasons to Study the College English Teachers in BJTU

There are two primary reasons largely contributing to why the BJTU college English teachers are the survey targets: one is the sharing traits with those English teaching team in other science & technology universities in Beijing area, and the other is its great contribution and accomplishments in the project of College English teaching and reform initiated by the National Education Ministry since 2006.

First, English teachers in BJTU share much similarities with the other Science & Technology universities in the same ranking such as Beijing University of Posts and Communications, Beijing University of Chemical Technology, Beijing University of Science & Technology, etc. According to the surveys, as to the academic background, majority of the college English teachers are English linguistics & Literature and teaching methodology majored (90-95%), and quite a few receive a cross-disciplinary degree such as cross-cultural communication, culture & Language communication, Language teaching & Psychology, etc. In addition, they, in most cases, shoulders a heavy work-load, teaching English to various students varying from undergraduates to postgraduates, but are conferred as low positions and titles as Lecturers or instructors in that most of the

teachers receive master degrees, accounting 70-80% of the total, while a small part, about 20-30%, obtain the Doctorial degrees. Also, the unbalanced gender structure between male English teachers and the female ones, young-aged, less research and publishing are named a few of the many similarities. Actually, some published studies have identified these characteristics through their surveys throughout Beijing, even the whole country. [4] Therefore, findings of this undertaken survey can be referred to the studies of the college English teaching of the science & technology universities with similar ranking as BJTU in China.

Second, as one of the first-group of 31 College English Teaching and Reform Experimental institutes qualified by China National Education Ministry in 2006, college English teachers in BJTU, as a team, have been widely recognized among universities all over the nation, and the team has been awarded with the title of "Excellent Team" in 2006, 2009, 2012 respectively for their great contribution and achievements in English Teaching & Reform practices. Besides, against the torrent of mediated college teaching environment, this teaching team has started the new project of building up the Internet-based MOOCs platform. Consequently, my research, granted by BJTU, endeavors to study how the team of teachers performs in the increasingly mediated teaching environment so as to provide some strategies to deal with the problems such as what the faculties should do and what measures BJTU should take.

B. Respondents

This research is done based an overall sample, and all the English teachers to teach non-English major students throughout Beijing Jiaotong university are supposed to be the subjects. There are 55 faculties participating in the survey with exception to 4 teachers visiting study abroad and 2 asking for a long leave. But 45 effective questionnaires are collected. Among the 45 subjects, 9 are male teachers. Almost 90% of the subjects graduate from the key universities of the country, primarily majoring in English Linguistics, British/American Literature and language teaching (95%), and the rest subjects majoring in cross-cultural communication or cultural studies(5%). Besides, among the respondents, 73.3% of them have received master degree, and 17.8%, doctor degree, 6.7% pursuing the doctorial study. (Table I- Table II)

The questionnaire is made up two parts, and personal information on gender, major, degree, the taught students' English level are listed in part one. Part two are the designed questions to survey the subjects' technology literacy, cross-disciplinary awareness, knowledge or horizon, and their roles specifically played in the language audio-visual class.

TABLE I RESPONDENTS' AGE & GENDER DISTRIBUTION

Age	f	%	Gender	f	%
30-35	5	11	male	9	20
36-45	29	64	female	36	80
46-55	11	25			

TABLE II RESPONDENTS' DEGREE & EXPERTISE DISTRIBUTION

Degree	f	%	Expertise	f	%
BA	3	7	Linguistics	28	62
MA	33	73	Literature	15	33
PhD	9	20	Cross-Culture	2	4

IV. RESULTS AND ANALYSIS.

A. Technology Literacy/Media Literacy

As to the questions about their media literacy, when asked how skillful you are in using the internet-based language system or software (Grading Compositions, Corpus, for instances) operation or practices, about 28.2% of the total subjects admit their not or not very skillful, but most of them claim that they are skillful (69.7%), while interestingly, as to the question whether you can help the students to deal with the operational or technical problem, 32.5% of the subjects think they are unable to. It seems the teachers can deal well with the technical difficulties they came across themselves, but not the students'. Similarly, upon being asked another question whether they are psychologically anxious or worried when guiding students to online English learning, as high as 67.4% of the teachers respond that they experienced such suffering, and about 30% even experience strong intensity of anxiety or worries. This might be accounted by the data acquired from the questionnaire that there are merely 32% of the subjects taking part in the training of internet based technology literacy, while the rest of the teachers seldom or never attend such kind of training.

Besides, a further study between the those having taken part in training and those never or seldom taking part in training, the with or without training experience is highly related to whether they are capable of operating internet-based systems ($r=0.55$), directing students' online learning ($r=.546$) and their suffering of anxiety or worries ($r=.548$). Those surveyed teachers who regular attending technique training or seminars score higher ($> \bar{X}+S=13.3+3.2$) than those who seldom or never attend the training courses. ($< \bar{X} -S =13.3-3.2$) (See Table III- Table VI)

TABLE III RESPONDENTS' TECHNOLOGY LITERACY STANDARD DEVIATION (S)

Figures(x)	S		
x	X- \bar{X}	(X- \bar{X}) ²	$\sum(X-\bar{X})^2$
14	1	1	445
17	4	16	
9	-4	16	
...	
14	1	1	
12	-1	1	
n=45 $\bar{x}=13.3$	$S^2=\sum(X-\bar{X})^2/n-1=445/45-1=10.11$ $S\approx 3.2$		

As to the degree, respondents with Doctor degree score lower marks in technology literacy. There are only 1 scoring higher than ($> \bar{X}+S=13.3+3.2$), 2 scoring in the medium level ($\bar{X} -S =13.3-3.2 < X < \bar{X}+S=13.3+3.2$), and 6 scoring lower than ($< \bar{X} -S =13.3-3.2$). So it does not

necessarily mean that English teachers with higher degree should qualify themselves with higher technology literacy.

TABLE IV TEACHERS WITH TRAINING SCORE (X) AND TECHNOLOGY OPERATION SKILL SCORE (Y1)

X	Y1	$x=X-\bar{X}$	$y=Y1-\bar{Y}$	xy	x^2	y^2	r
$\bar{X}=2.9$	$\bar{Y}1=3.4$	0	0	$\sum xy=44.6$	$\sum x^2=154.5$	$\sum y^2=42.8$.550

TABLE V TEACHERS WITH TRAINING SCORE (X) AND DIRECTING STUDENTS SKILL SCORE (Y2)

X	Y2	$x=X-\bar{X}$	$y=Y2-\bar{Y}$	xy	x^2	y^2	r
$\bar{X}=2.9$	$\bar{Y}=3.52$	0	0	$\sum xy=46$	$\sum x^2=160.0$	$\sum y^2=44.3$.548

TABLE VI TEACHERS WITH TRAINING SCORE (X) AND THEIR ANXIETY & WORRIES SCORE (Y3)

X	Y3	$x=X-\bar{X}$	$y=Y3-\bar{Y}$	xy	x^2	y^2	r
$\bar{X}=2.9$	$\bar{Y}=5.7$	0	0	$\sum xy=74.8$	$\sum x^2=71.8$	$\sum y^2=259.0$.546

B. Cross-Disciplinary Awareness

As we discussed earlier, with the intensifying informationization in language teaching, faculties are increasingly required to qualify themselves with cross-disciplinary horizon and knowledge. According to the survey, merely 6.9% of the total subjects responded that they know or partially know and understand some media theories in regard with media using, effects, audience studies. In sharp contrast to the other end of the continua, 30.2% of the subjects admitted their total ignorance in any media theory, and those scarcely understanding of any media theories account as high as 44.2%. Despite that fact, 85% of the subjects quite agree that media including on-line language learning system, internet-based audio-visual equipments, MOOCs, flipped-classroom etc. can positively assist the teachers to improve the language teaching effectiveness.

Similar results are obtained to subjects' responses to the question of their familiarity to any theories or concepts of cross-cultural communication, although this domain seems close to language teaching. A surprising figure of 58.1 in percentage indicated that more than half of the English teachers do not or seldom know cross-cultural theories such as Cultural Schema, Cross-cultural Identity, High or Low Context, etc. Although, yet there are 23.3% of the subjects chose the choices of "well know" and "not well know", which is quite in line with the percentage of 21.9% of the subjects majoring in English Linguistics and English Literature have started to learn and study the cross-cultural theories and the theoretical applications.

Greatly due to lack of media and cross-cultural knowledge and theories, 18.6% of the subjects admitted they failed to explaining media signs embodied with the cultural meanings such as value, life style, religion, historical, etc. Additionally, those who ignored the non-verbal cross-cultural communication in the language teaching also take up 34.9%.

C. Teachers' Roles

Facing the great changes against the traditional language teaching and increasingly promoted teaching style of teacher de-centering, the language faculties should change their traditional roles in the process of teaching and learning. The results demonstrate teachers' intend to make changes in their teaching roles, but in a quite passive sense. As it is, how to make best use of media technical platform to facilitate teaching and to organize students to learn how to learn language should take the first priority against the mediated teaching environment. However, only 9 surveyed teachers (20%) built up on-line courses in the internet-based teaching platform Besides, these teachers are inclined to introduce language learning materials from varieties of media contents including articles in magazine and newspaper, television/radio news, film clips, etc. in form of word, audio, visual, PPT, etc to effectively integrate to the classroom teaching. The rest of 36 teachers seem to prefer the traditional class-room teaching although the platform has been built up by the university for them. Consequently, 44.2% of the teachers heavily depend upon the assigned teaching materials such as textbooks and discs, and 37.2% of the subjects admitted they adopted 30-40 % teaching content searched in media and 60% more are from the textbooks.

As for the question that "how often do you organize the students to share, discuss the content you require them to prepare through on-line tools?" another disappointing result come out that most of the teachers (56.5%) organize such kind of activities twice a month. Obviously, they still undertake the traditional roles in the classroom teaching—to teach, instruct, pass by the knowledge to the audiences of students being seated around.

V. DISSUSSION.

As the data indicate, it can be concluded that English teachers in BJTU are badly needed to improve their technology literacy, cross-disciplinary awareness, and to change their ideas on the roles that English teachers should play under the mediated circumstances. As previous literature has identified, [6], [13] College English teachers are urged to improve their technical and information ability so as to establish the effective online teaching platform. From the survey about the technology literacy of the BJTU English teachers, the results reveal that a majority of teachers have a low technology literacy based on the variables of anxiety and worry in guiding students to study on-line courses and their lacking in confidence or ability to answer the technical problems raised by the students. Based on the high positive co-relation between literacy training and the teachers' skills, confidences, ability to solve technical related problems, and the negative co-relation between the literacy training and the intensity of anxiety and worries, English teachers' regular internet-related technical training is strongly urged as an efficient measure to reinforce their media literacy. In realities, English teachers in Tsinghua University and Beijing University of

Posts and Communications have witnessed their achievements in their Internet-based teaching platform, which allows for the former's Universal Center Speaking & Listening MOOCs and the latter's National Language Experimental Teaching Center topping throughout the science and technology universities in main-land China.

Actually, lack of technology literacy will impede teachers' intend to shift their traditional roles as a 'actor' or 'performer' to a good 'producer' or 'organizer'. Without the required technical operational skills, it would not be possible for teachers to make best use of the advanced media equipments to facilitate the teaching and learning process to the greatest extent.

In the same stand, BJTU English teachers should broaden their horizon in a cross-disciplinary horizon. With the growing combination between media using and language teaching, and the increasing emphasis on the cross-cultural communication in the English teaching reform, English teachers are urged to build up their theoretical knowledge range from single-discipline of linguistics and literature to cross- even multi-discipline among language, media and cross-culture communication. For instance, supposing the English teachers can apply the media theory of Use and Gratifications, they will be more flexible to select what kind of learning material, either audio, text or visual ones, can best appeal to their students according to their interests and needs. If English teachers well understood the distinction between the cross-cultural communication contexts, they would stress more upon the semantics of the language in the process of cross-cultural communication rather than upon the meaning of each single word and sentence patterns in their teaching.

Also to better adapt oneself to the mediated teaching environment, BJTU's English teachers are supposed to change their roles. Simply to be a knowledge presenter will be a great tragedy in that so many massive, open and free online knowledge are being stored, posted, accessed in various terminals. As Bill Gate's huge blueprint inspires, the third world of people will become educated with the wide spread of Internet and personal PCs. So to be a good course-organizer and to effectively arrange the students to learn how to acquire language and pick up language abilities are the primary roles that the language teachers should be trained. Slow in grasping of the torrent of mediation in education, and lingering to the old-fashioned teaching roles and principle---teacher & textbooks centered, the most likely ending is to be dumped out in the mediated education development.

REFERENCES

- [1] J. J. Lv and L. L. Dong, "Analysis to the Basic concepts of educational technology and its development trend," *China Educational Technology*, vol. 9, no. 5, pp. 2-3, May 2014.
- [2] M. C. Dai and X. C. Zhang, "A survey on college english teachers literacy," *Journal of PLA University of Foreign Languages*, vol. 27, no. 2, pp. 42-45, February 2004.
- [3] H. Y. Lou and F. Liao, "A study of the co-relation between the college english teachers' teaching ideas and teaching behaviors," *Foreign Language Teaching and Research*, vol. 37, no. 4, pp. 271-275, April 2005.
- [4] Y. Zhou, "Survey on the college english teachers' professional development studies," *Foreign Language Teaching and Research*, vol. 37, no. 3, pp. 206-211, March 2005.
- [5] C. F. Hao, "Survey on the college english professional development desire," *Education Theory and Practices*, vol. 12, no. 12, pp. 64-69, December 2006.
- [6] L. Q. Song, "Challenges brought by MOOCs and the professional development of college faculties," *China Educational Technology*, vol. 12, no. 9, pp. 139-143, September 2014.
- [7] J. L. Chen, "The integration of computer and networks into foreign language teaching." Ph.D. dissertation, Shanghai Foreign Language University, 2011.
- [8] D. C. Ji, "Research on English learning strategies in distance and open education," M.A. thesis, South West University, 2008.
- [9] R. Branch, "The effects of web based instruction on foreign language learning," Ph.D. dissertation, Walden University, 2012.
- [10] Z. F. Chen, Y. Yang, and Z. H. Cao, "The construction of dynamic balance teaching mode in college English class on the basis of multimodality and multimedia," *Journal of Xidian University (Social Science edition)*, vol. 24, no. 4, pp. 110-115, July 2014.
- [11] O. Ephraim, "Integrating social media technologies in higher education," *Journal of International Education Research*, vol. 8, no. 3, pp. 255-262, Third Quarter 2012.
- [12] A. Antonie, "Integrating emerging technologies in the foreign language classroom: A case study," *International Journal of Pedagogies and Learning*, vol. 4, no. 4, pp. 44-60, April 2008.
- [13] J. F. Mo, "How to improve college teachers' teaching ability," *Journal of China University of Geosciences*, vol. 7, no. 3, pp. 129-134, March 2014.
- [14] Z. L. Hu, "Analysis of the cross-disciplinary tendency in linguistics studies," *Foreign Language Teaching and Research*, vol. 36, no. 6, pp. 403-409, June 2007.
- [15] L. Liu and W. Wang, "Roles played by college english teachers in the information times," *Journal of WuHan University of Science and Engineering*, vol. 18, no. 12, pp. 158-161, December 2005.
- [16] Z. Yu and L. Qi, "Challenges brought by digitalization to college english teachers," *Distance Education in China*, vol. 7, no. 8, pp. 73-76, August 2011.
- [17] Z. X. Zhong, *Informational Teaching Mode*, Beijing: Beijing Normal University, 2006, pp. 125-127.



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