

Research Paper Writing Teaching in China's Classroom—Enlightenment From 3MT Competition*

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Enlightened by the 3MT (Three-Minute Thesis) competition first launched in the University of Queensland, the author intends to explore the feasibility of introducing 3MT into China's classroom and study how this practice can help students improve their research paper or thesis writing. In addition, the author analyzed the correlation between students' 3MT performance and their critical thinking ability with the assessment tool CCTDI (California Critical Thinking Disposition Inventory) in order to find possible ways to cultivate students' critical thinking ability.

Keywords: 3MT (Three-Minute Thesis), research paper writing, critical thinking ability

Introduction

Research paper writing is a big challenge for Chinese MA students, who have received little related academic training during their undergraduate years. At universities in China, an MA student, averagely speaking, needs to submit a graduate thesis of around 30,000-50,000 Chinese characters. Many complain that their main problems involve how to select useful material among vast information, how to express professionally, and how to organize the material logically. But these puzzles seem dwarfed by their vague idea about the ultimate purpose of their research.

In a small-scale survey conducted by the author in the research paper writing classroom, it was found that more than two thirds of students failed to clearly sort out the significance of their study and they, even after their completion of their first draft, started to realize that their research under way was meaningless, which led to a dramatic revision of their thesis, costing a lot of time and energy.

So the author, who has been teaching Graduates' Research Paper and Thesis Writing Course for more than five years at a university in China, enlightened by UQ's (the University of Queensland) 3MT (Three-Minute Thesis) Competition, plans to add the 3MT practice to the teaching schedule in hope of helping students with their smooth, efficient, and effective thesis writing.

Introduction of 3MT

UQ originated the 3MT Competition in 2008 for students completing a higher degree by research. The 3MT concept increasingly gained worldwide attention and till now, it has been spread to over 350 universities

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and 20 countries. The contestant can get three minutes and one slide to explain his/her research to non-specialist audience. The challenge is to condense two or three years' work into something meaningful in three minutes. The 3MT competition, whose participants are PhD candidates, aims to cultivate students' academic, presentation, and research communicative skills. More information can be found in its official website www.threeminutethesis.org.

The author, in 2016, conducted a project "Public Speaking and the Cultivation of Critical Thinking Ability-Enlightenment from UQ's 3MT competition" sponsored by ACC (Australia-China Council). Among that, the interviews with those contestants and winners at UQ show that the preparation for the 3-minute public speaking is an effective way for students to rethink seriously about their research, including its significance as well as its methodology. In spite of the fact that in China, a very marginal number of universities get engaged in 3MT competition, such as the University of Hong Kong and the University of Nottingham Ningbo China, let alone the application of 3MT in the classroom, the author determines to make a tentative study on the effect of 3MT practice on Chinese graduate students.

Research Procedure

Considering the problems mentioned by the graduate students in the process of their thesis writing, the author is considering whether it can be better if 3MT practice is employed before their thesis writing. Although time is not ripe enough to hold a 3MT Competition at a college level, the author thinks it is feasible to carry out an experiment in her Graduates' Research Paper and Thesis Writing Course and hopes that it can bring benefit to students' term paper and final thesis writing so that some detours can be avoided.

Research Questions

This investigation below was guided by the following research questions:

RQ1: Is it feasible for 3MT practice to be employed in Research Paper Writing Classroom?

RQ2: Can 3MT practice benefit the students? If yes, how?

RQ3: Is there any correlation between 3MT performance and students' critical thinking ability?

In order to find out the answers to these three questions, subjects and procedures are introduced as follows.

Research Procedure

Subjects. Subjects are 25 students of linguistics (3 males, 22 females) in their first year of graduate study pursuing their MA degree. They took the Research Paper & Thesis Writing course in the spring semester of 2016 with two periods for each week.

Since there are in all 18 academic weeks for the whole semester, the author, based on the requirements for the experiment, modified the course schedule slightly, dividing the whole writing course into two stages—pre-experiment stage and experiment stage.

Pre-experiment stage. In the pre-experiment stage, the author gave the lectures on the introduction of the course, introduction of the whole writing process, introduction of the research method, introduction of the way of data collection, and so on, which lasts 12 weeks, from Week 1 to Week 12. In process, the students were required to select a topic, collect relevant data, write out an outline and try writing the whole piece.

At the very beginning of the course, the author told the students about the tasks they were required to complete at the end of the semester: One is the 3MT presentation in Weeks 15 and 16; the other is the written research paper submitted in Week 18. In this way, students can have sufficient time to collect data, read

material, and prepare their final paper. In addition, in Week 2, the author sent to students the video clips of speeches by those 3MT winners. Its official website was also offered to students for self-study. Students can choose any linguistics topic that interested them. There are two reasons for the author to do so. On the one hand, people are inclined to devote themselves to what interests them; on the other hand, considering many branches and theories of linguistics, every student can be the non-specialist audience when listening to his/her classmates' presentation.

Experiment stage. In the follow-up experiment stage, the author implemented the study in three steps—preparation stage (2 weeks, from Weeks 13-14), practice stage (2 weeks, from Weeks 15-16), and reflection stage (2 weeks, from Weeks 17-18). Week 13 is for the introduction of 3MT, and Week 14 is for students to finish the first draft of their term paper and prepare for the 3MT. The following two weeks is for 3MT presentation. The third stage is the reflection time (Weeks 17 and 18) for students to revise their writing.

In Week 13, as scheduled, the author addressed a lecture on 3MT competition, including the origin, significance, and purpose of 3MT. Meanwhile, sample video clips of speeches by winners in the competition were analyzed and discussed on class. Followed was the requirement for students' presentation—three minutes' performance with only one single slide. In addition, they would have to be cut short if their presentation exceeds three minutes.

When Week 15 came, 12 students gave their presentation, which was videoed. Moreover, two experienced teachers, the author's colleagues, were invited to attend the show time, taking the responsibility of scoring the students' presentation. They were told the rules and judging criteria in advance. Students who did not participate in this week's presentation also joined the group of scorers, who were asked to write down brief comments beside the scores.

At the end of the presentation, a survey was conducted. Some questions were proposed for students to consider. Those who finished the presentation were asked to answer the following questions:

Q1: When you prepared for the presentation, which cost you most time, structure, content, expression, or time-control?

Q2: How do you self-evaluate your presentation? Which part do you think you did not present well?

Q3: Do you think your only PPT fully helped your presentation?

Q4: Do you think the 3-minute presentation (including the preparing process) can help you better your final paper? If yes, how?

Additionally, those who have finished presentation were asked to complete this sentence in a metaphoric way: "(Preparing) The 3-minute presentation is _____ because_____". At the end of the class, all the answer sheets were collected. In Week 16, the other 13 students gave the presentation. After the presentation, these 13 students also were required to complete the questionnaire on class. The whole procedure was the same as what was done last week. The students did not need to submit their term paper until Week 18.

After that, the author designed an online questionnaire (www.sojump.com) about students' critical thinking ability, to predict any correlation between 3MT performance and critical thinking ability, attempting to find some ways to improve graduates' academic performance. As can be seen obviously, thesis writing involves originality and problem-solving, which are closely bound up with critical thinking skills—interpretation, analysis, evaluation, inference, explanation, self-regulation (Facione, 1992).

Results and Discussion

As for Q1, 12 students claimed that content was the most disturbing part for them, followed by time-control (six students chose this item). The least annoying one is expression, for only three students chose it.

For Q2, more than half of the students (64%) gave a positive assessment to their own performance, but in the meantime, they pointed out the unsatisfactory part, and most of them thought that they failed to explain the research procedure or broadly speaking, the content part in a clear way.

In Q3, responses varied. Some thought that they should put the contents part in the slide, some thought that they should have research questions in it, and others claimed that they should put the research procedure in it. In the 3MT presentation, only one slide is permitted. The selection of this one slide matters a lot. It should be informative but concise, and not be distractive. Some students preferred to put much information in the slide (details about the research process). This practice helped them a lot when presenting, since it could ease their memory load and their nervousness, but unavoidably, it was not attention-grabbing.

As for Q4, all the students unanimously agreed that 3MT presentation produced a positive effect on their thesis completion. Here are some of the responses: "It makes me think more deeply of my term paper"; "During the process, I find some shortcomings in my paper"; "It gives me a relatively clear mind for my final paper"; "It gives me a chance to reevaluate what I have done so far and helps me reorganize the body part of the paper"; "It helps me to organize my thinking process and make my final paper more logic"; "It helps me specify what I should do and pick out what are the most important parts in my paper. What's more, I get a clear logical thinking after finishing the presentation".

They had to reduce their 6000-word paper to 3-minute talk (roughly 100 words per minute in speech). What information should be included in the talk? In what way should the information be exhibited? What information is important depends on how much it contributes to the whole thesis. It pushed students to ponder over the materials again and again.

In order to better know students' belief about the effect of 3MT practice on their research paper writing, the author designed the metaphor-oriented task, because the process of thinking of a metaphor involves employing a familiar object or event as a conceptual tool to explain features of a more complex phenomenon or a situation (Cameron & Maslen, 2010; Demir, 2007. Lakoff & Johnson, 1980). WAN (2014) once investigated the effects of a metaphor-oriented intervention on ESL (English as a Second Language) graduates' beliefs about writing. In this study, one student said that "preparing the 3MT is a process of self-discovering because it can help me find my limitations"; one student described that "preparing the 3MT is the process of reviewing, because in process, I reevaluate the methodology, realize which part is not good enough, familiarize myself with the content". Comparatively speaking, three students did an excellent job in the 3-minute presentation, ranked as the top three, based on the overall evaluation (from the author, two colleagues, their peers). I interviewed them. Among those, student Mao said that "the 3MT practice is like climbing a mountain, because it is hard work, but the view on the top is worth the effort". Student Tang said that "preparing the 3MT is like ripping the branches off a tree to get to the trunk because I only have three minutes to the audience". It can be seen clearly that the process of preparing 3MT does help to train students to think critically about their paper writing.

After the presentation, 24 students (one student asked for a long sick leave and did not join the survey) participated in the survey through the website *www.sojump.com* with the aim to learn the relationship between critical thinking ability and their performance in 3MT. Many assessment tools have been used to evaluate critical thinking (CT) skills. In this paper, CCTDI (California Critical Thinking Disposition Inventory) is adopted.

The CCTDI, a 75-item Likert Scale tool with seven scales, is the first instrument designed to measure the dispositional dimension of critical thinking (Facione, 1994). LUO and YANG (2001) revised CCTDI into Chinese version of Critical Thinking Disposition Inventory (CCTDI-CV). It simplified the scoring formula of CCTDI, but retained the same subscale and total scoring point.

The CT disposition includes seven sub-scales—truth-seeking, open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness, and cognitive maturity. After analyzing the CCTDI scores of these 24 students, it shows that there is significant correlation between high critical thinking ability and good 3MT performance (see Table 1).

Table 1
Correlation Between CCTDI and 3MT Performance

		CCTDI total	3MT performance
CCTDI total	Pearson correlation	1	.477*
	Sig. (2-tailed)		.018
	N	24	24
3MT performance	Pearson correlation	.477*	1
	Sig. (2-tailed)	.018	
	N	24	24

Note. * Correlation is significant at the 0.05 level (2-tailed).

The author also checked the correlation between 3MT performance and the seven sub-scales respectively, intending to find possible directions for future teaching. The results indicate that there is significant correlation between analyticity and 3MT performance (see Table 2), self-confidence and 3MT performance (see Table 3), inquisitiveness and 3MT (see Table 4), but no significant correlation between 3MT performance and the other four sub-scales.

Table 2
Correlation Between Analyticity and 3MT Performance

		Analyticity	3MT performance
Analyticity	Pearson correlation	1	.441*
	Sig. (2-tailed)		.031
	N	24	24
3MT Performance	Pearson correlation	.441*	1
	Sig. (2-tailed)	.031	
	N	24	24

Note. * Correlation is significant at the 0.05 level (2-tailed).

Table 3
Correlation Between Self-confidence and 3MT Performance

		Self-confidence	3MT performance
Self-confidence	Pearson correlation	1	.486*
	Sig. (2-tailed)		.016
	N	24	24
3MT Performance	Pearson correlation	.486*	1
	Sig. (2-tailed)	.016	
	N	24	24

Note. * Correlation is significant at the 0.05 level (2-tailed).

Table 4
Correlation Between Inquisitiveness and 3MT Performance

		Inquisitiveness	3MT performance
Inquisitiveness	Pearson correlation	1	.474*
	Sig. (2-tailed)		.019
	N	24	24
3MT Performance	Pearson correlation	.474*	1
	Sig. (2-tailed)	.019	
	N	24	24

Note. * Correlation is significant at the 0.05 level (2-tailed).

To sum up, considering that almost all graduate schools provide research paper writing course or workshops, it is feasible to implement 3MT practice in class, which only needs a minor modification of the teaching schedule. In addition, based on the results and analysis, students benefit a lot from the 3MT practice, for example, second thought about the logic of the thesis, key part of the thesis, purpose of the study. Lastly, CCTDI test reveals that those who have better 3MT performance generally have higher scores in critical thinking scores, especially in their analyticity, self-confidence, and inquisitiveness, which not only implies the significance of critical thinking ability, but also helps the author ponder over how to cultivate students' critical thinking ability so as to expect their better research paper or thesis writing.

Conclusion

3MT is a new concept in China. Few universities in Mainland China even attended the global 3MT Competition. But through this small-scale study, it can be found out that 3MT can help students rethink about the significance of their study and meditate upon the possible contribution of their study, which will lead to more high-quality weight papers in international journals written by Chinese scholars. Although in this study, the samples are too small and the analysis is not detailed enough, this is a good try for the introduction of the 3MT concept and the practice of 3MT among graduate students.

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