

Part C

2012/0326 (Revised)

Project details

1. Needs assessment and applicant's capability

Needs assessment

The proposed project will be conducted in collaboration with

students of mixed ability; however, it tends to have students of above-average ability. This higher standard will be important in achieving the objectives of the project because the innovative concept to be taught, i.e., generating multiple alternative viewpoints, and expressing these in written English, may be a challenge for below-average students.

Among the core values of are progressiveness and internationalism, two areas that have key links to the present proposal. via their progressive approach to teaching and learning, are open to new ideas that will enhance the learning experience of their students. Internationalism includes being receptive to the thoughts and culture of others. Both of these values embrace core features of the proposed project which endeavors to introduce an innovative learning concept that necessitates receptivity towards ideas and ways of thinking that are sometime outside of the students' realm. Additionally, has put a special focus on language learning, especially English, and within this subject, writing holds a high priority. As such, the proposed project is well-aligned with the school's strategic development.

Applicant's capability

The applicant

has taught at the tertiary level for 30 years, much of that time in faculties of education where he has conducted many studies in the area of second language writing. Among his more than 20 published studies on academic writing are several focusing on argumentative writing and critical thinking. A sampling of his published studies is listed below. The applicant has also published 16 course books related to English language teaching with major publishers. Lists of publications are available at:

http://www.ied.edu.hk/ele/people/academic/academic_pauls.htm

In addition to these studies, the applicant teaches a course on critical thinking a in the

General Education stream.

2. Goals and objectives

Audience

The target beneficiaries are initially meant to be both students and teachers at the 3
Under the proposed plan, three teachers of Primary 6 English classes plus one panel chair will develop lesson plans and teaching materials together with the research team from the Hong Kong Institute of Education, Department of English Language Education. These materials will be used in an intervention on approximately 81 Primary 6 students. It is expected that the findings arising from the study will show good potential to spread the intervention to a larger population.

Behaviour

The target performance or behavioral changes are twofold, one concerns thinking ability and the other concerns written expression. With regard to thinking, via focused instruction, students at the Primary 6 level will be able to both conceptualize and internalize the notion of counterargumentation. Specifically, upon exposure to a topic previously unrevealed to them, they will have the ability not only to express their own opinions in persuasive fashion, i.e., expressing an opinion plus reasons, but also to generate alternative arguments, i.e., opinions and supporting reasons that are different from their own. In turn, they will be able to structure a short essay in which their own arguments appear along with alternative arguments in written English while still maintaining their original beliefs. On a broader level, this change in behavior is meant to engender an ability to think from multiple perspectives, a key component of critical thinking. In tandem, the process of developing materials within the team and the instruction of same, the participant teachers are meant to develop both an understanding and belief in the importance of adopting teaching practices that encourage students' ability to broaden their thinking. A longer-term performance target is one in which a larger population of teachers and students via the dissemination of the findings and distribution of materials from this project take on the broader aims of the study.

Conditions

The conditions are defined by a period of six-months (for teachers) and two weeks for students. Via the process of materials preparation and lesson planning (for teachers) and classroom instruction and active engagement via an intervention (for students), positive behavioral changes are expected to occur.

Degree

As this is an exploratory study the outcomes are now uncertain. Thus, the extent of success will depend on the findings arising out of the data analysis. Preliminary discussions with staff in the collaborating school suggest that the students will be able to conceptualize and internalize the main teaching concept, i.e., expressing counterarguments in written English. The degree to which they are able to do this will be measured via content analysis performed by the research team.

At the micro level, indicators of the project's success should arrive via the analysis of data, i.e., whether students are able to express satisfactory counterarguments. At the macro level, the acceptance of paper(s) and proposals in journal(s) and conference(s) respectively, will

determine the success of the project.

3. Targets and expected number of beneficiaries

Three Primary 6 classes will participate in the study. Each class has one teacher and an average of 27 students. Initially, the direct beneficiaries will be the three teachers and 81 students as well as the other team members, i.e., the English panel chair plus the ex-officio member, i.e., the school principal.

4. Innovation

In the latest curriculum document released for Primary education in Hong Kong, *General Studies for Primary Schools Curriculum Guide* (Education Bureau, 2011), the “ability to view the world from multiple perspectives,” and variations on this objective, appear frequently as desired traits to instill in today’s youth. This ability is viewed as a critically important quality, yet the literature reveals that achieving this goal remains a challenge at all levels of education.

The present exploratory study, thus, introduces a way to encourage thinking from multiple perspectives via the concept of counterargumentation in the English writing class. A review of a commonly used textbook for teaching English language in Primary 6 (*My Pals are Here*, Smith & Ling, 2005) reveals that while students are encouraged to express their opinions, both orally and in written form, they are not urged to consider and judge the merits of alternative opinions. This may be because they are not considered developmentally mature enough to do so. However, the literature suggests that pupils as young as those in the fourth grade are able to conceptualize alternative views (Ferretti, et al., 2009), which is a harbinger of the ability to view matters from multiple perspectives. Accordingly, the present study proposes to explore the potential for this ability in Primary 6 students via the creation of an original set of teaching materials that are meant to stimulate among students a respect for viewpoints that differ from their own. Arising from the resulting training with the materials, students will be expected to formulate counterarguments in English prose. It is believed that such a project breaks new ground in two ways: 1) It introduces and teaches students at the primary level to generate, respect and evaluate alternative viewpoints. 2) It requires students to express these thoughts in written English. As such, the proposed study can be viewed as an important extension to what is already taught in Primary 6, and if the intervention is deemed effective, may be expanded into a trial on a larger population of students. From a larger perspective, the study can be seen to be aligning itself and enhancing broader curriculum goals related to engendering a mindset among students that seeks to understand viewpoints

beyond their own, which fits under the broad category of critical thinking.

Finally, in order to provide a practical example of the classroom approach envisioned as laid out in the proposal, the following example pertains:

Students are assigned to groups where they take a certain stand on an issue that they have to support with reasons, e.g., "cats make better pets than dogs," or "buses are better than taxis," after which they are given an opposing viewpoint, "dogs make better pets than cats," or taxis are better than buses." The idea here is to provide basic training in considering alternative views and the subsequent generation of reasons and supporting evidence for the given viewpoint. After this training, the linguistic resources for tying together a short essay in which their own and alternative viewpoints is modeled by the teacher.

Teaching approach

The teaching approach will be very much in keeping with modern classroom practices where materials are introduced in a progressive manner with students' time being divided among individual exercises, group work and classroom discussion. Sample model passages with the various sections normally associated with good argumentation will be drafted with the sections visually delineated graphically or with color codes to make the aims of the lesson clear. Care will be taken via pilot exercises to ensure the objects of inquiry, i.e., the content, are both of interest and within the range of thinking abilities of Primary 6 students.

The followings for example, show some of the model passages that have already been generated by this project and the pilot study respectively. These materials along with others, such as activities where students generate supporting reasons for opinions as well as exercises where the goal is to disagree with a proposition, will be used in the classroom.

Taxis are better than the MTR	
Yesterday I took a taxi for the first time this year. I really enjoyed the ride from my school to Tai Mei Tuk in the taxi and this made me think about transportation in Hong Kong. I thought about comparing taxis with the MTR. [REDACTED] because they are convenient, comfortable and fast.	<div style="border: 1px solid black; padding: 5px;">A little story to start out</div> <div style="border: 1px solid black; padding: 5px;">Introduce topic and give opinion</div>
The first reason why I prefer taxis is that they can go almost anywhere. No matter where you want to go, the taxi will take you there, just like my ride yesterday. The MTR only goes to places that have a big	<div style="border: 1px solid black; padding: 5px;">First reason</div> <div style="border: 1px solid black; padding: 5px;">Supporting evidence and example</div>

population, such as Taipo or Central. Small places like Tai Mei Tuk have no stations.

Another reason I like taxis is their privacy and comfort. In a taxi you can sit alone or with a friend or family member and relax. The seat is soft and you have your own space. It is not like the MTR where it is difficult to find a seat and if you are lucky to find one, it is hard steel, not a soft cushion. Also, sometimes on the MTR it is so crowded, you are touching someone on both sides of your body.

A final reason for taking a taxi is their speed. Unlike the MTR, you can go directly to your destination without stopping at stations or changing trains. Therefore, you arrive much faster.

Some people say the MTR is better because it is much cheaper than a taxi. Getting from Tai Mei Tuk to Fanling is only about \$4 by MTR, but it is over \$20 by taxi. This sounds a good point, but the bus service is not wise. However, if you take a taxi with four of your friends and share the fare, it will be much cheaper. For example, on the same route from Taipo to Fanling, if you share with four other people, it will cost only about \$12 each, so it's not so expensive and much more comfortable.

Second reason

Comparing with MTR's

Third reason with supporting reason and compare with

Counterargument with supporting example and admission that opposite viewpoint is strong

Rebuttal that directly discusses the strong point of the counterargument with example.

Giving Good Reasons

Which one is better for TRAVEL, taxis or MTR?

Taxis are better because...

The MTR is better because...



(1) _____

(1) _____

(2) _____

(2) _____

(3) _____

(3) _____

(4) _____

(4) _____

References

- Education Bureau, (2011) *General studies for primary schools curriculum guide*. Retrieved from, http://www.edb.gov.hk/attachment/en/curriculum-development/cross-kla-studies/gs-primary/gs_p_guide-eng_300dpi-final%20version.pdf
- Ferretti, R. P., Lewis, W.E., & Andrews-Weckerly, S. (2009). Do goals affect the structure of students' argumentative writing strategies? *Journal of Educational Psychology, 101*(3). 577-589.
- Smith, A., & Ling, J. (2005). *My pals are here*. Singapore: Educational Publishing House.

5. Conceptual framework

The ability to persuade via good argumentation skills has long been recognized as one of the key determinants of good critical thinking ability, not only as a scholarly pursuit, but also as a means to persuade others during casual discussions. Essentially, argumentation is the practice of stating claims and offering support or reasons to justify beliefs in order to influence others (Inch & Warnick, 2010); in other words, good argumentation skills are required for good communication (Nussbaum & Schraw, 2007). While the desire to seek reasons to support claims may be a built-in human trait best illustrated by the string of "whys" from the mouths of young children, argumentation in writing is a much more nuanced and sophisticated skill requiring training and practice.

Developing the ability to express opinions in writing is one of the fundamental teaching objectives experienced in school. Students learn that any opinions expressed should be supported with reasons and that these reasons need to be sound. Recent literature reveals that while students are generally good at supporting their opinions, they are much less proficient at considering alternative views. This "myside" bias, or lack of counterargumentation, has been noted in the writing of students at both the secondary (e.g., Ferretti, Lewis & Andrews-Weckerly, 2009; McCann, 1989; Yeh, 1998) and the tertiary level (e.g., Nussbaum & Schraw, 2007; Wolfe & Britt, 2008). This deficiency has direct connections with the goals of curriculum documents where critical thinking, often characterized as the ability to think from multiple perspectives, is highlighted as a key learning objective.

While counterargumentation has been researched extensively in the writing of high school and university students, there has been little work done with primary school students, particularly when students are writing in a foreign language. Accordingly, the present study

will introduce an intervention concerning counterargumentation during the teaching of a unit on expository writing. Primary 6 students will receive an intervention focused on counterargumentation for 16 lessons in the 2013-14 school year. The results are meant to inform the potential for developing teaching materials in this area and expanding to a wider population and possible inclusion in the curriculum at some stage.

Thus, the central research question will focus on the capability of senior primary school students to both cope with the higher order cognitive demands of generating alternative viewpoints on their own, as well as the expression and support of these in written English.

For the intervention, a team of teachers plus two members of HKIEd, together with the applicant will design a set of teaching materials that are meant to enhance students' ability to generate alternative arguments to key issues that are within the grasp of young learners. Strategies for expressing these ideas as counterarguments in written form will also be a key component of the intervention. On the final day of the intervention period of two weeks, students will respond to a previously unseen writing prompt. The subsequent scripts written by the students will be coded with a focus on counterargumentation, both in terms of the students' ability to follow good argumentative form as well as good substance. After coding, the data will be analyzed for patterns indicating the ability of students and success of the intervention.

A brief description of the data analysis is appropriate here. The research team will develop a data-driven coding frame (Schreier, 2012). That is, without specific categories in mind before the coding of the students' writing, in the spirit of qualitative research, we will allow categories to evolve via an iterative or recursive process (Dornyei, 2007). In the initial coding, two independent coders will read through all the scripts and identify arguments with a particular focus on counterarguments. During the second round of coding, a tentative coding frame with various categories will be established independently by each coder. These categories will consider both argumentative form, i.e., whether the students has generated arguments and counterarguments, as well as argumentative quality, i.e., the nature of the reasons and evidence supplied. Once this task is complete, the coders will compare their categories and determine an inter-rater reliability coefficient. Assuming satisfactory agreement, any discrepancies will be resolved via discussion. The resulting data will then be analyzed in order to determine the extent to which the intervention was successful in generating an ability among the students to effectively counterargue.

¹ Written agreement to participate in the project has been secured.

The significance of the proposed project comes in two forms. First, while very few similar studies have been performed on this age group (see Ferretti, et al., 2009), the literature reveals none that have done so on students writing in their second language. Second, given the focus that recent curriculum documents have put on critical thinking skills via encouraging viewpoints from multiple perspectives, the study outlined in the present proposal is aligned with key pedagogical goals for older students. Should the findings of the present study indicate that younger students can cope with the higher order thinking and writing skills necessary to successfully counterargue in writing, curriculum planners may consider introducing this concept at an earlier age.

References

- Dornyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Ferretti, R. P., Lewis, W.E., & Andrews-Weckerly, S. (2009). Do goals affect the structure of students' argumentative writing strategies? *Journal of Educational Psychology*, 101(3), 577-589.
- McCann, T. M. (1989). Student argumentative writing knowledge and ability at three grade levels. *Research in the Teaching of English*, 23(1), 62-76.
- Nussbaum, E. M., & Schraw, G. (2007). Promoting argument-counterargument integration in students' writing. *The Journal of Experimental Education*, 76(1), 59-92.
- Shreier, M. (2012). *Qualitative content analysis in practice*. Thousand Oaks: Sage Publications Ltd.
- Wolfe, C. R., & Britt, M. A. (2008). The locus of the myside bias in written argumentation. *Thinking & Reasoning*, 14(1), 1-27.
- Yeh, S. S. (1998). Empowering education: Teaching argumentative writing to cultural minority middle school students. *Research in the Teaching of English*, 33(1), 49-83.

6. Implementation plan with timeline

Contacts have been made with the principal () who has provided written endorsement of the proposed project. Two meetings have already been held with the English Panel Chair () and preliminary details regarding the timeline, classes, materials, intervention and participant teachers were discussed. The following schedule was generated from those meetings:

Stage 1 Team member consultation, work schedule and responsibility designation (Jan. 2014)
During the first stage, two meetings will take place during which members will plan the entire work schedule including a detailed timeline. Responsibilities will be allocated among the members, chiefly related to materials development. This stage is preparatory and no funding is needed.

Stage 2 Materials development (Jan 1. 2014-Feb. 2014)
Team members will develop a set of materials sufficient for applying the classroom intervention over a period of two weeks of English classes (16 lessons X 35 minutes). During this period, team members will share their materials both electronically and in meetings. This stage is also preparatory and no funding is needed.

Stage 3 Classroom intervention (April 2014)
Three teachers will use the materials during a two-week period to teach the newly developed concept. On the final day of the intervention period, students will produce a written response to a previously unseen writing prompt containing a new topic. Scripts will be collected and used for coding and analysis. It should be noted here that measures for ethical responsibility will be taken up prior to the intervention. As the student participants will not be of an age to give informed consent, parental permission will be secured first.

Stage 4 Data analysis (April 2014 – July 2014)
Two raters, one research assistant and one of the team members will code the scripts and note patterns during this stage. See Conceptual framework above for a detailed description of this process.

Stage 5 Report writing (May 2014 – Feb. 28. 2015)
The project leader (the applicant) will write a report during this stage and also make preparations for the dissemination of findings via preparation for submitting the final report.

7. Teacher's and principal's involvement in project

The Principal and English Panel Chair have expressed full support and cooperation for the proposed project in both frequent correspondence and face to face meetings. The three participant teachers listed below are tentative because a final schedule for the 2013-14 academic year has not yet been settled; however, the participation of three teachers has been assured.

The team consists of the applicant/project leader and two colleagues who will assist in project design and materials development. These colleagues have a special professional interest in second language acquisition at the primary level.

The team also includes the English panel chair and three teachers who teach Primary 6 English classes. Already, several meetings between the PI and the panel chair have taken place. In one meeting with all of the teachers, the plan going forward was discussed and all parties agreed to keep close collaboration throughout the project while preparing materials and collecting data and examining outcomes.

Participating class teachers will continue providing feedback during the materials development stage of the project. This feedback has already been valuable in deciding upon the objects of inquiry (content) of the passages. During the intervention, especially close contact will be maintained to ensure the materials that will be (and have already been) developed can be tweaked for maximum effectiveness.

8. Budget

One Research Assistant (RA) is requested for the period from March to November 2014. Funding for an RA is requested for assistance in creating teaching materials during the early stages of the project, and the coding of scripts during the latter stage. For materials creation, the RA would be responsible for working with the team members and taking their proposed ideas and then developing slides and handouts to be used during the intervention. During the stage following the intervention, the RA will be responsible for coding all the scripts and developing categories through a recursive process as described above. S/he would also be involved in writing the final report.

In the spirit of item #22 in the QEF guidelines, i.e., cost effectiveness, for this small-scale exploratory study, minimal extra funding is requested. It should be noted, however, that should the conference attendance mentioned in this application as part of the Dissemination require funding beyond the requested amount, the expenses will be covered by the applicant. In addition, as . is within walking distance of the applicant's present workplace, there will be no local travel expenses.

Expenses	Description	HKD
I. Staff Cost	Mar. 1, 2014 to Nov. 30, 2014	
A Research Assistant	(salary \$17,000 per month + 5% MPF) x 9 months (Mar. 1 – Nov. 30) =\$160,650	\$160,650
	Sub total	\$160,650
II. General Expenses		
Miscellaneous (e.g. postage, photocopying, stationery, etc)		\$9,900
Audit Fee		\$5,000
	Sub total	\$14,900
	Total	\$175,600 (to the nearest hundred)

Asset Usage Plan

Category (in alphabetical order)	Item / Description	No. of Units	Total Cost	Proposed Plan for Deployment (Note)
audio and video equipment	/	/	/	/
book & VCD	/	/	/	/
computer hardware	/	/	/	/
computer software	/	/	/	/
musical instrument	/	/	/	/
office equipment	/	/	/	/
office furniture	/	/	/	/
sports equipment	/	/	/	/
Others	/	/	/	/

Note: for use by school / organization / in other projects (please provide details of the department / centre to which the asset will be deployed and the planned usage of the asset in activities upon project completion).

9. Expected Project Outcomes

As the proposed study is exploratory, the outcomes are not completely known at this stage, although preliminary discussions indicate that students will respond positively to the intervention and be able to counterargue in written English, and at a higher level, be able to broaden their perspectives and become better critical thinkers. As for concrete deliverables, this project will first create an improved knowledge base about the thinking and writing abilities of Primary 6 students. Specifically, this knowledge platform refers to an understanding of the conceptualizing capacity for counterarguing as well as the language ability for expressing such thoughts in English. It is anticipated that this platform will be developed in a form that can be built upon and improved so that, if it is deemed worthwhile,

and a wide body of research suggests it is, more materials can be developed and the concept disseminated in appropriate ways. The degree to which this knowledge base reaches the expectations of the applicant is unknown at this stage; however, whatever the outcome, the findings will be delivered to a larger audience via the submission of a final report. Furthermore, a set of teaching materials will be developed for possible future use or publication. One more tangible outcome will be a workshop for teachers explaining the study and its potential. Intangible outcomes will include a greater awareness among both participant teachers and students of the need to consider alternative viewpoints. If it is apparent that the student response is positive, a larger scale pilot project will be proposed in which the materials will be further developed and applied on a larger population of students.

10. Project Evaluation

As the proposed study is exploratory in nature, no baseline data exist; however, indications can be drawn from the present Primary 6 curriculum as revealed by a survey of related coverage of the proposed teaching content in a textbook (*My Pal is Here*) that has current widespread usage in Hong Kong. This survey reveals that presently, counterargumentation is not part of the curriculum either in spoken or written form. Thus, any evidence of an ability to produce elements of counterargumentation in written English by the students can serve as an indicator of a positive step (assuming it is agreed that developing thinking skills that include a multi-perspective outlook is desirable). The benchmarks for evaluation will arrive once the coding and subsequent analysis of scripts written by each student as described earlier has been completed. The findings themselves arising out of this analysis will serve as one observable benchmark. However, this benchmark can be termed a knowledge platform; a more concrete outcome at a different level measurable by peer review will be the acceptance of an academic paper and conference proposal via a refereed process.

11. Report Submission Schedule

My tertiary institution commit(s) to submit proper reports in strict accordance with the following schedule :

Project Management		Financial Management	
Type of Report and covering period	Report due day	Type of Report and covering period	Report due day
Final Report 1/3/2014 - 28/2/2015	31/5/2015	Final Financial Report 1/3/2014 - 28/2/2015	31/5/2015

12. Sustainability of project outcomes

The sustainability of the project, as explained above, depends to a certain extent on the written responses from students. There are indications (via preliminary discussion with the proposed team members) that the participant students will reach a satisfactory level of understanding and expression. Assuming this level, it is contended that the project has significant potential for sustainability, and growth into a study with an expanded population using the knowledge and materials generated by the present proposal.

It is believed that the core objectives of the present proposal, i.e., to engender an early understanding and respect for the ideas of others among our youth, in other words, a multi-perspective view of life, will strike a chord among not only the participants of the study, but all of those who hear of its findings. Undoubtedly, there will be some surprises along the way; research proposals seldom run as smoothly as expected; however, it is believed that the small-scale, exploratory nature of the study positions it well for future sustainability given its core mission.

13. Dissemination/ Promotion of Project Outcomes

Several deliverables will be generated and disseminated by the proposed project:

1. One final report explaining the project, its findings and its significance.
2. Samples of the teaching materials developed during the project will be included as part of #1 above.
3. At least one workshop each at HKIEd and a local school promoting the teaching materials with a focus on the feasibility for expanding the use of the concepts and materials.