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Multi-text reading strategy for teaching and effectiveness evaluation

Yen-Ling Lin • Cheng-Chih Huang*

Center for General Education, National Taichung University of Science and Technology, Taichung, Taiwan.

*Corresponding author. E-mail: jimhuang@nutc.edu.tw

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Abstract. In this study, the concept of group co-learning and multi-text reading was incorporated into the teaching of Mandarin language in the second year of a Five-year Junior College Program, and attempts were made to create a co-learning environment, design learning courses and reading and writing activities to develop and enhance students' basic self-learning (reading and writing) skills. The teaching effectiveness was examined by testing and questionnaire feedback. In addition to comparing the results before and after teaching by the pre- and post-tests of the National College Language Proficiency Test, organized by the National Taichung University of Education, the study also used the learning feedback questionnaire to examine whether the teaching strategies were accepted by the students. The results showed that the change in the teaching strategy of Taiwanese Mandarin in the second year of Five-year Junior College Program was effective in enhancing students' reading initiative and writing achievement, as well as in building an acceptable learning identity.

Keywords: Taiwanese Mandarin, teaching, five-year junior college program, learning community, flipped teaching, reading skill, reading instruction.

INTRODUCTION

Students in the vocational system regard the learning of professional subjects and the training of skills assessment as their top priority and tend to face general subjects with a perfunctory attitude, especially the Taiwanese Mandarin subject, which leads to poor reading and comprehension skills, as well as "learned helplessness" due to frustration (Marks, 1998). Therefore, it is a major objective of this study to change the cavalier learning attitude of the students in the Five-year Junior College Program toward Taiwanese Mandarin.

The strategies proposed in this study to improve the learning of Taiwanese Mandarin were learning community and multi-text reading. A teaching strategy to improve students' reading and expression skills is the group learning model, which comes from the concept of "learning community" advocated by Japanese professor Manabu Sato. This concept suggests treating the school, parents,

and the local community as a learning circle to reform the past problems of teachers teaching in a unidirectional manner and students learning alone, resulting in the loss of a sense of belonging and interest in learning; through co-learning and instruction, children can experience the joy and achievement of learning (Yu, 2014). The concept of co-learning is to change the classroom into a space for teachers and students to learn together by setting a weekly reading theme and having the teacher and students read the recommended text separately and take turns introducing the text in the classroom for everyone to understand the content and expand their thinking. This teaching strategy utilizes self-learning in flipped teaching to spread reading outside the classroom while sharing and discussing the understanding of the text in the classroom. With the teacher's help, students are divided into groups according to their average language proficiency. Under the

control of a common theme, the group can choose to extend the reading text for co-learning. In the classroom, through the sharing of group reports, the diverse perceptions of the text are presented to stimulate and develop students' ability to integrate, think, analyze, and summarize. This is complemented by a weekly 5-minute handwritten summary of the reading experience, which allows students to explore the topic more in-depth and increase the effectiveness of learning literature and culture practically. Moreover, the multi-text reading teaching strategy is a new form of extended reading instruction in which teachers instruct students on multiple related texts within a period (Li, 2018). To improve students' reading skills, broaden their knowledge horizons, enrich their writing content, and enhance their core language literacy, teachers need to attach importance to the selection of materials in the text and properly guide reading methods knowledge. However, and leverage prior the implementation of multi-text reading must supplemented by a discussion process, which is easy to stimulate students' learning motivation.

As such, this study designed multi-text reading as the second variable of Taiwanese Mandarin teaching. Combined with the aforementioned teaching strategies of reading and learning in groups, the teaching activities are structured as a learning activity with basic rules and structures through the process of discussing and sharing questions designed for the reading topics: Students read together in groups, discuss the meaning of the text, speak (report on the text and answer questions), listen (report on the content of different groups), observe (integrate the text of each group, similarities and differences, and conduct peer-review), and write (extended thinking and perceptual association in a written expression). In receiving the understanding and interpretation of different teams, the students build their understanding of the theme of the text, and solve their doubts and share their feelings about the theme, thus enhancing their motivation and drive to read, and promoting the development of reading behaviors and expression skills.

LITERATURE REVIEW

This study focuses on the concepts of "learning community" and "multi-text reading" to enhance the reading and writing skills in Taiwanese Mandarin among second-year students in the Five-year Junior College Program at a national university of science and technology. Therefore, the overall study involves the impact of Sato's concept of a "learning community" and the application of the "multi-text reading" strategy to Taiwanese Mandarin teaching.

According to "The Learning Revolution: Reform from the Classroom" (Huang and Zhong, 2012), the concept of "learning community" has its own history and has been popular in various countries since 1910. In Japan, the

concept has been promoted in 3,000 schools since 1993 and has also been followed by other Asian countries. In Taiwan, 39 elementary and middle schools applied for pilot learning community schools in 2013, led by the Department of Education, Taipei City, which shows that the concept of learning community has been highly regarded (Chen et al., 2015). Learning community teaching shifts from teacher-centered teaching to studentcentered teaching where teachers listen more and talk less, and foster an equal, open, respectful, and inclusive relationship with students. The implementation of a learning community has its advantages and difficulties. It can improve learning efficacy, enhance peer friendship (Huang, 2011; Chen, 2013), and create a good learning environment (Wu et al., 2012), which are the most obvious advantages. However, it can increase teachers' workload; further, teachers are prone to different opinions and maladaptation (Weng et al., 2013). Students resist changing the learning status guo or misunderstand loud conversations as heated discussions, and it takes too much time to turn the tables and realign positions every time (Zheng, 2012). Some researchers gather that the learning community in Taiwan is not fully understood by all teachers, which can easily cause cognitive bias (Gao, 2012), making the practice of learning communities questionable.

Multi-text reading instruction refers to the process in which teachers group together texts with certain characteristics and rules on particular topics(s), select multiple texts, and together with students, conduct a collective discussion on the topic (Li, 2018). The multi-layered and diverse nature of textbooks can stimulate students to think in multiple ways, equip them with the learning experience of seeking common ground while reserving differences and enhance their cognitive flexibility (Wang, 2007). This shows that reading multiple texts makes it easier to obtain a good reading experience (Wang, 2017; Zhan, 2018). In addition, curriculum planning can also seek differences in similarities, finding differences in topics that are the same or similar (Bi, 2017).

In terms of teaching-related research, Chen used a quasi-experimental study to explore the obvious effects of cooperative learning and reading comprehension strategies on students' reading achievement and reading attitudes and concluded that they are worth promoting, providing the author with a practical approach to quasiexperimental research (Chen, 2002). Li (2005) examined the correlation between failure attribution and reading and comprehension strategies of higher education students using a questionnaire survey. In the works of Xu (2008) and Wu (2008), questionnaires were adopted to examine the significant positive effects of reading attitudes and comprehension abilities of higher education students. Zeng observed learning effectiveness and participation attitude from the students' perspective (Zeng, 2014). Chen and Gong used an action research method to explore the effect of the Xuesida teaching method on Taiwanese

Mandarin learning among middle school students (Chen and Gong, 2016). Lin also employed the action teaching method to investigate the teaching process and reflections on the application of the Xuesida teaching method to social science subjects in senior elementary schools, as well as the impact of the Xuesida teaching method on the critical thinking tendency of senior elementary school students. Further, Zeng took teachers' professional learning communities as the research subject to probe into the application of the Xuesida teaching method in flipped teaching to non-Taiwanese Mandarin majors (Zeng, 2018).

Teaching activities and curriculum design

The objective was to teach Taiwanese Mandarin to second-year students in the Five-year Junior College Program and to improve their reading and writing skills. This study adopted the concept of a "learning community" and the teaching strategy of multiple reading to design and implement the curriculum.

Classroom environment setting

As most students do not go to the library to borrow books, the author set up a book corner in the classroom after purchasing and collecting books related to course topics and allowed students to borrow them at any time according to their progress. Through the bonus point mechanism, students were encouraged to select texts to read and complete notes in a predetermined format. Each module was taught through group reading and peer review mechanisms to create a motivating reading atmosphere among students.

Use of teaching resources outside the classroom

Through the "Recommend a Good Book" activity, teachers and students from other classes were invited to participate in the voting, and students in partner classes were invited to put stickers on their favorite books. Faculty members were also invited to comment on the presentation performance of each group to expand the range of students' presentations. Seniors who graduated were also invited to participate in the program and give "face-to-face" lectures to introduce the industries that graduates can work in, the requirements, visions, and the journey involved, so that students can develop a clearer understanding of their future career plans and enhance their communication skills, cooperation skills, problem-solving abilities, and attitudes in the workplace.

Curriculum design and implementation

Language skills training and habit formation require longterm accumulation. In this study, we implemented a Taiwanese Mandarin curriculum for the second-year students in the Five-year Junior College Program, namely, the establishment of basic self-learning skills and patterns, creativity and appreciation, and literature and emotions (including writing about family, love, friendship, and emotions). Each module had several assigned texts and self-selected texts, and the training period was 36 weeks across the first and second semesters of the second year in the Five-year Junior College Program (different classes). The module begins with a model for developing students' self-learning skills and allows them to practice mastering the meaning of words, developing a sense of language, and practicing thinking through short, simple, and interesting texts. This aims to develop basic language skills and engender confidence. Through the process of reading texts together in groups, students can overcome their fear of classical Chinese texts and change their negligent attitude toward vernacular literature, thus guiding their thinking, searching for answers to the questions asked, and reaping the harvest of reading in the texts.

Classroom activities allow students to distinguish between "rational cognition" and "perceptual cognition" through note-making. Rational cognition needs to distinguish, compare, summarize, judge, analyze, infer, and integrate information before it can be finally applied. In contrast, perceptual cognition conveys the construction of an ideal world through the depiction of things in a work, and allows students to express their subjective experiences and feelings, and write down the thoughts they have at the time through the thoughts, emotions, images, insights, and contemplations associated with a text. Through repetitive exercises, students can establish a basic pattern of self-learning and extend it to each subsequent unit, deepening and broadening their reading of the text.

Three Taiwanese Mandarin classes were held each week at the Junior College. The author employs both the learning community and the multi-text reading variables to create a basic classroom model in which students can demonstrate their learning outcomes. Starting with an assigned topic and the selected reading text, students worked in groups to complete the reading and discuss the work in advance. In the formal classroom, the focus is on reporting on the understanding and extended thinking of the group reading (completing the process of learning, thinking, discussing, and expressing), while the teacher provides explanations of the text and helps to integrate the views and final conclusions of the groups. At the end of the course, students will be asked questions for "Five-minute Scribbling" to reflect and express their thoughts. The operations of group reading and classroom discussion are shown in Table 1.

METHODS

Selection of research methods

This study uses the concepts of "learning community" and

Table 1. Operations of group reading and classroom discussion.

Instructional steps	Activities	Objectives to be achieved
Group learning	Group reading and problem discussion before class	Read together in groups to increase students' patience and interest in participation and to strengthen their willingness to continue reading. Read in groups to reduce misreading and enhance comprehension. Expand the perspective of thinking and experience the different perspectives of peers in the reading process. Heterogeneous grouping will be used, and each group will have a good leader to lead the group in reading and completing tasks before class. A KPI (Group Discussion Sheet) will be designed for peer-to-peer grading.
Group reporting	Each group should complete the above discussion and complete the group report within the time limit each time they read the text.	Train students to be patient and polite by listening to other groups' reports. Design a KPI mechanism for grading, and announce the strengths and weaknesses of each group, their scores, and suggestions for each unit, to establish a positive competition among groups and motivate students to participate in the reading. The group report should have a simple PowerPoint presentation to train students to integrate key points and express themselves orally.
Teacher's lecture	The teacher will provide explanations for the text in progress, share the reading text, integrate the viewpoints of each group, guide the extended thinking of the unit, and make a general conclusion after reading the text.	Design classroom learning notebooks, plan the key points of the notebooks, and regularly check the contents of the notebooks to develop students' ability to listen to the lectures and grasp the key points for recording. Adjust/correct students' key points of extended thinking or misunderstandings through the questions presented in each group report. Link the common themes among the modules and guide students to enhance the level and depth of their thinking. Open class discussions or group activities as needed to sustain students' attention.
Five-minute scribbling mechanism	After completing the reading and extended thinking, the topics will be written in a random form, without any restriction on the content to reinforce the impression of learning.	Five minutes are set aside for each text or topic to guide students to write and train them to express themselves smoothly and accurately. The teacher will give positive feedback on each writing to form a mechanism for discussion between the teacher and each student and to develop a sense of identity for subject learning.

Table 1. Contd.

Achievement assessment

Midterm/final exams each semester

Pre- and post-tests of language
proficiency tests

Administration of the Teaching Feedback Questionnaire at the end of the semester by the Office of Academic Affairs and the author (anonymous) Midterm/final exams each semester to test reading skills and writing skills and conduct regular learning effectiveness tests. Language proficiency testing is conducted once in each semester (before the first semester of instruction and after the second semester of instruction), mainly through tests administered by the Ministry of Education because the results are more credible.

The Office of Academic Affairs and the author's end-ofsemester feedback questionnaire allow students to express their feelings about learning.

"multi-text reading" as the variables of teaching research, and the main points regarding this are as follows:

- 1. The teaching concepts of learning community and multitext reading help improve the reading skills of the target students.
- 2. The teaching concepts of learning community and multitext reading help to improve the writing skills of the target students.
- 3. The teaching concepts of learning community and multitext reading help the target students achieve the core goal of Taiwanese Mandarin teaching in the 108-part syllabi.

This study used the test method to examine whether the two teaching variables affected teaching effectiveness. Students were asked to participate in the National Assessment of Language Proficiency for College Students (NALPC) administered by the National Taichung University of Education, and the results of the pre-and post-tests were collected and analyzed. This test is based on reading and writing tests, which are in line with the default goal of improving students' reading and writing skills as discussed in this study.

The results of the test could not show the depth of influence of the two teaching variables of learning community and multi-text reading, so the results of the student feedback questionnaire were also used to illustrate the relevant research results.

Participants

The participants of this study were 83 second-year students (aged 16–17 years) in the Five-year Junior College Program at a national university of science and technology where the author teaches. The original classroom pedagogical intervention model was adopted, and the same teaching methods and strategies were implemented with the participating classes. The instructor added a declaration at the beginning of the survey, stating that the curriculum will only be used by academic institutions, and not for business purposes. All participants were unaware of the hypotheses, and the questionnaire did not include the participants' personal details, with their

names kept anonymous. In addition, two questionnaires were related to the evaluation of teaching pedagogies. Therefore, the ethical procedure was followed and matched the regulations of exemption from the IRB review in the Ministry of Health and Welfare, Taiwan (Ministry of Health and Welfare, 2012). All data were also stored securely, with access limited to the researchers.

Implementation steps and data collection/analysis

During the 3-credit second-year Taiwanese Mandarin course in the first and second semesters, students read multiple texts in small groups, discussed problems in groups, and produced presentations, which enhanced their reading, analyzing, organizing, writing, and expressing skills. During the teaching process, feedback sheets and writings of learning experiences were used to collect students' learning experiences and feelings about the teaching contents to adjust the teaching in a timely manner. Finally, the results of the university's "curriculum and teaching opinion statistics" were used to corroborate the results of the language proficiency tests.

In this study, there are two main parts of data analysis. One is the quantitative data related to the reading and writing tests, including the pre- and post-tests, and the data on whether to improve. This is the principal basis for the quantitative data in the study. There was also a feedback questionnaire that focuses on curriculum design, self-assessment of learning attitudes, and teacher instruction. The other is the collation of qualitative textual data, which are open-ended questions on the learning feedback form at the end of the semester, and this part is the primary qualitative data for reference in this study.

RESULTS AND DISCUSSION

Effectiveness of pre-test/post-test of language literacy test

The language literacy test was scheduled to coincide with the off-campus testing platform. The test was administered in the fourth week after the first semester of the 2020

Table 2. Average tota	l reading rate and	average writing	score in the 2020 school y	/ear.

Average total reading correct rate in the 2020 school year	Pre-test	Post-test	Percentage difference between pre- and post-tests
All Taiwan	75.1%	73.9%	-1.2%
National Taichung University of Science and Technology	75.4%	76.3%	+0.9%
Classes taught by teachers (not using two teaching strategies)	74.8%	67.2%	-7.6%
Classes taught by teachers using two teaching strategies (Class A and Class B)	65.3%	79.6%	+14.3%

Average writing score in the 2020 school year (out of 24)	Pre-test	Post-test	Difference between pre- and post-tests
National Taichung University of Science and Technology	13.0	12.9	-0.1
Classes taught by teachers (not using two teaching strategies)	9.2	14.0	+4.8
Classes taught by teachers (Class A and Class B)	15.0	16.4	+1.4

school year, and the post-test was administered in the 11th week after the midterm exam in the second semester of the 2020 school year, to examine the teaching effectiveness at the 24-week interval of the 2020 school year (2020–2021), to compare the reading and writing scores of the students in the two classes, and to explore whether there is any benefit from the test among the students in the National and Taichung universities of science and technology. It is possible to objectively determine whether the two teaching variables of learning community and multi-text reading sharpen students' reading and writing skills.

In Taiwan, the reading test of the NALPC is designed to test students' reading skills by reading short texts and setting multiple-choice questions from the text, with a total of around 26 questions that are functional, critical, and narrative in nature depending on the meaning of the text; the maximum possible score is 100. In addition, the writing test of the NALPC is designed to summarize the main points of the text, integrate the information in the text, and guide writing. There are a total of four writing questions each time, and the maximum score is 24 points.

As can be seen from Table 2, the performance of the pre-test correct rate (65.3%) of the classes taught by teachers using two teaching strategies (Class A and Class B) was lower than that of the classes taught by teachers not using two teaching strategies (74.8%), that of National Taichung University of Science and Technology (75.4%), and that of the schools participating in this language literacy test in Taiwan (75.1%). However, in the post-test, the correct rate (79.6%) of the classes taught by teachers using two teaching strategies (Class A and Class B) was higher than that of the classes taught by teachers not using two teaching strategies (67.2%), that of National Taichung University of Science and Technology (76.3%), and that of the schools participating in this language literacy test in Taiwan (73.9%). The total reading correct rate of the classes taught by teachers using two teaching strategies (Class A and Class B) increased by 14.3%.

In terms of writing, the average writing score in the pre-test

(15.0) of the classes taught by teachers using two teaching strategies (Class A and Class B) was higher than that of the classes taught by teachers not using two teaching strategies (9.2) and that of National Taichung University of Science and Technology (13.0). The language literacy testing schools did not provide writing performance statistics for all participating schools in Taiwan, so it was impossible to compare them. However, in the post-test, the average writing score of the classes taught by teachers using two teaching strategies (Class A and Class B) was 16.4, an increase of 1.4 from the pre-test. It was still higher than the writing scores of the classes taught by teachers not using two teaching strategies (14.0) and of the National Taichung University of Science and Technology (12.9). However, the classes taught by teachers using two teaching strategies (Class A and Class B) only improved by 1.4 points in the writing test, which was not as much as the reading test. It shows that there is room for teachers to adjust their teaching strategies in the writing section and suggests that more opportunities should be created for students to practice.

In terms of the overall performance of language literacy (both reading and writing), according to the statistics provided by the test host schools, Table 3 shows that the overall language literacy scores of the classes taught by teachers using two teaching strategies (Class A and Class B) increased by 10.2 points, which was 6.0 points higher than that of the classes taught by teachers not using two teaching strategies and 0.2 points higher than that of National Taichung University of Science and Technology. The results of the test showed that the teachers' use of two teaching strategies in language teaching helped improve students' language literacy.

Results of the feedback questionnaire

At the end of the course, a questionnaire was designed to address the issues of the instructional design and to understand students' self-assessment of learning attitudes

Table 3. Language proficiency test results in the 2020 school year.

Language proficiency test results in the 2020 school year	Pre-test	Post-test	Difference between pre- and post-tests
National Taichung University of Science and Technology	64.8	65.0	+0.2
Classes taught by teachers (not using two teaching strategies)	56.7	62.7	+6.0
Classes taught by teachers using two teaching strategies (Class A and Class B)	63.8	74.0	+10.2

Table 4. Course participation.

	Course participation					
	Strongly agree	Agree	No opinion	Disagree	Strongly disagree	
I can master the content of each module	27.6%	67.2%	5.2%	0%	0%	
I think this course is helpful for me	37.9%	56.9%	5.2%	0%	0%	

Table 5. Self-review.

	Self-review					
	Strongly agree	Agree	No opinion	Disagree	Strongly disagree	
I can feel the improvement in my understanding	36.2%	51.7%	12.1%	0%	0%	
I can feel the improvement in my ability to express myself	29.3%	58.6%	10.3%	1.8%	0%	
I can share my ideas in a group and respect the expression of others	43.1%	55.2%	1.7%	0%	0%	

Table 6. Teacher's leadership.

		Teacher's leadership					
	Strongly agree	Agree	No opinion	Disagree	Strongly disagree		
I agree with the way the teacher leads	39.7%	46.6%	12.1%	0%	1.6%		
The teacher can give me the right and professional leadership	37.9%	53.4%	8.6%	0.1%	0%		

and course acquisition. The questions were assessed using a five-point Likert scale with a certain degree of reliability. The questions are shown in Appendix A. The questionnaire was filled in anonymously. Since the school entered the state of distance learning in mid-May 2021 (after the 12th week), a total of 58 valid questionnaires were returned from two classes of students until the 18th week of the final semester, and the results of the questionnaire analysis are shown in Tables 4 to 6.

The feedback questionnaires at the end of the 2020 school year showed students' qualitative feedback on the curriculum, teachers, and peer learning. Regarding two teaching strategies of learning community and multi-text reading used in Taiwanese Mandarin teaching in the program, the questionnaires for students' feedback on the curriculum, teaching, and students' participation were mostly approved by the students, which can be regarded as evidence to support students' participation in the preand post-test progress of language literacy testing.

Problems and solutions

Although the results of the study confirmed that the integration of the two teaching strategies of learning community and multi-text reading into Taiwanese Mandarin teaching did help students improve their reading and writing skills, the process of the study was not entirely problem-free. The review of the aforementioned curriculum planning and implementation process can be divided into three aspects to explore the problems and solutions for the reference of teachers.

Aspect of students

Grouping: Group teaching is necessary for students to carry out the "learning community" strategy. In response to the actual class size and teaching time allocation, the author initially adopted a heterogenous group of around six

students and encouraged excellent group leaders to lead the team. However, when students were unsure about the assignment, they reported that the pressure was either on the group leader or on the students who did not want to let the group perform too poorly, so some students protested that the group had peers who did not work. After listening to the students' suggestions, the author's strategy was to maintain a fixed assignment of tasks for the group leaders, and to rotate the tasks among the members of each group: the data leader was responsible for collecting and organizing text-related information; the clerk leader was responsible for recording the status of group discussions and filling out peer evaluation forms; the presentation leader was responsible for consolidating the content of the report; and the report leader was responsible for presenting the report on stage. The group leader can adjust the number of students to complete the task according to the needs of each text reading; for example, the data leader can be one person, or two people can work together, which not only cultivates the leadership of the group leader, but also cultivates the ability of students to work together as a team and appreciate the responsibilities of different tasks. The students' complaints about this arrangement were reduced through the "learning by doing" experience of the different roles in the group.

Setting up of peer review form: The Peer Review Form (Appendix B) was originally an important mechanism for training students to listen quietly to their peers' reports, as they had to give their opinions on the reports of groups other than their own. After the students responded to one of the feedback questionnaires, the author had the group members take turns completing it. Some students later commented that they "finally understood that grading was not a simple task and that they had to listen very attentively before they could advise their classmates." The author did not just conduct a peer review among the groups but also set up a rubric to calculate the scores. The teacher had to compile the scores and suggestions of each group for each unit and announce them in the class community to provide a basis for each group to improve the next time around.

Organization of the learning manual: The author predesigned the lesson notebooks according to the scheduled progress of the modules and asked students to write by hand to help them consolidate what they had learned. Whether students were writing in class or at home, they would need to listen, recall, and reflect, and then complete each item. At the beginning of the course, many students still waited to see if the teacher would correct them; the author did correct them and gave comments or suggestions, and most students completed their notes to enhance their learning.

Aspect of teachers

It is very important to explain before the course: In

practice, teachers need to establish a consensus with students at the beginning of the semester. If there is not enough explanation, teachers and students are prone to poor adaptation and communication, and it is not easy to establish a good learning environment. Therefore, it is important to explain the course well before it is conducted.

It is necessary to highlight the function to group leaders: It is easy for group leaders to question their responsibilities in the group learning session. The author treated group leaders as important helpers in teaching from the beginning and gave them the utmost importance and trust. Regular appointments were required during the teaching period (recommended after each midterm/final exam). Designing "group discussion sheets" to foster a sense of commitment and responsibility among group leaders helped resolve many individual students' learning difficulties more quickly.

The "Five-minute Scribbling" requires patience: "Five-minute Scribbling" is an important activity that takes part in the classroom in which students' ideas and expressions are evaluated. If they only write but do not give feedback, students will easily lose the motivation to participate, but this part will bring a heavy workload to the teacher because it is better for the teacher's feedback to be sent to students immediately (usually for each module). Between writing and feedback, the teacher and students will form a textual dialogue situation, which can shorten the distance between them and maintain students' willingness to learn.

Aspect of curriculum

Adjusted learning community: The "learning community" concept of teaching has a large collaborative mechanism that requires cooperation among teachers, the interaction between classes, and the entry of parents into the classroom, and even the integration of many resources from the school community to provide student learning. This part cannot be done in the real teaching environment and must be adjusted. The author tried to find resources, such as collaborative teachers and classes, setting up a book corner in the classroom, and inviting seniors in their professional fields to come back to the school and share their work and experiences, so that students not only read multiple texts in groups during the school year but also have more opportunities to apply their learnings and experience life.

Curriculum planning close to life experiences: Curriculum planning focuses on the multi-text reading strategy from students' perspective. Selecting texts or topics that students are interested in allows them to develop the motivation of "wanting to know more" and the ambition of "wanting to be more complete than other groups" to stimulate their enthusiasm for learning, especially in the case of the same text. If the group

chooses its own text to present, there is also a basic requirement for the report structure. For example, we can see students' brilliant performance in understanding an author, commenting on a text, and even thinking about other stories that can be associated with the text in an extended way. As the topics of the course are close to life, students are more enthusiastic to open the books and read them quietly. This shows valuable progress for the young generation, who are deeply affected by computers, communication, and consumer electronics products.

CONCLUSION

Looking at the results of the one-year teaching program covered by this study, it can be confirmed that the author's intended goals have been achieved. By allowing students to participate in the pre- and post-tests of the NALPC, the teachers were able to obtain objective feedback on the curriculum design and teaching effectiveness, and the students' reading and expression skills were improved. Furthermore, the final student feedback questionnaires showed that the author's teaching was recognized by most students, and the feedback statistics were consistent with the quantitative results of the pre- and post-tests of the Ministry of Education's Language Proficiency Test for College Students.

The kernel of the learning community strategy is that the teacher does not stop at one-way teaching but treats the students as the protagonists of the learning process in the classroom, while the teacher changes their role to that of a thought leader and facilitator. Hence, learning in the classroom can be completed smoothly. The concept of a learning community offers the possibility of transforming the teaching of Taiwanese Mandarin in the second year of the Five-year Junior College Program, allowing students to stimulate, learn, support, and cooperate with each other under the mechanism of peer learning. The multi-text reading strategy expands students' reading scope and enhances their ability to integrate/analyze under the guidance of the theme and report their conclusions to their peers. It is evident that both teaching strategies are useful variables for students to improve their reading and expression skills.

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REFERENCES

- **Bi F (2017).** A brief study on the instructional design of multi-text reading. Literat. Educ. (6):89.
- Chen L, Chen J, Chen X (2015). Is your classroom out? Reflections on the model and strategy of introducing learning community schools in Taiwan. New Taipei City Education Learning Community Special Issue. 2:18-45.

- Chen P, Gong X (2016). Flip it, Mandarin! An action research on the learning of Chinese language among middle school students by Xuestar teaching method. Educ. Pulse (8):42-56.
- Chen W (2002). Research results of cooperative learning reading comprehension strategies on reading achievement and reading attitudes of vocational students. Master's thesis. National Changhua Normal University, Changhua.
- Chen Y (2013). "Learning Community" changes the landscape in the classroom. Taiwan Educ. Rev. Monthly 2(2):159-160.
- **Gao C (2012).** Full of interest, the joy is also Tao: the application of the concept of "learning community" in class management. New Taipei City Educ. 5:35-39.
- **Huang Y (2011).** Stimulate the joy and potential of learning the introduction and implementation of "learning community" in Japan's educational reform. Teachers' World 171:39-42.
- Huang Y, Zhong Q. (translation) (2012). The Revolution of Learning-Reform from the Classroom (Original Author: Sato Gakuin). Taipei: Commonwealth Magazine. (Original publication year: Sato Gaku, 2012)
- Li J (2005). The effects of reading attitudes and attribution styles of higher vocational students on reading comprehension strategies. Master's thesis. M.S., National Taiwan University of Science and Technology, Taipei.
- Li M (2018). A brief introduction to multi-text reading teaching. Literary Life (12):192.
- **Marks SB (1998).** Understanding and preventing learned helplessness in children who are congenitally deaf-blind. J. Visual Impair. Blind. 92(3):200-211.
- Ministry of Health and Welfare (2012). Regulations for Organization and Operation of Human Research Ethics Review Board. MOHW. Available online: https://dep.mohw.gov.tw/doma/dl-16078-31bb0e95-2407-4323-9bbf-a62b7f8dcee3.html (accessed on 5 July 2012).
- Wang Q (2007). The application of multiple teaching materials in the action research of "class management." J. Natl. Taiwan Normal Univers. 52(2):1-21.
- Wang Y (2017). Talking about the strategies and thinking of multi-text reading. Teach. Res. (2):64.
- Weng M, Huang C, Lai Y (2013). Learning community pilot experience. Taiwan Educ. Rev. Monthly 2(1):91-92.
- **Wu B (2008).** A study on the relationship between reading attitudes and reading comprehension among vocational students. Master's thesis. National Changhua Normal University, Changhua.
- Wu L, Ma Y, Weng X (2012). Learning community spreads in Bailing, Taipei City Government Education Bureau editor-in-chief "Learning Community and Teaching Research Pilot School, Cross-border Visit Report (1st Group)", Taipei City Education Bureau.
- Xu X (2008). Research on the relationship between reading behavior and reading comprehension ability of higher vocational students. Master's thesis. National Changhua Normal University, Changhua.
- Yu, Z (2014). Talking about the "learning community" of Sato school. Taiwan Educ. Rev. Monthly 3(5):122-125.
- **Zeng Q (2018).** Flipped Teaching—Talking about the possibility of the Xuestar teaching method in the development model of teachers' professional learning community. Taiwan Educ. Rev. Monthly 7(7):105-111.
- Zeng W (2014). From the perspective of students, to explore the influence of the learning effect of Xuesida teaching method and the intention of students to participate in flipped teaching. Master's thesis. Private Chung Hwa University, Hsinchu.
- **Zhan W (2018).** Integrating Action Research into Citizen Action-Oriented Environmental Literacy Courses with Multi-Text Reading Discussions Taking a Sustainable Global Village as an Example. Master's Thesis. Private Tamkang University, Taipei.
- Zheng Y (2012). From the perspective of teachers, we need to learn what we need to learn before changing the pilot learning community. Retrieved from Taipei 2012 National High School Pilot Learning Community Program Korea International Exchange Visit Report Taipei City Education Bureau website: https://www-ws.gov.taipei/001/Upload/public/Attachment/2112917495948.pdf.

Appendix A: Course Satisfaction Questionnaire

Hello, dear students!

Your heartfelt and honest responses to this questionnaire will be an important reference for our teachers in making future adjustments to our teaching and curriculum planning. Please read the questions carefully and then fill them out according to your personal situation. Thank you very much for your cooperation. This questionnaire is divided into three sections, including course participation, self-review, and teacher's leadership.

	Very satisfied	Satisfied	Fairly satisfied	Dissati sfied	Very dissatisfied
1. Course participation					
1. I can master the content of each module.					
2. I think this course is helpful for me.					
2. Self-review					
1. I can feel the improvement in my understanding.					
2. I can feel the improvement in my ability to express myself.					
3. I can share my ideas in a group and respect the expression of others.					
3. Teacher's leadership					
1. I agree with the way the teacher leads.					
2. The teacher can give me the right and professional leadership.					

Appendix B: Example of Peer Review Form (Part of the General Form)

Peer Evaluation Form for Taiwanese Mandarin Course in the Second Semester of the 2020 School Year

Week: Week 2

Class: Class B, Department of Accounting and Informatics II

Group	ltem	Score	Reason for scoring	Specific advantages of the group	Suggestions for improvement
Group 1	Presentation Production	3.6	Easy to understand, simple and clear, concise content, no highlighting		Time is not well
	Oral Presentation	3.6	Lively, fluent, smooth oral expression, good storytelling	Very lively presentation, complete PPT content, detailed text	controlled, the speech is smooth but not intoned, the speed of speech can
	Text Mastery	4.1	The main points are presented, well understood, accurately grasped, and fully explained	description, and clear storytelling	be slowed down, and the key points can be marked with colors.
	Extended Thinking Performance	2.5	No key points, not covered, mediocre points, no oral report		

Appendix B: Cont

	Presentation Production	2.9	Too many words, no focus, too dark, clear column	Cood time	The tone of voice is	
Group 2	Oral Presentation	3.1	Speed of speech is fast, clear, reads from a brief report, smooth oral presentation	Good time management, sufficient content for extended thinking, clear presentation,	flat, the presentation can be clearer, don't read it out, the text can be better, not	
	Text Mastery	3.3	Cannot understand the main points, clear explanation, precise grasp	great text selection, Taiwanese atmosphere, clear oral expression	looking at the stage, the speech is a little blurred, the presentation content	
	Extended Thinking Performance	4.3	Very relevant thinking, profound viewpoints, echoing the content of the text	Grai expression	is slightly reduced.	
	Presentation Production	4.1	The picture is neat, beautiful, with a focus on the picture, the layout is mediocre	Good timing, lots of additions, extended	Speech is a bit fast, text can be more	
Group 3	Oral Presentation	3.9	Good expression, a bit stuck, smooth oral expression, too fast	thinking from different positions, stable stage	explanatory, speech can be clearer, presentation can be more exquisite, text is not detailed enough, oral pace can be a bit slower	
	Text Mastery	3.6	Clearly understand the main points, somewhat concise, fully grasp the content	presence, empathy, and clear expression of content		
	Extended Thinking Performance	4.4	Deeply reflective, thoughtful, close to reality			
	Presentation Production	4.1	Nice and neat layout, clearly labeled, properly organized		Not familiar with the presentation, presentation could be more fluent, presenter could be	
Group 4	Oral Presentation	2.7	Only expresses the content of the presentation, clear and small tension, intermittent speech	Good presentation, accurate extended thinking with practical examples,		
	Text Mastery	3.6	No special focus, precise focus, fully grasp the content	clear typography with key points, lots of supplements	more relaxed, more practice in oral presentation	
	Extended Thinking Performance	4.4	Point out many problems, deep points of view, empathy, self-reflection			
	Decembetion		To a second sold sold for second			
	Presentation Production	2.7	Too many words without focus, not easy to read, too small words	The content is simple and clear, the	The presentation could be more organized, the	
Group 5	Oral Presentation	3.1	Reads from the script, sometimes gives own viewpoint, no highs and lows	timing is just right, the content is rich, the text is complete, the explanation is	content should be more concise, not familiar with the report, don't keep	
	Text Mastery	3.4	Easy to understand the content, the text says a lot, can grasp the content	clear, the extended thinking has ideas, and the key points are well explained	looking down at the script, the words in the presentation are	
	Extended Thinking Performance	3.7	It is relevant to us, fully oriented, and has a deep perspective	are well explained	too small, and the speech is bland.	

Appendix B: Contd

	Presentation Production	3.7	Simple and clear, neat and tidy, well-illustrated, with key points marked	The content is simple and easy to	The tone of voice can be more, the speed of speech is too fast, do not read from the script, keep looking at the phone, the meaning of the article can be added to the text.	
Group 6	Oral Presentation	3.1	Reads from a script, but makes key points, speaks fluently, speaks too fast	understand, the presentation is well illustrated, the presentation layout		
	Text Mastery	3.6	Good comprehension, good explanation, fair grasp of key points	is clear and focused, the extended thinking is rational, and the oral		
	Extended Thinking Performance	3.7	Profound observation, rational and empathetic, many key points	expression is great.		
	Presentation	0.7	Neat but too simple, can't find the		-	
	Production	2.7	main points, concise content	The extended thinking is close to	The content of the presentation can be embellished, the expression can be more fluent, don't read from the script, don't look at the stage, and the PPT can have larger spacing between	
Group 7	Oral Presentation	3.0	Smooth expression, eye contact, reads from the script, no intonation	modern life, the text is complete, the extended thinking is		
	Text Mastery	3.1	Easy to understand the main points of the article, wrong main points, good grasp	empathetic, there is a lot to add, the timing is just right, and the volume is appropriate.		
	Extended Thinking Performance	3.3	Asking modern questions, empathetic, a little short on content	арр ор нас	words and sentences.	
	Presentation		Consider along the little toyt lets of			
	Production	3.3	Concise, clear, too little text, lots of emphasis, rich content	Prepared, large		
Group 8	Oral Presentation	3.1	Stutters, reads from a script, speaks slightly fast, speaks clearly and at a moderate volume	enough font size, clean layout, lots of extended thinking, many key points,	Always then, expression can be more fluent, not looking at the stage,	
	Text Mastery	3.7	Precise grasp of the subject matter, and capture the main points	text with additional explanations, clear speech and moderate volume	time is not good, can practice more report content	
	Extended Thinking	3.2	The topic is worth thinking about but not finished			