行政院國家科學委員會補助專題研究計畫成果報告

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行政院國家科學委員會專題研究計畫成果報告

學習成果檔案在語言學習上之設計、實施與評量

Portfolios in Language Learning:
Design, Implementation and Evaluation

一、　　　中文摘要

　　學習成果檔案是學習者學習過程各階段表現成果之收集，並用以做為有別於傳統測驗之一種評量方式。它源自美術與建築設計，後來廣泛應用於教育上，強調評量應以學習之自然呈現為主。使用學習成果檔案作為評量可以避免測驗帶給學生的壓力，了解學生學習的過程和進展，並可增進學生自我主導學習和自省的能力。

　　近年來國外亦有許多報導使用學習成果檔案於語言教學上，並有各類型成果檔案之設計應用。學習成果檔案常用於寫作課程，因為從學生長期的寫作作品可以分析瞭解其寫作能力之進展情形，而且寫作評量難以測驗方式進行，而適合以作品來評量。

　　本研究探討學習成果檔案於英文閱讀課程之使用，研究包括學習成果檔案之設計、實施、與評量三階段。設計階段探討閱讀成果檔案之目標、準則與內容之設計、與教學內容之互動、以及學生如何編寫成果檔案等方面之規劃。實施階段則是依設計好的計畫逐步實施，包括擬定指導綱領、說明實施成果檔案之學習意義、指導編寫過程、及收集完成之成果檔案。評量階段主要為分析並評量學生完成之閱讀成果檔案及實施意見調查，瞭解實施成效及學生對編寫成果檔案之看法。

　　研究結果顯示學生對於閱讀新聞、雜誌、小說故事、有關運動及電影之報導等主題較感興趣。從檔案包括之內容顯示大部分學生仍著重字彙及片語等之學習而較少省思閱讀過程或有批判性閱讀。此外，學生意見調查顯示，幾乎所有學生都認為閱讀成果檔案之編寫有助於英語閱讀之學習，而大部分的學生也指出編寫閱讀成果檔案有助於瞭解自己的閱讀興趣及閱讀過程，閱讀文章之後撰寫摘要及省思有助學習效果。另一方面，許多學生指出編寫成果檔案的困難在於尋找適合興趣與程度的文章及撰寫文章之摘要及省思。

關鍵詞：學習成果檔案、學習評量、學習過程、學習省思

Abstract

　　A portfolio is the collection of a student's works over a long period of learning. It is used as an alternative to traditional test-based assessment. The notion of portfolio came from art and architecture design, and was later widely applied in education. Portfolio assessment emphasizes evaluation that can really demonstrate students' achievement in a natural context. It can avoid the pressure caused by test. Furthermore, it reflects students' improvement over the learning process and facilitates active learning and reflection.

　　Recently, there have been a number of studies on the use of portfolios in the language classroom. Many types of portfolios have been designed and successfully implemented. Portfolios are often used in writing courses since they help reveal students' writing process and improved writing ability throughout the curriculum. It is also more appropriate to evaluate the strengths and weaknesses of their writing works by portfolio than by test.

　　This study investigated the use of portfolios in a college English reading course. It focused on three important stages of portfolio compilation: design, implementaton, and evaluation. The design stage explored the

design of a portfolio plan, including the rationale, objectives, principles, and contents of the portfolio, interactions between instruction and portfolio, and student commitment to the portfolio. The implementation stage was the practice of the portfolio plan in the classroom, including explanation, content selection, progress monitoring, and collection of portfolios. The stage of evaluation included analysis and evaluation of portfolios and collection of student feedback.

Results show that students are interested in reading newspapers, magazines, reports about sports or movies, or fiction. Most students still focused on the learning of vocabulary and idioms rather than critical thinking or reflecting over the learning process. On the other hand, almost all of the students indicated that portfolio compilation is helpful to the learning of English reading. A majority of students indicated that portfolio compilation helps them find out their reading interest, and understand their reading process, and that writing summaries and reflections after reading a text increases the learning effect. About the problems in portfolio compilation, many students found it difficult and time-consuming to find appropriate reading materials that fit their reading level and interest, and to write summaries and reflections.

Keywords: portfolio, learning assessment, learning process, reflection

二、緣由與目的 (Introduction)

Traditionally, norm-referenced, formative tests have been used to assess, and even guide students' learning. Standardized tests gained momentum in the 1920s and 1930s. The establishment of Educational Testing Service (ETS) in the U.S. in 1947 seemed, furthermore, to confirm testing as the ultimate tool of assessment. (Cole et al. 2000) In the 80s and 90s, however, educators and teachers began to realize the limitation of test as the sole source of assessment. They seek for more authentic assessment which can really demonstrate students' learning process and improvement in a natural context. Dis-

tinct from test-based evaluation, portfolio assessment is performance-based, and learning- and process-oriented. The notion of portfolio came from art and architecture design. It refers to a collection of a learner's art or design works for the purpose of presenting to and requesting for an evaluation by an art or design master. It was then gradually adopted in education as an alternative to test-based assessment.

As Vavrus defined, a portfolio is "a systematic and organized collection of evidence used by the teacher and student to monitor growth of the student's knowledge, skill and attitudes" (1990:48). As a portfolio is the product of long-term effort of a student, it functions not only as assessment but as a record of learning, progress and achievement. Besides, the student is actively involved in determining the content of the portfolio, it promotes active and motivational learning. Therefore, portfolios are now acknowledged as the best tool to combine instruction with assessment. (Hamp-Lyons 1994)

Recently, portfolios have caught the attention of language teachers. Many types of portfolios have been proposed in various learning contexts, such as experience portfolio (Sweet 1976), learning portfolio (Graves 1992), student portfolio (Calfee and Perfumo 1996), literacy portfolio (Johns 1995), disciplinary portfolio (Hirvela 1997), and writing portfolio (Yancey 1992; Chen 1999).

Among the studies using portfolios for evaluation, Padilla et al. (1996) analyzed students' portfolios to assess students' improvement in foreign language learning. It was found that many factors contribute to the determination of the objectives and content of portfolios. Many studies have used portfolios in writing courses. (Yancey 1992; Hamp-Lyons 1994; Belanoff and Dickson 1991; Chen 1999) For example, Yancey (1992) indicated that the writings students carefully selected to be included in their portfolios revealed both the effort and the ability throughout the curriculum. Chen (1999) used portfolios in EFL university writing instruction to analyze students' writing process and evaluate the strengths and

weaknesses of their writing.

On the other hand, a number of studies have focused on the design and implementation of portfolios. Herman, Gearhart and Aschbacher (1996) discussed in detail the issues involved in portfolio design and practice, including priority purposes, specification of contents, specification of scoring criteria, fair assessment, and validity. Gottlieb (1995) proposed a CRADLE (collections, reflections, assessment, documentation, linkages, and evaluation) approach to portfolio development, each signifies a stage of development and has a set of specified criteria that shape its function. Burch (1997) offered a two-tiered model for portfolio construction.

Domestically, portfolios have been used mostly in education. Little has been published about the application of portfolios in language learning. However, it was thought that language learning emphasizes regular practice and long-term effort. The learning process can reveal how students develop their interest and competence step by step. In addition, portfolios in the language classroom can help the teacher understand individual student's reflection upon specific learning points or problems which may otherwise be neglected. Portfolios, therefore, should be a valuable alternative to test-based assessment for language learning. On the other hand, they may be used in not only writing but reading courses. Layzer and Sharkey (1996) reported the use of portfolio in an English reading course at a Japanese college. They found that students' reflections on language learning included in the portfolios is a contributing factor of teaching success. In a reading course, students may often be required to do outside reading to build up their extensive reading ability. It is usually difficult and inappropriate to use test-based evaluation for extensive reading since students may select very different reading materials, depending upon their interest and reading ability. The use of portfolios can not only accommodate individualized learning but also assess learning effects more reasonably.

This study, therefore, investigated the use of portfolios in a college English reading course. It focused on the three important stages of portfolio compilation: design, implementaton, and evaluation. The design stage explored the design of a portfolio plan, including the rationale, objectives, principles, and contents of the portfolio, interactions between instruction and portfolio, and student commitment to the portfolio. The implementation stage was the practice of the portfolio plan in the classroom, including explanation, content selection, progress monitoring, and collection of portfolios. A guideline was prepared for the students explaining the why, what, and how of portfolio compilation, and their role. The evaluation stage included the analysis and evaluation of students' portfolios and a survey of students' opinions about compiling portfolios.

The portfolio was required of students in two reading classes of the same reading course the author was teaching. At the beginning of the semester, the author, as the teacher, while explaining the syllabus to the students, initiated the idea of incorporating the portfolio into the course and using it as part of assessment. On the third week when the students were familiar with the regular classroom practice, the author gave students a guideline clearly specifying the principles of portfolio compilation, content requirements of the portfolio, and criteria of evaluation. Students were asked to compile a portfolio, individually or in a group not more than three. The compilation should go along with the classroom instruction; that is, students read regularly one or two reading texts every week and included them in their portfolios. For each entry in the portfolio, they should follow the basic requirements described in the guideline, but could include more categories they thought appropriate. The portfolio would account for 30 percent of the total assessment for the semester. Students turned in their portfolios three weeks before the end of the semester. Then, a questionnaire which contains eight questions about portfolio compilation was used to collect students' feedback. The author evaluated the portfolios according to the criteria specified earlier and returned them to the students. The survey was also analyzed.

三、結果與討論 (Results and Discussions)

Design

Portfolio is regarded as an excellent tool for assessing the learning process and fostering self-monitored learning; therefore, the rationale of using it in the reading classroom is to help students discover or develop their reading interest as well as good reading habits and to understand their reading process. Furthermore, at the university level, we think it is important for students to summarize the main ideas of a text after reading it and to reflect on the text or the learning process, since these skills not only improve students' reading ability but also foster their metacognition. Then, for language learning, regular practice of vocabulary, sentence structures, and rhetorical patterns should also play a role. These, hence, become the basic requirements for the content of the reading portfolio. With these restrictions, however, each student can decide on the topic or theme he or she likes to work on and then searches for the reading texts he or she thinks interesting and appropriate to read. In compiling the portfolio, students must organize all reading texts as well as their summaries and reflections into a self-contained product. This could create a sense of commitment, ownership, and accomplishment.

Implementation

As most students were not familiar with portfolios, it was necessary for the teacher to explain what a portfolio is, why we want to use as it as part of assessment in a reading course, and how each student can compile a portfolio successfully. Students could choose a topic or theme related to the instruction or of their interest. They then should regularly select and read appropriate materials centered on the topic or theme. Students were told it is essential for them to reflect on the reading process and on what they learn from the materials. Finally, the teacher explained how the portfolio would be evaluated. To provide students with clear and specific principles for the compilation of a reading portfolio and the criteria of evaluation, a guideline was prepared and given to the students.

The teacher emphasized the importance of regular reading practice and of the portfolio as representation of their reading performance. To ensure that each student or group of students decided on an appropriate topic or theme and started to select and read appropriate materials, the teacher asked each student to turn in a draft outline in two weeks and discussed with those whose outlines were considered not adequate for a rearrangement of the content.

Evaluation

Three weeks before the end of the semester, students' reading portfolios were collected and a survey was conducted. An analysis of the portfolios showed that students were interested in topics such as newspapers, magazines, reports about sports or movies, or fiction. Most students just followed the requirements specified in the guideline without contributing additional categories to the content of the portfolio. Only a few students carefully selected the reading materials which are closely related to one another or can complement one another in terms of the subject content. In some portfolios, the progressively increasing difficulty level of the reading materials can be recognized. Most students still focused on the learning of vocabulary and idioms rather than critical thinking. Most could write summaries better than reflections which were often very short and similar to summaries. Evaluation of the portfolios followed the criteria: reading materials 40%, summary 20%, reflections 20%, and other categories (including language learning, portfolio design, etc.) 20%.

Student Feedback

There are eight questions in the questionnaire. The first one asks students if they knew what a portfolio is before taking this course. Five of them are 4-item questions about whether portfolio compilation helps English reading. Two are open-ended questions about students' general feelings of compiling portfolios and difficulties encountered in the compiling process. There are 62 usable questionnaires.

The results of the survey show that only 7 students knew a little (6) or a lot (1) about portfolio before they took this course. Almost all of the students (60 out of 62) thought portfolio compilation was helpful to the learning of English reading. Among them, 20 indicated that it helped a lot. For the writing of summaries and reflections, respectively, 16 and 17 students thought they could greatly increase the learning effect. 42 and 35, respectively, indicated that they could slightly increase the learning effect. With regards to the usefulness of portfolio compilation to help find out one's reading interest, 17 and 36 students indicated that it helped a lot and slightly, respectively. About the usefulness of portfolio compilation to help understanding one's reading process, 20 and 32 students indicated that it helped a lot and slightly, respectively.

Answers to the two open-ended questions seem to reveal more concrete and detailed opinions and feelings about portfolio compilation. Seventeen students indicated that portfolio compilation, though time-consuming and difficult, improved their English reading ability, including reading speed. Seven students felt happy about discovering their own reading interest as they were searching for appropriate materials to read. Seven students indicated that portfolio compilation provided them with incentive to finish reading a lot regularly over a period of time. They said that otherwise they would never be able to read so much. Four students expressed that they learned to self-monitor their learning and enjoyed active learning. Other opinions include realizing their reading problems, obtaining new information and knowledge, learning a lot of vocabulary, improving writing ability through the writing of summaries and reflections, feeling great to find and read many texts on a topic one is interested in, and having a sense of accomplishment.

With regards to the difficulties of compiling a portfolio, sixteen students complained about the difficulty of writing summaries and reflections. Fifteen students also found it difficult to find appropriate reading materials that fit their reading level and in-terest. Eight students indicated the difficulty in comprehension because of either too many unfamiliar words or complicated sentences. The same number of students complained that portfolio compilation was time-consuming, especially in searching for reading materials. Other difficulties students identified include the lack of experience, difficulty in recognizing the main ideas in reading materials, and inability to finish reading so many texts. Students also made suggestions such as less restrictions on the form of the portfolio, more teacher involvement in the process of compilation, and requirement of progress report weekly or bi-weekly.

四、計畫成果自評 (Self-evaluation)

This project investigates the use of portfolios in a reading course. It focuses on the design, implementation, and evaluation of portfolios. It seems that the use of the portfolio in this case study is successful in terms of its effect on improving students' overall reading ability, but not as successful as expected on active learning or students' reflections on their learning process. The reasons are as follows:

1. The students are not used to the compilation of a portfolio. A number of students complained that the portfolio cost them too much time. Especially, selecting appropriate reading materials is time-consuming. This also shows that students did not have the habit of reading English materials regularly and they were not familiar with the reading sources.

2. A number of students did not select and read texts regularly; instead, they tried to complete the portfolio within the last two or three weeks before it was due, and thus they regarded the portfolio merely as another form of homework and neglected the meaning of portfolio as the representation of long-term learning effort.

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