



A Case Study of English Reading Teaching in Higher Vocational Schools Under the Context of “Internet Plus”

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Abstract. The global pandemic outbreak in the past two years has propelled the fast development of modern education technology, and the deep integration of “Internet Plus” new technology and education industry has brought about innovations and reforms to language teaching and learning. This study, taking the first-year vocational school students as subjects and their English reading teaching and learning as a case, tentatively examined the application of PBL strategy under the internet plus environment to provide practical implications for foreign language teaching. Quantitative and qualitative research methods were adopted to investigate the factors influencing individual exploration and joint interactions in the process of task completion. The results indicated that the PBL-based teaching practice: (1) motivated the participants’ autonomous learning with well-designed tasks; (2) improved the participants’ language proficiency by exposing them to English environment and supervising their learning process; (3) contributed to the elevation of the participants’ communicative competency through collaborative discussions and interactions; (4) enhanced the participants’ self-confidence in English learning with online presentations and positive feedbacks from the teacher and their peers.

Keywords: Internet Plus Context · Higher Vocational Schools · English Reading Teaching · Project-Based Learning (PBL) · Autonomous Study

1 Introduction

Presently, the progress of science and technology and the wide spread of internet has spurred the rapid and constant improvement of modern education, especially in the post-pandemic era. As the teaching subjects in higher vocational colleges are different, the teaching objectives are different from those in higher education in the general sense. Under the context of global pandemic outbreak, overwhelming online teaching environment offers both challenges and opportunities for English teaching. In the era of massive data, how to organize online English teaching? How to ensure the effectiveness of online teaching? To improve the teaching and learning efficiency, the Ministry of Education of China issued a document to guide the implementation of online teaching in February 2020, encouraging the integration of information technology into education via public

service platforms. This research is a tentative study on how to improve the students' reading performance by adopting project-based learning strategy via online platforms. Effective course design and teaching strategies integrating online and offline teaching resources were adopted to promote the effectiveness of English reading teaching, and to enhance foreign language learners' autonomy, motivation and cooperation, which may provide some case study experience for vocational English teaching.

2 Theoretical Framework

With emphasis on language learners' active exploration, discovery and construction of knowledge, constructivism theory focuses on the learning process, that is, the construction of meaning as well as the reformation and the reconstruction of the learners' previous experiences. The learners are the subjects of cognition and the active constructors of meaning rather than the passive receptors of information. Factors influencing learning involve physical and social elements, individually and interactively [9]. Constructivism takes interactivity as the major means of meaning construction, advocating the learners' active construction of meaning through collaborative interpersonal relationship under certain instructions and circumstances. In other words, knowledge acquisition relies on the learners' efforts of meaning construction with group cooperation, which provides theoretical foundation for the application of project-based learning strategy.

3 Literature Review

The concept of PBL was first proposed by William H. Kilpatrick in 1918 [7], but it was John Dewey who made it well accepted in 1960s. Since the 1970s, project-based teaching has been applied to vocational or professional teaching practice in Europe and the United States. The past decades has witnessed the application of PBL as a well-accepted approach in practical teaching [10]. Compared with traditional teacher-centered teaching method, PBL is project-based, teacher-guided and student-centered, which involves students' active participation, independent exploration and innovative collaboration. Under this teaching mode, the main duty of the teacher is to design various projects for the students to complete the assigned tasks independently or collaboratively, give proper instructions to help the students to discover new knowledge and master new capabilities in the process of autonomous or cooperative study. The guidelines for PBL teaching are listed as follows:

3.1 Autonomous Acquisition

The process of knowledge acquisition, understanding, analysing, criticizing and absorbing, is complicated and irreplaceable, which should be achieved through the learners' efforts to construct meaning autonomously or by means of necessary instructions and collaborative interactions rather than passive reception of the teachers' lectures.

3.2 Capability Cultivation

Constructivism-based PBL is student-orientated and task-driven, with task or project as the trigger of learning, cultivating language learners' capability of knowledge acquisition through autonomous exploration, discovery, group discussion and cooperation.

3.3 Effective Collaboration

Team work is essential in PBL teaching, where members discuss the task, share information, and complete the project collaboratively under the instructions of the teacher, so as to improve the efficiency of problem solving.

3.4 Adequate Context

Tasks or problems in PBL teaching should be clearly expressed for the team members to explore and discuss, attainable and accessible with efforts and cooperation in light of the learners' knowledge and capability level.

3.5 Formative Assessment

Assessment of the learners' performance relies on the motivation, the efforts and corresponding efficiency in the process of knowledge acquisition rather than the accurate answers for the problem. The objective of the assessment is to help the learners to find out their drawbacks and inadequacy in autonomous study.

Scholars have made many theoretical and experimental studies quantitatively and qualitatively on the validity and the effectiveness of online education. Bender [3] created a vision of online pedagogy based on the learners' experience and desire to create a virtual environment that involved the learners and fostered their deep learning. Angelino and Natvig [2] introduced a model for engagement and provided 4 strategies to engage distance online learners. Kabilan, Ahmad and Abidin [6] investigated if Facebook, a popular online social platform, was considered as a useful and meaningful learning environment to support, enhance and/or strengthen English language learning. Alrushiedat and Olfman [1] explored the potential benefits of anchoring in asynchronous online discussions for business statistics classes required for students majoring in information systems. Bricault [4] investigated the impact of socio-economic differences in the viewing behavior of e-learners in blended learning. Hamane [5], Yang and Dai [13] studied English learners' engagements and investigated how their engagement influenced their performance and success under the context of online learning. Lv and Yang [8] explored students' motivation for learning English as a foreign language and how it correlated with their persistence and performance in the learning process. Wu [11] proposed the use of advanced multimedia technology and network technology in the context of "Internet plus" to construct an ecological teaching model for college English courses. Zheng [14] conducted empirical research on the teaching reform and innovation of "College Movie English" in the context of "Internet Plus". Wu [12] explored how the cloud class education platform could be applied in Comprehensive English Teaching under the background of Internet plus.

However, few studies have been made with vocational school students as subjects on how effective teaching strategies may contribute to the improvement of their English reading proficiency via online platforms. The internet era helps to promote students' knowledge construction, and poses various challenges as well. The purpose of higher vocational education is to cultivate competent personnel and qualified workers in specific fields in the labour market. Thus, the goal of higher vocational English teaching is to enhance autonomous learning ability and lifelong learning awareness, and improve practical English proficiency as well, so as to prepare the language learners better for future career development. This is exactly in line with the orientation of higher vocational education.

4 The Study

According to an experiment made on a smaller scale in one of the natural classes of a vocational school in the autumn semester of 2018–2019, we assumed that project-based learning (PBL) could effectively promote English learners' performance and enhance their language competency. This study took English reading teaching and learning in vocational school as a case, examined the application of PBL strategy under the internet plus environment, and both quantitative and qualitative measures were employed for the analysis and interpretation to provide practical implications for foreign language reading instruction by analysing various factors influencing individual exploration and joint interactions in the process of task completion.

4.1 Participants and Research Context

All of the 128 participants were the enrolled first-year students in natural classes in the biology department of a vocational school, and they took the national college entrance examination in China and were admitted by the biology department as intermediate-level language learners. Because of the outbreak of Covid-19, the students had to stay at home and the course "Higher Vocational School Comprehensive English" was taught online via U-learning platform and Tencent conference platform, accessible by mobile phone or computer for the spring semester of 2020–2021. Abundant resources were provided on the U-learning platform for the students to study autonomously, and lectures and presentations were given with the technical support of Tencent conference.

4.2 Experiment Design

In the teaching practice which lasted for 16 weeks, participants in three natural classes were randomly divided into groups of 5 to 6, each with one group leader, and they were supposed to study the course "Comprehensive English" online with clear directions and specific tasks from the teacher. The course design was to take each unit study as a project, which were subdivided into several tasks, namely, pre-reading, while-reading and post-reading tasks, involving the participants' independent and collaborative preparations, group discussions, team presentations and class interactions. In the last procedure, students were required to give group presentations online, and their performance would

Table 1. Course Arrangement for How to Handle Customer Complaints (Unit 3).

Session	Tasks
Pre-reading	Discuss in groups to list the reasons for customer complaints and possible tips to handle the complaints.
While-reading	1) Skim for the main idea and the structure of the text. 2) Read the ten statements which contain information given in the text. Identify the paragraphs from which the information is derived.
Post-reading	1) Work in groups and prepare a presentation on the following topic: If you start your own business after your graduation, how could you deal with customer complaints? 2) Discuss on whether the solutions are effective or not and assess the performance of each group.

receive feedback and assessment from the teacher and the students as well. A demo unit course arrangement is demonstrated as follows (see Table 1).

The students' performance were recorded and feedbacks were collected for analysis. Besides, an investigation was made to figure out the factors that might influence language learners' motivation and language proficiency.

4.3 Data Analysis

Observation of the class indicated that some students were more active online than offline, and they demonstrated great enthusiasm in completing the projects, responding to questions actively online publically or privately. While some were more reliant on group support, expecting the group leaders to assign specific tasks rather than offering creative ideas or suggestions. A small number of students were too reluctant to participate in the group work, being not collaborative or unable to communicate publically. Interviews with the participants exposed there were various reasons for the difference. Firstly, vocational school students in Chinese environment were more reluctant to communicate in English, since learning a foreign language had always been a challenge to many of them. Secondly, some students were incapable of time management, and they would delay the task until the deadline was approaching. Thirdly, many students were confronted with various problems, poor vocabulary, inadequate reading, accent or dialect barriers, etc. However, online English study offered them better platforms to search whatever resources to help them to express themselves better conveniently and efficiently, which explained their active performance in the online classroom.

The investigation indicated that 75% of the participants believed online learning helped to promote their English learning competency, while there were only less than 2% of the subjects who completely denied that internet environment was beneficial to their English learning, about 6.25% of the subjects thought they didn't get much help from the online learning (See Fig. 1).

As to project-based learning strategy, 85% of the subjects agreed that the specific and attainable tasks effectively motivated them to spend more time on English learning,

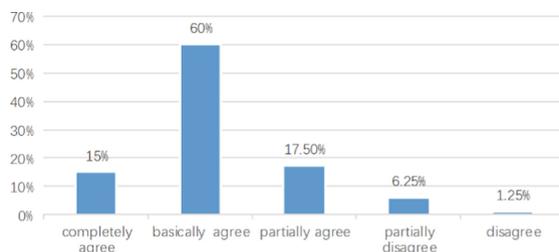


Fig. 1. Online learning efficiency to language learners' competency.

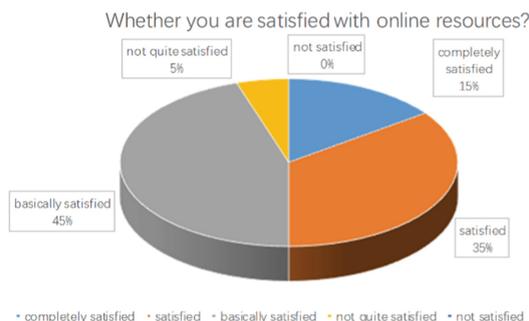


Fig. 2. Students' degree of satisfaction with online teaching materials.

although 12.5% of the subjects took group work as time-consuming and burdensome. About 2/3 of the subjects agreed that team work contributed to the timely and effective fulfilment of the project, taking communication and interactions as well as feedbacks from their teachers and classmates seriously. As to how they would prefer to give presentations, online or offline? About half the participants chose online, while 35% chose offline. Possible reasons might be the challenge of the uncertainties in the online environment and the students' reliance on traditional classroom.

However, the problems of online learning were also unavoidable in that accessible online resources provided great conveniences for the participants to explore and copy abundant online information for various reasons, approaching deadline, limited knowledge, poor English proficiency, etc. Despite that, a great majority of the subjects were satisfied with the online materials. 15% of the participants were very satisfied with the resources, and 35% were satisfied, which took up half of the total subjects, while nobody showed any hostility to the online resources (See Fig. 2).

Feedbacks from the participants indicated that although some subjects were less motivated to study English autonomously, they admitted positive assessments from the teacher and their peers increased their sense of achievement and enhanced their confidence in language learning, which undoubtedly proved the validity of collaborative interactions in language learning.

5 Results and Discussion

The results proved that the application of PBL strategy in English reading teaching in the internet plus environment, which integrated autonomous study, language skill training and communicative ability cultivation, contributed to the elevation of communicative competency. Online teaching, different from traditional classroom, broke the limits of traditional classroom teaching and was more preferable to the younger generation. Under such context, the students were the center and the main constructors of meaning, while the teacher was the active instructor and designer of the course, or the projects. By designing and guiding the projects, the teacher helped the students to complete the tasks and construct meaning through autonomous exploring, discovering, collaborative discussing and interacting. However, various factors influenced the effectiveness of online language learning, which remained to be dealt with. The PBL-based teaching practice effectively supervised the learning process of the participants, encouraging their autonomous learning and collaborative interactions with their peers as well. Thus, we may safely conclude that PBL based English teaching, with the real-time guidance and supervision of the teachers, should be employed to provide practical help to language teaching through the integration of online and offline teaching reform, which may be of significance in the internet plus context of the post-pandemic era.

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