

# The Empowerment of Digital Platforms in the Cultivation and Evaluation of Students' Autonomous Learning Ability

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**Abstract.** This paper is mainly based on the summary of the achievement teaching reform project of the research on the application of digital technology to train students' autonomous English learning ability. Researchers combine four different digital platforms to assist teaching and evaluation and change the content and final evaluation of traditional classroom teaching, which is mainly teacher-oriented instead of student-oriented teaching and the combination of teachers' guidance, assistance, supervision and evaluation, so as to stimulate students' eagerness in learning English and mobilize their autonomy. The results of the experiment verify the hypothesis that the proper use of various platforms and formative assessment tools can really help students form and develop the ability of autonomous learning, so as to have the habit of independent thinking. This paper is hoped to provide some references to the practical empowerment of digital information platform in the cultivation and formative evaluation of students' autonomous English learning ability.

**Keywords:** Digital information platform; Autonomous learning; Formative evaluation

## 1. Introduction

This paper is summarized from the teaching reform project named as "Research and Practice on the Cultivation of College students' Independent English Learning Ability and Educational Evaluation" which lasted for two years from May 2020 to May 2022, which was evaluated as excellent by the school experts after the evaluation. To cultivate students' autonomous learning ability in the teaching environment of the network era, teachers can establish a process evaluation mechanism on the effect of students' autonomous English learning by consulting digital platform data. In the process of increasing the use of resources on various digital platforms, students' ability to search, identify, organize, refine and sublimate online information and materials is cultivated. Although the project has ended, the research on the application of digital information to teaching is still continuing, and the current achievements are summarized in the end.

## 2. Teaching Problems Solved in Practice

### 2.1 The Traditional English Teaching Model Cannot Meet the Educational Needs of Students' Autonomous Learning Ability in the Information Age

Only with the awareness and ability of independent learning can students benefit for life, but the traditional teaching mode makes them accustomed to following instructions to learn, and it is basically impossible to generate cognitive needs and stimulate the learning motivation of independent inquiry. Although students spend a lot of time in contact with the Internet, it is also very insufficient to select high-quality English teaching resources for their own use and improve the quality and efficiency of independent learning.

### 2.2 The Traditional Evaluation Model Cannot Evaluate the Achievement of Students' Independent Learning Comprehensively and Objectively

The traditional teaching evaluation relies on the final evaluation, that is, the test results measure the teaching effect. The situation of students' independent learning after class has not been

considered at all, so it is necessary to have a new evaluation mode, focusing on "feedback" and "process", which can evaluate students' learning effect from all aspects and multiple angles, and reflect students' real-time learning situation more objectively and truly, which will be of great benefit to the cultivation of students' independent learning ability.

### 3. Measures and Processes of Solving these Two Problems

#### 3.1 Establish a New Teaching Model: Complete the Training Program of Students' Independent Learning for Two Academic Years

Teachers change to the new teaching mode assisted by information platform. Taking students as the main body, teachers coordinate work with multiple digital information platforms to guide and assist students to complete various types of online or offline learning activities based on some listening, speaking, reading, writing and translating skills. In this process, real-time data feedbacks from digital platforms are used for timely supervision, encouragement, correction and suggestions. During this process, the theoretical analysis, teaching plan design and program implementation of the subject provide a good example for teaching, which is worthy of reference and reflection.

##### 3.1.1 Set Learning Objectives and Plans for Each Platform before Class



Figure 1. Four Platforms used in the Project

As Fig.1 shows teachers use the Welearn platform (the first green one) developed by Shanghai Foreign Language Education Press is used to train students' listening and speaking ability; the U Campus platform (the second blue one) developed by Shanghai Foreign Language Teaching and Research Press is used to train students' independent reading and writing ability after class; and the third Xun Fei Teaching system (FIF) is mainly used for CET-4 training and monthly test. The last one is the FIF Oral training APP (white cat with glasses) belongs to Xun Fei and is a special APP for oral English practice, which can realize the AI interaction between students and the system.

According to the teaching plan, the teacher arranges the learning tasks of the semester in advance, and consciously guides the students to list their learning objectives, learning plans, and learning resources to be supplemented on these platforms. Students can check the contents of e-learning files on stages, compare the learning results, and adjust the learning plan, learning objectives and learning strategies in time.

##### 3.1.2 Use Digital Platforms to Assign Colorful Tasks to Students, and Gradually Improve Students' Media Literacy in the Process

In the teaching process, students should be active inquirers in learning. The role of teachers is to create tasks before, during or after class, so as to arouse students' interest in knowledge itself, instead of implanting ready-made knowledge. Teachers use various teaching platforms to arrange various activities after class, such as looking up relevant information before class and warm-up exercises for speaking and listening. Browse background videos related to the theme, or assign after-class extension homework, such as personal or team English presentation or performance task brief, etc. In the process of completing these tasks, students can consciously develop a unique personal learning style, as well as a sense of teamwork.

How to arrange individual and team tasks requires many students to arrange their own time and find the resources they need on the Internet. During this process, teachers recommend and guide some good websites and popular apps to students, and help them to do various English learning activities, such as regularly punching words in APP, watching movies in English, etc. Take the

initiative to use a platform to practice English reading, listening, speaking and so on. In this way, high-quality English teaching resources are selected through the network environment to improve the quality and efficiency of independent learning and enhance students' lack of media literacy.

### **3.2 The Statistical Data of Digital Platform is Used to Complete the Formative Evaluation of Students, and the Evaluation Mechanism of Students' Autonomous English Learning is Established**

Researchers didn't not take the final exam results as the final evaluation of student achievement, but used the formative evaluation to evaluate each student. At the end of each semester, students' scores of each digital platform are collected under the established evaluation model, and then combined with students' final exam scores with different proportions. At last, a procedural objective evaluation is done. Through experimental tests, this method can effectively stimulate students' interest in learning English, mobilize learning initiative and communication skills, enhance cross-cultural awareness, and become lifelong beneficiaries of independent learning.

Teachers use the statistical data of the U campus, Welearn, to understand the class and individual learning situation, and to evaluate the whole class or individual students. It includes students' class attendance, classroom participation, completion of tasks, problems reflected in learning and the efficiency of solution, homework records (including frequency, content, quality and grade, etc.), records of extracurricular activities (number of activities, quality, self-evaluation, peer evaluation and teacher evaluation, awards, etc.). In the course of teaching, the teacher recorded the online study time, frequency and monthly test results of the students' after-class exercises, as well as the achievements of oral training. Teachers can give comprehensive evaluation to students according to various data. For example, the final exam score only accounts for 35% in total mark, while the usual score accounts for 50% (platforms accounts for 30%) and the monthly exam score accounts for 15%. That is the calculating way to obtain the final total evaluation score.

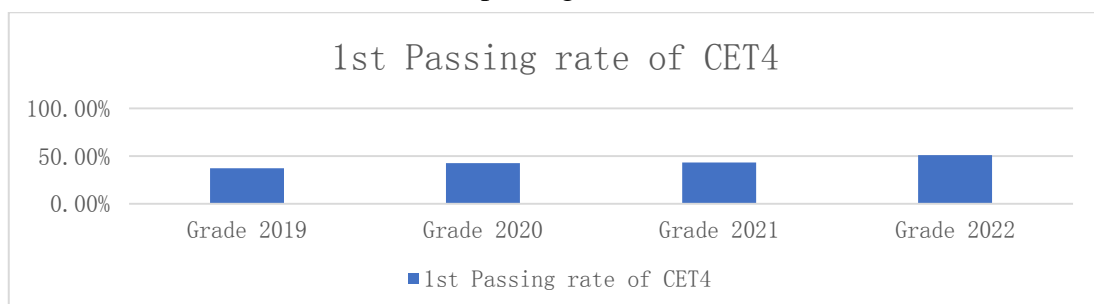
At the same time, teachers and students can check the contents of online files on stages, compare the learning effect, adjust the learning plan, learning goals and learning strategies timely, and make objective self-evaluation based on this. Students in the same group can evaluate each other by comparing their data and performance in collaborative learning. The evaluation feedback process encourage students to learn, help students control their own learning process effectively, so that students have a sense of accomplishment, enhance self-confidence, cultivate the spirit of cooperation, and ultimately help students become self-motivated, self-monitoring independent learners and lifelong learners.

## **4. The Effect of Promotion and Application of the Results**

### **4.1 The One-Time Passing Rate of College English Test Band 4 Has Steadily Increased Year by Year**

Remarkable results have been achieved on 1st passing rate of CET4 as Table 1 shows. The rate of Grade 2019 is 37.03%, Class 2020 is 42.7% and Grade 2021 is 43.2%. In 2022, Grade 2022 is 51%. Our passing rate has been above average as early as 2021 and continues to grow.

Table 1. 1st passing rate of CET4



## 4.2 Students Perform Well in Multiple Types of English Competitions



Figure 2 Three main Competitions participated by Students

In the "SFLEP (China Foreign Language and Education Research Press) - VocabGo Cup" (the first blue one) National English Vocabulary Contest, the number of participants in 2022 is 4006, including 12 provincial competition awards: 2 provincial first class, 5 provincial second class, and 5 provincial third class. In 2023, a total of 3864 students have registered, and 67 students have been promoted to provincial competition, 1 special prize, 5 first prizes, 18 second prizes, 44 third prizes for non-English majors, and 4 second prizes and 3 third prizes have been promoted to provincial competitions for English majors.

In 2022, 196 students participated in "FLTRP.ETIC English Public Speaking, writing and Reading series Contests" (the middle red one) for the preliminary selection. The school competition committee selected 4 special prizes, 10 first prizes and 19 second prizes, and 29 third prizes in total. 7 students advanced to the final of Shaanxi provincial competition, in which 1 student won the first prize and 6 won the third prize, achieving the best results in this competition in recent years.

In 2021, a total of 1208 students participated in the preliminary competition of "National English Competition for College Students (NECCS)", after the preliminary competition, 7 students won first prizes, 31 second prize and 38 third prize. Later these 7 were recommended to participate in the provincial competition. In 2022, A total of 1,993 students registered for the preliminary round: the first prize 13 students, the second prize 64, the third prize 96.

The participation of NECCS, and series of Cup Contests are used to test students' learning ability. In turn, the fruits obtained can effectively stimulate students' interest in learning English and promote the extension of students' independent learning time. At the same time, students' various abilities have been strengthened in this process. They take the initiative to answer questions, complete extracurricular homework and tasks, consult the feedback of the platform in time, and no longer resist various competitions, but actively register for the competition, and achieve gratified results.

## 5. Innovation of the Empowerment of Digital Information Platforms in Teaching and Evaluating

### 5.1 Innovative Digital Information Teaching Mode

For teachers, the independent learning mode in the network media environment has brought new impetus and energy to the reform of college English, and also promoted profound changes in the teaching mode. Also, it shifts the focus of classroom instruction and make it a place of negotiation, discussion, and cooperation between learners and learners or between learners and teachers in order to solve problems that learners cannot solve alone. Teachers take students as the center, teach students according to their students' learning information feedback, and help students develop independent learning strategies that suit their own conditions. At last, it can increase the flexibility of the teaching syllabus, increase the time of students' independent learning, so that teachers have greater autonomy in teaching, thus shortening the distance between classroom teaching and students' independent learning.

Furthermore, for independent students, tasks on the platform make learning no longer a one-way and fragmented process, but an interaction between subjects. Various learning tasks on the digital

platform are not only the one-way implementation of teachers to students, but also the integration of task assignment and task completion through the positive interaction between teachers and students. Digital platform is not only an effective way of learning, but also a kind of learning ability, an indispensable way of learning, so that students can learn self-decision-making and self-management, so that students with different abilities can find their own learning mode.

### **5.2 Innovative Formative Evaluation Educational Evaluation Method Supported by Innovative Multi-Platform Data**

This multiple evaluation system based on formative evaluation on digital platform can evaluate students' learning effect in an all-round way and from multiple angles, and more objectively and truly reflect students' learning situation. Teachers can know every progress and enhancement of students' ability, and feedback can not only let teachers know how to further guide students. Students have a comprehensive and correct evaluation of their own learning, understand their shortcomings and advantages, and promote independent learning. It can make students believe that as long as they work hard, they can improve their academic performance.

## **6. Conclusions**

In practical teaching, designing various types of tasks on different digital platforms to create a certain space for independent learning and help students establish the habit of independent English learning can indeed stimulate students' learning motivation and improve their learning efficiency. Also, formative evaluation can undoubtedly help them reduce their learning anxiety, improve their learning self-confidence and self-control, fully guarantee the personality development of college students, and help them establish a correct outlook on life and values. English learning is not a one-way input process. It is an interactive process of input and output. The effect of independent college English learning also highlights new characteristics in this process.

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