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## An Action Research of Student Cognitive English Program: The Online Activity Teaching Strategy Applications

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### Abstract

The study aimed to examine difficulties encountered by higher education agencies through action research and to integrate "Online Activity" into an after-school english program at a university to optimize their teaching strategy. The study was conducted between October and December 2022. "Online Activity" was chosen as a possible optimization strategy because it assisted teachers in applying online activities to current course materials, improving students' learning motivations and learning outcomes. The results showed that online activity was a practical strategy for improving foreign language learning. Meanwhile, collaboration, discussions, and reflections among the action research team assisted professional development in teaching. The researchers recommend that educators choose appropriate action strategies to adapt to various learning situations, which may create opportunities for innovation in the current rigid education and learning environment.

**Keywords:** After-school learning, Online activity, Action research, English program.

## 1 | Introduction

There are many after-school learning institutions, including supplemental educational institutions, private vocational training institutions, talent learning-class schools, etc. However, this case study is primarily aimed at licensed private Taiwan English after-school talent classes currently included in the official curriculum of a university school. This major talent program seeks to enhance and extend the learning of a second language for university students. The "Online Activity" attached to the program is a strategic action plan the instructor and research team proposed. It is the strategic plan we have adopted after interviewing some students and teachers based on the current status and needs of the teaching presented by the institution. The main strategic background includes: 1) The level of device resources, namely idle conditions of the e-Classroom and e-Curriculum, etc., 2) the group of students and teachers' demands, that is, most teachers have expectations of high standards for academic achievement, and students, on the other hand, find the usual classroom teaching activities and regular tests boring, and 3) regarding the levels of difficulty in teaching, teachers hope for teaching methods that bring more motivation and efficiency.



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This study used online teaching and learning activities in English as an auxiliary unit of the original course content. It aimed to have students learn from approaches different from regular classroom learning via the diverse and digitized range of operating activities. Among these are the sound and pictures from the online teaching content, which is hoped to offer students space to learn autonomously, particularly in free time after school or at home, for it is designed to adapt to students' differences and willingness to learn. Thus, an action plan was launched regarding online teaching activities to optimize students' learning motives and efficiency in learning English.

## 2 | Literature Review

The core issue of this action plan is mainly to understand the practice of on-learning activities in after-school English learning. Analysis of the problems related to the literature will be further described in the following.

### 2.1 | Theory and Practice

In terms of language learning, Carroll [1] pointed out three characteristics of language learning, the first being structure. Then, the usage in interpersonal communication, and the third was the catalog of events. Chomsky [2] then further proposed that if we stressed the importance of language learning on the first category, structure, to an undue extent, the result would turn out to be practices of grammar rules, and what we should do instead is to lay stress on the latter two categories, which are applications for situations in life<sup>2</sup>. Orlova [3] made a view of attaching importance to learning through situational activities that by enhancing the rhythm of movements and storytelling, motives and efficiency of learning might be strengthened<sup>3</sup>.

Extending the original language learning to second language learning, an American linguist, Krashen, proposed five theoretical hypotheses in his works, including Second Language Acquisition and Second Language Learning, The Natural Approach: Classroom Language Acquisition, The Input Hypothesis: Issues and Implications, etc.

- I. The Acquisition-Learning Hypothesis claims that language acquisition is picking up a language since it is formed through a subconscious process in the context. Hence, official teaching needs to be improved for such matters; language learning is based on knowing a language principle suitable for the conscious formal learning approach.
- II. The Natural Order Hypothesis states that the acquisition of grammatical structures proceeds in a predictable order, from simple to complex.
- III. The Monitor Hypothesis: Conscious learning in language tests contains the function of monitoring errors; however, subconscious acquisition may lead to natural communication within a short period.
- IV. The Input Hypothesis: It claims that language acquisition requires the convergence of context, and together, it will be formed into a comprehensible input; if the input lays stress on knowledge information that is difficult to comprehend, then learning efficiency is limited.
- V. The Affective Filter Hypothesis states that the design, checking, and assessment process of language learning may form depression or affective disorder filters to establish a natural flow of language acquisition to help smooth language learning.

By analyzing Krashen's theories of second language acquisition and second language learning, that acquisition through natural contexts is better than learning through traditional classroom learning, establishing elements of life and knowledge remains the key. In particular, learners' emotions and attitudes are filters; they will affect the learning context's approval, obstruction, and blockade. When a learner gets anxious or lacks motivation or self-confidence, their filter will block access to the learning context access. Glisan [4] stated in the study that affective variables, such as motivation, anxiety, self-confidence, and others, are significantly related to students' language learning.

At present, domestic university schools are diligent in implementing the teaching of English; in addition to responses to changes in time and teacher demands, the most important thing is how to guide the emotional characteristics of students, including low anxiety, high participation, and excellent performance, etc., and further to improve students' language acquisition. Accordingly, Krashen's [5] theory of second language acquisition argues that after-school learning in English should consider students' cognitive, emotional, individual, and environmental dimensions and avoid learners' filters being clogged and blocked by establishing a lively, independent, diverse life situation.

Cognitive applications of English teaching methods in terms of the approach based on students as the main body in the life situation are divided into three major categories.

- I. Total Physical Response (TPR): A method developed by Asher and Glisan states that how a beginner learns a foreign language should be the same process through which an infant internalizes their first language, that listening ability and physical responses should be enhanced. Glisan [4] argued that the right and left hemispheres of the human brain are different from each other, as before the left brain outputs the language, the right brain will interpret the movement operation of the language. Teachers should apply the TPR method to help students develop their mental equilibrium. However, using the TPR method might undermine the natural order of foreign language learning, leading to confusion or disorder in teaching steps.
- II. The Natural Approach: It was developed by Terrel and Krashen, claiming that language acquisition must be derived from interactions through natural situations, aiming at meaningful input instead of mechanical exercises. Kemmis and McTaggart suggested that to make up for the inadequacy of natural situations, teachers could arrange life situations such as interactive games or role plays to lead students to meaningful acquisition. This is the only teaching method that relies on teachers' abilities to create situations.
- III. Communicative Language Teaching: Developed by Stockley, states that besides traditional grammar teaching, teachers should attach importance to dealing with the contingency and applications of language. In a classroom, communicators could choose speech content and expressions freely; the teacher works as an assistant and should emphasize students' independence and interactions among themselves.

## 2.2 | Methods and Types of Online Learning

Derived from e-learning, online learning originally referred to the teaching technology based on features of electronic information, from videotapes, cassette tapes, satellite TV, and computer-aided training, until the current Internet; therefore, it is also known as Web-based Learning or Online Learning. In summary, online learning still needs to integrate teaching situations and devices, especially digitizing traditional materials. Whether learners and instructors are online simultaneously, types of online learning can be divided into three groups: synchronous, asynchronous, and blended [6].

- I. Synchronous learning refers to when learners and the instructor are online simultaneously for education, using tools such as video conferencing, streaming media, etc. Although it is limited by time, it can break away from space and distance [7].
- II. Asynchronous learning allows students and teachers to abandon time and space constraints but has relatively poor interactions because students and teachers only interact in turn; the instructor must prepare online data, and learners can choose to participate at any time as needed. Examples of this include blogs, internet forums, and online bulletin boards.
- III. Blended learning refers to combining synchronous and asynchronous learning methods. These three methods contain advantages and disadvantages, and we must select an appropriate mix to account for differences in learning environments [7]. As for the foreign language teaching situation of the university school addressed in the study, the key was to change the original monotonous course through active and vivid digital materials to enhance learning motivation and efficiency. Thus, the study employed the blended learning method to create more space and allow learners to learn independently without being limited to fixed classroom learning.

There are differences between online learning and traditional learning. According to arguments, we may compare the differences and similarities through the following five dimensions.

- I. The learning subject: traditional learning is often limited by frameworks such as teachers' professional backgrounds and designs of materials, and online learning places importance on the subject established by learners after they break through the limitation of space.
- II. Interactions between teachers and students: traditional learning may facilitate instant and actual communications and interviews, while online education requires information media to provide communicative channels.
- III. Paths of learning: traditional learning is a single path, but online learning may help learners with diverse needs due to various content and methods.
- IV. Cognitive passages: traditional learning as a single path helps learners identify a clear direction and goal, thus reducing the chance of getting lost and having trouble; online teaching has higher interaction rates. Even though it may lead to cognitive confusion and loss for learners, it has relatively higher rates of cognitive extension and expansion.

### 3 | Research Method

The study used the after-school teaching of English at a university school as the primary theme, online learning activities as the action strategy, and action research as the research method. The point literature included Krashen's theory of second language acquisition as the background for the action strategy, which was aimed at establishing meaningful acquisition situations and reducing the resistance of affective filters. By integrating the advantages and disadvantages of the three methods of online learning, the blended learning method was adopted, and synchronous learning was used as the classroom learning format. In contrast, asynchronous learning was used for flexible time. In the action research model applications, the practical mode developed was used concerning the professional and helpful aspects of the whole team.

Concerning the research process, the study was based on the definition addressed. The researchers conducted action research to solve practical problems and enhance work quality. Stockley defined action research as an exploring form of reflection adopted by participants to improve the correctness and theory of the practice. Kemmis and McTaggart stated four steps of implementing action research: 1) To carry out the action plan to improve things that have occurred. 2) To begin to implement the plan. 3) To observe impacts caused by the action activities. 4) To reflect these impacts. Accordingly, the practice of the study is shown in *Fig. 1*.

#### 3.1 | Case Study

The case study is an after-school supplemental educational institute specializing in liberal arts located in the culture and education district in Banciao in New Taipei City. The school filed with the Education Bureau of Taipei Country and received approval to become a licensed talent educational institution for students. The study is based on the action research as the implementation phase, which carried out implementations of frameworks, including: 1) problems, 2) assessment and diagnosis, 3) proposed solutions, 4) the course of action, and 5) effectiveness evaluation.

#### 3.2 | Identifying Problems

With the diminishing number of students, domestic talent institutions are encountering difficulties in class openings and student recruiting, among which the popular talent course has become the primary competition of all talent centers in the neighboring area. English class for university students is no doubt the focus of the institution of study. Students are divided into beginner, intermediate, and advanced classes based on their learning backgrounds. The institution's founder places importance on the quality control of learning efficiency; since the English course was launched, it has regularly promoted inspections of students' learning efficiency to satisfy teachers' expectations. Thus, it has earned a good reputation and many achievements. However, students are actual learners; their motivations and interests differ from

those of their classmates. Emphasizing learning efficiency may attract parents to continue the course enrollment, but it cannot motivate students to learn. This is the essence of the problem we wish to solve.

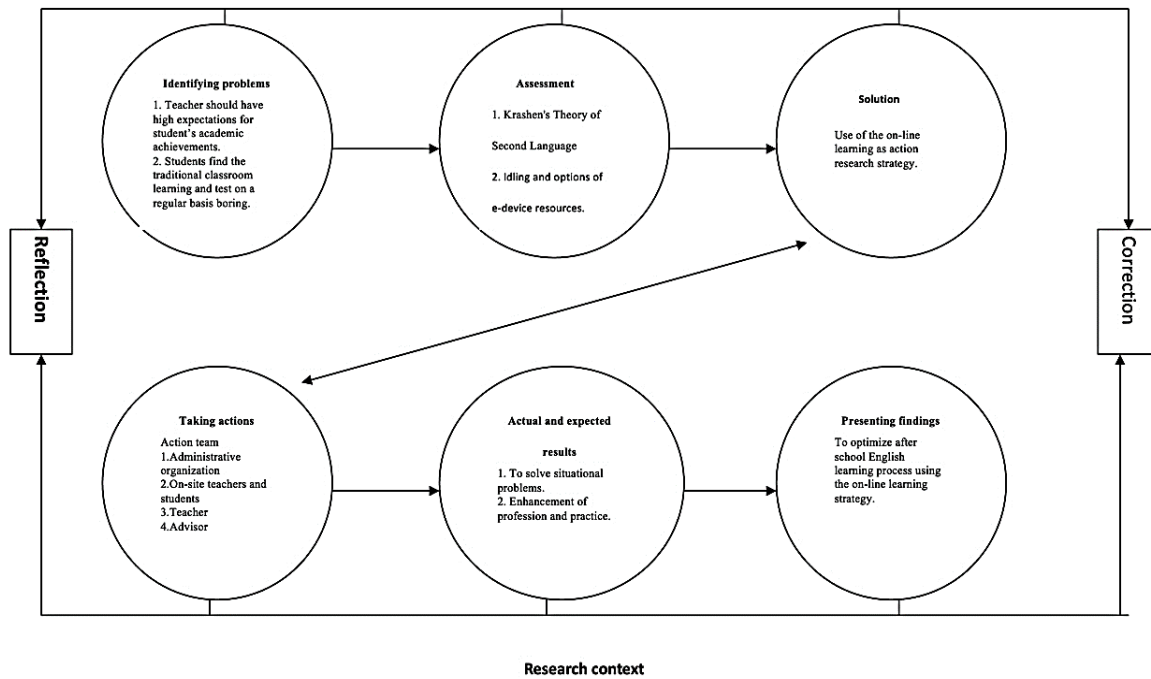


Fig. 1. Process map of the action research implementation.

### 3.3 | Assessment and Diagnosis

The English program in the study adopts general classroom teaching, and the primary teaching methods include TPR, the natural approach, and communicative language teaching. By analyzing the teaching methods it uses, we have found that they are currently the mainstream approach for teaching English to students. Thus, there is no particular place it needs to improve. By examining its content material, we have found that it needs to be improved when motivating students to learn. During the initial discussion, both English teachers and counselors thought that partial course activities could be changed into viable strategies. Thus, the study chose to use online activity as the primary strategy to optimize after-school English teaching for the university school.

### 3.4 | Solutions

The case institution launched an action plan named "Online Activity – An Applicable Strategy to Optimize the University School After-school English Program." It used teachers within the institution as teaching practitioners. Teachers claimed that expanding the teaching space and extending the teaching materials could pique students' interest in learning, and hoped to integrate the e-Classroom and e-devices via the plan, "Online Activity – An Applicable Strategy to Optimize the University School after-school English program" designed by the former educational department of the institution. How to improve university school students' motivations in learning English and subjective qualities of "interesting, active, fun, self-assessment" were the critical ideas teachers arrived at after they went through various professional interviews and analyses. It differs from the preschool stage for it does not place importance on student's abilities in information; in the location of university school English learning, online resources are adequate and available for students, and they can participate in operating teaching-related activities, arranging listening lists, singing English ballads, doing matching exercises, and enjoying learning games, etc.

### 3.5 | Effectiveness Evaluation

In mid-November, after one month of planning and preparation, "Online Activity – An Applicable Strategy to Optimize the University School after-school English Program" was finally ready to go; the first teaching demo was led by the teacher of the Beginner Class, and teachers of the other two classes were in charge of the online teaching demo observation. Because they were about the same age, students of the Beginner Class performed exceptionally and fully showed their passion and energy toward English learning. Teacher Nancy designed a "Fire Fighting Activity," first using a musical firefighting video to draw students' learning motivations; then, she used learning vocabulary through animations, songs, and dialogues. She had students participate in firefighting by pressing the keys on the screen during the process, and at the end, she played games to examine students' learning outcomes.

The second and third teaching demos were carried out individually after that. Teachers claimed that adding online learning activities into the curriculum during the discussion and sharing moment could enhance students' learning motivation. Replacing the traditional written tests with e-games could help reduce students' pressure from testing. According to the example in the study, we suggest that online learning activities may be used to optimize university school after-school English teaching and that combining e-device resources with suitable content helps enhance students' learning motivations and efficiency.

## 4 | Conclusions

In summary, after analyzing the process and results after the action case has put the optimizing strategy into practice, the results show that it could improve students' relatively low motivation initially and show the importance of the learning processes. We may also like to suggest to counseling institutions not to let e-device resources take over the general teaching completely but to integrate them into the existing foundation and to employ online learning activities related to the central theme, which could enable students to have more free space and allow them more chances to participate in learning situations. According to SWOT analysis and assessment conducted by the school, teachers, and counselors, we confirmed that with low fertility rates, the school is willing to optimize course features and teachers' professional knowledge by integrating the existing device resources. Thus, the e-classroom, which the school established, has become the strategic background for optimizing the case. After three months of demo teachings and discussion groups, we have assisted the school in re-examining its educational administrative and general administrative management.

Teaching methods in a diverse setting could enhance students' learning interests; the case chose online story teaching as the optimization strategy via the current status analysis. Co-teaching groups conducted by school teachers are the key to success. In this case, the teacher of the Intermediate Class brought the effect of the seed teacher into full play and led other teachers to proceed with the selection and practice of online story teaching materials to enhance teachers' abilities in information capacity, course integration, and related teaching knowledge via the method based on each teacher's expertise was one of the critical outcomes of the case as well. Teaching methods in a diverse setting could enhance students' learning interests; the case guided students to use an e-classroom and e-materials. Students have shown significant interest in participation and enjoyed each type of online teaching activity, including animations, games, songs, role-plays, tests in adventure-game mode, etc.

Good peer interaction contributes to learning; the case has reduced pressure on students to test well, and students' anxiety towards a strange language could be diminished via the support, cooperation, and encouragement among teachers. They could develop their strengths through interactions with classmates and teachers to remedy their lack of confidence. In implementing teaching practice, the case greatly valued students' performance and considered their learning processes and outcomes instead of paying attention only to their test results.

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## Conflicts of Interest

The authors declare no conflict of interest.

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