Research and Practice of Blended Teaching Mode Based on “Mobile Learning Platform and PAD Class”

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Abstract
This paper is to build a blended teaching mode of “Mobile Learning Platform + PAD class”, and explain how to combine the PAD class with the blended teaching mode under the learning background of “Internet + Education” and its application in the courses of the second foreign language (Japanese). Through continuous practice, it is found that the PAD class and blended teaching can be well integrated and achieve excellent teaching results.

Keywords
Mobile Learning Platform, Duifene, Moso Tech, PAD Class, Blended Teaching, Practice and Research

1. Introduction
In recent years, the integrated development of information technology and teaching has become the hot spot and emphasis of education and teaching reform (Chen, L., 2016). Under the learning environment of “Internet + Education”, the education and teaching reform urgently calls for the deep integration of information technology and education and teaching and the building of a brand-new educational ecology with learners as the center in combination with online and offline, thus comprehensively improving teachers and students’ information technology application ability and their information literacy ability, promoting students’ active learning, independent learning and cooperative learning, and developing good habits of lifelong learning. This research attempts to build a community of students, teachers and high-quality learning resources by the use of Mobile Learning Platform such as “Duifene” and “Moso Tech”, form a blended teaching mode of PAD class in combination with online and of-
fline, and give full play to the blended teaching advantages of PAD class and “Internet + Education”.

2. Related Concepts

2.1. Mobile Learning Platform

As a learning application software, such as “Duifene” and “Moso Tech”, mobile learning platform provides students with an interactive mobile online learning platform. Mobile learning platform breaks the time and space constraints of traditional teaching and realizes the convenience, autonomy and humanization of students’ learning.

“Duifene” is the official teaching platform of “presentation assimilation discussion class (PAD class)”, and its biggest feature is concise, bright, practical and useful (Wang, 2019), which is widely praised and recognized by teachers and students. The “Duifene” platform has three remarkable features: first, it is simple, convenient and covers less CPU memory. If logging with a mobile phone, you don’t need to download the APP, just directly follow the “Duifene” WeChat official account; if with a computer, you can click the website. Second, the platform has complete functions, including more than 20 functional sections such as students, interactive live broadcast, curriculum resources, homework, WeChat messages, attendance, discussion boards and online exercises, which fully covers the functions required for teaching and managing students. Third, it is easy to realize the all-round management of students and the process record of formative evaluation, the Duifene platform can scientifically record students’ learning trends.

“Moso tech” is a teaching housekeeper app based on mobile terminal. It has the same powerful functions as “Duifene” platform in assisting teachers’ teaching and managing students. They are excellent “intelligent teaching assistants”. The outstanding advantage of “Moso tech” is that it has powerful cloud computing function and can make timely data statistics on students’ learning progress, learning participation and learning effect, so as to help teachers effectively understand students’ learning.

Based on the needs of this research, “Duifene” platform and “Moso tech” platform are used simultaneously in teaching to realize their complementary advantages.

2.2. PAD Class

Under the influence of educational theory of Constructivism, the PAD class puts forward the new teaching modes suitable for Chinese local culture, gives full play to teachers’ advantages, exploits students’ conscious and autonomous learning potential, and reasonably combines teachers’ “teaching” with students’ “learning” and “thinking”, which reflects the unique combination of constructivism and traditional teaching modes (Du & Zhang, 2016). “PAD class” explicitly divides “teaching and learning” into three specific links, namely presentation, as-
Assimilation, and discussion. Presentation refers that teachers give intensive lectures on teaching contents in class, in order to help students build the knowledge framework, sort out the key and difficult points, and help them build a “zone of proximal development (ZPD)” efficiently; assimilation refers that students assimilate the boring symbolic knowledge into vivid personal experience by reading the textbooks, references, videos and other materials after the intensive teaching, fill in the knowledge blind spots for the “ZPD”, and improve their high-order thinking ability to solve practical problems; discussion refers that students discuss and exchange with classmates and teachers with their own thoughts, in order to truly “assimilate knowledge into the mind”. The three “teaching and learning” links of the PAD class are linked with one another and indispensable with clear ideas easy for operation, which also conforms to the cognitive laws of students’ learning.

Teachers can make appropriate adjustments to the time division in teaching practice. If assimilation and discussion are separated by one week, it is called “PAD across different classes”, and if they are conducted in the same class, it is called “PAD in one class”. Depending on the teaching, as the case may be, the “PAD across different classes” mode is employed (Chen, R., 2016).

2.3. Blended Teaching

Since the late 1990s, the blended teaching has undergone three evolutionary stages (Feng, Wang, & Wu, 2018). The first is the technology application stage (late 1990s-2006) with the most representative definition of the Sloan Consortium in the United States: “It believes that blended teaching is a teaching method combining face-to-face teaching with online teaching.” That is, for a certain teaching content, there are both online teaching and face-to-face teaching, reflecting the combination of the two teaching methods (Bonk, Graham, Cross et al., 2009). The second stage is the technology integration (2007-2013) with the most representative definition of Bliuc et al.: “It believes that blended teaching is a new learning method, which realizes the combination of face-to-face and online interaction between students, teachers and students, students and resources.” (Bliuc, Goodyear, & Ellis, 2007), and this stage focuses on the learning effect and change of interactive learning. The third is the “Internet+” stage (since 2013). The blended teaching has become more mature after the development of the first two stages. A growing number of scholars believe that blended teaching is not a simple technology mixture, but creates a truly high involved and personalized learning experience for students. Goodyear believes that: It is more important for the blended teaching in the mixture of teaching and tutoring methods under “student-centered” learning environment (Goodyear & Dudley, 2015). This research believes that blended teaching implements the teaching philosophy of “student-centered” from the perspective of students, and gives full play to the high-quality learning resources of “Internet+” to assist students in learning, in order to achieve deep learning.
3. Building of the Blended Teaching Mode of “Mobile Learning Platform + PAD Class”

PAD class is concise, useful and operable, comprehensively and systematically implements the principles of pedagogy and psychology, which is suitable for Chinese education reality with distinctive local characteristics. However, there are also the following problems of the PAD class: For example, 1) The PAD class advocates “teaching before learning” in opposition to pre-class preview (Qiao, 2018). 2) The PAD class does not properly reflect the deep integration with information technology.

Aiming at the problem of “teaching before learning” in opposition to pre-class preview, this research believes that preview reflects the coherence of learning and is an indispensable learning link in the face of different disciplines and courses. Taking the Japanese course as an example, previewing the cultural background knowledge involved in this course before class is helpful for better learning of language knowledge. Only with rich cultural knowledge as support can boring language knowledge have the stronger significance connotation. Guo Shurong points out in the Research of Building the Blended Teaching Mode of “Internet + PAD Class” (Guo, 2017) that teachers publish teaching resources through the online teaching platform before class, students preview relevant contents and enter the classroom with questions have better learning effect.

In view of the problem that the PAD class is not deeply integrated with information technology, we should create the PAD class with deep integration of information technology by the concept of “combination of online and offline teaching”, thus realizing the blended teaching based on the PAD class. The realization of blended teaching based on PAD class requires a proper mobile platform, thus this research uses the “Duifene” and “Moso Tech” teaching platform to build a bridge between blended teaching methods.

The concrete building of the blended teaching mode based on “Mobile Learning Platform + PAD class” is shown in the table:

<table>
<thead>
<tr>
<th></th>
<th>Preview</th>
<th>Presentation</th>
<th>Assimilation</th>
<th>Discussion</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Release learning tasks and integrate resources of cultural background knowledge</td>
<td>Build the knowledge framework and explain the key and difficult points</td>
<td>Answer questions online and release relevant learning resources</td>
<td>Organize discussion, Q &amp; As, summary &amp; evaluation</td>
<td>Online Q &amp; As Humanistic care</td>
</tr>
<tr>
<td>Duifene platform, Mobile Learning Platform</td>
<td>Flexible use of the sections such as online exercises, curriculum resources, discussion boards, attendance, classroom questions, group, teaching evaluation, WeChat messages, homework, questionnaires and vote</td>
<td>Learn the knowledge framework, understand the key and difficult points, and ask new questions</td>
<td>Conduct assimilation or adaptation and build the knowledge system</td>
<td>Discussion, report, self-assessment and mutual evaluation</td>
<td>Consolidate knowledge and improve ways of thinking to solve practical problems</td>
</tr>
<tr>
<td>Students</td>
<td>Online self-test, and learn relevant cultural background knowledge</td>
<td></td>
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DOI: 10.4236/ce.2022.136133
The blended teaching of “Mobile Learning Platform + PAD class” fully reflects the coherence and integrity of learning, thus teaching can be carried out in a planned, organized and logical way, which not only gives full play to teachers’ professional advantages, but also exploits students’ potential of autonomous learning. This learning mode also efficiently integrates the high-quality learning materials of “Internet”, and sends the related culture, background knowledge, academic frontiers as well as key and difficult points of this discipline, course, unit and chapter to the Duifene platform by means of texts, audios, videos, downloads or links, etc., in order to organically integrate “teaching and learning” and create a learning community of teachers and students.

4. Implementation of Blended Teaching Mode Based on “Mobile Learning Platform + PAD Class”

The research objects are students majoring in English with Japanese as their second foreign language. Taking the fourth lesson of The New Edition of Sino-Japanese Exchange Standard Japanese Primary as an example, this paper gives a solid explanation to the implementation of the blended teaching mode of “Mobile Learning Platform + PAD class”.

4.1. Preview

Teachers: Teachers assign the preview tasks of this lesson on the “Moso Tech” platform. For example, the cultural links of this lesson: How do Japanese people address each other politely? What are the similarities and differences of appellations between Japanese and Chinese people? What are the differences between internal and external appellations in Japanese calling each other? As mentioned in the text, what are the similarities and differences between “ご両親” and “両親”? What is the usage of honorific in Japanese as well as its origin? And the transportation modes in Japan and its transportation advantages. Teachers refine relevant resources from the Internet and upload them to the “Moso Tech” platform with rich learning resources. In the process of collecting, downloading and reading materials, teachers constantly improve their professional quality, and resources are continuously accumulated and stored in the “Moso Tech” platform to form a rich resource chain, which is essentially a process of reducing teachers’ burdens.

Students: Students have a comprehensive and profound understanding of the cultural background of this lesson through the learning resources of the “Moso Tech” platform, which lays a solid foundation for the next language learning. Of course, although there are abundant learning resources, students are not required to read all the learning materials, they should have an optional reading in accordance with their actual knowledge reserves. However, if it is not mentioned in the “Moso Tech” platform in the process of continuous knowledge building, students are required to give full play to their ability to acquire information technology and further use the “Internet+” learning platform for deep learning.
4.2. Presentation

Teachers: Focus on the grammar knowledge of existential clauses in this lesson with an excellent explanation of their auxiliary words and clause meaning to the students. Do more exercises for the existential clauses with complete and profound understanding. Publish relevant scene dialogues, deepen students’ learning impression, help students flexibly apply them to actual situations and solve practical problems through the “Duifene” platform.

Students: Listen carefully, make notes, and actively cooperate with the teaching activities. Reflect and build a learning framework, assimilate or adapt it vividly with prior knowledge forms, and internalize abstract and complex textbook knowledge into personal knowledge.

4.3. Assimilation

Teachers: Release the teaching videos, courseware, vocabulary and text audios, the links of grammar knowledge and the situational application of words of this lesson to facilitate students’ learning and use.

Students: During assimilation, students are the main subjects of learning, so they not only need to understand and remember the vocabularies, grammars and clauses in the text, but also need to spend a lot of time and energy reading aloud and reciting to cultivate their language sense and language thinking ability.

4.4. Discussion

Teachers: Teachers are the organizers and guides of class discussion activities. They have two tasks at this stage: The first is to organize students’ discussions, ensure them in order, have a cordial cooperation among group members and form good discussion atmosphere; The second is to guide the group members to have a discussion around the course content, in order to avoid ineffective discussion deviating from the topic. All these aim to make sure that the topics revolve around the existential clauses of the lesson.

Students: Students are the subjects of knowledge exchange and the leader of classroom in the class discussion. Students actively participate in the discussion in groups, and their language competence, teamwork ability as well as innovative thinking ability can be improved.

4.5. Review

Teachers: In this process, teachers keep in touch with students online at all times through the discussion boards and WeChat messages of the “Duifene” platform, give their maximum company and encouragement, and keep emotional connection with them, thus promoting the growth of teachers and students.

Students: Students feel the continuity of learning, receive their homework and consolidate their learning through the interaction of “Duifene” platform.

5. Summary

The blended teaching mode based on “Mobile Learning Platform + PAD class”
absorbs the essence of PAD class and blended teaching respectively, and maximizes students’ deep learning. PAD class and blended teaching comply with the requirements of education and teaching reform, fully reflect the teaching philosophy of “student-centered”, and fully integrate the respective advantages and potentials of teachers, students and “Internet + Education” for joint contribution of a learning community.

**Fund Program**

2019 Guangxi Higher Education Undergraduate Teaching Reform Project + “Research and Practice of Mobile Blended Teaching Mode Based on Mobile Combination Platform and PAD Class—A Case Study of College Foreign Language Courses of Medical Colleges in Minority Areas” + (2019JGA265).

**Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

**References**


