Junior Middle School English Education and Teaching Practice Under the Micro-class Mode

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ABSTRACT. In the traditional English classroom teaching process, we are used to treating teachers as the center of classroom activities, so that teachers can play a leading role in the teaching process. Its disadvantage is that it is easy to ignore the initiative of students, limit the creativity and imagination of students, and cannot teach students in accordance with their aptitude. In order to study the improvement of students’ learning enthusiasm and teachers’ teaching efficiency to the greatest extent under junior high school English education and teaching, based on the micro-class model, this paper uses example analysis and questionnaire survey methods to collect data from five middle schools in the city. The English education and teaching practice system. The experimental results prove that in the micro-class mode, the students’ understanding of the knowledge learned is about 50% higher than that in the traditional mode. In the after-class test, the scores far exceed those of the students in the traditional curriculum. Teachers have an effect on this teaching mode. Satisfaction is also above 80%, which is much higher than the traditional teaching model. This shows that the junior high school English teaching model based on micro-classes is more conducive to students’ integration of knowledge, and also conducive to improving students’ learning experience and promoting their generative cognition.

KEYWORDS: Micro-class Mode, English Education, Multimedia Teaching, Teaching Practice

1 Introduction

In English teaching, the research on teaching mode has always taken the brunt of it. In the traditional teaching model, teachers usually help students consolidate their knowledge with the help of classroom explanations + after-school training [1]. Although this method can achieve the expected teaching purpose in the short term, from a long-term perspective, this teaching mode not only damages students’ learning initiative, increases the cognitive load of English learning, but also weakens students’ learning. Language output ability, because this model emphasizes the repeated training effect of exercises. Especially under the educational background of
the reform of the new curriculum standards, the current English teaching pays more attention to the overall training of language learning, rather than the ability to take exams [2]. As the digital society continues to deepen and expand, the trend of digital education has become more and more mainstream. Combined with the widespread popularity of mobile terminals (such as mobile phones, tablet computers, etc.), micro-classes, as a brand-new teaching carrier, have rapidly grown for all ages. Educational channels for the class to acquire knowledge. Make micro-classes become a trend and the vane of the new education era.

In view of this, it is extremely important to improve students' comprehensive language proficiency. We have to review the English teaching model, introduce micro-class links and transform the existing classroom teaching functions, and form a junior high school English teaching model with micro-classes as the core [3]. The new teaching mode of micro-class model has completely broken the inherent thinking of traditional classroom teaching. Although it originated abroad, it has also quietly emerged in China in recent years, and more and more scholars and teachers have begun to pay attention to this new teaching mode [4].

MaYibing believes that micro-classes, as a product of the development of the times, is an alternative to the traditional teaching mode after the teaching content and teaching methods have problems. It introduces the reasons for the emergence of micro-classes and the difference between micro-classes and traditional teaching modes. Advantages, I have heard of the questionnaire survey method, applied the micro-class in the classroom, and conducted investigations on academics and teachers, which verified the success of the micro-class in teaching [5]; LiXinjuan believes that the micro-class needs to be taught by the teacher according to the different students Different online or video courses are a new way of teaching students in accordance with their aptitude. In this teaching mode, teachers and students are no longer the traditional teaching mode, but are teaching and learning from each other. The method can be a good solution to difficult problems that students are difficult to understand in class. It has investigated the academics that they want to pass and verified the effectiveness of the micro-class [6]; WangJinping believes that the micro-class model is an effective supplement to the traditional classroom model. Under the traditional classroom teaching model, it is difficult for students to efficiently learn the content taught by the teacher. After listening to the micro-class mode, the teacher can reduce the main content of the course into a few minutes of short videos. Students’ learning enthusiasm can also improve teachers’ teaching efficiency [7]. These studies have a certain reference role for this article, but because the samples of these studies are too small, they are not universally applicable, and they are too biased towards theory, and their effects in practice have no strong empirical evidence.

The main content of this article is to conduct a preliminary study on the management of junior high school English classroom teaching under the micro-class mode. Through the application status and existing problems of junior high school English classroom teaching management under the micro-class learning mode, the reasons for its formation are analyzed, and corresponding rectification measures are proposed for these problems, so as to achieve the purpose of improving the effect of
teaching management. It tries to organically integrate the theory and practice of classroom teaching management suitable for the micro-course learning mode, guide practice through theory, and in turn test the correctness of theory through practice.

2 Junior High School English Teaching Methods under the Micro-class Mode

The rapid development of computer technology and the wide application of multimedia learning platforms in teaching have realized the integrated presentation of multiple sensory channels such as vision and hearing, so that the teaching classroom can easily exceed the limitations of time and space; compared with traditional teaching, with the support of information technology the modern teaching model is more three-dimensional, diverse and practical [8]. With the widespread popularization of mobile Internet technology, teachers can easily use portable PCs, smart phones, etc. in their hands to obtain teaching-related illustrations, copywriting, images, and some web animations and other materials that can be liked by young students from the Internet platform. It is applied to PPT, teaching micro-classes, etc., to make the teaching content presented more colorful, and the teaching methods used are more diverse. In the actual teaching process, teachers no longer need to spend a lot of time and energy to write blackboard writing in the classroom as usual. The single teaching mode of "three in one" of chalk, textbooks, and drawings has gradually ceased to be mainstream, especially in middle school classrooms or some online teaching platforms. The use of multimedia teaching presentation tools such as PPT and electronic whiteboard has become the absolute mainstream teaching method [9].

The emergence of micro-classes has brought earth-shaking changes in the field of basic education, and has also provided support and assistance in various aspects for the innovation of English teaching models. The rapid development of computer technology and the wide application of multimedia learning platforms in teaching have realized the integrated presentation of multiple sensory channels such as vision and hearing, so that the teaching classroom can easily exceed the limitations of time and space; compared with traditional teaching, with the support of information technology the modern teaching model is more three-dimensional, diverse and practical [10]. With the widespread popularization of mobile Internet technology, teachers can easily use portable PCs, smart phones, etc. in their hands to obtain teaching-related illustrations, copywriting, images, and some web animations and other materials that can be liked by young students from the Internet platform. It is applied to PPT, teaching micro-classes, etc., to make the teaching content presented more colorful, and the teaching methods used are more diverse. In the actual teaching process, teachers no longer need to spend a lot of time and energy to write blackboard writing in the classroom as usual [11]. The single teaching mode of "three in one" of chalk, textbooks, and drawings has gradually ceased to be mainstream. Especially in middle school classrooms or some online teaching platforms, the use of multimedia teaching presentation tools such as PPT and electronic whiteboard has become the absolute mainstream teaching method. The emergence of micro-classes has caused earth-shaking changes in the field of basic
education, and it also provides various support and assistance for the innovation of English teaching mode [12]. For the teaching efficiency and student acceptance in micro-class teaching, we have designed the following calculation formula:

\[
E = \frac{1}{m} \left( \sum_{i=1}^{n} \sum_{j=1}^{l} x^j \log(h_j(x^j)) \right) + \left(1 - y^j\right)^2 + \frac{1}{2m} \sum_{i=1}^{l-1} \sum_{j=1}^{l} (\theta_{ji})^2
\]

\(1\)

\[
P = 1 - E = 1 - \frac{1}{m} \left( \sum_{i=1}^{n} \sum_{j=1}^{l} x^j \log(h_j(x^j)) \right) + \left(1 - y^j\right)^2 + \frac{1}{2m} \sum_{i=1}^{l-1} \sum_{j=1}^{l} (\theta_{ji})^2
\]

\(2\)

\[
P(q) = \int_{P_u(q)}^{P_j(q)} f(x)dx, f(x) = \begin{cases} 1, & a < x < b \\ 0, & \text{others} \end{cases}
\]

\(3\)

### 3 Junior High School English Education Teaching Experiment under the Micro-class Mode

#### 3.1 Pre-teaching Analysis

Analysis The main content of the analysis of the learning environment is whether the existing learning environment conditions allow students to carry out the micro-course teaching mode. Including objective environment analysis, such as whether students have terminal equipment that can conduct micro-class learning, whether each learner has the convenience of Internet access, etc. The second is the subjective environmental analysis, whether the classroom atmosphere is active and whether the pressure of learning competition is too great. These seemingly simple questions actually directly determine the feasibility of the teaching model. Therefore, at the beginning of curriculum design, the investigation of the learning environment is an indispensable and important part.

#### 3.2 Micro Course Selection

Micro-class learning is different from closed classroom learning on campus. In the learning process, learners often encounter interference from the external environment, their learning focus time is relatively short, and they are often in a state of marginal engagement and discontinuous attention. According to mobile learning data, in the process of mobile learning, the content of micro-classes with a duration range of 3 to 5 minutes is most acceptable to learners. In micro-classes, by using multimedia technology to set up signs reasonably, students' attention can be effectively guided.
3.3 Study Guide

After selecting or completing the micro-class, it is necessary to make a study guide for students based on the key points of the course and the knowledge points that the micro-class needs to present. The study guide is arranged to students in the form of course tasks. The content includes practice questions and learning feedback of knowledge points. They are usually distributed to target students in the form of tables, and can also be pushed to students through online examination tools. The main purpose of the learning guide is to help students analyze the learning materials, adjust the basic cognitive load in micro-class learning, and improve the efficiency of students' knowledge integration.

3.4 Learning Feedback

After watching the video, complete the pre-class homework assigned by the teacher, which will be given to the teacher the day before the class. The pre-class work mainly examines the knowledge content in the micro-class teaching videos. Most students cannot complete the pre-class work by watching the video once, which will induce them to watch it repeatedly. Let students learn with questions, in line with the requirements of task-based teaching. In addition, with the help of the online evaluation tool of the questionnaire star, the pre-class test can be released in real time to evaluate the students' mastery of the content of the micro-class, and through the questionnaire star real-time data processing system, student learning data can be generated for the next in-class teaching. Good to prepare in advance.

4 Experimental Analysis of Junior Middle School English Education and Teaching Under the Micro-class Mode

We conducted a survey of English teaching in five schools in this city, and conducted surveys on several important parameters in student learning, and compared their values through related models for easy comparison. The specific data under the traditional teaching mode are shown in Table 1:

<table>
<thead>
<tr>
<th></th>
<th>Learning interest</th>
<th>Student initiative</th>
<th>learning result</th>
<th>Interactive</th>
<th>Class rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.232</td>
<td>0.193</td>
<td>0.180</td>
<td>0.248</td>
<td>0.213</td>
</tr>
<tr>
<td>2</td>
<td>0.239</td>
<td>0.218</td>
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<tr>
<td>3</td>
<td>0.224</td>
<td>0.209</td>
<td>0.176</td>
<td>0.276</td>
<td>0.197</td>
</tr>
<tr>
<td>4</td>
<td>0.276</td>
<td>0.246</td>
<td>0.217</td>
<td>0.233</td>
<td>0.199</td>
</tr>
<tr>
<td>5</td>
<td>0.245</td>
<td>0.184</td>
<td>0.208</td>
<td>0.247</td>
<td>0.268</td>
</tr>
</tbody>
</table>
In order to facilitate the comparison, we used the micro-class mode to teach these five schools for three months. After that, we conducted a statistical survey on the relevant parameters. The specific values are shown in Table 2:

**Table 2. Learning parameters in micro lesson mode**

<table>
<thead>
<tr>
<th>Different school</th>
<th>Learning interest</th>
<th>Student initiative</th>
<th>learning result</th>
<th>Interactive</th>
<th>Class rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.452</td>
<td>0.436</td>
<td>0.498</td>
<td>0.423</td>
<td>0.207</td>
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<tr>
<td>2</td>
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<td>0.497</td>
<td>0.504</td>
<td>0.431</td>
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<tr>
<td>3</td>
<td>0.513</td>
<td>0.537</td>
<td>0.497</td>
<td>0.513</td>
<td>0.235</td>
</tr>
<tr>
<td>4</td>
<td>0.543</td>
<td>0.473</td>
<td>0.553</td>
<td>0.481</td>
<td>0.187</td>
</tr>
<tr>
<td>5</td>
<td>0.449</td>
<td>0.524</td>
<td>0.441</td>
<td>0.524</td>
<td>0.247</td>
</tr>
</tbody>
</table>

**Figure 1. Traditional teaching parameters**

In order to facilitate the comparison, we used the micro-class mode to teach these five schools for three months. After that, we conducted a statistical survey on the relevant parameters. The specific values are shown in Table 2:
From Figure 1 and Figure 2, we can see that in the micro-class mode, after 3 months of teaching, students’ learning enthusiasm and learning efficiency have been greatly improved, and the improvement is mostly over 80%. However, classroom discipline under the micro-class mode has not improved, and some schools even have a slight decline. This is due to the shortcomings after joining the Internet, which needs to be noticed and corrected in the subsequent micro-class mode.

**5 Conclusion**

As a new type of teaching information carrier, micro-classes show more advantages of visual and auditory dual-channel stimulation compared with traditional teaching blackboard writing. Therefore, multimedia learning theory has important guiding significance for the content production of micro-courses, and many guiding ideas can directly participate in the process of designing the content of micro-courses. The grammar teaching model based on micro-classes helps to reduce the cognitive load of students and deepen their understanding of relevant knowledge points. On the one hand, the teaching mode based on micro-classes makes the classroom more flexible and helps to cultivate the comprehensive language ability of junior high school students. On the other hand, the grammar teaching model based on micro-classes can generally improve students’ learning experience in grammar classes.
References


