

The Impacts of Teachers' Teaching Styles on High School Students' Learning Engagement : An Example of English Class

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Abstract. As the golden learning time period in a lifetime, it is extremely crucial to investigate the influence mechanism of teaching styles on learning engagement to improve students' learning engagement level in high school. By using the questionnaire method, this study aims to tap into the teacher's standpoint on how to maximize the level of learning engagement of high school students by changing the teaching styles. This study found that there is a significant positive correlation between different teaching styles and students' learning engagement. Besides, the degree of English learning motivation of high school students is most influenced by the extent of the teacher's rigor and logic. The more caring and sharing the teacher is to high school student, the more energetic the student is in learning English. The more obvious the teacher's rigorously logical style, the more concentrated the high school student's learning is. Overall, different teaching styles have different advantages. To maximize high school students' English learning engagement, teachers should pay a great attention to developing their own teaching styles of caring and sharing as well as rigorous and logical. Meanwhile, teachers should create a positive learning atmosphere by encouraging students to learn cooperatively, in the process of teaching.

Keywords: Teacher's teaching style; learning engagement; influence factor.

1. Introduction

Individualized student instruction has improved in recent years as educational resources are optimized. Students are increasingly concerned about their learning emotions influenced by teachers' teaching styles. Previous studies have showed the positive impact of teachers' teaching styles on students' learning emotions, which are also linked to learning engagement. This study examines the influence of teachers' teaching styles on high school students' learning engagement, aiming to enhance teaching and learning.

Learning engagement is a multidimensional concept, generally defined as the positive and optimistic mindset during the learning process, as well as the ability to handle stress well when facing challenges. This is embodied in the student's spontaneous enthusiasm and immersion on learning, including vigor, concentration and dedication [1]. Learning engagement, as a key concern of researchers in instructional psychology, not only reflects students' learning process and predicts academic achievement, but also indicates the learning atmosphere and teaching quality [2]. High school students are in the golden period of their learning life, whose academic performance has always attracted much attention from the education sector. Since learning engagement serves as a determining factor of high school students' academic performance, it is of great research value and practical significance to explore the influence mechanism of high school students' learning engagement.

As research advances, the definition of teaching styles by academics has become richer. Some researchers believe teaching style is a concentration of integrated performance during the teaching process, known for teacher's uniqueness and stability of the individual differences [3]. Some researchers suggest that teaching style is the reflection of teachers' individualized teaching strategies and organization, as well as the embodiment of the teacher ethics [4]. Although the claims are different, the connotation of teaching style mostly revolves around three core ideas. First, teaching style is generated and known by teachers' individuality. It is continuously shaped and refined in



teaching practice. Second, teaching style is continuously shaped and refined in teaching practice. Third, teaching style is specifically embodied in the teachers' language, methods, and characteristics [5].

Nowadays, in the teaching and learning setting, teachers' contact time with high school students is particularly long. Besides, the teaching styles do have different degrees of influence on students' learning condition and academic performance. Therefore, it is crucial to investigate how the teaching style of teachers impacts the engagement of high school students in learning.

Currently, a large body of relevant research focuses on exploring the impact of teacher style on junior high school students' learning engagement, while less attention has been paid to discover the influence of teachers' teaching styles on senior high school students' learning engagement. This study is carrying on by taking the method of questionnaire survey, to compare the differences in student learning engagement under different teaching styles, aiming to find out the impact of teaching style on high school students' learning engagement. Ultimately, providing feasible suggestions and references to upgrade teaching outcome by effectively combining the advantages of diverse teaching styles.

2. Methods

2.1. Design

The research centered on teacher teaching style and student learning engagement, is conducted through a questionnaire survey. The questionnaire is made of the Thinking Styles and teaching Inventory and the Learning Engagement Scale in Chinese translation [6].

The "Teacher Teaching Style Inventory", compiled by He Wen in 2011. After combining with the practical teaching situation in China, the scale contains 18 measurement indicators, covering four dimensions of teaching style: humorous and lively, caring and sharing, rigorous and logical, and innovative and exploratory [5]. The reliability of this scale has been well tested in both national and international studies, with a Cronbach's score of 0.897.

The learning engagement scale used in this study was first introduced by foreign scholar Schaufeli and then revised by Chinese scholar Li Xiyang in the light of the factual situation in China [7]. The scale contains 10 items, involving 3 dimensions, which are vigor, motivation and concentration, in which subjects are instructed to rate themselves on a 5-point scale of "1 not at all ~ 5 perfectly". The Cronbach's alpha of the questionnaire was confirmed to be 0.91, and the results of the validation factor analysis revealed that the structural validity of the questionnaire is good.

2.2. Research Object

The subjects of this study consists of 90 ordinary high school students from grades 10 to 12, who come from Sichuan Province. The age range is between 16 and 18 years old.

2.3. Research Process

Based on the research variables, this study collected relevant mature scales from abroad and partially modified the original scale according to Chinese educational realities. The final questionnaire design consisted of basic information, teaching style scale and high school student learning engagement scale.

Before the formal survey, 30 questionnaires were distributed to a high school in Meishan, face-to-face, during students' rest time in school. It is expected to recover in half an hour, to organize and analyze whether the questionnaire design can successfully achieve the research targets, and make timely adjustments in the improper places.

Questionnaires will be delivered face-to-face to 90 students from the freshman to junior year of Meishan General High School, in proportion to the sample, while the students are on break in class.

To ensure the authenticity of the students' filling, students will take the questionnaires home and complete the questionnaires independently. After 24 hours, we are expected to collect the questionnaires face-to-face from school again, to analyze the data.

2.4. Analysis Method

Above all, Cronbach's coefficient for the scale was calculated and tested to check the reliability of the questionnaire by checking if the coefficient was 0.6 or higher. Second, we conduct descriptive analysis and analyzed the correlation between different teaching styles and learning engagement. Simple linear regression analysis was used to see if teachers' teaching styles significantly affected students' learning engagement.

3. Results

3.1. Reliability and Validity Analysis

To ensure the reliability and validity of the survey data, the questionnaire was first subjected to a reliability test. Reliability analysis is mainly used to assess the stability and reliability of measurement instruments. The Colombach coefficient is often used as a research reliability test. The test results show that the Cologne Bach coefficients of Teacher Teaching Style Scale and Learning Commitment Scale are 0.941 and 0.955 respectively, which are higher than 0.7, proving that the design of the above scales is able to solve the research problem.

Both scales are multidimensional. The Teaching Style Scale contains four dimensions with Colombach's coefficients of 0.912, 0.832, 0.841, and 0.766, and the Learning Commitment Scale contains three dimensions with Colombach's coefficients of 0.841, 0.928, and 0.892, respectively. The Colombach's coefficients of all dimensions are higher than 0.7, which confirms the high quality of the two scales once again. The specifics are shown in the table below.

Table1. reliability analysis

| | Apha | tIem count |
|--------------------------|-------|------------|
| Teacher's teaching style | 0.941 | 18 |
| Learning engagement | 0.955 | 17 |

Validity is the degree to which a measurement instrument or method is able to accurately measure the concept or characteristic to be studied. Exploratory Factor Analysis is frequently used as a validity test for research. When the KMO has a value greater than 0.8, the scale has good validity. The data calculation revealed that the KMO of the teaching style and learning engagement, were 0.947 and 0.940 respectively, indicating that the validity of the mentioned scales can support the study. The details are as table2.

Table2. Validity analysis

| | KMO |
|-------------------------------------|-------|
| Teacher's teaching style | 0.947 |
| Rigorous and logical teaching style | 0.940 |

3.2. Correlation Analysis

To verify the close factors associated between English teachers' teaching styles and high school students' learning engagement, the questionnaire data were correlated and analyzed. The detailed data are displayed in the table2 and table3 below.

Table3. Corresponding analysis of teacher's teaching style and learning engagement

| | | Learning engagement |
|--------------------------|---------------------|---------------------|
| Teacher's teaching style | Pearson correlation | .927** |
| | Sig. (two-tailed) | < 0.01 |

Table4. Corresponding analysis of each dimensionality

| | | learning motivation | learning energy | learning concentration |
|---|---------------------|---------------------|-----------------|------------------------|
| Humorous and lively teaching style | Pearson correlation | .716** | .784** | .760** |
| | Sig. (two-tailed) | <0.01 | <0.01 | <0.01 |
| Rigorous and logical teaching style | Pearson correlation | .773** | .757** | .778** |
| | Sig. (two-tailed) | <0.01 | <0.01 | <0.01 |
| Caring and sharing teaching style | Pearson correlation | .744** | .808** | .806** |
| | Sig. (two-tailed) | <0.01 | <0.01 | <0.01 |
| Innovative and exploratory teaching style | Pearson correlation | .718** | .738** | .760** |
| | Sig. (two-tailed) | <0.01 | <0.01 | <0.01 |

On the basis of the data, it is known that the more apparent the characteristics of the four teaching styles are, the higher the students' learning engagement level is. Second, the teacher's degree of logical rigor has a particularly significant effect on students' English learning motivation. Thirdly, the teacher's degree of care and sharing is of great influential to students' English learning energy and attention.

3.3. Regression Analysis

In order to further verify the mechanism of the influence of different teaching styles on the level of English learning engagement of high school students, the simple linear regression was done on the questionnaire data. Detailed data are shown in the table below. On the basis of the data, it is known that there is a significant positive correlation between teachers' teaching styles as a whole, rigorous and logical, caring and sharing, innovative and exploratory, and humorous and active, and senior high school students' English learning engagement. Second, teachers' level of logical rigor has a particularly significant effect on students' motivation to learn English. Thirdly, the teacher's humor and sharing level had the greatest impact on students' English learning energy. Lastly, students' English learning concentration is most affected by the teacher's rigor and the degree of caring and sharing towards the students.

Table 5. Regression analysis of teacher's teaching style and learning engagement

| model | Unstandardized coefficient | | Standardized coefficient | t | significance | tolerance VIF | |
|---|----------------------------|----------------|--------------------------|-------|--------------|---------------|-------|
| | B | standard error | Beta | | | | |
| (Constant) | -765 | .191 | | 3.998 | .284 | | |
| 1 Humorous and lively teaching style | .291 | .066 | .267 | 4.392 | <0.01 | .437 | 2.290 |
| Rigorous and logical teaching style | .335 | .065 | .313 | 5.171 | <0.01 | .439 | 2.280 |
| Caring and sharing teaching style | .318 | .076 | .285 | 4.209 | <0.01 | .351 | 2.849 |
| Innovative and exploratory teaching style | .187 | .058 | .200 | 3.226 | .002 | .418 | 2.392 |

a. Dependent variable: learning engagement

4. Discussion

4.1. The Advantages of Positive Teaching Styles

It is the common academic pressure and interpersonal pressure, and individual pressure from the family of origin that make the psychological state of our high school students not optimistic. Humorous and lively teaching style can create a kind of sincere and warm classroom atmosphere, which is the key part to relieve the psychological pressure of high school students, stimulate their learning motivation and improve their learning concentration [8]. Rigorous and logical teaching style can make students develop the habit of thinking critically and forming better learning habits under the influence of the teacher. Caring and sharing teaching style teachers can greatly understand students, better establish equal and harmonious teacher-student relationship, promote students' positive mind and raise students' learning energy. The innovative and exploratory teaching style can minimize the boredom of the traditional teaching mode, guide students to think from multiple perspectives, and stimulate students' innovative potential.

4.2. The Development of Integration of Teaching Styles

This study suggests that, it is the caring and sharing teaching style, as well as rigorous and logical teaching style, which, in contrast, have the greatest positive impact on high school students' engagement in English learning. In this way, the teacher's personality charisma can be utilized to effectively stimulate students' interest in English learning, enabling high school students to appreciate English culture and learn English knowledge in a relatively warm and pleasant atmosphere. Furthermore, to a certain extent, the caring and sharing teaching style can promote the positive psychological construction of high school students [9]. But merely attracting students' interest in English learning with personality charms cannot perfectly spur high school students' motivation to learn English. The Rigorous Logical Teaching Style is not only the greatest factor influencing student motivation, but is also the influencing factor with the highest correlation to student participation. Therefore, in order to maximize the level of students' learning engagement from all dimensions, teachers should continuously improve the English professionalism and enrich personal charisma at the same time.

4.3. Improving Students' Learning Engagement

Apart from teaching style, the learning atmosphere in which learners live inevitably affects their level of engagement in learning. To be specific, in the same learning environment, the higher the students' own enthusiasm for learning, or the higher the students' expectations of holding to classmates, the higher the learners' motivation will have [10]. As a result, teachers should focus on emphasizing awareness of group discussion and cooperative learning to their students in the actual teaching process. Beyond that, teachers can also design more group cooperative tasks or establish English learning groups without delaying the completion of learning tasks. In this way, not only does it ensure the implementation of the teaching concept of "students as the main body", but also effectively strengthens the atmosphere of cooperative learning in the class and improves the students' engagement level in English learning.

5. Conclusion

By using the questionnaire, this study confirms that humorous and lively, rigorous and logical, caring and sharing, as well as innovative and exploratory teaching styles do have a significant positive impact on high school students' English learning engagement level. What's more, student motivation to learn is most affected by the teacher's level of rigor. Additionally, students' learning energy and concentration are most strongly influenced by the level of caring and sharing that teachers offer to students.

On the basis of the above research results, this paper summarizes the advantages of different teaching styles and puts forward practical suggestions for the integrative development of teachers' teaching styles, taking into account the psychological characteristics of high school students. In order to promote high school students' English learning engagement level in all dimensions, teachers should not only improve the logic and systematization of teaching and learning through continuous learning and summarizing, but also cultivate students' good habit of critical thinking. At the same time, it is also necessary to care about the students' situation from time to time, and do some sharing in the teaching process appropriately to ease the pressure of high school students and stimulate their interest in learning.

Although the research is successfully done, there are still some shortcomings in this research. For example, the data source is relatively single, which to some extent makes the findings not thorough and precise enough.

In future studies, data collection channels should be broadened to make the findings more generalizable. The sample should be drawn from as many schools as possible to enrich the categories of the sample and to exclude chance or one-sided conclusions as much as possible.

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