

Monitoring and Quality Evaluation Method of English Teaching in Machine Manufacturing Based on Machine Learning and Internet of Things

Fang Xie^{1,*}

¹ Changsha Aeronautical Vocational and Technical College, Changsha 410124, Hunan, China

Abstract

INTRODUCTION: With the continuous development of society, education is getting more and more attention, and all stages of education, such as elementary school, middle school, high school, Etc., are the fundamental objects of attention, while English in the university, as a critical foreign language, is also given considerable attention. Among the various majors in the university, different majors pay different attention to English, among which in the mechanical engineering major, the importance of English is still relatively front and centre, which is helpful for the improvement of students' mechanical engineering level. However, in the current teaching, there are still a series of problems in the English teaching of mechanical majors, which have certain obstacles to improving students' English level.

OBJECTIVES: To give university English teachers more feedback and opinions through a reasonable and perfect teaching monitoring and quality evaluation method; combining their English reading teaching with relevant rules and regulations can better promote the educational quality level of university English and help students improve their English more reasonably.

METHODS: To study and analyze the monitoring and quality evaluation of English teaching in mechanical majors to get the relevant optimization suggestions of teaching mode, and to solve the correlation problem based on multiple linear regression through the calculation of SPSS software, to analyze the final impact mechanism of each item on the quality of teaching.

RESULTS: The results of the sample survey indicate that, firstly, five factors, namely, research direction, disciplinary ladder, scientific research, talent cultivation and management, will have a significant impact on the monitoring and quality evaluation of English teaching in the mechanical program. Secondly, further research on the influence mechanism suggests that the monitoring and quality evaluation of English language teaching in mechanical majors needs some improvement, affecting the English language proficiency of students in this field.

CONCLUSION: After summarizing several factors that impact the evaluation of the quality of English teaching, it is clear that such English classroom teaching has a positive effect on the training of mechanical students.

Keywords: Machine learning and Internet of things, machine building, English teaching, monitoring and quality evaluation

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*Corresponding Author. Email: 956960476@qq.com

1. Introduction

University is a turning point in life, and many people's university life needs clarification, with no clear direction

for their future [1-3]. Moreover, for mechanical students, modern society is a society of rapid information development; better adapting to society is worthy of consideration. At this time, English teachers in universities play a vital role. Combining the modern

society represented by machine learning and the Internet of Things with English teaching can improve the efficiency of English teaching, which provides teachers with new teaching ideas [4-5]. It is necessary to practice and explore the monitoring and quality evaluation method of English teaching, which has specific benefits for improving the English of university students majoring in mechanics. Many schools do not adopt this teaching quality evaluation method, so it is new for mechanical students, which can easily attract their attention and interest [6]. Driven by their interest, their learning motivation can be increased, thus helping them better understand the teaching contents of machine learning and the Internet of Things, stimulating their inner curiosity and increasing their interest in English. (2) Enhance the English ability of college students. Traditional English teaching has been challenging to arouse college students' interest in mechanical majors, making it difficult for them to study seriously [7-9]. Improving teaching monitoring and quality evaluation can enrich the English classroom teaching content of college students after combining the modern knowledge of the Internet of Things and machines and teaching them more professional English knowledge to improve their English ability. (3) Cultivate the comprehensive quality of college students. In addition, English needs to express ideas on paper, which is a necessary comprehensive ability for college students, and the introduction of teaching monitoring and quality evaluation into English teaching can better cultivate the comprehensive quality of college students. In the general teaching mode of mechanical majors, they only pay attention to the study of professional courses and only make a few requirements for such subjects as English, as long as they can pass the exam. By improving teaching quality evaluation methods, teachers can make higher requirements for mechanical students to improve their overall quality [10].

Some scholars have conducted a survey and found that, at present, universities have requirements for teachers' English teaching effectiveness, such as class length, student performance, student evaluation, Etc [11-13]. Some universities also have rules and regulations, such as bonuses for teachers with excellent English teaching performance and, naturally, no generous bonuses for poor class performance. However, many schools still need mature teaching monitoring, quality evaluation methods, and explicit rules or a perfect system. According to the survey, the percentage of teachers who know about teaching monitoring and quality evaluation methods is less than 50%. Teachers of mechanical engineering majors know even less about this concept, only 35%, which indicates that the application of teaching monitoring and quality evaluation methods in mechanical engineering majors needs to be higher [14-15]. In the literature, the concept of "teaching monitoring and quality evaluation methods" is studied separately and interpreted from the perspective of teaching methods to arrive at a relevant view of this concept. Very few scholars will

combine teaching monitoring and quality evaluation methods with modern mechanical engineering professions to analyze how to promote and implement teaching monitoring and quality evaluation methods scientifically and rationally in universities. Teaching monitoring and quality evaluation methods involving machine learning and IoT knowledge are not available; inspired by this, this paper will combine the analysis of teaching monitoring and This paper will analyze the system of teaching monitoring and quality evaluation methods in conjunction with the analysis of teaching monitoring and quality evaluation methods, and find ways to implement and optimize the teaching monitoring and quality evaluation system by organizing the collected data.

This paper uses Excel and other computing software to construct a teaching monitoring and quality evaluation of mechanical engineering. The contribution of this paper is reflected in the following: first, the quality evaluation index system has eight major directional evaluation indexes, which cover all items of evaluating a course evaluation, and the sub-projects reach 29, involving more specific and reasonable elements. Secondly, the teaching monitoring and quality evaluation analysis is better for carrying out the subsequent related English teaching courses. Third, comparing the teaching monitoring and quality evaluation system in classroom construction and the traditional teaching feedback model are analyzed to understand the advantages and disadvantages. Fourth, to provide some reference value for deepening teaching monitoring and quality evaluation in China, to improve the teaching level of the English courses of the relevant machine manufacturing, and to promote the continuous development of China's education in the context of economic globalization.

2. Research Background

As a reflection standard of teaching effectiveness, teaching monitoring and quality evaluation methods have been gradually promoted in recent years with the development of big data, and many scholars have begun to apply this evaluation system to teaching in various disciplines for relevant research. However, there needs to be more literature that combines teaching monitoring and quality evaluation methods with the mechanical engineering profession, not to mention the addition of machine learning and the Internet of Things [16-18].

The literature review mainly revolves around the following parts: first, regarding the research related to teaching monitoring and quality evaluation methods, domestic and foreign literature mainly adopts a combined approach to explore and analyze teaching monitoring and quality evaluation, collecting data through questionnaires and using the current mainstream teaching monitoring and quality evaluation criteria [19-21]. The overall structure can be distinguished by the monitoring system and evaluation system, which can be divided into five

systems, and the evaluation system can be divided into eight indicators, as shown in Figure 1.

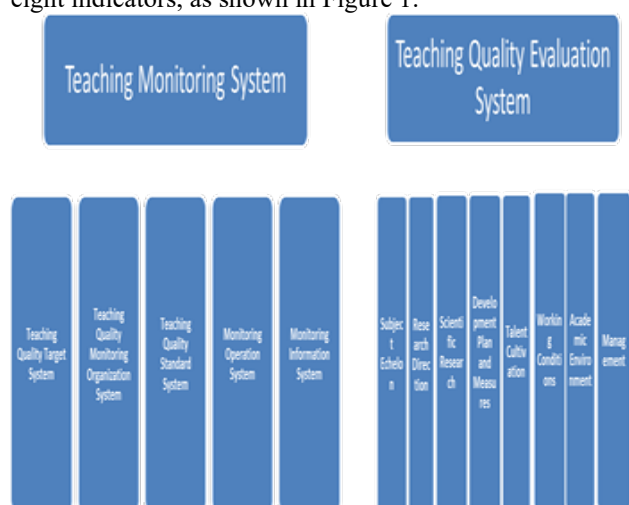


Figure 1 Common structure of teaching monitoring and quality evaluation

Second, the research on English teaching. Currently, China is deepening teaching reform, and English, a critical foreign language, is content many universities must pay attention to. Moreover, according to the research of many scholars, it is found that most colleges and universities are following the direction of national guidelines to optimize the construction of the curriculum, especially such courses as English, such as increasing its variety and number of courses, integrating English with other courses, and so on. Some universities are teacher-oriented and advocate excellent teachers to instil English knowledge into students through excellent lecturers; some universities pay attention to classroom format and develop new courses such as interactive and lecture styles to attract student's attention to the course as much as possible. Other colleges and universities can take students as the main body and truly realize that students should be the main protagonists of education, putting themselves in their shoes and establishing many student-led English courses, such as free English debate classes and English music appreciation classes.

Thirdly, the study on the curriculum of machinery manufacturing. At present, China is also promoting the strategy of manufacturing in the solid country, so machinery manufacturing can be said to be a significant trend in the profession, and in recent years is also emerging and active in the academic world; its research freedom, can be applied to many types of problem analysis, typical are the prospects of the profession, advantages and disadvantages, teaching content, Etc. Most scholars' research on manufacturing courses for mechanical majors mainly focuses on these aspects. Some of these scholars start from the construction of a curriculum system to adapt to the talent market, give some construction strategies for the current machine learning era curriculum, show the framework of the curriculum module system for the whole four-year whole process from entrance to graduation, and give the specific curriculum teaching organization and implementation

methods. Some scholars also combine teaching for practical purposes in this aspect, combining teaching quality testing and evaluation with students' sense of innovation, legal concepts, and international perspectives and strengthening the application of multidisciplinary knowledge in machine-building. Other aspects need to be covered, especially in the area of English curriculum, which is the research direction of this paper.

Fourth, scholars are basically in a vacuum regarding selecting and using research methods and theories for teaching monitoring and quality evaluation and constructing modern English courses for machine-building majors. There are errors in the research of the same issue by different researchers, which may cause bias in the research results. In the issue of teaching monitoring and quality evaluation, scholars mostly use existing criteria for research: this descriptive analysis is easy, but the analysis perspective is single and limited, and it may not be possible to present a correct and unbiased analysis of the results in a complex cause-effect relationship, for example, the English course in mechanical engineering in this paper is challenging to summarize comprehensively with this universal approach. Some scholars infer the relationship between the two through qualitative studies, and this approach has some limitations. In terms of research on curriculum construction, most scholars adopt the existing criteria that when conducting college curriculum construction, the effectiveness of the classroom will be considered in terms of its scores, and teachers are required to pay attention to students' test scores, Etc. However, while deepening the reform, English education pays more attention to subtle Influences than momentary high test scores.

To sum up, the combination of teaching monitoring and quality evaluation and modern machinery manufacturing professional curriculum in China is still in the comparative analysis of theory and examples, and the method of causal inference between various characteristics has yet to be fully applied to this neighbourhood. Therefore, the analysis and research of this study on teaching monitoring and quality evaluation and modern machinery manufacturing professional curriculum will make up for the shortcomings of previous studies and help to explore teaching monitoring and quality evaluation. It will help to explore the impact of teaching monitoring and quality evaluation on the construction effect of modern English courses in machine building and actively promote teaching reform and optimization of English education.

3. Materials and Methods

3.1. Basic theory

Teaching monitoring and quality evaluation methods can be divided explicitly into monitoring and quality evaluation, both of which are essential aspects of teaching management, with the main objects being the classroom and the lecturer, and play an essential role in teaching

development and quality improvement. The central concept of this method has three main points: firstly, it insists on the student as the main subject. To determine the subject quality evaluation index system of "English teaching method" course, we should start from the needs of students' comprehensive development, pay attention to students' learning status and emotional experience, focus on the teaching process reflecting students' leading position and playing the central role of students, emphasize respecting students' personality and individuality, encourage discovery, inquiry and questioning, cultivate students' It emphasizes respecting students' personality and individuality, encouraging discovery, inquiry and questioning, cultivating students' innovative spirit and practical ability, and highlighting the concept of curriculum reform - student-based development. Secondly, we insist on the combination of assessment of teaching and learning, focusing on assessment of learning. Subject construction is also a process in which teachers organize and guide students to learn effectively, a process in which teachers and students interact, and students interact to achieve development goals together. The "evaluation of teaching" establishes an evaluation system to promote teachers' continuous improvement, which is conducive to improving teaching quality on a large scale. "Evaluation of learning" establishes an evaluation system to evaluate students' learning status and learning effects. The purpose and characteristics of the evaluation of the "English teaching method" subject determine that the evaluation should focus on the evaluation of learning to encourage teachers to change their concepts and improve their teaching. It is necessary to completely change the phenomenon of only evaluating teaching without evaluating learning. Finally, the feasibility of the evaluation program should be insisted on. Feasibility is the premise of implementing evaluation. The subject quality evaluation index system should align with the current reality of classroom teaching reform. The evaluation criteria are goals that are expected to be achieved. However, they must be goals that can be achieved under the current conditions to facilitate the motivational function of evaluation. The evaluation points must be observable, perceptible and measurable to facilitate the evaluator's judgment. The evaluation methods should focus on a qualitative and comprehensive evaluation and strive to be simple and easy to operate

3.1.1. Teaching monitoring methods

First, the teaching monitoring method will be divided into five parts in the standard system, (1) teaching quality objective system, which will set up objectives for the whole monitoring activities and require the monitoring activities to help achieve this quality objective. (2) The Teaching quality monitoring organization system includes the organization of each teaching unit, such as faculty, grade, Etc., to arrange and assign personnel for monitoring activities. (3) The Teaching quality standard

system sets up specific judgment standards for monitoring activities and facilitates the actual implementation of monitoring activities. (4) Monitoring operation system, which is implemented in each department, classroom and teacher, is required to play the role of teaching monitoring in the actual teaching process. (5) Monitoring information system. The information from the monitoring process is collected, organized and used in a relevant way. Moreover, for the construction of English courses in the machine building majors studied in this paper, this paper can take these monitoring methods into account and link them with the subsequent quality evaluation methods to prepare for them, and after further collecting information on the evaluation of teaching quality in various aspects, comprehensively comparing the optimal solutions of the two problems before arriving at the global optimal solution, to propose targeted teaching strategies and improve teaching efficiency.

3.1.2. Teaching quality evaluation method

The teaching quality evaluation method is a system that directly reflects the teaching effect and monitors its effectiveness. The details of teaching quality evaluation are generally different in different schools and institutions. However, in general, they are still similar and will be divided into four parts: (1) student evaluation, in which the students of the classroom evaluate the lecturer and the classroom effect; this method is the most intuitive, and almost all evaluation methods will have This is the most intuitive method and is included in almost all evaluation methods. (2) Teacher peer evaluation, this one is evaluated by colleagues of the lecturer or similar teachers and has some objectivity, but not every school's teaching quality evaluation system will use this method; for one thing, the number of teachers may not be enough, and it is easy to be subjectively influenced by peers. (3) Monitoring group evaluation, which is generally organized in schools with a complete monitoring system, carries out a comprehensive evaluation of quality according to the teaching monitoring methods mentioned above, and the criteria used and the scores given are more objective and based on evidence. (4) Teaching norms evaluation, used less in many schools, is scored by leaders at all levels. In turn, efficiency will be affected, but the results are still more reasonable. The basic logic of one of the standard teaching quality evaluation systems is shown in Figure 2.



Figure 2 Basic logic diagram of teaching quality evaluation system

3.1.3. Teaching monitoring methods

This paper adopts a complete teaching monitoring and quality evaluation system, including eight extensive evaluation indexes and 30 small evaluation items. It sets up the corresponding evaluation weights according to the existing theoretical knowledge, calculates the corresponding scores by weighted average and compares them with the actual situation, screens out the unreasonable data, and finally will also use SPSS version 23.0 software for data analysis, mainly using one-way ANOVA, multiple linear regression analysis and independence test, with a p-value less than 0.05 representing a statistically significant difference in the data.

3.2. Tool setting and strategy analysis

In order to solve the endogeneity problem with unbiased estimation in the above study, the data analysis function of SPSS was chosen to solve the validity problem in this paper. Because the questionnaire statistics used in this paper do not have too complicated a calculation process compared to the limitations of other algorithms, it has unique advantages. After measurement, the data in this paper has exceptionally excellent statistical significance.

3.2.1. Teaching monitoring methods

The primary research tool used in this study is a questionnaire, namely the Teaching Monitoring and Quality Evaluation Scale, which was modified from the scale previously developed by Xiao Shuqin and other scholars and used in this survey, which contains a total of 20 questions and is divided into five leading indicators, namely: research direction, disciplinary echelon, scientific research.

The scale is divided into five indicators: research direction, disciplinary team, scientific research, talent cultivation, and management. Each question has three options, from excellent, good, passing, and failing to poor, with a score of 5-1, respectively. The final summary score is 100 points, and according to the previous survey, it is defined that more than 80 points are excellent, 60=80 points are good, and less than 60 points are failing. The general classification of the topics is shown in Table 1.

Table 1 English teaching monitoring and quality evaluation scale

Evaluation index	Evaluation items	Description
Research direction 5%	Research direction 30%	Whether the research direction of the English discipline is clear and stable
	Frontier 40%	The position of the leading research

		direction in the domestic and international academic community
	Adaptability 30%	Whether the research direction matches the national development strategy
Academic echelon 25%	Head of the discipline 50%	Whether to lead the whole discipline
	Academic echelon 30%	Whether the staffing of the echelon is reasonable
	Academic backbone 20%	The age and achievements of the leading personnel of the echelon
Scientific research 25%	Completed projects 35%	Affiliation of the results of the project
	Ongoing projects 35%	Project progress
	Academic Publications 30%	Award Level
Talent Cultivation 25%	Cultivation scale and quality 30%	Number of students in the faculty
	Teaching situation 40%	Course arrangement, number of awards
	Students' academic research 30%	Thesis awards
Management 20%	Management System 15%	System Establishment and Operation
	Rules and Regulations 15%	Development of relevant rules and regulations
	Work status 30%	Development of academic programs
	Management measures 30%	Degree of implementation of the plan
	Management objectives 10%	Management milestones

3.2.2. Data sources

This study is a survey-based experimental research, and a random sampling method was used to survey a random sample of 50 English teachers of mechanical engineering within one of three universities in Zhengzhou City in February 2022. The inclusion criteria for the sample were: ① college or bachelor's degree or higher in their

institution; ② central alignment and main teaching subject was English; ③ voluntary and active cooperation with the questionnaire. The exclusion criteria were: ① teachers of secondary schools or some vocational and technical colleges ② unable to survey special reasons, and the specific distribution of respondents' ages is shown in Figure 3.

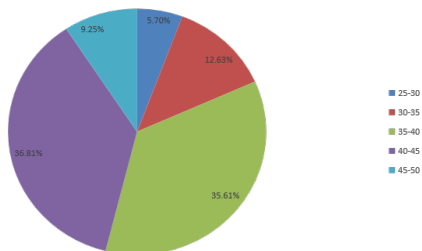


Figure 3 Age Distribution of Respondents

3.2.3 Strategy analysis

In this questionnaire survey, the scores of the respondents' answers and the information collected from other aspects will be used for scoring. Some subjective evaluation questions will be scored by English teachers or their colleagues, such as personal age, awards, Etc., while some objective evaluation questions, such as teaching quality and management system, will be filled in after collecting relevant information in the target institutions and then combined with the questionnaire. The total score will be expressed and calculated by the following formula through Excel and other calculation software. □

All evaluation elements of the questionnaire are worth 100 points.

Evaluation item scores

$$S = \sum_{i=1}^n a_i x_i \quad (a \text{ is the weighting factor}), i=1 \quad (1)$$

Evaluation index score

$$S = \sum_{i=1}^n b_i x_i \quad (b \text{ is the weighting factor}), i=1 \quad (2)$$

After the questionnaires were collected, scores were obtained and organized, and t-test and regression analysis of factors in the regression analysis would be conducted by SPSS software to determine whether they were statistically significant to conclude the degree of Influence of each factor on the quality of English teaching.

4. Results and Discussion

4.1. Analysis of statistical results

Table 2 Scores of English teaching monitoring and quality evaluation scale (n=50)

Type of topic	Score obtained	Number of questions	Average score per question
Direction of study	15.24±2.56	4	3.95±0.68
Subject Echelon	14.35±5.13	4	3.06±0.86
Scientific research	17.62±1.85	4	2.86±0.49
Talent Cultivation	12.03±2.91	4	2.76±0.73
Management	13.24±2.45	4	3.33±0.66
Total score	80.61±9.52	20	3.13±0.81

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Scientific research	17.62±1.85	4	2.86±0.49
Talent Cultivation	12.03±2.91	4	2.76±0.73
Management	13.24±2.45	4	3.33±0.66
Total score	80.61±9.52	20	3.13±0.81

After organizing the questionnaire, the scores and average scores of each question type can be known from Table 2 above. Specifically, the highest mean score is in the scientific research section, which indicates that this group of English teachers has some achievements in scientific research and can feed them back into the actual teaching in the classroom. The lowest mean score is in the talent development section, which means that these teachers do not do as well as others in cultivating students, neglecting students' absorption and understanding in their teaching courses, and thus do not achieve better results in talent development.

Moreover, the overall score distribution for a more precise comparison is shown in Figure 4.

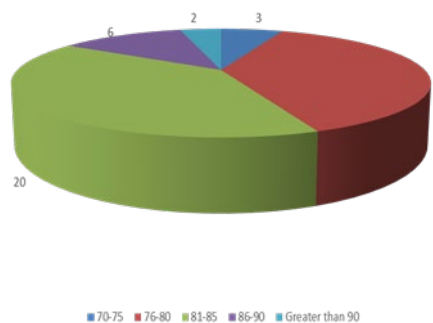


Figure 4 Distribution of overall scores of English teaching monitoring and quality evaluation

For the two types of topics with the highest and lowest scores, the specific evaluation items' scores are as follows: firstly, the scores of scientific research are shown in Figure 5.

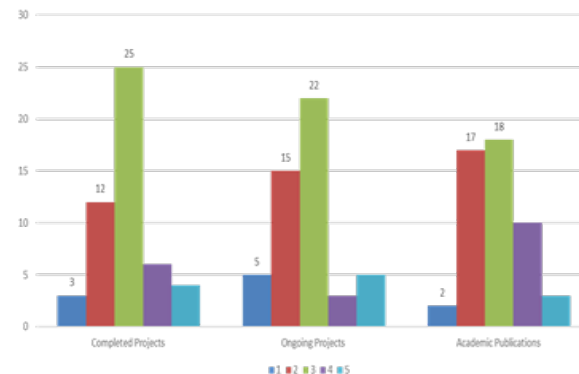


Figure 5 Evaluation items of scientific research

The second is the talent cultivation evaluation item scored, as shown in Figure 6.

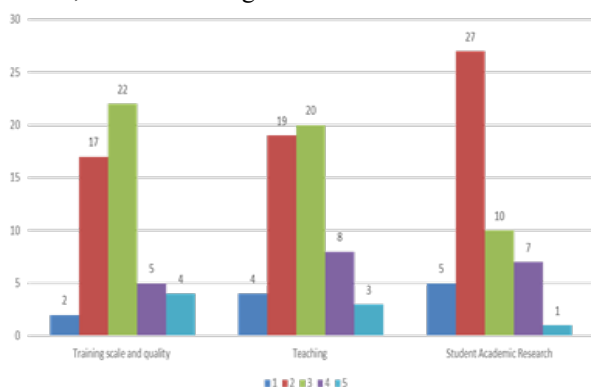


Figure 6: Evaluation item score of talent cultivation

4.2. Result verification

In order to further explore the Influence of respective variables on the monitoring and quality of English teaching in mechanical professions, this paper will also use multiple linear regression analysis to verify the results of these data after the questionnaire survey has collected the data. After some calculations, some results are obtained: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Considering the complexity of the operation, the data with a 95% confidence interval were selected as the results in this paper. According to the above model and related data, the p-value was less than 0.005 after the iterative operation. This indicates that the validity test was passed within the 95% confidence interval, and the statistical results were reliable. The specific regression analysis results are shown in Table 3 below.

Table 3 Results of multiple regression analysis of ELT monitoring and quality evaluation (n=60)

Independent variable	Coefficient of the regression equation	Standard error	T-value	P-value
Direction of study	85.124	10.231	6.84	0.02
Academic echelon	63.275	2.317	7.52	0.04
Scientific research	5.131	9.628	24.63	0.03
Talent development	6.241	1.735	16.27	0.02
Management	4.862	2.864	13.72	0.03

4.3. Analysis of the mechanisms influenced by the monitoring and quality evaluation of English teaching

The questionnaire survey and multiple linear regression above have indicated that the five factors of research direction, disciplinary echelon, scientific research, personnel training and management have a significant impact on the monitoring and quality evaluation of English teaching in mechanical majors, and the p-value is more significant than 0.05 after inclusion in the statistical model. Therefore, these meaningful factors will be analyzed next in conjunction with the data above and the actual situation in the survey.

4.3.1. The effect of research direction on ELT monitoring and quality evaluation

From the results in the table above, the research direction is a macro judgment basis for the evaluation system in teaching English in mechanical disciplines. Machinery manufacturing professionals focus on engineering, for the importance of English is generally not high, and if teachers can, in general, research the direction of the study, clear that its strengths can be mapped to the actual teaching in these studies, mechanical professionals help students improve their English ability, the quality of English teaching is higher required.

4.3.2. The Influence of subject echelon on English teaching monitoring and quality evaluation

Teaching is a long process; mechanical professional English courses do you usually need 2-3 years; in this process, the outstanding discipline echelon can provide students with more suitable the teaching course, equipped with more high-quality teaching staff, in a more appropriate time to explain more knowledge of English, neither delayed mechanical professional students of regular class time and rest time, It can also bring them more effective knowledge improvement, to stimulate their desire for knowledge, and then guide them to carry out independent learning in their spare time, to improve their English ability, and help English teaching get more praise.

4.3.3. Influence of scientific research on English teaching monitoring and quality evaluation

However, in reality, English teachers in most universities need to conduct scientific research in English, publish works, and share results and other affairs to display teaching results effectively, and only those who are genuinely competent can successfully stay in the classroom and carry out subsequent English teaching. Thus each English teacher's scientific research is particularly critical to find in their professional field orientation, to establish a feasible goal, down-to-earth, to arouse their scientific research power step by step, thus

phased achievements unceasingly, share more professional knowledge of teaching for the English class, also can obtain a better evaluation, Motivate yourself to continue your research, creating a virtuous circle.

4.3.4. Influence of talent training on English teaching monitoring and quality evaluation

In the investigation and interview process, I found significant differences in the effectiveness of talent training in these schools. Significant differences exist in graduation rates, subject pass rates, and ordinary grades. Some students need more time to study because they are too busy with work. Some students cannot further self-study at school because their English foundation is not solid. These factors will affect the effect of talent training and then affect the quality evaluation of English classrooms.

4.3.5. Influence of management on English teaching monitoring and quality evaluation

In addition, I also found that these teachers need to carry out other aspects of work while teaching English, and there is specific negligence in the management of students. Few teachers can complete the teaching and simultaneously carry on the relatively perfect management of the students. On the one hand, the university is relatively free, and students can choose and carry out many aspects independently. On the other hand, the importance of English classrooms in mechanical majors could be higher, and it is difficult to carry out practical constraints and management. These factors will increase the difficulty of teacher management and then affect the quality evaluation of the English classroom.

To sum up, these five factors will significantly impact the monitoring and quality evaluation of English teaching in mechanical majors. Although the mechanisms are different, they also have their commonalities, which need to be paid attention to.

5. Conclusion

This paper mainly studies and analyzes the monitoring and quality evaluation of English teaching in mechanical majors to get relevant suggestions on optimizing the teaching model. SPSS software is used to solve the correlation problem based on multiple linear regression to analyze the final impact mechanism of each project on teaching quality. The results of this sampling survey show that: first, the five factors of research direction, discipline echelon, scientific research, personnel training and management work will have a significant impact on the English teaching monitoring and quality evaluation of mechanical majors. Second, further study on the influencing mechanism shows that the English teaching

monitoring and quality evaluation of the mechanical primary need to be improved to some extent, affecting the improvement of students' English ability in this major.

Although the English course of the mechanical major is not as important as the engineering course of the primary major, it is self-evident that it is of great importance to the students of this major, which can improve their English level and help them to find better opportunities in the job market after graduation. Therefore, after summarizing several factors influencing the quality evaluation of English teaching, it should be made clear that such English classroom teaching has a specific positive effect on the cultivation of mechanical students. This kind of understanding should not be divorced from reality but should be combined with social reality. Especially in the era of deepening teaching reform, teachers must understand the importance of English teaching evaluation, start from a sense of social responsibility, and reflect their social values to help students improve their English level. To sum up, based on the previous analysis results and mechanism research, this paper draws the following suggestions for optimizing the construction of mechanical English courses:

5.1 Teach students to extract basic English knowledge from textbooks

Mechanical major English requirements are low; basic English knowledge can be found in the daily textbooks and similar sentences, and some basic grammar knowledge can be found in the reading article example sentences. Therefore, teachers should dig out the knowledge needed for English teaching from reading textbooks and carry out corresponding English teaching. Such knowledge includes summarizing the overall content of articles, summarizing the centre of paragraphs, studying the grammar of sentences, Etc., which can help students transform what they read into knowledge for writing. For example: in the process of reading teaching, I met "How was your school trip?" When this sentence is used, teachers can split the sentence and let students write short English essays or make sentences according to the keywords. This can help students accumulate some good words and sentences and lay a good foundation for students' future English learning.

5.2 Create a rich and diversified English teaching environment

For college students, changes in the external environment are pronounced, and they can easily perceive the changes in their surroundings, especially in schools and classrooms where they stay for a long time. Therefore, schools should pay attention to the classroom environment of college English teaching, actively carry out joint teaching of reading and writing, and create a good teaching atmosphere. More multimedia equipment

can be equipped, some fashionable elements can be added, and English-related videos can be shown so that college students can feel the importance of English in learning English. In addition, teachers should also take the initiative to show students excellent reading articles and guide them to explore the words and grammar and other knowledge in them to create a rich and diversified English teaching environment and give college students a fresh and exciting feeling.

5.3 Implementing practical activities of English teaching

No matter how perfect the theory is, it must be implemented. After integrating English teaching and life practice, students are required to implement the integration into practice in the classroom. Therefore, English teachers of mechanical engineering should pay attention to coordinating explanations and assignments in the teaching classroom. After teaching specific English knowledge, they should appropriately assign some English reading and writing tasks, such as asking students to share interesting articles they read or learn to write about their travel experiences to stop unnecessary imagination and realize the perfect combination of English classroom teaching and practical application. By rendering the two environments together, the smooth running of the rational human assumptions course can be better achieved.

The above three strategies have only one purpose, which is to hope that college teachers can actively improve their English teaching methods, pay attention to the monitoring and quality evaluation of English teaching, and adapt to the teaching direction of the institutions, which is also precisely related to the policy of deepening teaching reform and enriching teaching materials in China. It is expected that the teaching of English courses for mechanical majors in significant schools can be continuously developed in the next period, and help mechanical It is expected that the teaching of English courses for mechanical majors in primary schools will continue to develop in the next period, helping students of mechanical majors to improve their English level and cultivate more talents for the overall development of China.

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