# Analysis of the Performance Evaluation Method of University Informationization Based on Teacher Satisfaction

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Abstract: With the development of information technology, modern colleges and universities are generally carrying out information construction work, aiming to provide convenience to teachers through information technology and improve teaching quality and efficiency. However, there are differences in the informatization teaching systems constructed by different universities, and teachers may not be satisfied. At this time, in order to promote the further development of the informatization teaching system as much as possible, universities can evaluate the performance of informatization construction from the perspective of teacher satisfaction. Know the current defects according to the evaluation results, and finally make targeted improvements. This paper will carry out research work based on this logic, mainly constructing a teacher informatization satisfaction evaluation system, and then launching an evaluation to obtain the performance level of various aspects of college informatization construction, and finally put forward relevant strategies based on the performance level.

#### 1. Introduction

Informatization construction work of colleges and universities puts forward brand-new requirements for teachers' teaching, and teachers are also actively responding, gradually adapting to the new requirements, and being able to give full play to the role of information technology in teaching. At this time, the status of teachers and information technology is transferred, which makes teachers Standing in a dominant position to review information technology, many teachers find that information technology cannot fully meet their own requirements in teaching work under this situation, indicating that the construction of information technology in colleges and universities is not perfect and needs to be further promoted. Focusing on the requirements of advancement, colleges and universities cannot blindly carry out advancement work. They must first grasp the actual problems, then weigh the severity and make decisions, and finally carry out the work. This requires colleges and universities to evaluate the performance of informatization construction based on teacher satisfaction and understand the current focus of informatization construction. And subsequent processes.

### 2. Construction of Teacher Information Satisfaction Evaluation System

Any evaluation system is composed of indicators and standards. Therefore, the basic framework construction plan of the teacher informatization satisfaction evaluation system includes at least two parts: indicator construction and standard establishment. At the same time, considering that universities should analyze the key points of informatization construction, therefore, the weight level part is added to the two basic parts, and the specific content of each part is shown below. Table 1 shows the basic framework of the teacher informatization satisfaction evaluation system.

Table 1 Basic Framework Of Teacher Informatization Satisfaction Evaluation System

Index	Standard	Weight
		level
Whether the teacher's teaching work needs are met	If yes, the performance level is high,	Highest
	otherwise the performance level is low	
Whether the teacher is satisfied with the system	If yes, the performance level is high,	General
experience	otherwise the performance level is low	
Does the system help teachers improve teaching quality	If yes, the performance level is high,	Highest
and efficiency	otherwise the performance level is low	
Whether the system can provide teachers with help that	If yes, the performance level is high,	Higher
colleges and universities cannot provide	otherwise the performance level is low	

## (1) Index analysis

1 Teachers will have many intermediate needs in their teaching work, for example, they want to understand the learning situation of students, they want to strengthen extracurricular communication with students, and they want to help students answer questions at any time. Therefore, the functions of the information teaching system built by universities should be satisfied. All the teaching work needs of teachers, otherwise teachers will not be able to complete the work through the system, and the quality and efficiency of teaching will be adversely affected. Therefore, it is necessary to set up an indicator of "whether the teaching work needs of teachers are met"; ②If the teacher is using an information system for development the bad experience in teaching work indicates that the teacher is not satisfied with the system, which will affect the teacher's trust in the system, and may also hinder teaching. Teaching is difficult to carry out, and teachers will be dissatisfied with the system and gradually unwilling to use the system. Therefore, it is necessary to set up an indicator of "whether the teacher is satisfied with the system experience"; 3The quality and efficiency of teaching are issues that teachers must pay attention to, which is not only related to Teachers' personal benefits are also closely related to the development of education. If the information system cannot help teachers improve the quality and efficiency of teaching, it means that the construction of the information system is meaningless. Therefore, if this is not done, teachers will naturally not be satisfied. Whether it can help teachers improve teaching quality and efficiency" indicators; (4) In the past, teachers were limited by university resources and many problems could not be solved. For example, the extracurricular materials were not rich enough, and teachers could not obtain extracurricular information through channels other than universities. However, the information system can break through this limitation and use the Internet to obtain rich extracurricular resources. Therefore, it is necessary to establish an indicator of "whether the system can provide teachers with help that colleges and universities can hardly provide"[1]

# (2) Standard analysis

According to the problem discussion and basic logic, the questions raised in all indicators are to judge the pros and cons of the information system at the teacher level. Therefore, when the information system is beneficial to the teacher, it means that the teacher is satisfied with the information system, and vice versa. satisfaction. In this case, an evaluation standard of yes or no is

established in accordance with the logic of the question.

# (3) Weight level analysis

With reference to the four major indicators, first, the indicators with the highest weight levels are "whether the teacher's teaching work needs are met" and "whether the system can help teachers improve the quality and efficiency of teaching". The system cannot provide teachers with complete work support and will hinder teaching work. This kind of performance has great influence and the highest level of solid weight. The latter indicator determines whether the information construction work is meaningful. If it is meaningless, it is better to not build, Which shows that informatization construction must help teachers improve teaching quality and efficiency, with the highest level of solid weight. Secondly, the index with a higher level of weight is "whether the system can provide teachers with help that colleges and universities can hardly provide". This index is used to judge the pros and cons of informatization construction on teaching quality and efficiency, but even if it is unable to provide help to teachers, it will not as a result, teachers cannot carry out teaching work through the information system, and the solid weight is relatively high. Finally, the general index of the weight level is "whether the teacher is satisfied with the system use experience". This indicator mainly judges whether the teacher is satisfied with the system performance. It does not mean that the system has defects, and the fixed weight level is general.

# 3. Evaluation Expansion

#### 3.1 Evaluation Plan

Taking 3 teachers of mathematics major in a university as the evaluation object, let 3 teachers use the current information system built by the university for teaching as much as possible within a month (use as much as possible on the basis of ensuring that the teaching quality and efficiency are not affected.), and refer to table 1 to issue an evaluation questionnaire to teachers after one month, and teachers should evaluate based on their real feelings. In addition, all three teachers have good information system operation ability. There are no obstacles in operation and cognition in the teaching of information system, so the evaluation results are reliable and free of irrelevant factors.

#### **3.2 Evaluation Results**

Table 2 Shows the Evaluation Results of Teachers' Satisfaction with the Information System of Colleges and Universities.

Table 2 Performance Evaluation Results of College Informatization under Teacher Satisfaction

Index	Standard	Detail
Whether the teacher's teaching	Yes (2); No	Two teachers said that a small number of needs were not met, but
work needs are met	(1)	they had a greater impact on teaching, so they were not satisfied; one
		teacher said that all needs were met and teaching was smooth, so they
		were satisfied.
Whether the teacher is satisfied	Yes (0); No	All three teachers thought that the performance of the system was
with the system experience	(3)	relatively poor, and it often stalled and crashed during use, so they
		were dissatisfied.
Does the system help teachers	Yes (3); No	All three teachers believed that the use of the system improved the
improve teaching quality and	(0)	quality and efficiency of teaching, and they were therefore satisfied.
efficiency		
Whether the system can provide	Yes (3); No	All three teachers believe that the system integrates teaching with the
teachers with help that colleges	(0)	Internet, and they can obtain a large number of extracurricular
and universities cannot provide		resources from the Internet. These resources are not available in
_		colleges and universities, so they are satisfied.

#### 3.3 Discussion

According to table 2, the basic work needs of teachers have been met, but a small number of more important needs have not been met. At the same time, the performance level of the information system is poor, and all teachers are dissatisfied. All teachers expressed satisfaction with the two major indicators of "whether the system can help teachers improve teaching quality and efficiency" and "whether the system can provide teachers with help that colleges and universities cannot provide". In this case, this article refers to the index weight level and the satisfaction evaluation results in Table 2 to evaluate the performance of college informatization, and the results are shown in table 3 [2].

Table 3 Performance Evaluation Of University Informatization

Total	Score evaluation method	Scoring process	Final
score			score
		"Whether the teacher's teaching work	
9 Points	The highest score value of the weight level is 3	needs are met" has the highest weight	5 Points
	points, the higher score value is 2 points, and the	level, and the majority of unsatisfied	
	general score value is 1 point. If the indicator shows	teachers are deducted 3 points.	
	dissatisfaction, the corresponding points will be	"Are the teachers satisfied with the	
	deducted, otherwise, no points will be deducted.	system use experience" index weight	
		level is average, dissatisfied teachers are	
		the majority, and 1 point is deducted.	
		"Whether the system can help teachers	
		improve the quality and efficiency of	
		teaching" has the highest weight rating,	
		and the majority of satisfied teachers do	
	not deduct points.		
	"Whether the system can provide		
		teachers with help that colleges and	
		universities can hardly provide" has a	
		higher weight level, and the majority of	
		satisfied teachers do not deduct points.	

# 4. Strategies for College Informatization Construction

First of all, because "whether the teaching work needs of teachers are met" has the highest weight, the primary goal of colleges and universities in subsequent informatization construction is to thoroughly analyze all the needs of teachers' work, and then improve the informatization functions according to the needs, such as one of the evaluation objects teachers find that the university information system can only allow themselves to conduct live teaching to students at regular intervals, and cannot do offline teaching, making it difficult to understand students' learning conditions during non-teaching periods, and teaching needs are not met. Therefore, universities must add additional settings in subsequent work The offline teaching function is recommended to upload/download function, data statistics function, this function allows teachers to upload learning materials to the system repository in advance, students can download self-study at any time, and the data statistics function can count students' self-study time, downloaded materials, etc. , It is convenient for teachers to understand the learning situation of students during non-teaching time when they are online, indicating that teachers' teaching needs are met, and the information performance is naturally improved.

Secondly, although the weight level of "whether the teacher is satisfied with the system

experience" is average, it does not mean that colleges and universities can ignore this indicator. At least after solving the problem of high weight level, colleges and universities must optimize the information system to allow teachers Get a good experience, lack of an information system to fully integrate into teaching. According to the discussion of the problem, all three teachers think that the performance of the system is relatively poor, which is the main reason for the bad experience. Therefore, universities should optimize the performance of the system in the subsequent informatization construction. The main method can be system upgrades and replacements. Communication protocols, ways to improve broadband configuration, etc.

#### 5. Conclusion

In summary, this article has carried out research work on the subject of "Analysis of the Performance evaluation method of college informatization based on teacher satisfaction", and expounded the construction method of teacher informatization satisfaction evaluation system. According to the teacher informatization satisfaction evaluation system, the article first evaluates the satisfaction of teachers, and then evaluates the informatization performance of colleges and universities with reference to the performance score evaluation method, and finally proposes the informatization construction strategy based on the weight level and performance score evaluation results . Strategies can allow universities to accurately carry out follow-up information construction work, improve teacher satisfaction, and give full play to the role of information technology.

#### References

- [1] Zhu C,Liu Y Q,Li H J,et al.An Empirical Analysis of Performance Evaluation of University Teachers Based on KPI[J].SHS Web of Conferences,2015,14:01004.
- [2] Kyushu, University, Shiizuka, et al. Evaluation of Product Design User Satisfaction based on the Systematic Analysis of Kansei [J]. Transactions of Japan Society of Kansei Engineering, 2015, 15(2):265-277.