Factors Impacting students learning Outcomes at A Medical College in Zhengzhou City, Henan Province, China

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Abstract

This study consulted domestic and foreign literature on the outcomes of what students learn in college, gotten a handle on the inquire about status at domestic and overseas on the basis of reviewing the literature, found the problems needing further research and determined the research theme of this study. In this study, what factors affect how well students learn, including students' Cognitive Ability, self-efficacy, learning motivation, learning strategies and teachers' behaviors, are studied. Then, the impacting components of students' learning outcomes are determined, and the data are collected using a research tool: questionnaire survey. The results showed that there were a significant relationship between IV(cognitive ability, self-efficacy, learning motivation, learning strategies, teacher behavior) and DV(learning outcomes).

Keywords: Cognitive Ability, Self-efficacy, Learning Motivation, Learning Strategies, Teacher Behavior and Learning Outcomes

Introduction

With the expanding ubiquity of higher instruction in China, the quality of higher education has also attracted people's attention. The learning result of college students is the direct reflection of the teaching effect and teaching quality of specialized courses. In this manner, it is vital to ponder the learning outcomes about of college students.

In this study, what factors affect how well students learn, including students' Cognitive Ability, self-efficacy, learning motivation, learning strategies and teachers' behaviors, are studied.Then, the impacting components of students' learning outcomes are determined, and the data are collected using a research tool: questionnaire survey. Finally, through sorting and analyzing the data, we can understand the basic situation of college students' learning outcomes, and analyze the impacting components of college students' learning outcomes. This study is likely to help college students learn better and improve how well colleges and universities teach.

As for the research methods, this paper mainly adopts questionnaire survey, interview and statistical analysis. The interview method is mainly used after the questionnaire, which is conducive to in-depth exploration of students' deep-seated thoughts and reasons behind the questionnaire results.

The questionnaire survey method studied the existing relevant scales about the variables in the paper, and formed a questionnaire according to the research variables and the research purpose. The IOC of the questionnaire was assessed by 5 experts in the industry, and the project objective consistency index was used to test. Some students majoring in clinical medicine and nursing in a medical college in Zhengzhou, Henan Province, China, conducted a questionnaire survey by means of online distribution, aiming to understand the background information of students, the current situation of learning outcomes, and to study the influencing factors on learning outcomes. Secondly, the interview method is to conduct interviews with some students of clinical medicine and nursing in a medical college in Zhengzhou, Henan Province, China, focusing on the factors affecting the learning outcome and students' learning outcomes, so as to further understand the situation and conduct strategic planing measures. Finally, statistical analysis, this study mainly uses questionnaires as data collection tools, and this study adopts quantitative methods for data collection and analysis. This paper mainly uses SPSS software for data analysis, independent sample T test and variance analysis. Multiple regression analysis was used to explore the specific effects of several variables on learning outcomes. The findings identify significant variables that influence the results, and recommendations for this study are presented in after.

Objective

1. To determine the significance of the causal relationship between cognitive ability and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
2. To determine the significance of the causal relationship between self-efficacy and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
3. To determine the significance of the causal relationship between learning motivation and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
4. To determine the significance of the causal relationship between learning strategies and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
5. In order to determine the significance of the causal relationship between teacher behavior and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
6. In order to assess and analyze the curprent level of cognitive ability, self-efficacy , learning motivation, learning strategies, teacher behavior and learning outcomes in a medical college in Zhengzhou, Henan Province, China.
7. To design and implement appropriate intervention design Implementation (SP) in the following areas: cognitive ability, self-efficacy, learning motivation, learning strategies, teacher behavior to improve student learning outcomes in a medical college in Zhengzhou, Henan Province, China.
8. To determine are there any differences of IV(cognitive ability,self-efficacy,learning motivation, learning strategies,teacher behavior) and DV (learning outcomes) between the current SP and expect SP phases in a medical college in Zhengzhou, Henan Province, China.

Literature Review

Theories Related to the Model

The researchers revised the research conceptual model based on the three core theories, the three research frameworks that apply these theories and the previous research models. The purpose of studying relevant theories is to deduce the application and correlation of variables used in the research results according to the research objectives (Thomas, 2017). The three core research theories used by researchers in the conceptual framework is Bandura(1997)self-efficacy theory. The conceptual framework of the influence of research on students' learning outcomes in higher education has been formed by integrating relevant research theories and relevant literature of previous researchers.

Self-efficacy theory

According to Bandura's self-efficacy theory (1986), self-efficacy can affect individual behavior and environment, and conversely, it will also be affected by individual behavior and environment. On the other hand, individuals who engage in specific tasks and have the ideal environment to achieve goals are more likely to have high self-efficacy (Schunk, 2012).

Bandura(1977) believed that there are four factors affecting individual self-efficacy :(a) mastery experience, (b) surrogate experience, (c) social persuasion, and (d) physiological and emotional states.However, according to Pajares (1996), self-efficacy is not automatically affected by these four factors; Instead, self-efficacy is based on an individual's own understanding and interpretation of these four factors. Therefore, if individuals believe that they have achieved good academic achievements and grades because of their hard work, their sense of academic self-efficacy will increase.Individuals who receive positive feedback (including encouragement) from others tend to have higher self-efficacy than those who receive negative feedback. Finally, physical and emotional states refer to an individual's physical and emotional response when asked to perform a task. If people have a higher level of anxiety, the lower their confidence in completing this particular task, then their self-efficacy in successfully completing the task is likely to be lower (Bandura, 1977).

Self-efficacy works in three ways. First , self-efficacy affect people's behavior choice. Second, self-efficacy decides how hard people will work and how long they will endure within the confront of impediments. Third, self-efficacy affects people's thinking patterns and emotional response patterns (Shen&Liu,2002). Self-efficacy plays an critical part in people's self-regulationa, and self-efficacy is widely studied in various application fields. In education and teaching, self-efficacy theory, as a novel and unique learning motivation theory, plays an important role in improving students' learning results, guSPng teaching practice and teachers' teaching effectiveness (Wang , 2000).

Related literature of Learning Outcomes: Posthuma et al. (2017) 's research model shows that there is a positive correlation between business students' cognitive ability level and learning outcomes,learning outcomes are the outcomes of the learning process.Marantika's (2022) findings suggest that there is a correlation between learning styles, related learning strategies, gender, and learning outcomes.Marantika (2021) showed that metacognitive ability, learner autonomy and learning outcomes were significantly correlated.The research results of Kustyarini (2020) show that active learning methods and strategies have a significant impact on students' learning outcomes. Self-efficacy and emotional intelligence also affect and improve students' learning outcomes.Pham et al. (2020) found that e-learning acceptance and cooperative learning among students have a significant impact on learning outcomes.Studies have found that factors such as teacher-student interaction in class, students'

learning motivation, curriculum structure and teachers' own knowledge positively affect students' learning outcomes and student satisfaction (Baber, 2020).The research results of Sulistiyowati and Sumardi (2020) show that, firstly, parents' educational style has a significant impact on students' learning outcomes in history courses; secondly, students' learning interest and motivation have a significant impact on history course learning outcomes.The use of e-learning, the correct and effective use of e-learning methods, students' learning enthusiasm and students' achievement motivation are all considered to be factors that can improve students' learning outcomes (Lao et al., 2021).

Conceptual Framework

The purpose of this study was to study the factors that affect students' learning outcomes in a medical university in Zhengzhou City in China. The researcher use self-efficacy theoretical models and three theoretical frameworks to support and develop the conceptual framework of this study. Research can be represented in structural or conceptual frameworks (Clark & Ivankova, 2016). A conceptual frame is characterized as a graphical shape that speaks to the relationship between all factors within the ponder (Cooper & Schindler, 2014). Researchers mainly develop their own conceptual framework on the basis of previous research frameworks, so there is a connection between the previous research frameworks and conceptual frameworks (Clark & Ivankova, 2016).

Therefore, the conceptual framework of this study is constructed with the support of existing theories and previous empirical studies. The conceptual framework describes all the variables used in this study. The conceptual framework in Figure 3 shows the causal relationship between variables and aims to study and analyze the various factors that influence the learning outcomes of students in a medical college in Zhengzhou.

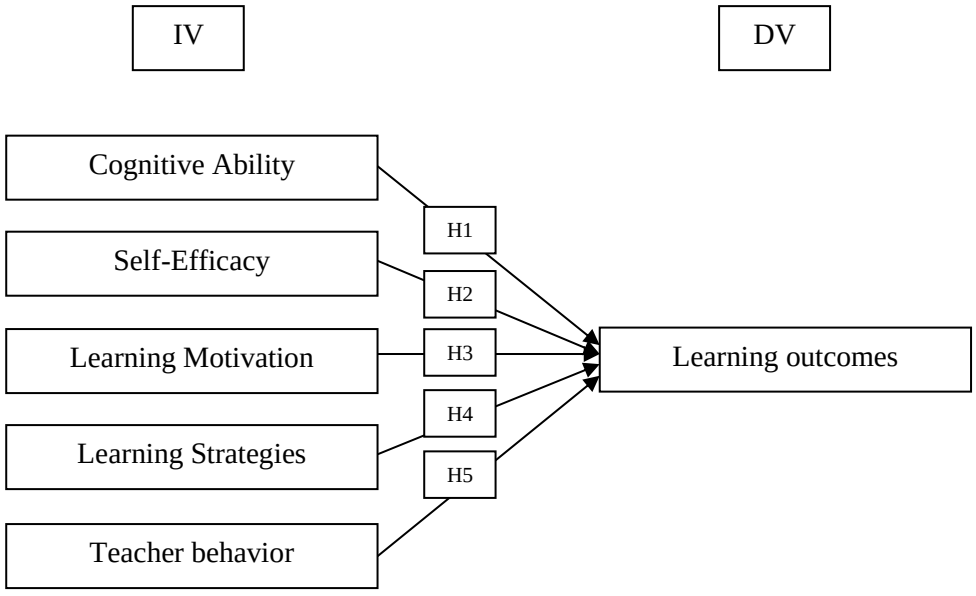

Figure 1: The Conceptual Framework of "Factors impacting students learning outcomes at a medical college in Zhengzhou, China"
Note: Created by author.

Research Methodology

This section details the various stages of action research. In this study, a mixed method was adopted. Use qualitative methods first, choosing tools such as observations and interviews. Through the literature review of the previous chapter, the previous research has given us many important implications. On the basis of literature analysis, this chapter will specifically elaborate the research methods of this study and related data collection and processing methods. Because quantitative research based on data seems to be a better way, by analyzing the data we can explain the problem and prove the possible connection. In addition, quantitative research has the characteristics of objectivity, standardization and controllability. Utilize Survey Star's research application as a tool to collect data for quantitative research.

In arrange to guarantee the unwavering quality and scientificity of the study, the variables are processed in this chapter and the results of reliability analysis are reported.After reliability tests, questionnaires were distributed to 180 students as respondents in order to test the relationship between independent and dependent variables. The results of SPSS multiple linear regression were used to determine the framework and hypothesis for the next step. Once the conceptual framework is confirmed, SP measures based on independent variables can be designed and the final assumptions confirmed. The detailed design scheme of the intervention will be presented in the next chapter, with 30 students selected from the sample population for the SP measures.The SP measures lasted 16 weeks, and the detailed design scheme is described in this Chapter. Participants enter the process of change. The expect SP stage was followed by the intervention, and the results of the SP stage were evaluated by the combination of qualitative and quantitative methods. Part of the questionnaire was sent out again, and observation and interview were conducted again. Qualitative and quantitative data were analyzed and compared to demonstrate the effectiveness of SP measures.

Research Finding

Empirical Results and Data Analysis

There are 8 research questions in this study, and the following content will give the answers to the research questions.Research questions 1-5 are about "Do students' cognitive ability, self-efficacy, learning motivation, learning strategies, and teacher behavior significantly impact learning outcomes?"

So, after testing for reliability and validity, the researchers sent questionnaires to 180 students. MLR results show that students' cognitive ability, self-efficacy, learning motivation, learning strategies and teacher behavior significantly impact learning outcomes.

Research question 6 was about “What is the current level of IV(cognitive ability,self-efficacy,learning motivation, learning strategies,teacher behavior) and DV(learning outcomes)?”,Questionnaires were filled out by 30 participants and all items were measured using a 5-Likert scale. It contains 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5 = strongly agree. Through descriptive statistics, including mean (M) and standard deviation (SD), the results show that the current level are as follows, IV:Cognitive ability (6 items),M=3.72, SD=0.559; self-efficacy (7 items),M=3.7, SD=0.525; learning motivation (8 items),M=3.65, SD=0.653; learning strategy (9 items),M=3.7,SD=0.662; teacher behavior (9 items),M=3.89, SD=0.536, and DV:learning outcomes (7 items),M=3.87, SD=0.622.

Table 1: Respondents Profile by Gender

Gender	Frequency	Percentage	Valid Percent	Cumulative
Female	15	50.0	50.0	50.0
Male	15	50.0	50.0	50.0
Total	30	100.00	100.00	

Note: Created by the author.

Table 2: Descriptive Analysis of Measurement Scales in Current SP

Constructs	Items	Mean	Std. Deviation
Cognitive Ability		3.72	0.559
	CA1	3.70	0.877
	CA2	3.90	0.662
	CA3	3.83	0.531
	CA4	3.57	0.971
	CA5	3.43	1.073
	CA6	3.90	0.803
Self-efficacy		3.70	0.525
	SE1	3.80	0.805
	SE2	3.63	0.765
	SE3	3.53	0.900
	SE4	3.50	0.777
	SE5	3.83	0.747
	SE6	3.97	0.890
	SE7	3.60	0.855
Learning Motivation		3.65	0.653
	LM1	3.50	1.009
	LM2	3.77	0.679
	LM3	3.63	0.928
	LM4	3.73	0.828
	LM5	3.70	1.088
	LM6	3.67	0.884
	LM7	3.60	1.037
	LM8	3.63	0.999
Learning Strategies		3.70	0.662
	LS1	3.97	0.718
	LS2	3.50	0.974
	LS3	3.83	0.747
	LS4	3.50	1.009
	LS5	3.67	1.124

Constructs	Items	Mean	Std. Deviation
	LS6	3.73	1.015
	LS7	3.67	1.155
	LS8	3.70	1.022
	LS9	3.73	1.112
Teacher Behavior		3.89	0.536
	TB1	3.60	0.932
	TB2	3.83	0.913
	TB3	4.07	0.640
	TB4	3.90	0.759
	TB5	3.97	0.669
	TB6	3.97	0.765
	TB7	3.97	0.809
	TB8	3.80	0.887
	TB9	3.93	0.944
Learning Outcomes		3.79	0.622
	LO1	3.87	0.681
	LO2	3.90	0.923
	LO3	3.77	0.858
	LO4	3.63	0.765
	LO5	3.83	0.834
	LO6	3.80	0.761
	LO7	3.73	1.048

Note: Created by the author.

Research question 7 was about “What is the appropriate Strategic plan (SP) on IV(cognitive ability,self-efficacy,learning motivation, learning strategies,teacher behavior) to improve DV(learning outcomes)?”.Based on previous studies, the researchers designed the methods of the clinical medicine knowledge contest and the mannequin anatomy knowledge contest to stimulate students' cognitive interest in the major, let students realize the role that the major can produce, and then improve students' cognitive ability, self-efficacy and learning motivation. The learning strategies presented by the group are designed to stimulate students' interest in learning, enhance students' conscious initiative in learning, and promote and improve learning strategies. The researchers designed two 90-minute teacher-concept training sessions to optimize and improve teacher behavior.

Research question 8 was about “ Are there any differences of IV(cognitive ability, self-efficacy, learning motivation, learning strategies,teacher behavior) and DV(learning outcomes) between the current SP and expect SP phases?”.According to 4.5,Cognitive ability between current SP (M=3.72, SD=0.559) and expect SP (M=4.37, SD=0.268) ; Self-efficacy between current SP (M=3.7, SD=0.525) and expect SP (M=4.36, SD=0.316) ; Learning motivation between current SP (M=3.65, SD=0.653) and expect SP (M=4.38, SD=0.37) Learning strategies between current SP (M=3.7, SD=0.662) and expect SP (M=4.3, SD=0.447) ;Teacher behavior between current SP (M=3.89, SD=0.536) and expect SP (M=4.6, SD=0.389)

;Learning outcomes between current SP (M=3.87, SD=0.622) and expect SP (M=4.52, SD=0.334) ,so there had any differences of IV(cognitive ability, self-efficacy, learning motivation, learning strategies, teacher behavior) and DV(learning outcomes) between the current SP and expect SP phases.

Table 3: Descriptive Analysis of Measurement Scales in Expect SP

Constructs	Items	Mean	Std. Deviation
Cognitive Ability		4.37	0.268
	CA1	4.13	0.507
	CA2	4.37	0.669
	CA3	4.53	0.571
	CA4	4.30	0.596
	CA5	4.50	0.630
	CA6	4.37	0.615
Self-efficacy		4.36	0.316
	SE1	4.47	0.629
	SE2	4.13	0.730
	SE3	4.43	0.568
	SE4	4.13	0.730
	SE5	4.40	0.498
	SE6	4.53	0.571
	SE7	4.40	0.563
Learning Motivation		4.38	0.370
	LM1	4.33	0.802
	LM2	4.53	0.629
	LM3	4.37	0.669
	LM4	4.27	0.828
	LM5	4.30	0.750
	LM6	4.30	0.651
	LM7	4.50	0.630
	LM8	4.38	0.370
Learning Strategies		4.30	0.447
	LS1	4.27	0.691
	LS2	4.23	0.774
	LS3	4.20	0.847
	LS4	4.20	0.761
	LS5	4.50	0.509
	LS6	4.33	0.661
	LS7	4.40	0.724
	LS8	4.37	0.809
	LS9	4.17	0.986

Constructs	Items	Mean	Std. Deviation
Teacher Behavior		4.60	0.389
	TB1	4.43	0.728
	TB2	4.63	0.615
	TB3	4.80	0.484
	TB4	4.70	0.466
	TB5	4.70	0.466
	TB6	4.63	0.556
	TB7	4.50	0.630
	TB8	4.40	0.724
	TB9	4.57	0.626
Learning Outcomes		4.52	0.334
	LO1	4.43	0.774
	LO2	4.67	0.479
	LO3	4.57	0.626
	LO4	4.43	0.679
	LO5	4.47	0.629
	LO6	4.50	0.630
	LO7	4.57	0.626

Note: Created by the author.

The next part shows the paired sample T-test results in current SP and expect SP for each variable, revealing whether SP intervention is effective.

Table 4: Paired Samples T-Test of Cognitive ability

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-CA	30	3.72	0.559	-6.28	29.0	<.001
	Expect-CA	30	4.37	0.268			

Note: Created by the author.

From table 4.4, there was a significant difference in Cognitive ability between current SP (M=3.72, SD=0.559) and expect SP (M=4.37, SD=0.268) condition; t (29) =-6.28, p <.001 and the mean difference was -0.644.

Table 5: Paired Samples T-Test of Self-efficacy

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-SE	30	3.70	0.525	-6.45	29.0	<.001
	Expect-SE	30	0.36	0.316			

Note: Created by the author.

From table 4.5, there was a significant difference in Self-efficacy between current SP (M=3.7, SD=0.525) and expect SP (M=4.36, SD=0.316) condition; t (29) =-6.45, p <.001 and the mean difference was -0.662.

Table 6: Paired Samples T-Test of Learning motivation

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-LM	30	3.65	0.653	-5.42	29.0	<.001
	Expect-LM	30	4.38	0.370			

Note: Created by the author.

From table 4.6, there was a significant difference in Learning motivation between current SP (M=3.65, SD=0.653) and expect SP (M=4.38, SD=0.37) condition; t (29) =-5.42, p <.001 and the mean difference was -0.721.

Table 7: Paired Samples T-Test of Learning strategies

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-LS	30	3.70	0.662	-4.69	29.0	<.001
	Expect-LS	30	4.30	0.447			

Note: Created by the author.

From table 4.7, there was a significant difference in Learning strategies between current SP (M=3.7, SD=0.662) and expect SP (M=4.3, SD=0.447) condition; t (29) =-4.69, p <.001 and the mean difference was -0.596.

Table 8: Paired Samples T-Test of Teacher behavior

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-TB	30	3.89	0.536	-5.47	29.0	<.001
	Expect-TB	30	4.60	0.389			

Note: Created by the author.

From table 4.8, there was a significant difference in Teacher behavior between current SP (M=3.89, SD=0.536) and expect SP (M=4.6, SD=0.389) condition; t (29) =-5.47, p <.001 and the mean difference was -0.704.

Table 9: Paired Samples T-Test of Learning outcomes

Variables		N	Mean	Std. Deviation	t-value	df	p-value
Pair 1	Current-LO	30	3.79	0.622	-5.72	29.0	<.001
	Expect-LO	30	4.52	0.334			

Note: Created by the author.

From table 4.9, there was a significant difference in Learning outcomes between current SP (M=3.87, SD=0.622) and expect SP (M=4.52, SD=0.334) condition; t (29) =-5.72, p <.001 and the mean difference was -0.729.

In summary, the above quantitative indicate that there were significant differences between current SP and expect SP stages on students' cognitive ability, self-efficacy, learning motivation, learning strategies and teacher behavior and learning outcomes.

Discussion/Conclusion

Here, the author summarizes and discusses the benefits and challenges of SP interventions based on the results of SP interventions and surveys.

Benefits of SP Interventions

About clinical medical knowledge answer contest and human model anatomy knowledge answer contest are carried out to form an organic knowledge and skill network with the curriculum as the carrier. Change the traditional "teacher as the main body" infusing teaching mode, through these activities, further promote the reform of classroom teaching methods and assessment and evaluation mechanism, mobilize students' enthusiasm and initiative in learning, and create an external environment to enhance learning motivation (Guo et al.,2023). Clinical medical knowledge answer contest and human model anatomy knowledge answer contest activities among students help students to form the overall learning goal. The overall goal can give full play to students' subjective initiative, so the student-centered teaching concept is easy to achieve.

Students' performance in knowledge competition also prompts teachers to think about and improve problems existing in daily teaching, thus improving students' learning outcomes and teaching effects (Yan et al., 2013).

In addition, according to the research of Chen (2005), it can enhance the sense of teamwork and collective honor, because the accuracy rate of each student's answer is directly related to the overall score of his or her team, and some questions need to be discussed by the team to get the final answer. Therefore, knowledge competition is a channel for students to give full play to their talents. Through the display and improvement of students' talents, they can support the development of the group and improve the group cooperation and communication skills.

About training programs on teachers', in the research conducted by Wang and Yu (2019), teachers were organized to participate in the teaching concept training activities of the university, which stimulated teachers' love for teaching, made them understand the advanced teaching culture and teaching concept of Peking University, mastered effective teaching methods, and were capable of university classroom teaching. To promote the improvement of curriculum teaching quality by improving teachers' teaching concept and teaching ability, and then support the strategic objectives of teaching reform and talent training.According to the research of Wang (2017), most of the participants in the training course have gained growth, they communicate with experts and peers and learn from each other in 11 days, and their thoughts are greatly influenced, both in terms of conceptual update and theoretical improvement; There is also the growth of teaching skills, but also the precipitation of educational concepts. It also lays a foundation for improving teachers' teaching ability.

Challenges of SP Interventions

About clinical medical knowledge answer contest and human model anatomy knowledge answer contest,

About training programs on teachers', Zhou (2021) pointed out in their paper that the challenge and reflection of teacher concept training is how to deal with the relationship between teaching and scientific research from the perspective of basic concept and top-level design. In reality, it is an objective existence that universities place more emphasis on scientific research than on teaching. In the professional development of young teachers, scientific research achievements often become a decisive indicator, affecting their core needs and pursuits such as professional title promotion, awards and selection of advanced workers, and improvement of life, while teaching ability and level have little support for the growth and development of young teachers.

Suggestion

On the basis of the summary, findings, discussions and conclusions of this study, the researcher propose suggestions to help improve student learning outcomes at the students, teachers, school and future researchers levels.

Actively shaping excellent campus culture and developing a good learning atmosphere for students

Learning atmosphere is one of the external factors of learning motivation (Sadia et al., 2010). Ling (2019) showed that teacher factors and teaching environment in the environment of students in higher vocational colleges would have an impact on their learning motivation.

Develop and implement learner-centered strategies

Here, four learner-centered strategies were recommended.

First of all, Hybrid teaching is a teaching method that combines online digital online education with offline classroom teaching, emphasizing student-centered teaching and giving full play to the enthusiasm, initiative and creativity of students as learning subjects (Wei , 2019). The second, PBL (problem-based Learning) is a student-centered teaching model that fosters their ability to build knowledge, solve problems, and stimulate student learning through intrinsic motivation. It is based on cognitive psychology and falls under the category of Piaget's constructivist learning theory (Jin & Sun, 2011). The role of the teacher is to facilitate the learning process, not to provide knowledge. At this time, the role of teachers is the facilitator of students' autonomous learning.Third, interactive teaching, the interactive classroom is understood as a community of learning between teachers and students. Its essence is to build a new student-centered classroom teaching life world on the basis of criticizing the teacher-centered classroom teaching mode. Fourth, self-directed learning is a learning method that students learn from their own masters. It includes the horizontal elements of learning driven by oneself, learning capacity chosen by oneself, learning strategies adjusted by oneself, learning time managed by oneself, and the whole longitudinal process of learning (Jin, 2005).

Introduce more diversified forms of teacher training program activities

At present, the teacher training process has various forms of interactive participation, including discussion, participation, interaction, group cooperation, observation, discussion, etc. (Zhou, 2017). In addition, teacher training programs should strengthen training standards and norms and move closer to the international level. Seidel et al. (2015) analyzed and studied the practices and experiences of teaching and learning teacher training centers in colleges and universities and constantly improved the internationalization level of the design and implementation of teacher training programs to make them conform to the latest academic concepts of teacher teaching ability development in the world, also actively cooperating with international teacher development associations or institutions.

Recommendations for universities and education administrators

It is suggested that education administrators introduce OBE (Outcome based education) educational concept into schools and promote it. Locke (2016) believes that this concept is a construction concept of the curriculum system carried out by taking the results as the goal orientation, taking the students as the foundation and using the reverse thinking mode. When applying the OBE education concept, it is necessary to clarify the learning outcome, which is not only the end of the concept, but also the starting point.

Recommendations for the future researchers

The results of this study will be useful to future researchers working on the same topic. Because this study was limited to one department at a vocational medical college in Henan, China, the findings may not be representative of all students at that university. Therefore, the researchers suggest that future researchers in this subject should try to expand the sample scope to include students from different professional institutions, including vocational and technical colleges and undergraduate colleges.

While different schools will have different data and results, it is recommended that future researchers try a more diverse set of studies. More research is also needed to test the factors influencing student learning outcomes in other Chinese institutions of higher learning, and the results may have important contributions to the quality of management and talent development in Chinese institutions of higher learning.

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