

The Factors Influencing the Effectiveness of The Integration of Ideological and Political Management in Basic Computer Courses of Medical Students

Caida Duan¹, Surachai Traiwannakij²

^{1,2}*Institute of Science Innovation and Culture, Rajamangala University of Technology Krungthep, Bangkok, Thailand*

**) correspondence: surachai.t@mail.rmutk.ac.th*

ABSTRACT

Yunnan Faculty of Medicine and Health College is a well-known medical college in Kunming, China, which has long attached great importance to medical students' ideological and political education and management. In recent years, Yunnan Faculty of Medicine and Health College has actively promoted the construction of a large ideological and political classroom, embodied in integrating ideological and political management in the basic computer course. However, the concrete implementation of various factors restricts it. This study, therefore, aims to investigate the impacts of the key factors, namely, demographic factors and school environment factors, on the effectiveness of integrating ideological and political management in basic computer courses for medical students. The quantitative method is applied in this study based on questionnaires, which are equal to 1,542 units collected from 3 different medical majors: Nursing (797 units), Imaging (436 units), and Clinical Medicine (309 units). These 1,542 units are much higher than the number of samples calculated from the Yamane Table, which is about 400 units. The two-stage sampling method is applied to this study. The Stratified Sampling Method is used in the first stage to select three medical majors. Convenience Sampling Method is introduced in the second stage. Descriptive statistics such as frequency, percent frequency, arithmetic mean, and standard deviation are introduced. Various inferential statistical methods are used to test the hypothesis, particularly the Independent Samples t-test, the One-way ANOVA, and the Multiple Linear Regression Analysis. Learning Motivation is the most important aspect of School Environment, followed by Classroom Environment, Perceived Usefulness, Self-efficacy, and Difficulty Expectations. Political Management Performance is more important than Ideological Management Performance. Regarding Inferential Statistics, differences in Gender, Age, Educational Level, and Major Subject generate differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students. On the contrary, differences in college location, position held, and rewards obtained generate no differences in the effectiveness of integrating ideological and political management in basic computer courses for medical students. The results obtained from the Multiple Linear Regression Analyses show that all aspects of the School Environment (Learning Motivation, Self-efficacy, Classroom Environment, Difficulty Expectations, and Perceived Usefulness) have influenced the Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students. This research is of great reference value because it can help medical teachers make successful teaching plans by creating different teaching methods for different students based on their gender, age, educational level, and major subject suggested by the results of this study.

Keywords: *Ideological and Political Management/ School Environment/ Yunnan Medical School*

INTRODUCTION

In today's rapidly advancing era, China is witnessing substantial economic growth, technological advancements, and an overall enhancement of its national strength. This progress heralds a new phase in the journey towards rejuvenating the Chinese nation, a goal now more attainable than ever before. In this context, the role of young students is pivotal. They are tasked with the monumental responsibility of being the architects and inheritors of socialism. To effectively rise to this challenge, it is essential for these students to not only excel in their academic pursuits but also to develop a robust set of life, values, and moral principles. Universities must

extend beyond the realm of imparting specialized knowledge and skills. They must also focus on nurturing correct life perspectives and ethical values. This involves strategically integrating professional education with ideological and political education (Lu, 2023).

Li (2023) also confirms that under the background of the new era, "ideological and political curriculum" has become an essential goal of education and teaching reform. Wen and Sha (2023) state that the effect of ideological and political education plays a very important role in promoting the achievement of moral education. Colleges and universities should carry out the responsibility of ideological and political education to every employee, make ideological and political education work throughout the whole process of education and teaching, and integrate ideological and political education activities into every link of study and life. Huang and Lyu (2023) emphasize that the great founding spirit of the Communist Party of China (CPC) inspires the Party to unite and lead the Chinese people to create miracles in the struggle over more than a century. The great founding spirit of the CPC is a valuable resource for conducting a series of ideological and political education courses in China. Integrating it into college ideological and political courses can help the students strengthen their ideals and beliefs, enhance their sense of responsibility, consolidate their sense of responsibility, and enhance their emotional and value identity of patriotism, loving the party, and loving the people.

Wei (2022) states that under the background of enterprises in the new era, business startups and innovation education for university students are the key factors that enterprises need. Culturing business startups and innovation ability is also of key significance to universities. Although many university students will choose to start their businesses when they graduate, most of them still lack practical experience. Therefore, to improve the success rate of university students' entrepreneurship, the three relevant influencing factors, namely, the integration of Ideological and Political Education (IPE), business startups, and innovation education, should be investigated. This will help students position themselves correctly, form a correct outlook on life, world outlook, and values, play their talents in social practice, and create value for society. IPE business startups and innovation education are related and have the same goal, so universities can safely integrate them.

Introductory computer courses in Chinese colleges and universities are positioned as public basic courses, and the main purpose of learning basic computer courses is to let students master various operations of using computers. By learning basic computer courses, students should initially acquire the basic knowledge of information technology and understand the process of computer and network information processing. At the same time, they can improve their skills in using Windows Operating System and Office Applications. This, in turn, helps strengthen their basic knowledge of computer networks, makes them more proficient in the basic application of the Internet, and finally lays the foundation for subsequent courses. Basic computer courses for medical students include the relationship between computers and medicine, basic computer knowledge, Office applications, massive medical data management, computer network technology, and multimedia technology and its medical applications.

This basic computer course is very important and key for medical students. Integrating ideological and political management in the basic computer course significantly improves the students' medical ethics. With the popularization of ideological and political ideas, it is necessary to integrate ideological and political management into basic computer courses. From the current situation, although many medical schools or medical specialties in China have realized the necessity of integrating ideological and political management into basic computer courses, the effect is not ideal due to the lack of experience. There are some problems in the actual implementation process, such as failure to develop the resources of ideological and political management in depth and lack of scientific and reasonable teaching design. Li (2023) concludes that the learning motivation, self-efficacy, classroom environment, and difficulty expectations of students in ideological and political education impact perceived usefulness, and the strength of perceived usefulness will directly affect ideological and political education achievements. Therefore, to help medical schools carry out high-quality ideological and political management work, this paper investigates key factors' impacts on

integrating ideological and political management into the computer foundation curriculum, particularly Demographic Factors and School Environment Factors.

Research Questions

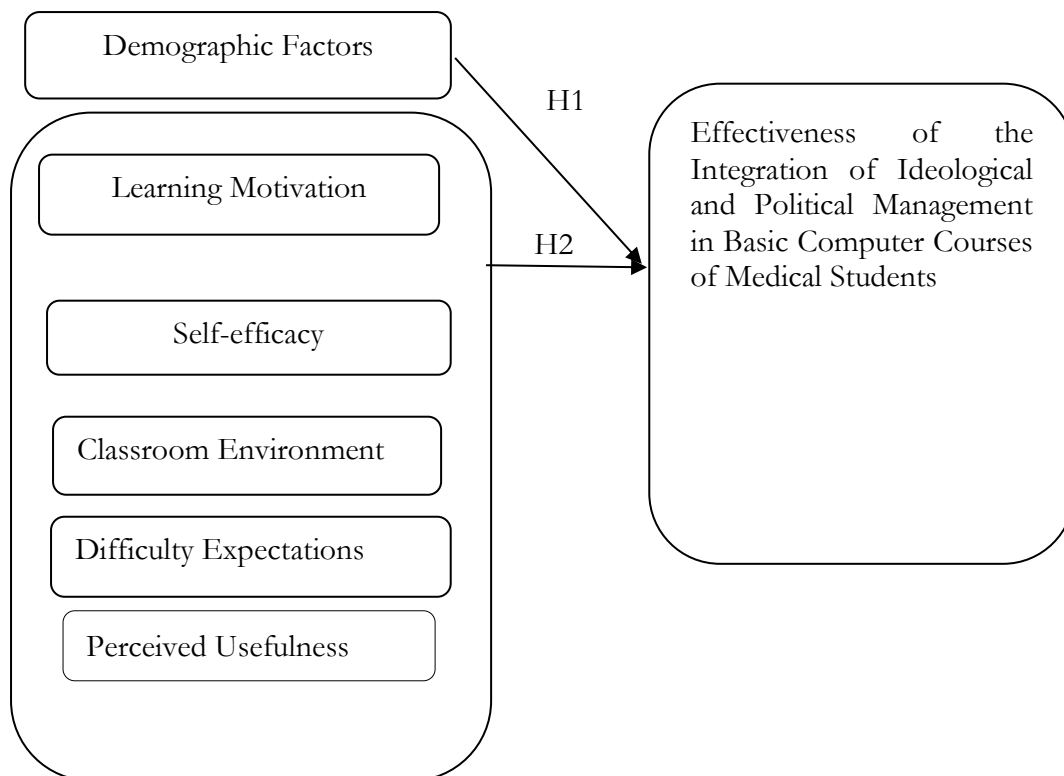
1. How do demographic characteristics have different impacts on integrating ideological and political management in basic computer courses for medical students?
2. How do school environmental factors affect ideological and political management integration in basic computer courses of medical students?

Research Objectives

To investigate the impact of demographic factors on the integration of ideological and political management in basic computer courses of medical students.

To investigate the impact of school environmental factors on integrating ideological and political management in basic computer courses for medical students.

Research Framework



Research Hypothesis

H1: Differences in Demographic Factors generate differences in Effectiveness of the Integration of Ideological and Political Management in Basic Computer Courses of Medical Students.

H2: School Environment Influence on the Effectiveness of the Integration of Ideological and Political Management in Basic Computer Courses of Medical Students.

1. Demographic Factors

Thorndike (1920) states that women are generally better than men in the ability of language expression and short-term memory. Still, in the ability of spatial perception and observation reasoning, women are generally weaker than men. Maccoby and Jacklin (1974) conclude that College students in different grades receive different levels of education and have various degrees of social cognition, so their thoughts and behaviors differ. However, they can still sum up certain characteristics of thoughts and behaviors. Meera and Jumana (2015) reveal a significant difference

in the academic performance in English and the self-efficacy of rural and urban students. In the case of gender and type of management, no significant difference was found.

2. School Environment

2.1 Learning Motivation

Rohana (2021) states that educational psychology has identified two basic classifications of motivation: intrinsic and extrinsic. Intrinsic motivation arises from a desire to learn a topic due to its inherent interests, self-fulfillment, enjoyment, and mastery of the subject. On the other hand, extrinsic motivation is motivation to perform and succeed to accomplish a specific result or outcome. Students who are very grade-oriented are extrinsically motivated, whereas students who seem to truly embrace their work and take a genuine interest in it are intrinsically motivated. Zhou (2023) discovers that students with different learning motives will achieve different ideological and political teaching results. Students with strong learning motives will achieve good results when integrating ideological and political management into basic computer courses. Luo and Qin (2023) state that stimulating students' motivation to learn is essential to enhancing ideological and political effects.

2.2 Self-efficacy

Self-efficacy is a person's particular set of beliefs that determine how well one can execute a plan of action in prospective situations. In simple terms, self-efficacy is a person's belief in their ability to succeed in a particular situation (Bandura, 1988). From the ideological and political education management perspective, self-efficacy refers to a student's grasp of the effect of ideological and political education in basic computer courses. Suppose they believe they will improve their literacy and skills by integrating ideological and political education in basic computer courses. In that case, it means that their self-efficacy is high. After controlling for conscientiousness and ACT scores, Jung et al. (2017) found that academic self-discipline mediated the relationship between academic self-efficacy and performance. The importance of academic self-discipline in academic performance is addressed. Zhang (2023) finds it very important to integrate ideology and politics into information technology teaching to shape students' sense of self-efficacy, which is an important guarantee to improve the actual work effect.

2.3 Classroom Environment

Classroom Environment refers to all the factors' students encounter in the learning process. The classroom learning atmosphere, the overall environment of the computer room, and the arrangement and design of teaching tools in the information technology classroom will substantially impact the effect of ideological and political management. Ambrose et al. (2010) state that your classroom environment blends your class's social, emotional, and instructional elements. Research shows that many aspects of your classroom environment can affect student motivation and that more motivated students put more effort into learning activities. Fraser (2015) states that having positive classroom environments is a valuable goal of education. But, it should not be assumed that the equally important issue of student outcomes is ignored in this entry. Extensive past research proves that the classroom environment is consistently associated with student outcomes.

Jin et al. (2021) believe that flipped classrooms can be essential in integrating daily information technology teaching and ideological and political management. They believe that the whole integration process can be divided into pre-class learning, problem introduction, class discussion, and case study, and teaching effect evaluation should also be carried out. Yang (2023) finds out that whether the classroom environment is carefully designed has a significant impact on the effect of ideological and political management. If teachers carefully set the teaching environment and focus on forming a good atmosphere, it will help improve the teaching level. Chen et al. (2023) conclude that teaching design includes teaching environment design, which

forms a good classroom environment in ideological and political teaching and contributes to improving ideological and political effects.

2.4 Difficulty Expectations

Lerner (1989) states that a person with a learning difficulty may be described as having specific problems processing certain forms of information. The United States of America's public law, for instance, defines "Specific learning disability" as a disorder in one or more of the basic psychological processes involved in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, and spell or to do mathematical calculations. The term "Learning difficulty," however, does not include learning problems, which are primarily the result of visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or environmental, cultural or economic disadvantage.

Lenhard & Lenhard (2013) state that learning difficulties are an umbrella term for academic problems of different origins. It comprises general learning deficits and low academic performance, e. g., in the context of disabilities and specific forms like reading, spelling, and arithmetic disorders. Consequently, many different denotations exist that try to differentiate between general and specific forms or point out the stability of the learning problem. Learning disability usually highlights general and long-lasting learning difficulties, often linked to special education. Learning disorder characterizes learning problems in a specific field that contrast the person's general aptitude. Apart from the classification in DSM-IV and ICD-10, there is no universally accepted terminology, and the connotations of the technical terms even vary within the same language (e.g., between Great Britain and the U.S.). Luis and Karen (2015) found that experts' learning difficulty judgments did not lead to significant predictions, whereas the learners' difficulty rankings correlated significantly with their performance on the measure of explicit knowledge.

Karunanayake et al. (2020) revealed that most children with learning difficulties were happy when involved with extra-curricular activities. This shows that their needs could be met through a good observation of their personalities and meeting their needs through individualized adaptive instructions. The study revealed that teachers knew pupils with learning difficulties but not the specific type of learning difficulties they experienced. Teachers also were not well equipped to use adaptive instructions to meet their needs. The study concluded that there was a gap between the teachers and their learners, which needs further analysis. Yan (2023) states that the influence of difficulty expectations on students' ideological and political learning is very obvious. When difficulty expectation is increased, students' learning enthusiasm will increase. On the contrary, their learning enthusiasm will decrease.

2.5 Perceived Usefulness

Perceived usefulness is defined here as "the degree to which a person believes that using a particular system would enhance his or her job performance." This follows the definition of usefulness: "capable of being used advantageously." Within an organizational context, people are generally reinforced for good performance by raises, promotions, bonuses, and other rewards (Pfeffer, 1982; Schein, 1980; Vroom, 1964). In turn, a system high in perceived usefulness is one for which a user believes in a positive use-performance relationship (David & David, 1989). Cui and Wang (2023) find out that perceived usefulness not only affects students' learning motivation, self-efficacy, classroom environment, and difficulty expectation but also directly influences the effect of ideological and political education.

Li (2023) concludes that the learning motivation, self-efficacy, classroom environment, and difficult expectations of students in ideological and political education impact perceived usefulness, and the strength of perceived usefulness will directly affect ideological and political education achievements.

2.6 The Effectiveness of Integrating Ideological and Political Management

Herbart (1898) states that subject teaching should not only complete the teaching task but also attach importance to moral education, which is the ultimate goal of education. Subject education and moral education should be placed in the same position. Wang (2019) states that with the advent of the information age, the emerging media tools represented by the Internet have developed rapidly. The wide application of new media in the ideological and political work of colleges and universities has brought great convenience to the development of educational work and the reform of models. The new media tools, the continuous improvement of daily life, and the learning integration of college students make colleges and universities face enormous challenges while meeting the development opportunities in the Internet age.

Tang (2020) believes that moral education can be revitalized only when it comes to students' real lives, and only when it is integrated into students' studies and life scenes can it help them find significant moral events. The development of a moral education curriculum should also be based on students' real lives to express the conflict of students' values and reflect their moral emotions. Gluchman (2016) states that moral education should be carried out in any discipline in college education rather than placed on a certain discipline. Only by integrating into all disciplines can actual effects be achieved.

Zhang (2020) states that the essential requirement of promoting the integration of ideological and political education in primary schools, secondary schools, and universities is to strengthen the Party's overall leadership of ideological and political education to adhere to the core values of socialism. It is necessary to enhance the thinking of the system and the top-level design and optimize the coordination mechanism as the method and strategy to promote the integration of ideological and political education in universities and primary and secondary schools.

Lan (2020) believed that ideological and political education should be student-centered, and blended teaching should be realized based on students' needs and considering the objectives of curriculum teaching and ideological and political teaching. Liu et al. (2021) believe that when ideological and political education is integrated into the college curriculum, it should adhere to the teaching model of independent learning, co-class teaching, and small-class discussion. It is necessary to take the lead in reforming ideological and political teaching in the curriculum, which can reflect professional characteristics and ensure that it is lively and interesting. In this way, students' enthusiasm can be aroused, and good teaching results can be achieved.

Song and Dong (2021) believe integrating ideology and politics with the curriculum should realize the joint linkage between online and offline learning. At the same time, curriculum teaching should establish the teaching goal of the trinity of education shaping, ability cultivation, and knowledge imparting. Kong et al. (2021) believe that the application of the compound teaching mode is conducive to integrating ideological and political education and curriculum teaching, which is of great significance for improving the pertinence of the design and practice of curriculum ideological and political teaching. To improve the teaching effect, teaching means should be further optimized.

Anastasi et al. (2015) believed that integrating ideology and politics should start from the three stages of preparation: teaching, teaching, and recursive feedback. When preparing for education, teachers should prepare content based on the expected results of their behaviors. In the second stage, teachers must respond promptly to the student's situation and form a positive interaction with the students. In the third stage, virtual reality technology should also imitate the students' simulation classroom environment to enhance the effect. When the teacher receives the recursive feedback, he should observe the students' behavior in time to provide the basis for the adjustment of subsequent teaching.

Gu (2020) believes that integrating information technology curriculum and ideological and political work in the new era needs to solve technical problems and theoretical guidance problems from the perspective of ideas. Only when a good plan is formed can it achieve actual results? Liu (2022) believes that in the process of integrating the traditional advantages of ideological and political work in colleges and universities with information technology, we should start from the

basic law of student development, the basic law of ideological and political work, and the basic law of the integration of information technology with ideological and political work, and carry out overall planning, systematic thinking, and overall deployment.

METHODS

The quantitative method based on questionnaires is applied in this study. As far as the population is concerned, in this paper, the medical students of Yunnan Faculty of Medicine and Health College are selected as practical cases to carry out in-depth research. This College, a famous medical college approved by the State Administration Council after founding the People's Republic of China, was established in 1951. In 1994, it merged with other schools and became Yunnan Faculty of Medicine and Health College. The total number of medical students at Yunnan Faculty of Medicine and Health College is unrecorded.

Under the formula of Yamane (1967), that is, $n = \frac{N}{(1+N)(e^2)}$ where n represents the sample size, N is the total population number, and e is the sampling error at 0.05, it is evident that when population (N) is uncountable, the sample size (n) equals approximately 400 units. However, several thousand questionnaires were distributed in this study, and in the end, only 1,542 completed questionnaires were used. These questionnaires were from 3 different medical majors: Nursing (797 units), Imaging (436 units), and Clinical Medicine (309 units).

The two-stage sampling method is applied to this study. The Stratified Sampling Method is used in the first stage to select three medical majors. Convenience Sampling Method is introduced in the second stage. The questionnaire was designed in bilingual English and Chinese, aiming to facilitate the communication and modification process with the researcher's supervisor and ensure the respondents could understand the questionnaire's content accurately, hence increasing the validity and reliability of the data for analysis. This self-completed questionnaire was sent through online transactions from 1-15 May 2024.

The validity of the questionnaires is successful under the IOC concept. The reliability based on Cronbach's α Coefficient of the questionnaires is also satisfactory, as shown in Table 1.

TABLE 1: The Reliability Test Results of Questionnaires

Factors	Variables	Cronbach's α Coefficient
School Environment	Motivation to learn	0.864
	Self-efficacy	0.881
	Classroom Environment	0.891
	Learning Difficulty	0.869
	Perceived Usefulness	0.956
Effective Ideological and Political Management	Ideological Performance	0.843
	Political Performance	0.896

The research selected the most appropriate descriptive statistics to describe the data, such as absolute frequency, percent frequency, arithmetic mean, and standard deviation. For the arithmetic mean, the results obtained from School Environment factors and the Effectiveness of the Integration of Ideological and Political Management in Basic Computer Courses of Medical Students are not exactly equal to the discrete numbers (1, 2, 3, 4, and 5) as classified as Likert Scale in the questionnaires. It is calculated in terms of continuous numbers with a decimal that has to be interpreted as related to the objective of the questionnaires. According to Srisaard (2002). The criteria for interpreting these means are as follows.

The arithmetic means 1.00 – 1.50 is in the strongly disagree level.

The arithmetic means 1.51 – 2.50 is in the disagree level.

The arithmetic means 2.51 – 3.50 is in the neutral level.

The arithmetic means 3.51 – 4.50 is in the agree level.

The arithmetic means 4.51 – 5.00 is in the strongly agree level.

However, in this study, the criteria for interpreting the means are designed to cover all possibilities of results: infinity digits, not only two digits, as mentioned above. To calculate the mean of the continuous data, there is no gap between the upper-class limit of the first class and the lower limit of the second class. That is, the upper limit of the first class should be the same as the lower limit of the second class. (Weiers, 2008).

The arithmetic means of 1 but less than 1.5 strongly disagrees.

The arithmetic mean is 1.5, but less than 2.5 is at the disagree level.

The arithmetic mean is 2.5, but less than 3.5 is at the neutral level.

The arithmetic mean is 3.5 but less than 4.5, which is at the agreed level.

The arithmetic means of 4.5 but less than or equal to 5 strongly agrees.

Inferential statistics, independent samples t-tests, one-way ANOVA, and multiple linear regression analysis are also used to test the hypothesis.

RESULT AND DISCUSSION

1. Descriptive Statistics

1.1 Demographic Factors

TABLE 2 The Frequency and Percent Frequency Classified by Demographic Factors

		Frequency	Percentage (%)
1. Gender	Male	544	35.28
	Female	998	64.72
2. Age	17 but less than 19 years old	393	25.49
	19 but less than 21 years old	916	59.40
	21 but less than 23 years old	215	13.94
	23 years old and more	18	1.17
3.Educational Level	1st year student	556	36.06
	2nd-year student	344	22.31
	3rd-year student	497	32.23
	4th-year student	58	3.76
	5th-year student	87	5.64
4.Major Subject	Nursing	797	51.69
	IMAGE	436	28.27
	Clinical Medicine	309	20.04
5.College Location	Kunming	1428	92.61
	Yunnan	111	7.20
	Others	3	0.19
6. Position Held	Monitor	57	3.70
	Course Representative	25	1.62
	Learning Committee Member	27	1.75
	Others	1433	92.93
7.Rewards Obtained	Three Good Students	74	4.80
	Excellent Model	30	1.95
	Scholarships	67	4.35
	Others	1371	88.91
Total		1542	100.00

The results shown in Table 2 suggest that most of the respondents are female, accounting for approximately 64.72%. From the perspective of Age distribution, most are between 19 and less than 21, accounting for around 59.40%, followed by the age group between 17 but less than 19 and between 21 but less than 23, respectively. The students aged over 23, about 18 persons, capture the minimum percentage of around 1.17%. Regarding the Educational Level, 556 students in the first year, accounting for 36.06%, claim the highest proportion, followed by 497 students in the third year (32.23%) and 344 students in the second year (22.31%), respectively. Regarding major subject distribution, nursing ranks first, registering at about 51.69%, followed by IMAGE and clinical medicine, accounting for 28.27% and 20.04%, respectively. Regarding the College Location, about 92.61% of the respondents come from Kunming City, 7.20% from Yunnan City, and only 0.19% from other cities. Regarding positions held, Monitor takes about 3.70%, Course Representative and Learning Committee Member occupy around 1.62% and 1.75%, respectively, while the rest are 92.93% from other positions. As far as the Rewards Obtained are concerned, about 4.80% are obtained from "Three Good Students", 1.95% are from "Excellent Model", and 4.35% are from "Scholarships," while the rest, 88.91% from other rewards.

1.2 School Environment

TABLE 3: Descriptive Statistical Results of School Environment

Classification	Mean	Standard Deviation	Mean Rank	Meaning
8. Learning Motivation	4.1088	.92436	1	Agree
8.1 Internal Motivation	4.1139	.95213	(1)	Agree
8.2 External Motivation	4.1038	.91560	(2)	Agree
9. Self Efficacy	4.0384	.94375	4	Agree
10. Classroom Environment	4.0611	.95972	2	Agree
10.1 Learning Facility	4.0603	.97272	(2)	Agree
10.2 Learning Material	4.0711	.96573	(1)	Agree
10.3 Classroom Design	4.0519	.97638	(3)	Agree
11. Difficulty Expectations	3.7778	1.03130	5	Agree
11.1 Learning Ability	3.8530	1.01571	(1)	Agree
11.2 Teaching Style	3.7026	1.11124	(2)	Agree
12. Perceived Usefulness	4.0477	.93999	3	Agree
Overall	4.0068	.86371		Agree

It is evident from Table 3 that Learning Motivation is the most essential aspect of the School Environment, with a mean value of about 4.1088, followed by Classroom Environment, Perceived Usefulness, Self-efficacy, and Difficulty Expectations, the values of which are 4.0611, 4.0477, 4.0384, and 3.7778, respectively. Internal motivation is more important than external motivation for learning motivation. Concerning the classroom environment, learning material is the most important component, followed by learning facilities and classroom design. Regarding difficulty Expectations, Learning Ability is more important than Teaching Style. Overall, the school environment is at the agreed level, with a mean value of about 4.0068.

TABLE 4: Descriptive Statistical Results of the Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students

Classification	Mean	Standard Deviation	Mean Rank	Meaning
Ideological Management Performance	4.0566	.92731	2	Agree
Political Management Performance	4.0856	.92717	1	Agree
Overall	4.0711	.91139		Agree

The data from Table 4 indicate that Political Management Performance is more important than Ideological Management Performance since the former's mean value is about 4.0856

compared to 4.0566. Overall, the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses for Medical Students is at the agreed level, evidenced by its mean of about 4.0711.

2. Inferential Statistics

2.1 Differences in Demographic Factors Generate Differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students

2.1.1 Differences in Gender Generate Differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students

$$H_0 : \mu_1 = \mu_2$$

$$H_a : \mu_1 \neq \mu_2$$

TABLE 5: The Independent Samples t-test of the Gender Factor

Items	Gender	N	Mean	S.D.	t-value	p-value
Ideological Performance	Male	544	4.1397	.94765	2.604	.009*
	Female	998	4.0113	.91334		
Political Performance	Male	544	4.1967	.91880	3.486	.001*
	Female	998	4.0251	.92656		
Overall	Male	544	4.1682	.91563	3.098	.002*
	Female	998	4.0182	.90515		

* The mean difference is significant at the 0.05 level.

Table 5 shows that the p-value of the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students for Gender is about 0.002, much lower than the critical value of 0.05. Therefore, the null hypothesis (H_0) is rejected, which implies that differences in Gender generate differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students.

2.1.2 Differences in Age, Educational Level, Major Subject, College Location, Position Held, and Rewards Obtained Generate Differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students

$$H_0 : \mu_i = \mu_j$$

$$H_a : \mu_i \neq \mu_j \text{ at last one Pair where } i \neq j.$$

Table 6: The One-Way ANOVA of Age, Educational Level, Major Subject, College Location, Position Held, and Rewards Obtained

Variables	Classification	Sum of Squares	df	Mean Square	F-value	p-value
Age	Between Groups	7.508	3	2.503	3.025	.029*
	Within Groups	1272.506	1538	.827		
	Total	1280.014	1541			
Educational Level	Between Groups	9.598	4	2.399	2.903	.021*
	Within Groups	1270.416	1537	.827		
	Total	1280.014	1541			
Major Subject	Between Groups	12.710	2	6.355	7.717	.000*
	Within Groups	1267.304	1539	.823		
	Total	1280.014	1541			

College Location	Between Groups	.446	2	.223		
	Within Groups	1279.568	1539	.831	.268	.765
	Total	1280.014	1541			
Position Held	Between Groups	2.801	3	.934		
	Within Groups	1277.212	1538	.830	1.124	.338
	Total	1280.014	1541			
Rewards Obtained	Between Groups	1.929	3	.643		
	Within Groups	1278.085	1538	.831	.774	.509
	Total	1280.014	1541			

* The mean difference is significant at the 0.05 level.

The results obtained from Table 6 indicate that the p-value of the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students concerning Age, Educational Level, and Major Subject are approximately .029, .021, and .000, respectively, which are much less than the critical value of 0.05. Therefore, the null hypothesis (H_0) of these aspects is rejected, meaning that differences in age, educational level, and professionalism generate differences in the effectiveness of integrating ideological and political management in basic computer courses for medical students. On the contrary, the p-values of College Location, Position Held, and Rewards Obtained are about .765, .338, and .509, respectively, much higher than the critical value of 0.05. Therefore, the null hypothesis (H_0) cannot be rejected, meaning that differences in College Location, Position Held, and Rewards Obtained generate no differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students.

2.2 The Influence of School Environment Factor on the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students

To determine the influence of the School Environment Factor on the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses for Medical Students, the Multiple Linear Regression Analysis is applied in this study.

$$H_0: \beta_i = 0$$

$$H_a: \beta_i \neq 0 (i=1, 2, 3, 4, 5)$$

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where Y = Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students

X_1 = Learning Motivation

X_2 = Self-efficacy

X_3 = Classroom Environment

X_4 = Difficulty Expectation

X_5 = Perceived Usefulness

ε = Error

The results from the Multiple Linear Regression Analysis are presented in terms of the predicted value of Y ($\hat{Y}$), shown in Table 7 and Equation (1).

$$\hat{Y} = .133 + .012X_1 + .041X_2 + .139X_3 + .050X_4 + .729X_5$$

(.002) (.001) (.003) (.000) (.000) (.000)(1)

Adjusted $R^2 = 0.877$

Table 7: The Multiple Linear Regression Analysis of Ideological and Political Management Performance based on School Environment Factor

Model	Coefficient	T-value	p-value
-------	-------------	---------	---------

	Unstandardized Coefficients		Standardized Coefficients Beta	
	B	Std.Error		
Constant	.133	.043		3.082 .002*
X ₁ - Learning Motivation	.012	.023	.013	.551 .001*
X ₂ - Self-efficacy	.041	.021	.042	1.939 .003*
X ₃ - Classroom Environment	.139	.017	.143	8.059 .000*
X ₄ = Difficulty Expectation	.050	.012	.055	4.271 .000*
X ₅ = Perceived Usefulness	.729	.018	.738	41.042 .000*

a. Dependent variable Y; Ideological and Political Management Performance

Table 7 shows that the p-value of the constant term is about .002, meaning that other factors of independent variables not mentioned in this study have influenced the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students. Among the five independent variables listed in this study, Perceived Usefulness is the most important factor, evidenced by its Standardized Coefficients Beta of about .738, followed by Classroom Environment, Difficulty Expectation, Self-efficacy, and Learning Motivation, respectively. The Adjust R² of this Multiple Linear Regression is approximately .877, which is very high, meaning that one unit change in these five factors will cause the Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students to change in the same direction approximately .877 unit.

CONCLUSION AND DISCUSSION

Most respondents are females between 19 and under 21 years old, studying in their third year of working as nurses in Kunming. Concerning the School Environment, Learning Motivation is the most essential aspect, followed by Classroom Environment, Perceived Usefulness, Self-efficacy, and Difficulty Expectations regarding the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses for Medical Students. Political Management Performance is more important than Ideological Management Performance regarding Inferential Statistics; Differences in Gender, Age, Educational Level, and Professional Generate Differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students Performance. On the contrary, differences in School Location and Working Position generate no differences in the Effectiveness of Integrating Ideological and Political Management in Basic Computer Courses of Medical Students' Performance. These findings are inconsistent with Meera and Jumana (2015), who reveal a significant difference between the academic performance of English students and the self-efficacy of rural and urban students. In the case of gender and type of management, no significant difference was found.

The results obtained from the Multiple Linear Regression Analyses show that all aspects of the School Environment (Learning Motivation, Self-efficacy, Classroom Environment, Difficulty Expectation, and Perceived Usefulness) have influenced the Effectiveness of Integrating Ideological and Political Management in Basic Computer Course of Medical Students. The above findings are consistent with Zhou (2023), who found that students with different learning motives achieve different ideological and political teaching results. Students with strong learning motives will achieve good results when integrating ideological and political management into basic computer courses. The findings from Multiple Linear Regression above are also consistent with Zhang (2023), who finds that it is very important to integrate ideology and politics into information technology teaching to shape students' sense of self-efficacy, which is an important guarantee to improve the actual work effect. After controlling for conscientiousness and ACT scores, Jung et al. (2017) found that academic self-discipline mediated the relationship between academic self-efficacy and performance. The importance of academic self-discipline in academic performance is addressed. This consistency is confirmed by Yang (2023), who finds out that whether the classroom environment is carefully designed significantly impacts the effect of ideological and political

management. If teachers carefully set the teaching environment and focus on forming a good atmosphere, it will help improve the teaching level. It is also consistent with Chen et al. (2023), who conclude that teaching design includes teaching environment design, which forms a good classroom environment in ideological and political teaching and improves ideological and political effects. The consistent results can be obtained from Luis and Karen (2015), who found that experts' learning difficulty judgments did not lead to significant predictions, whereas the learners' difficulty rankings correlated significantly with their performance on the measure of explicit knowledge. Cui & Wang (2023) find out that perceived usefulness not only affects students' learning motivation, self-efficacy, classroom environment, and difficulty expectation but also directly influences the effect of ideological and political education. Similar results can be seen from Li (2023), who concluded that the learning motivation, self-efficacy, classroom environment, and difficult expectations of students in ideological and political education have an impact on perceived usefulness, and the strength of perceived usefulness will directly affect the achievements of ideological and political education.

In introduction, authors should state the objectives of the work at the end of introduction section. Before the objective, authors should provide an adequate background, and very short literature survey in order to record the existing solutions/method, to show which is the best of previous researches, to show the main limitation of the previous researches, to show what do you hope to achieve (to solve the limitation), and to show the scientific merit or novelties of the paper. Avoid a detailed literature survey or a summary of the results.

REFERENCES

- Ambrose, S. A., Bridges, M. w., Lovett, M. C., DiPietro, M., & Norman, M. K. 2010. How Learning Works: **7 Research-Based Principles for Smart Teaching**. San Francisco, CA: Jossey-Bass.
- Anastasi, P., Aida, G., & Sandra, G. (2015). Learning the Spanish Language for Ideological, Political, and Other Curious Reasons[J]. **European Journal of Social Sciences Education and Research**, 3(1), 100-107. DOI:[10.26417/ejser.v3i1.p99-105](https://doi.org/10.26417/ejser.v3i1.p99-105)
- Bandura, A. (1988). [Organizational Application of Social Cognitive Theory](https://doi.org/10.1177/031289628801300210). **Australian Journal of Management**. 13 (2): 275–302. <https://doi.org/10.1177/031289628801300210>
- Chen, C. (2023). Research on the Cultivation of Non-Intellectual Factors in Ideological And Political Education in Colleges and Universities. **Frontiers in Educational Research**, 6(9), 151-156. DOI: 10.25236/FER.2023.060925
- Chen, S., Zhong, C., & Dai, L. (2023). Effectiveness Evaluation of Network Ideological and Political Education Method in Universities Based on MLP Neural Network[J]. **Frontiers in Educational Research**, 6(8), 28-37. DOI: 10.25236/FER.2023.060804
- Cui, M. & Wang, M. (2023). Research on the Function of Ideological and Political Education in WeChat Public Platform of Universities with the Aid of Python: A Case Study of the Communist Youth League of Universities. **Journal of Educational Research and Policies**, 5(3), 202-205. ISSN: 2006-1137.
- David, F. D. & David, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. **MIS Quarterly**, 13 (3), 319-339. DOI:[10.2307/249008](https://doi.org/10.2307/249008)
- Fraser, B. (2015). Classroom Learning Environments. In: Gunstone, R. (eds) **Encyclopedia of Science Education**. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-2150-0_186.
- Gluchman, V. (2016). Moral (or ethical) education in Slovakia and its theoretical basis. **Ethics & Bioethics (in Central Europe)**, 6(1-2), 79-89. DOI:10.1515/ebce-2016-0010

- Gu, Y. (2020). Promoting the reform and innovation of ideological and political theory courses by improving teachers' scientific research ability. **Theory and Reform**, 14(1), 5.
- Herbart, J. F. (1898). **Letters And Lectures on Education**. Swan Sonnenschein & Co., Ltd. Syracuse, New York: C.W. Bardeen.
- Huang, X. & Lyu, H. (2023). Research on the Value and Path of Integrating the Great Founding Spirit of CPC into College Ideological and Political Education. **Advances in Politics and Economics**, 6(2), 132-139. DOI:10.22158/ape.v6n2p132.
- Jin, T., Qian, Y., & Deng, H. (2021). Teaching case design of "Medical Polymer Materials" Ideological and political demonstration course. *Chemical Education (Chinese and English)*, 42(10), 4.
- Jung, K.R., Zhou, A.Q., & Lee, R.M. (2017). Self-efficacy, self-discipline and academic performance: Testing a context-specific mediation model. **Learning and Individual Differences**, 60, 33-39. <http://doi.org/10.1016/j.lindif.2017.10.004>
- Karunanayake, D., Madushani, K., & Vimukthi, N.D.U. (2020). The Importance of Identifying Students with Learning Difficulty in the School Context. **Asian Journal of Education and Social Studies** 12(4): 8-18. Article no.AJESS.62590 ISSN: 2581-6268
- Kong, X. L., Chen, D., & Wang, M. (2021). TPKCEE model of community nursing teaching integrating ideological and political ideas into the curriculum. **Journal of Nursing**, 36(10):4.
- Lan, M. (2020). Ideological and Political approaches to college English curriculum under Blended teaching model [J]. **Social Scientist**, 21(12):6.
- Lenhard, W. & Lenhard, A. (2013). **Learning Difficulties**. L. Meyer (Ed.), Oxford Bibliographies in Education. New York: Oxford University Press.
- Lerner J. W. (1989). Educational Intervention in Learning Disabilities. **Journal of the American Academy of Child and Adolescent Psychiatry**, 28(3), 326-331. <http://doi.org/10.1097/00004583-198905000-0004>
- Li, R. (2023). The Construction and Research of "Curriculum Ideological and Political Education" in the Public Music Education System of Colleges and Universities in the New Era. **Curriculum and Teaching Methodology**, 6(3), 58-62. DOI: 10.23977/curtm.2023.060311
- Li, Y. (2023). Construction and Practice of Multi-dimensional Ideological and Political Education Ecosystem in College English Curriculum under the "Three Whole Education" Pattern. **Curriculum and Teaching Methodology**, 6(3), 85-88. DOI: 10.23977/curtm.2023.060316
- Luis, H. R-S. & Karen, R-R. (2015). PERCEIVED LEARNING DIFFICULTY AND ACTUAL PERFORMANCE Explicit and Implicit Knowledge of L2 English Grammar Points among Instructed Adult Learners. **Studies in Second Language Acquisition**, 38(02), 1-24. DOI:10.1017/S0272263115000340
- Liu, X. (2022). Research on the path of Ideological and political education Practice in Colleges and universities from the perspective of Ideology and politics. **University: Research and Management**, 12(S2), 94-96.
- Liu, Y., Duan, L., & Li, H. (2021). Design and practice of Ideological and political Teaching in SPOC: A case study of Ideological and political teaching reform in inorganic and Analytical Chemistry courses. **Chemical Education**, 42(20), 35-40.
- Lu, H. (2023). Research on the Construction of "Curriculum Ideological and Political Education" in Universities in the New Era. **Studies in Social Science Research**, 4(4), 139-144. DOI:10.22158/sssr.v4n4p139
- Luo, W. & Qin, Z. (2023). Research on the Individual Value of Ideological and Political Education in Colleges and Universities in the New Era: Taking Core Value Education as an Example. **Adult and Higher Education**, 5(7), 1-7.

DOI: 10.23977/aduhe.2023.05070

- Maccoby, E. E., & Jacklin, C. N. (1974). *The psychology of sex differences*. Stanford University Press
- Meera, K. P. & Jumana, M. K. (2015). SELF-EFFICACY AND ACADEMIC PERFORMANCE IN ENGLISH. *Research in Pedagogy*, 5(2), 25-30. DOI:10.17810/2015.13
- Pfeffer, J. (1982). *Organizations and Organization Theory*. Pitman, Boston, MA.
- Rohana, S. (2021). LEARNING MOTIVATION MOTIVATION OF LEARNING. In the book **EFFECTIVE LEARNING AND TEACHING FOR ESP**. (pp.1-32)
- Schein, E.H. (1980). *Organizational Psychology, Third Edition*. Prentice-Hall, Englewood Cliffs, NJ.
- Song, L.& Dong, F. (2021). Application of "Flipped classroom" mixed teaching model In the Ideological and political teaching of the college curriculum. *Journal of Yangling Vocational and Technical College*, 20(3), 87-89.
- Srisaard, B. (2002). Basic Research, 7edition. Bangkok: Suweeriyasarn Publishing
- Tang, A. (2020). Analysis of the Reform Path of Ideological and Political Course in Colleges and Universities Based on Moral Education. *Advances in Higher Education*, 4(9), 34. DOI:10.18686/AHE.V4I9.2654
- Thorndike, E.L. (1920). Intelligence and Its Uses. *Harper's Magazine*, 140, 227-235.
- Vroom, V.H. (1964). *Work and Motivation*. Wiley, New York, NY.
- Wang, W. (2019). Effectiveness of Ideological and Political Education in Colleges and Universities in the New Media Environment. **2019 9th International Conference on Social Science and Education Research (SSER 2019)**.
- Wei, T. (2022). Research on Ideological and Political Education Mode Based on the Cultivation of Innovative and Entrepreneurial Talents. *International Journal of New Developments in Education*, 5(3), 36-40. DOI: [10.25236/IJNDE.2023.050307](https://doi.org/10.25236/IJNDE.2023.050307).
- Weiers, R.M. (2011). *Introductory Business Statistics, 7th Edition*. United Kingdom: South-Western Cengage Learning.
- Wen, B. & Sha, J. (2023). Comprehensive Ideological and Political Education Based on Three Full-education. *The Educational Review, USA*, 7(3), 358-362. DOI:10.26855/er.2023.03.014
- Yamane, T. (1967). *Elementary sampling theory*. Englewood Cliffs; London: Prentice-Hall.
- Yan, W. (2024). Research on Incentive Mechanism of Ideological and Political Education for College Students. *Taiyuan University of Science and Technology*, 15 (20), 22-23.
- Yang, D., Sun, S., Yang, L. & Zhang, X. (2023). Research on the Teaching Reform of Human Resource Management Curriculum Based on the Ideological and Political Education in the Course. *Teacher Education and Curriculum Studies*, 8(2), 68-75. DOI: 10.11648/j.tecs.20230802.15
- Yang, Z. (2023). Research on the Integration of Spiritual Elements into Ideological and Political Education Practice in Colleges and Universities. *International Journal of New Developments in Education*, 5(6), 94-97. DOI: 10.25236/IJNDE.2023.050615
- Zhang, F. (2023). Inspiration of Moral Judgment Evaluation Methods on Assessing Curriculum Ideological and Political Education for Foreign Language Courses. *The Educational Review, USA*, 7(3), 344-349. DOI :10.26855/ER.2023.03.011
- Zhang, M. (2020). Research on the mode of "unity of knowledge and Action" in the new era's ideological and political education in colleges and universities. *Shenyang Normal University*, 32
- Zhou, Y. (2023). The Principles and Approaches of Ideological and Political Education

For Foreign Language Majors in the Context of Ideological and Political Education.
Curriculum and Teaching Methodology, 6(6), 9-16.
DOI: 10.23977/curtm.2023.060602