


## Research Article

# The Implementation of Network Big Data on Vocational College Teacher Training Strategy

Bin Wang <sup>1,2</sup>, Genutė Gedvilienė,<sup>1</sup> Hongfeng Li,<sup>3</sup> and XinYue Wang<sup>4</sup>

<sup>1</sup>Education Academy, Vytautas Magnus University, Kaunas 44248, Lithuania

<sup>2</sup>College of Art Design, Ningxia Polytechnic, Yinchuan 750021, China

<sup>3</sup>College of Design and Art, Xijing College, Xi'an 710000, China

<sup>4</sup>College of Humanities and Arts, Macau University of Science and Technology, Macau 999078, China

Correspondence should be addressed to Bin Wang; [bin.wang@vdu.lt](mailto:bin.wang@vdu.lt)

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Teachers' teaching level and teaching philosophy have an important impact on students. As the country pays more and more attention to education, the relevant level of teachers also needs to be continuously improved. Training for teachers is one of the important ways to improve teachers' level. Although the strategy of training teachers in vocational colleges has a long history, there is no analysis of its implementation. With the popularity of the Internet of Things, lives are full of data information and data, and the field of education and training is no exception. Network big data refers to a collection of data that cannot be captured by conventional software tools within a certain time frame. It is an information asset that requires new processing modes to have stronger decision-making, insight, and process optimization capabilities. This paper aims to study the analysis of network big data on the implementation of teacher training policies in vocational colleges. It is expected that with the support of network big data, the implementation of vocational teachers' training policies will be analyzed, and the implementation effects of relevant policies will be explored, so as to help teachers improve their professional abilities and promote the development of the education industry. In a broad sense, the implementation of educational strategy refers to the identification, construction, and termination of educational policies. Educational strategy in a narrow sense refers specifically to the educational strategy, educational setting plan, educational budget, and educational plan formulated by the competent educational authority. From the perspective of career management, this paper briefly analyzes the situation of teachers participating in training in vocational colleges and reexamines the connotation of current higher vocational teacher training. It takes the teacher training of vocational colleges as the content and makes a brief analysis of the relevant situations, attitudes, and achievements in the process of teacher training by means of a questionnaire survey. The results showed that the largest number of teachers who participated in the training received scores between 80 and 100 points, indicating that the implementation of training policies is in place; the proportion of schools that attach importance to teacher training is as high as 80%, indicating that the environment for strategy implementation is better.

## 1. Introduction

The development of social economy is inseparable from the progress of basic education. The development of education is inextricably linked with today's national economy, and it can continuously transport personnel for economic development. Therefore, the current era is an era of fierce competition for talents. With the development of society and the acceleration of the frequency of knowledge update, the society's require-

ments for talents are constantly increasing. The development of the teaching staff is the root of education development, which requires the continuous improvement of the quality of teachers. One of the best ways to educate teachers is to train them. Although the strategy of education has been around for some time, we are not very clear about the effect of the implementation of this strategy. Possible problems in the implementation of educational policies are as follows: lack of communication and coordination among the various

departments of the strategy implementation agencies; single means of strategy implementation subjects; vague strategy implementation plans; and the implementation subjects are not easy to grasp. Therefore, we analyze the implementation of teacher training strategy in vocational colleges and explore the actual effect of this strategy.

At present, everyone is generally concerned about the current situation of teacher training, but there is no analysis of the implementation of teacher training. Combining the implementation of teacher training with the actual performance of teachers can provide a theoretical basis for relevant practice. By exploring the implementation of teacher training, we can find out the practical problems in the implementation of the strategy and put forward corresponding perfect countermeasures. By taking the characteristics of new teacher training under digitalization as a starting point, the research on teacher training transformation is enriched.

This paper analyzes from the perspective of strategy research, opens up a new perspective for teacher training research, and is conducive to enriching the relevant theories of education and training. Based on the perspective of big data, this paper takes big data as a new entry point to study the implementation of teacher training in vocational colleges and expounds the current situation of education and training.

## 2. Related Work

Teachers are the premise of educational development, and training teachers is an important way to improve comprehensive ability. Susan studied and evaluated web-based training and instruction and feedback provided through videoconferencing software to increase teacher use of behavioral methods related to improving compliance. The experimental participant, a preschool special education teacher, increased her knowledge of effective interventions for autism spectrum disorder (ASD) and her loyalty to treatment over the course of the case study. ASD patients cannot establish normal interpersonal communication with others, they have no eye contact, and their expressions are poor; they cannot use language for interpersonal communication and lack body language; they are accompanied by different degrees of intellectual disability. The experimental results showed that students with ASD showed extremely high compliance at the beginning of the case study, indicating that the method is effective [1]. Given the gap between strategy design and strategy implementation, Kvietok aims to understand how teachers understand and implement Intercultural Bilingual Education (EIB) policies. He explores how in-service teacher training seminars affect teachers' interpretation and implementation across cultures through his experience with teacher training seminars [2]. Itzel provides guidance for the development of online teacher training programs through the use of information and communication technologies (ICTs) to facilitate educational change, hoping to establish a theoretical approach to the concept of online teacher training. Within the framework of a professional teacher development strategy, this work aims to pay for the precision of its concept and to provide the necessary input into its definition as a research object. The concept of teacher professional development is first defined as the gen-

eral framework for establishing teacher training. Professional development of teachers refers to the process of continuous development and improvement of teachers as professionals in terms of professional thinking, professional knowledge, and professional ability, that is, the process from novice teachers to expert teachers [3]. Shin attempts to analyze process-based educational assessment policies. His study aims to review the Department of Education strategy and further explore its implementation in schools. Based on the findings, he proposes various ways to encourage and facilitate the use of process-based assessment. Additionally, to analyze strategy as practice, he surveyed 2015 secondary school teachers from SELS data and 2016 survey data and conducted in-depth interviews with teachers. The findings indicate that despite the emphasis on process-based assessment in strategy documents, actual implementation in schools appears to be low, and there are various limitations in its use. In addition, teachers' professional activities, including diverse classroom research and teacher training, had a positive impact on teachers' use of discussion as a means of evaluation, highlighting support for more professional activities [4]. It appears that these theories explore teacher training, but not strategy implementation. Therefore, this paper analyzes the implementation of policies with the help of network big data technology and explores the relationship between strategy implementation and actual achievements.

The data processing method commonly used in big data analysis is data mining. Buczak reported and described a focused literature survey of machine learning (ML) and data mining (DM) methods for network analysis in support of intrusion detection. Data mining refers to the nontrivial process of revealing implicit, previously unknown, and potentially valuable information from a large amount of data in a database. Additionally, he provides short tutorial descriptions of each ML/DM method. Since data is very important in ML/DM methods, some well-known network datasets for ML/DM are described. The experiments discuss the challenges of using ML/DM for cybersecurity and provide some recommendations on when to use a given method [5]. The increasing popularity and development of data mining technology has brought a serious threat to the security of sensitive personal information. In recent years, an emerging research topic in data mining, known as privacy-preserving data mining (PPDM), has been extensively studied. Xu takes a broader perspective on privacy issues related to data mining and studies various methods that help protect sensitive information. For each type of user, they discuss its privacy concerns and the methods that can be used to protect sensitive information. He proposed to analyze that the data mining scenario is the interaction between different users; each user has his own evaluation of sensitive information [6]. Yan constructs a "universe" of more than 18,000 fundamental signals from financial statements and uses a bootstrap approach to assess the impact of data mining on fundamental-based anomalies. He found that many fundamental signals are significant predictors of cross-sectional stock returns, even after accounting for data mining [7]. Although these theories discuss data mining, they do not combine education and training, and the effectiveness is poor.

### 3. Method of Teacher Training Strategy Implementation

**3.1. Strategy Implementation.** Strategy implementation is a behavioral way to turn ideas into facts, and it is one of the effective ways to achieve management purposes [8]. Strategy implementation is a process in which executors transform strategy concepts into actual resources and actual effects by establishing organizational structures, using strategy resources, and taking various actions such as publicity, interpretation, coordination, and monitoring according to strategy goals. Education strategy implementation refers to a series of ways and means adopted by strategy executors in accordance with strategy instructions to achieve strategy goals or effects [9]. Relevant scholars said that strategy implementation includes four elements, idealized strategy, target group, environmental factors, and implementing agencies. Each element contains different elements to form a complete strategy implementation structure [10, 11], and its specific situation is shown in Figure 1.

The executive agency mainly includes the agency composition and executive personnel of the executive agency, the leadership style and related leadership skills of leaders in strategy implementation, and the confidence that executives should have.

When the strategy is adopted, the executor needs to plan the strategy content and turn the architectural content into practice in order to achieve its desired effect [12]. As an extremely important link in the strategy process, strategy implementation plays a vital role and is directly related to the success or failure of the strategy. Therefore, in the specific implementation process of the strategy, it needs to be changed according to the changes of the object of implementation, the environment, and other relevant factors to ensure the normal implementation of the strategy [13, 14]. The main variables in the process of strategy implementation include the solvability of strategy issues, the regulatory capacity of the strategy itself, and variables other than the strategy itself.

In the process of strategy implementation, the executors directly participate in the implementation process of the strategy, which has a great influence on the implementation of the strategy, and the implementation ability of the executors determines the effect of the strategy implementation to a certain extent. Therefore, strategy executives can not only use strategy strategies proficiently, but also need to have high theoretical level and leadership ability to complete strategy implementation [15, 16].

In fact, whether the strategy can be implemented is not only related to the personal ability of the executive, but more importantly, the rationality of the strategy itself [17]. If the strategy itself is not scientific and rational, it will lead to the failure of the strategy to complete or to achieve the desired effect. The rationality of the strategy mentioned here refers to whether the strategy is consistent with the law of social development [18, 19].

The implementation of the strategy is not an ideal execution environment, and it will be limited by several factors [20]. Taking education strategy implementation as an exam-

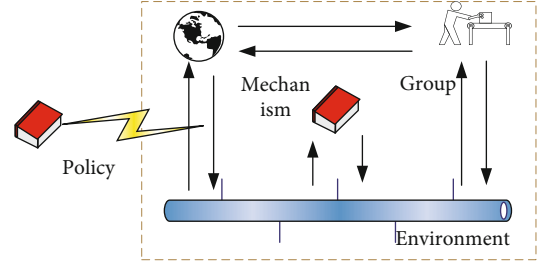


FIGURE 1: Strategy enforcement flow chart.

ple, when the whole society attaches great importance to education, strategy implementation will reduce a lot of resistance, and when there are unfavorable factors in the society, it will hinder strategy implementation [21, 22]. Figure 2 shows the work related to the implementation of the teacher training strategy.

When carrying out education and training work, it is related to many factors. First, it needs to be trained in relevant institutions. After the training, the results need to be displayed in schools. During the presentation, they will be supervised by relevant institutions to evaluate the results of the training. After the whole process is completed, it is necessary to report the effect of the training to the educational institution and summarize the problems and results of the training, and make relevant improvements to the strategy to improve its deficiencies [23, 24].

**3.2. Big Data Processing Algorithms.** Human society is flooded with more and more information; especially, after the promotion of Internet technology, various kinds of information began to appear [25]. However, when we look for information, it is not that the more information the better, it will reduce the efficiency of decision-making. To make better use of various information, we need to preprocess the data [26]. Data preprocessing refers to some data processing before the main processing, such as vertical stacking, rearranging, adding track headers, editing, resampling, and multichannel editing, for some profile measurement data, such as seismic data. Figure 3 is a brief processing structure of data.

$$\text{Cov}(W, T) = \frac{\sum_u^o (W_u - W)(T_u - T)}{o - 1}. \quad (1)$$

Formula (1) represents the covariance, which is usually used to calculate the population error of the data.

$$G_{a,b} = \frac{P_{a,b}}{P_a P_b}. \quad (2)$$

Formula (2) represents the correlation coefficient of the data, which is usually used to compare the closeness between the data. Among them,  $P_a$  and  $P_b$  represent the standard deviation of the sample.

$$t = \frac{t - Y}{\beta_Y}. \quad (3)$$

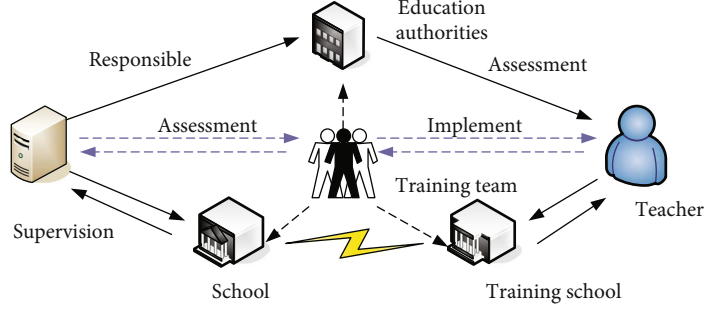


FIGURE 2: Work related to teacher training strategy implementation.

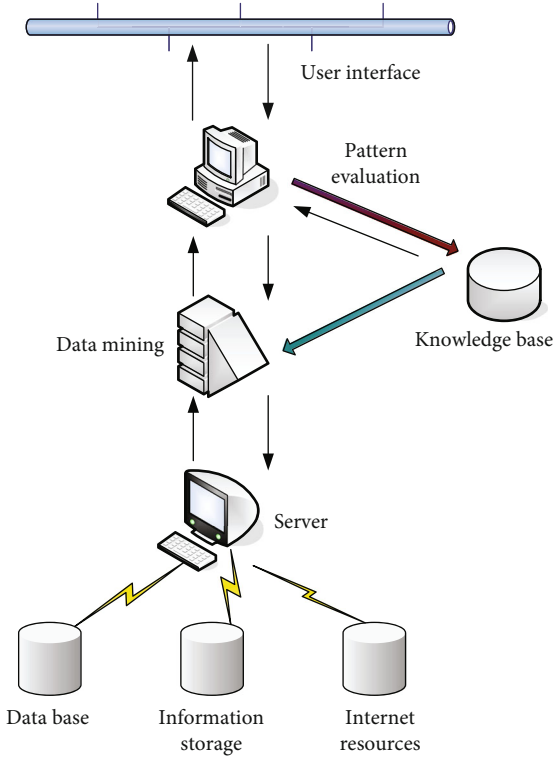


FIGURE 3: Brief data processing structure.

Formula (3) represents data normalization, which can transform large values into small values when processing data information to reduce the difficulty of data; among them,  $Y$  represents the attribute of the data.

$$h_k = \frac{1}{k} \sum_1^k h(a_1). \quad (4)$$

Formula (4) represents the arithmetic mean.

$$Q(1) = Q(h(a)) = \frac{1}{k} \sum_1^k h(a_1). \quad (5)$$

Among them,  $h(a)$  is an unbiased estimate of  $Q$ .

$$\beta(a) = \frac{w(a) = w_1(a_1)w_2(a_2|a_1) \cdots w_c(a_c|a_1 \cdots a_{c-1})}{y(a) = y_1(a_1)y_2(a_2|a_1) \cdots y_c(a_c|a_1 \cdots a_{c-1})}. \quad (6)$$

Among them,

$$\beta_j(a_j) = \beta_{j-1}(a_{j-1}) \frac{y_j(a_{j-1})}{w_j(a_{j-1})}, \quad (7)$$

$$y(a_j|g_j) = \sum_1^h \beta_j^l(a_j - a_j^l). \quad (8)$$

Among them,  $y(a_j|g_j)$  represents the posterior probability.

$$W_a = \alpha + \beta W_{a-1} + \delta_a. \quad (9)$$

Among them,  $W_a$  represents the demand of the client,  $\beta$  represents the change between the demands, and  $\alpha$  represents a constant.

$$k_a = Q\bar{W}_a + \eta\sqrt{Q}F_a. \quad (10)$$

Among them,  $Q$  represents the expected demand,  $\bar{W}_a$  represents the estimated value, and  $\eta$  represents the standard deviation.

For mixed feature datasets, we need to take a different approach.

$$D_s(O_i, O_j) = \sum_{k=1}^m \frac{n_{h_{ik}} + n_{h_{jk}}}{n_{h_{ik}} \cdot n_{h_{jk}}} \sigma(x_{ik}, x_{jk}). \quad (11)$$

Among them,  $x_{ik}$  and  $x_{jk}$  are the corresponding  $k$ th of  $o_i$  and  $o_j$  ( $1 \leq k \leq m$ ), and  $n_{h_{ik}}$  and  $n_{h_{jk}}$  are the number of attribute  $h_k$  values  $h_{ik}$  and  $h_{jk}$  in the dataset, respectively.

$$D(O_i, O_j) = \mu D_s(O_i, O_j) + D_n(O_i, O_j). \quad (12)$$

Among them,  $\mu$  is the weight of the adjustable character attribute, and  $D_n(O_i, O_j)$  is the Euclidean distance of  $n$  numerical attributes.

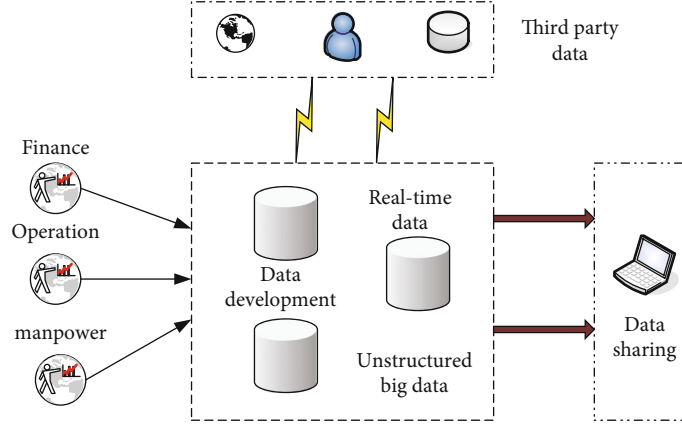


FIGURE 4: Data sharing working mode.

Group similarity refers to the degree of similarity between the data objects in the dataset and other data objects in the field. The definition types are

$$f(O_i) = \begin{cases} \sum_{O_j \in \text{neigh}(r)} \left[ 1 - \frac{D(O_i, O_j)}{\alpha} \right], f(O_i) \geq 0 \\ 0, \text{ other} \end{cases} \quad (13)$$

Among them,  $\text{neigh}(r)$  represents a circular area with radius  $r$ , and  $a$  is an adjustable group similarity coefficient, which determines the number of clusters and the speed of convergence.

$$\frac{\text{Var}(T_a)}{\text{Var}(W_a)} \geq 2 + \left( G\phi + \frac{G^3\phi^3}{\phi} \right). \quad (14)$$

$\phi$  represents the smoothing coefficient, and  $0 < \phi < 1$ . The closer the smoothing constant is to 1, the faster the influence of the forward actual value on the current smoothed value decreases. The closer the smoothing constant is to 0, the slower the influence of the forward actual value on the current smoothed value will decrease.

$$\frac{\text{Var}(T_a)}{\text{Var}(W_a)} \geq 2 + \left( \frac{G}{c} + \frac{3G^3}{c^3} \right). \quad (15)$$

At this point, the variance of the function is in an independent distribution state.

$$W_a = \alpha + \beta_a. \quad (16)$$

Formula (16) represents the state of no information sharing, where the change between the demand quantities is zero. Figure 4 shows the basic structure of information sharing.

$$p_a^s = G_s * \bar{h}_a^s. \quad (17)$$

Formula (17) expresses the information requirements

for each step.

$$\bar{h}_a^f = \frac{\sum_a^{b-3} T_a^{b-2}}{c}, b \geq 3. \quad (18)$$

Among them,  $\bar{h}_a^s$  represents the initial demand, and  $\bar{h}_a^b$  represents the later demand.

$$\frac{\text{Var}(T_a^s)}{\text{Var}(W_a)} \geq \prod_j^{s-2} \left( 1 + \left( \frac{G}{c} + \frac{G^3}{c^2} \right) \right). \quad (19)$$

Formula (19) represents the difference between the estimated quantity and the demanded quantity.

Different inner product kernel functions in SVM will form different algorithms, and the algorithms fall into the following two categories:

$$K(x, x_i) = [(x * x_i) + 1]^{ij}, \quad (20)$$

$$K(x, x_i) = \exp \left\{ -\frac{|x - x_i|^2}{\sigma^2} \right\}. \quad (21)$$

The result is a polynomial classification algorithm, both of which and the output weights are automatically determined by the algorithm.

**3.3. Overview of Network Big Data.** With the continuous development of computer technology, the concept of big data has gradually emerged [27]. Although big data has been used in many fields, there is currently no internationally recognized concept, and big data has its own unique understanding in various fields [28, 29]. Figure 5 shows the structure of big data users.

Big data is a term that can be used to describe any type of data. Although it can bring us a huge amount of information, big data also brings a lot of difficulties to data processing. Since the Internet of Things technology has been promoted, big data has become more and more abundant in daily life, and its application scope has been continuously expanded [30]. Big data is a comprehensive technology that involves processes such as data storage, data collection, data

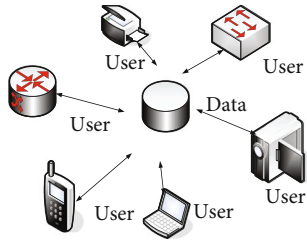


FIGURE 5: Big data user structure diagram.

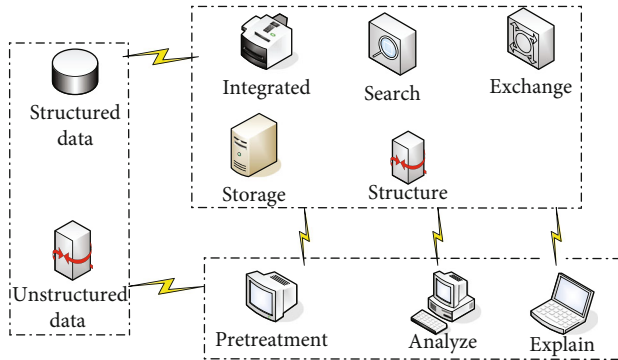


FIGURE 6: Information attribution structure in big data processing flow.

TABLE 1: Basic information of surveyed teachers.

Major category	Category	Number of people	Proportion
Gender	Male	89	44.5
	Female	111	54.5
Age	Less than 30 years old	60	30
	30-45 years old	93	46.5
	Greater than 45 years old	47	23.5

analysis, and data transformation. Some scholars believe that big data can be roughly divided into three working stages, and big data technology can be divided into four types, which cooperate with each other to realize information sharing. Figure 6 shows the information attribution structure in the big data processing flow.

When faced with a large amount of data, we need to process it, use valid data, and eliminate invalid data. With the promotion of Internet technology, there is more and more data in life, and more and more time is spent in the process of processing. Therefore, we need to use related technologies to fuse information, interoperate and integrate data information under multisource heterogeneous conditions, and reduce data analysis time.

Teacher training is also inseparable from the support of big data. In the field of teacher training, online training has emerged with the help of technology. This method breaks

the limitations of teacher training, enabling more teachers to participate in the training and be exposed to more educational concepts.

#### 4. Experiment on the Implementation of Teacher Training Policies

*4.1. The Basic Situation of the Investigation.* In order to understand the relevant implementation of vocational teacher training, we conducted a brief survey of teachers in a school in city A. First of all, we briefly analyze the basic situation of the respondents; the specific situation is as follows.

According to the data in Table 1, we have conducted a relevant survey on the situation of teachers in the school. In terms of gender of teachers, there are 89 male teachers, accounting for 44.5% of the total, and 111 female teachers, accounting for 54.5% of the total. It can be seen from this that there are more female teachers than male teachers, which is consistent with the current basic situation, indicating that the data is more real. Judging from the age of teachers, there are 60 teachers younger than 30 years old, accounting for 30% of the total number. There are 93 teachers between the ages of 30 and 45, which is 46.5% of the total number. There are 47 teachers over the age of 45, accounting for 23.5% of the total. According to the data, there are more teachers between the ages of 30 and 45, and the number of teachers in other age groups is normal, indicating that the school has better teaching ability.

According to the data in Table 2, we have investigated the school's educational background and teaching experience. Judging from the educational background, there are 55 people with a bachelor's degree, accounting for 27.5% of the total number. There are 115 people with a master's degree, accounting for 57.5% of the total. There are 30 people with doctoral degrees, accounting for 15% of the total. From this data, it can be seen that the number of teachers with master's degrees is more, and the number of doctors is the least, which is consistent with the facts. Judging from the teaching age, there are 42 people with the teaching age of less than 3 years, accounting for 21% of the total number. There are 57 people with teaching age between 4 and 7 years, which is 27% of the total number. There are 82 people with teaching age between 8 and 12 years, which is 41% of the total number. There are 19 people with teaching experience of more than 12 years, which is 9.5% of the total number. From this data, it can be seen that the most teachers are 8-12 years old, which shows that the school has strong teaching ability.

*4.2. Training External Environment Survey.* The training of teachers can make young teachers' teaching ability grow rapidly, can make other teachers make up for their own shortcomings, and can strengthen the school's teachers. Therefore, whether it is for teachers personally or for schools, it is very important to train teachers. When training teachers, we should pay attention to many factors, not only need strategy support, but also pay attention to the external environment.

TABLE 2: Survey on teachers' educational background and teaching age.

Major category	Category	Number of people	Proportion
Academic qualifications	Bachelors	55	27.5
	Master	115	57.5
	PhD	30	15
Teaching experience	Less than 3 years	42	21
	4-7 years	57	27
	8-12 years	82	41
	More than 12 years	19	9.5

TABLE 3: Analysis of training emphasis.

Category	Frequency	Proportion
Not important	4	2
General	30	15
Important	98	49
Very important	68	34

TABLE 4: Survey on teacher training levels.

Category	Frequency	Proportion
National level	52	26
Provincial	94	47
City level	44	22
Other categories	36	18

According to the data in Table 3, we have conducted a survey on the views of teachers participating in the training. Among them, 4 people think that the school does not pay enough attention, and the proportion is 2% of the total number. There are 30 people who think that the school attaches general importance to it, and its proportion is 15% of the total number. There are 98 people who think that the school attaches more importance, and its proportion is 49% of the total number. There are 68 people who think that the school attaches great importance to it, which is 34% of the total number. From this data, it can be seen that the teachers who participated in the training generally believed that the school attached more importance to the training of teachers, indicating that the school supported this work.

According to the data in Table 4, we have investigated and analyzed the level of school teachers' participation in training. There are 52 people who have participated in the national training, accounting for 26% of the total number. There are 94 people who participated in the provincial training, which is 47% of the total number. There are 44 people who participated in the municipal training, which is 22% of the total number. There are 36 people who participated in other types of training, accounting for 18% of the total number of people. From this data, it can be seen that among the teachers surveyed, some people not only participated in one training, but also according to the survey, it can be seen that the national and municipal training accounts for a large proportion, which limits the training of many other teachers.

## 5. Implementation of the Teacher Training Strategy

*5.1. Teacher Training Situation.* Training is very important for teachers, not only to improve their own ability, but also to improve the overall teaching staff of the school. Different teachers need different aspects of training. Therefore, when teachers participate in training, they will conduct training in different ways according to the training institution and their own situation. To this end, we conducted a brief survey of teacher training, as shown below.

According to the data in Figure 7, we have investigated and analyzed the training situation of teachers. First of all, we conducted a survey on the training methods. There were 84 people who were trained by the method of theoretical lectures, which accounted for 42% of the total number of people. There were 114 people who were trained in a combination of theory and practice, accounting for 57% of the total number of people. There are 44 people who are trained by way of practice inspection, accounting for 22% of the total number. There are 26 people who were trained in the form of special discussions, accounting for 13% of the total number of people. There were 14 people who were trained in the form of special lectures, which accounted for 7% of the total number of people. From this data, it can be seen that the training method is mainly based on practice. Due to the particularity of the occupation, most training institutions also use this method. According to the number of participants in the survey, some teachers have participated in a variety of training methods, and the current training methods are more diverse.

Judging from the cycle of teachers' participation in training, 38 teachers participated in the training for less than a week, accounting for 19% of the total number of teachers. There were 104 people who participated in the training between 1 and 2 weeks, accounting for 52% of the total number of people. There are 60 people who participated in the training between 2 and 5 weeks, which is 30% of the total number of people. There are 9 people who participated in the training between 5 and 7 weeks, which is 4.5% of the total number. There are 4 people who participated in the training for more than 8 weeks, which is 2% of the total number of people. According to the data, the proportion of the training period of 1-2 weeks is the highest, and the proportion of more than 8 weeks is the least, which shows that teachers are still faced with the pressure of work and study during the training period, so the training period of 1-2 weeks is the largest number of people.

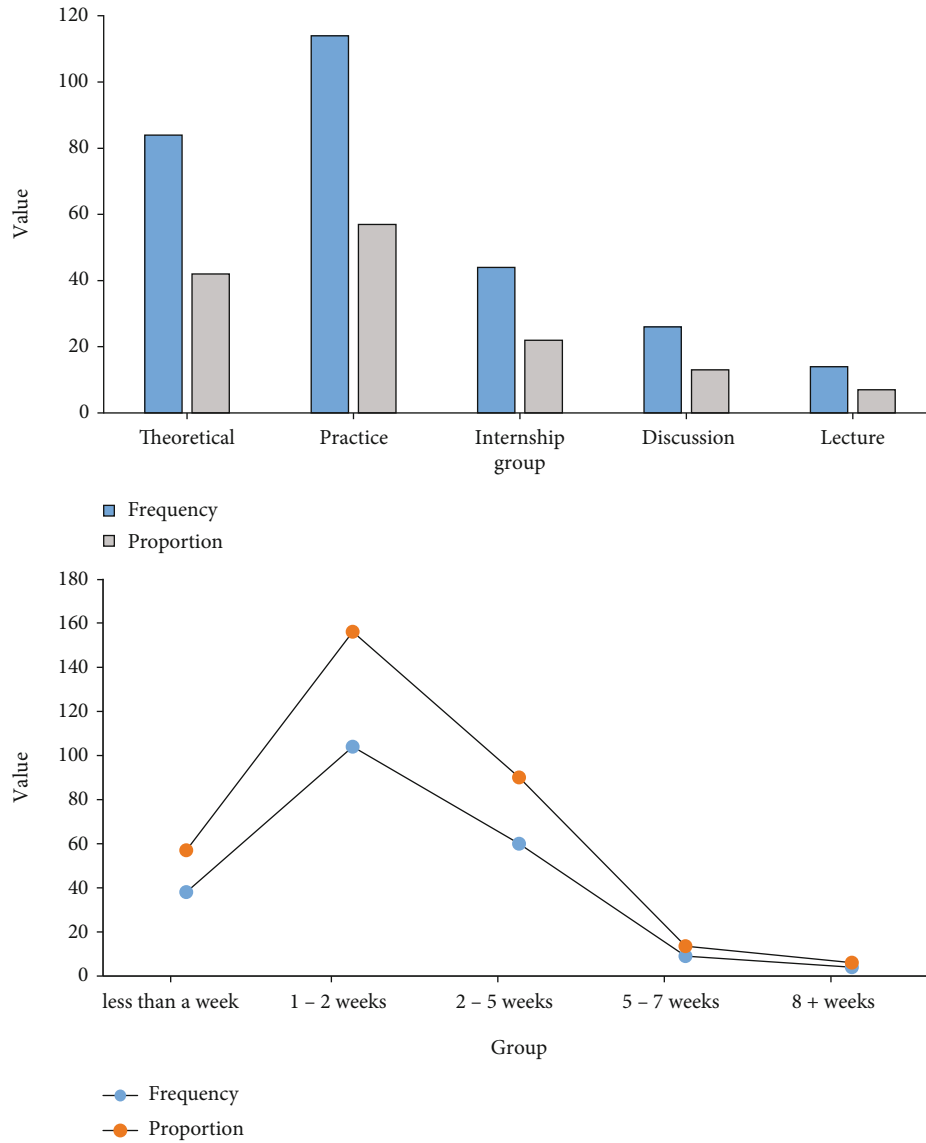


FIGURE 7: Analysis of teacher training.

According to the data in Figure 8, we have conducted a survey and analysis of the attitudes of participating training teachers towards training institutions. First, we investigated the hardware situation of the institution. According to the data, 70 people are satisfied with the organization’s training plan, 49 people think that the plan is general, and 7 people are dissatisfied with the plan. According to the data, the organization’s training plan is relatively general. There are 66 people who are satisfied with the training materials of the institution, 48 people who think that the teaching materials are average, and 10 people who are dissatisfied with the teaching materials. According to the data, the training materials of the institutions are very general, and the quality of the teaching materials can be appropriately improved. There are 82 people who are satisfied with the training content of the institution, 51 people who think the content is average, and 4 people who are dissatisfied with the content. According to the data, the training content of the institution needs to be improved. There are 115 people who are satisfied with

the experimental equipment of the institution, 76 people think that the equipment is normal, and 3 people are dissatisfied with the equipment. According to the data, the training equipment of the institution is better.

Judging from the software of the training institution, 137 people are satisfied with the teaching staff of the institution, 27 people think that the teaching staff are average, and 5 people are dissatisfied with the teaching staff, indicating that the teaching staff of the institution is relatively high. There are 88 people who are satisfied with the course design of the institution, 42 people think that the course design is general, and 13 people are dissatisfied with the course design, indicating that the course design is good. There are 122 people who are satisfied with the organization and management of the institution, 33 people who think their organization and management are average, and 7 people who are dissatisfied with the organization and management, indicating that their organization and management ability is relatively high. There are 98 people who are satisfied with the teaching



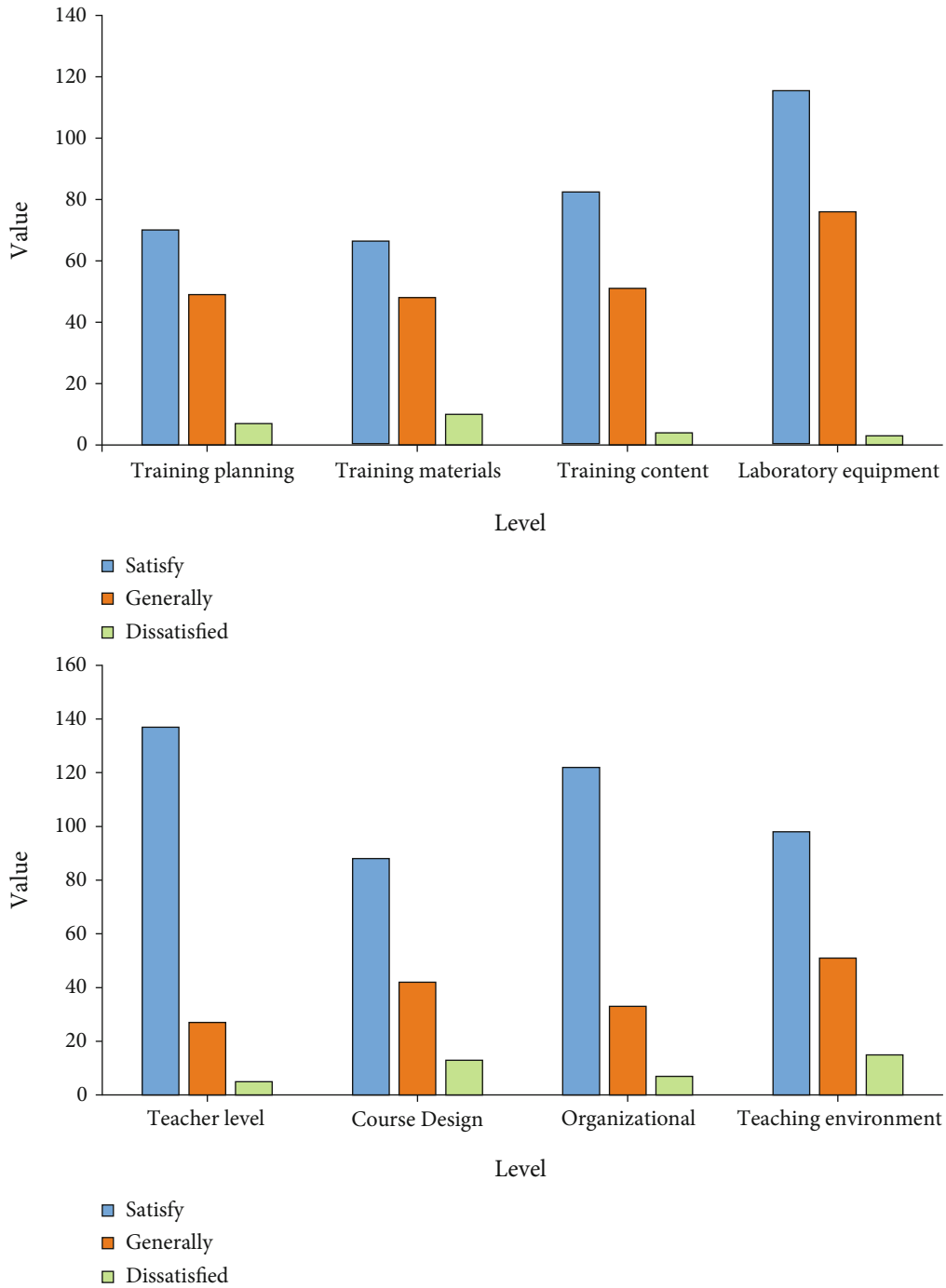


FIGURE 8: Analysis of satisfaction survey of training institutions.

environment of the institution, 51 people think that the teaching environment is average, and 15 people are dissatisfied with the teaching environment, indicating that their teaching environment is relatively general.

**5.2. Training and Learning Situation.** In order to improve the training effect, the training tasks need to be completed in time during the training process. To analyze task completion, we surveyed its completion.

According to the data in Figure 9, we have investigated the learning situation of teachers participating in the training. First of all, we analyzed the degree of task completion. Among them, 192 people submitted their assignments, accounting for 96% of the total number of people. There were 188 people who completed the study summary, accounting for 93.5% of the total number of people. There were 194 people completed the study review, accounting for 97.5% of the total number. There were 63 people

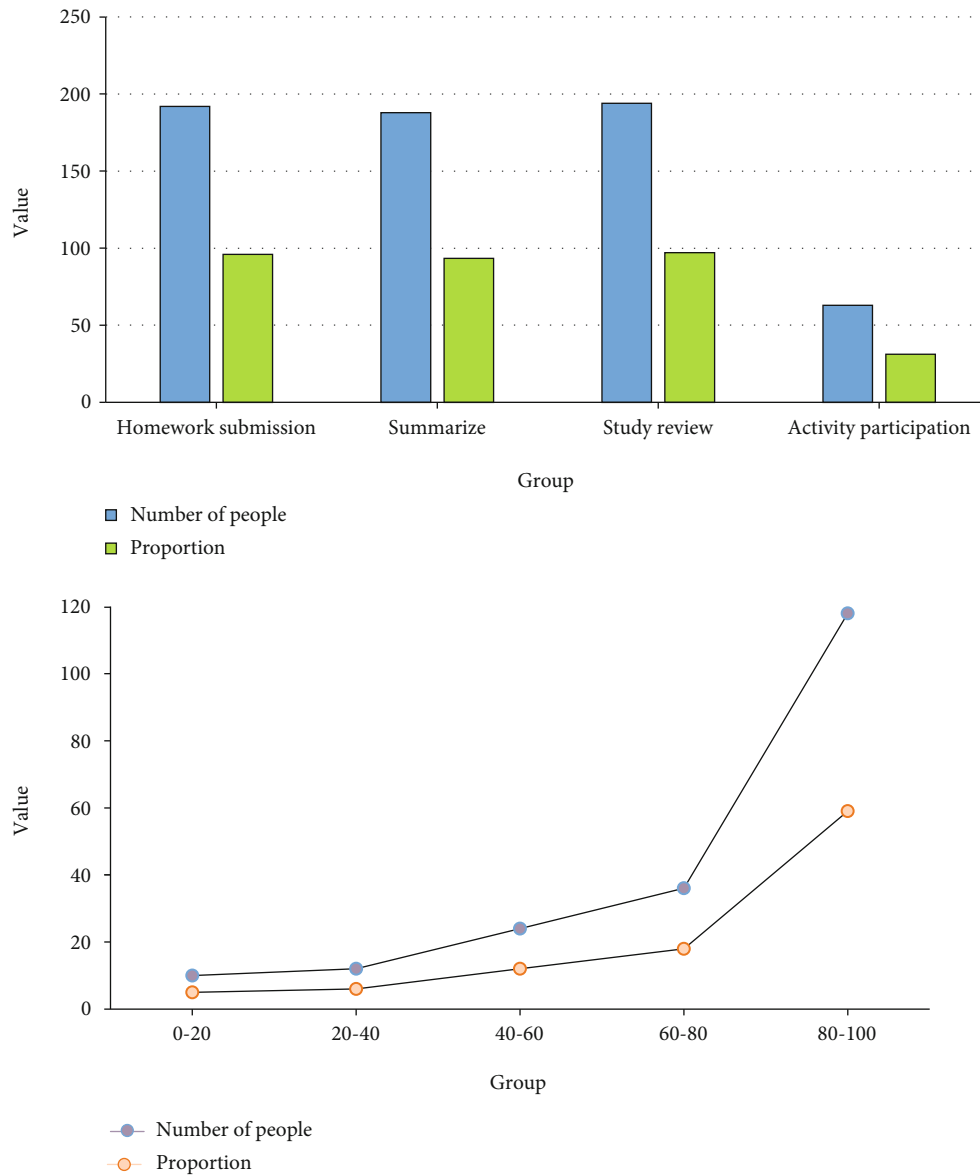


FIGURE 9: Analysis of training learning situation.

participating in the activity, accounting for 31.2% of the total. According to the data, the vast majority of teachers were able to complete the homework in the training process and were highly motivated to learn. However, from the perspective of activity participation, the teachers who participated in the training had poor interaction, and the activity participation was very low.

Judging from the distribution of teacher training scores, there are 10 students with scores between 0 and 20, accounting for 5% of the total number. There are 12 people with scores between 20 and 40, which is 6% of the total number. There were 24 students with scores between 40 and 60, accounting for 12% of the total. There are 36 students with scores between 60 and 80, accounting for 18% of the total. There were 118 students with scores between 80 and 100, accounting for 59% of the total. According to the data, the number of teachers with scores

between 80 and 100 is the largest, and the proportion of teachers who fail is relatively small. Combined with the completion of the task, we can think that the seriousness of the learning attitude, the better the results. On the whole, the training effect is good.

**5.3. Completion of Training Objectives.** The achievement of strategy objectives is the feedback on the effect of strategy implementation. Through scientific analysis of the achievement of strategy objectives, it can be determined whether the overall implementation of the strategy is assessed and whether the strategy can continue to be implemented. In order to analyze the teacher training strategy, we conducted a survey on the achievement of its strategy objectives, as shown below.

According to the data in Figure 10, we have investigated the theoretical and practical knowledge learned from this

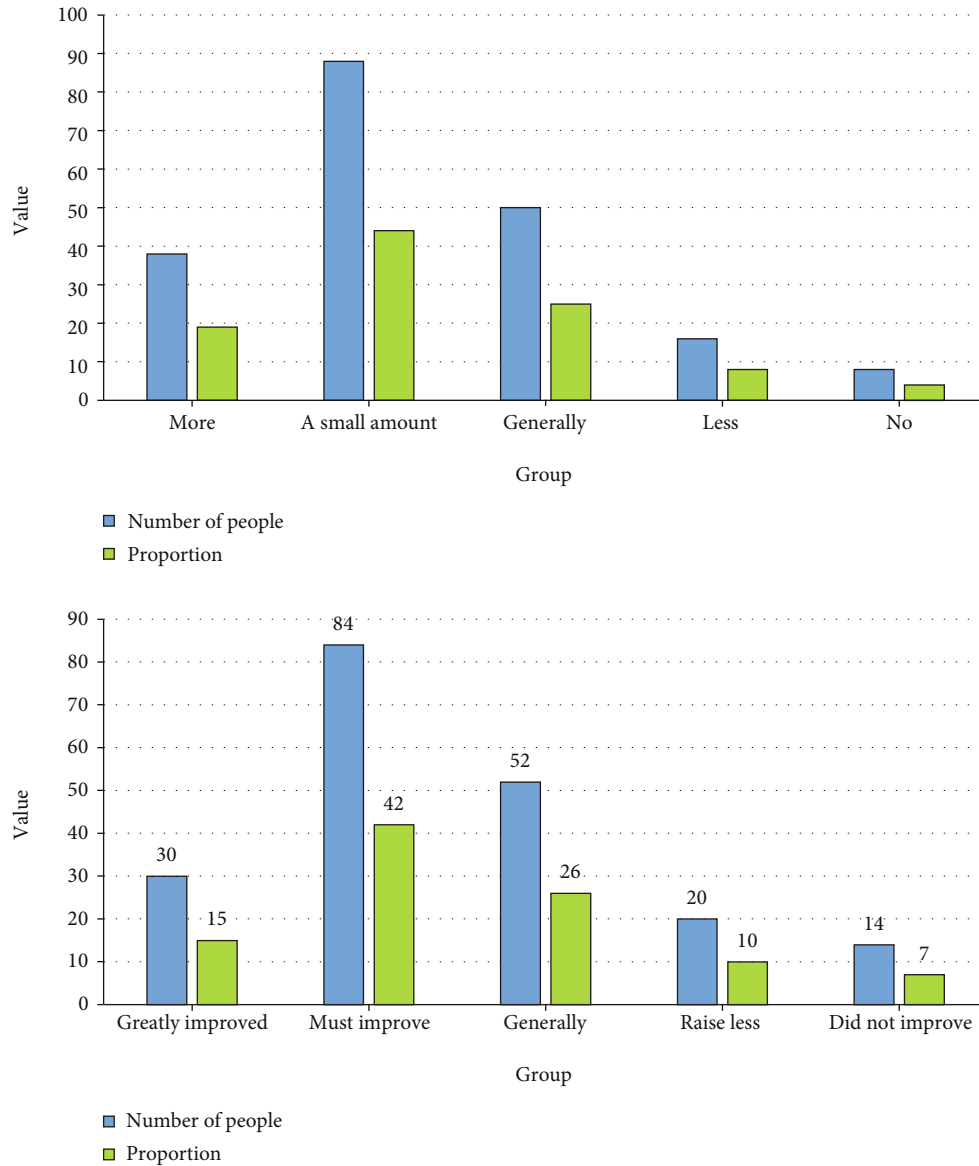


FIGURE 10: Analysis of training objective completion.

training. According to the survey, there are 38 people who think that the training has learned more theoretical and practical knowledge, which is 19% of the total number. There are 88 people who think that the theoretical and practical knowledge they have learned from this training is less, which is 44% of the total number of people. There are 50 people who think that the theoretical and practical knowledge learned in this training is very general, which is 25% of the total number of people. There are 16 people who think that the theoretical and practical knowledge they have learned from this training is very small, accounting for 8% of the total number of people. There are 8 people who think that they have not learned the theoretical and practical knowledge in this training, which is 4% of the total number. According to the data, most teachers were able to learn new theories and knowledge from the training process, indicating that the training was effective.

Judging from the improvement of comprehensive ability, there are 30 people who think that this training is of great help to the improvement of comprehensive ability, and the proportion is 15% of the total number of people. There are 84 people who believed that the training was helpful to improve their comprehensive ability, accounting for 42% of the total number of people. There are 52 people who thought that the training was very general in improving their comprehensive ability, accounting for 26% of the total number of people. There are 20 people who thought that the training was of little help in improving their comprehensive ability, accounting for 10% of the total number of people. There are 14 people who believed that the training was not helpful for the improvement of comprehensive ability, accounting for 7% of the total number of people. According to the data, there are many people who think this training is helpful to improve their comprehensive ability, which shows that this training is effective.

## 6. Conclusions

Education is the eternal issue of national development, and educational development is the foundation of national development, and the competition among countries around the world is becoming increasingly fierce. To enhance a country's international status and international competitiveness, promoting education development is one of the most effective ways. Teachers are the foundation of educational development, so teachers must be trained to improve their comprehensive ability to promote educational development. This paper aims to study the analysis of network big data on the implementation of teacher training policies in vocational colleges. It is expected that with the support of network big data, the implementation of vocational teachers' training policies will be analyzed, and the implementation effects of relevant policies will be explored, so as to help teachers improve their professional abilities and promote the development of the education industry. In the process of exploration, we investigated the problems existing in the current education and training process and the external environment of strategy implementation and analyzed the current implementation situation. Although this paper has certain achievements, there are still shortcomings: Due to the factor of ability, it is not possible to compare and analyze the relevant situation of the experimental site with other provinces and cities. It is expected that in the future, better and wider countermeasures can be found through comparative analysis.

## Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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