Differentiated Model Construction of Teachers' Role Transformation in Higher Vocational Colleges Against the Background of Entrepreneurial University Based on MBTI (Myers-Briggs Type Indicator) Personality Type Theory

Qing Qing

1School of Economics and Management, Lingnan Institute of Technology, Guangzhou, Guangdong 510663, China
*Corresponding author. Email: 36284583@qq.com

ABSTRACT
This research takes full-time teachers of the School of Economics and Management of a private higher vocational college that are creating an entrepreneurial university as the research object. On the one hand, it analyzes their professional personality through the classic MBTI questionnaire; on the other hand, it analyzes the role of teachers in higher vocational entrepreneurial colleges, and finally constructs a differentiated model of teacher role transition in higher vocational entrepreneurial colleges based on MBTI occupational personality theory.

Keywords: entrepreneurial university, teacher role, MBTI personality theory

I. INTRODUCTION
As soon as the slogan for the creation of an entrepreneurial university is put forward, it often faces various questions from teachers: an entrepreneurial university? Do you want me to start a business? Should I guide students to start a business? Should every student start a business? ... These doubts will undoubtedly become a realistic obstacle to the creation of entrepreneurial universities. Part of these doubts comes from teachers' misunderstanding of the connotation of entrepreneurial universities, and more questions come from teachers' confusion about their own development. Faced with change, most teachers are not unwilling to change, but do not know how to change. They don't know what to change to meet the requirements of entrepreneurial universities for teachers. On the one hand, the banner of entrepreneurial universities is held high, on the other hand, there is no change in teachers. Therefore, it is urgent to analyze the role of teachers in higher vocational entrepreneurial universities and solve the puzzle of teacher transformation.

Vocational entrepreneurial universities "call" the transformation of traditional teacher roles. The shortage of entrepreneurial teachers has become a bottleneck restricting the creation of entrepreneurial universities. The transformation of the role of existing teachers in schools as a breakthrough can increase the effective internal supply of entrepreneurial teachers and solve the bottleneck of teacher shortage to a certain extent. This research intends to analyze the role of teachers in higher vocational entrepreneurial universities and the MBTI occupational personality survey of existing full-time teachers in higher vocational entrepreneurial universities, so as to construct a differentiated model of teacher role transition in higher vocational entrepreneurial universities based on MBTI occupational personality theory.

II. THEORETICAL BASIS FOR THE RESEARCH
A. MBTI personality type theory
The theoretical research basis of this article is MBTI personality type theory.

MBTI (Myers-Briggs Type Indicator) was wrote by American psychologist Katherine Cook Briggs (1875-1968) and her psychologist daughter Isabel Briggs Myers (1897-1980). It is a type-breaking and self-reporting personality assessment tool to measure and describe people's psychological laws and personality types in obtaining information, making decisions, and dealing with life. It has designed four independent
propensity scales, which are the four dimensions people often say, as shown in "Table I":

<table>
<thead>
<tr>
<th>Relationship with others</th>
<th>Extrovert (E) or introvert (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect and generate information</td>
<td>Sense (S) or intuition (N)</td>
</tr>
<tr>
<td>Make use of information</td>
<td>Thinking (T) or feeling (F)</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Judgment (J) or perception (P)</td>
</tr>
</tbody>
</table>

According to the MBTI personality type theory, how a person chooses the direction and responds to the world around him can be divided into the above 4 groups of corresponding typical ways. In each group, people will tend to one of the two. In each group of tendency combinations, people naturally prefer one tendency thereinto, so there are 16 personality types, as shown in "Table II" below.

<table>
<thead>
<tr>
<th>Table II. The 16 Personality Types of MBTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESFP</td>
</tr>
<tr>
<td>ESTP</td>
</tr>
<tr>
<td>ESFJ</td>
</tr>
<tr>
<td>ESTJ</td>
</tr>
</tbody>
</table>

In fact, these 16 types of MBTI personality theory can be further classified into four categories. Here the characteristics of the four categories of SJ, SP, NF, and NT are summarized.

B. The guiding significance of MBTI personality type theory

The MBTI personality type theory can help teachers see their own strengths and weaknesses and determine the direction of role transformation that suits them. At the same time, it can also help schools "train teachers according to their own personality", improve the effectiveness of teacher training, and help teachers complete the "differentiated" transformation of their roles.

MBTI can help individuals clearly realize "why, where and how to develop". Therefore, it is scientific and feasible to use MBTI personality type theory to guide the development of teacher role transformation. At present, there are few achievements in the academic field using MBTI theory to study the teacher group, so the characteristics of the four categories of SJ, SP, NF, and NT are summarized.

III. RESEARCH DESIGN

A. Research procedures

This research integrates the typical questionnaires of the MBTI personality test in foreign countries, and conducts communication and interviews with some full-time teachers and middle-level management personnel of the college to obtain the questionnaire for this research. Since the items in the questionnaire are relatively mature, and the scope of this research is mainly concentrated in the School of Economics and Management, the total number of survey subjects is small but the sample coverage rate is high, so this research questionnaire has not been pre-tested. Questionnaires were issued to the subjects, who were full-time teachers of the School of Economics and Management. Because the content of the questionnaire is mainly aimed at the subjects' personal subjective evaluation of their own interests, it has a high sensitivity, so the subjects answered anonymously, allowing the subjects to answer openly. The questionnaire answer takes the form of subjective cognitive evaluation of the subjects. At the same time, it conducted interviews with some teachers to understand their views on their own transformation. After the formal survey, it uses the Sojump to conduct data and theoretical analysis on the questionnaire. Finally, it summarizes the research results and makes recommendations.

B. Questionnaire

The questionnaire structure is divided into two parts. The first part is the basic situation of the respondents. It includes 6 topics such as gender, age group, educational background, professional title, affiliated teaching and research section, and working time at school. The second part is the questionnaire on personality traits. Among them, questions 7-13 are in the dimension of energy tendency (E-I); questions 14-20 are in the dimension of receiving information (S-N); questions 21-27 are in the dimension of processing information (T-F); questions 28-34 are in the dimension
of pattern of actions (J-P). The questionnaire answer takes the form of subjective cognitive evaluation of the subjects.

IV. RESEARCH IMPLEMENTATION

A. Distribution and returning of questionnaires

The questionnaire uses the Sojump system to distribute, answer and return with the mobile phone as the carrier. 50 questionnaires were distributed, 43 were returned, and the questionnaire response rate was 86%, of which 43 were valid questionnaires and the questionnaire effective rate was 100%.

B. The reliability and validity of the scale

Since the scale taken is relatively mature, the validity of the questionnaire is relatively high. In order to ensure the reliability of the questionnaire, before each subject filled out the questionnaire, they were told about the questionnaire options in detail.

C. Sample data statistics

1) Gender: Among the 43 people surveyed, 15 were men and 28 were women. This also reflects the common phenomenon in the secondary colleges of Lingnan Institute of Technology: there are generally more female teachers than male teachers.

2) Age distribution: There is 1 person under 30 years old, there are 26 people between 31 to 40 years old, there are 9 people between 41 to 50 years old; there are 7 people between 51 to 60 years old, and there is no one above 61 years old. It shows that there are mostly middle-aged and young teachers in the prime of their life in the School of Economics and Management.

3) Education background: There are 1 doctor, 25 master students and 17 undergraduates. It shows that the teachers of the School of Economics and Management are mostly with master degrees.

4) Professional title: There is no one with high professional title, and there are 3 people with deputy high professional titles, 35 people with medium-grade professional titles and 2 people with junior professional titles, and 3 people have not yet been assessed. It shows that there are relatively few teachers with senior professional titles in the School of Economics and Management, and teachers there are mainly with medium-grade professional titles.

5) Distribution of teaching and research sections: 1 person in marketing; 4 people in international trade, 5 people in finance, 13 people in accountant, 5 people in human resource management, 5 people in hotel management, 4 people in business administration, 4 people in logistics management, and 2 people in psychological consultation. It shows that in addition to the marketing teaching and research section, the data collected by other teaching and research sections is relatively complete.

6) Working years in school: There are 4 people who have worked in this school for less than 3 years, 6 people for 3-5 years, 17 people for 6-9 years, and 16 people for more than 10 years. It shows that the faculty of the School of Economics and Management is relatively stable.

7) Four dimensions of MBTI: The statistical results of the four dimensions of MBTI are shown in "Table III":

<table>
<thead>
<tr>
<th>Types</th>
<th>Number of people</th>
<th>Types</th>
<th>Number of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>34</td>
<td>I</td>
<td>9</td>
</tr>
<tr>
<td>S</td>
<td>34</td>
<td>N</td>
<td>9</td>
</tr>
<tr>
<td>T</td>
<td>20</td>
<td>F</td>
<td>23</td>
</tr>
<tr>
<td>J</td>
<td>39</td>
<td>P</td>
<td>4</td>
</tr>
</tbody>
</table>

8) MBTI personality type: Among the 16 personality types in MBTI theory, 7 types are absent. And the statistics of the other 9 types are shown in "Table IV" below:

<table>
<thead>
<tr>
<th>Type</th>
<th>ESFP</th>
<th>ESFJ</th>
<th>ESTJ</th>
<th>ISTJ</th>
<th>INTJ</th>
<th>INFJ</th>
<th>ENFJ</th>
<th>ISFJ</th>
<th>ENTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people</td>
<td>4</td>
<td>11</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
V. RESEARCH RESULTS AND DISCUSSIONS

A. Four dimensions of MBTI analysis

From the MBTI four-dimensional statistical table, it can be seen that in the School of Economics and Management, the extroverted (E) teachers (34 people) are far more than the introverted (I) teachers (9 people). In the MBTI personality theory, extroverted (e) people are good at expressing, can express emotions and ideas freely, can listen, speak, and think at the same time, and love to make friends. While introverted (I) people usually retain emotions and thoughts and do not express emotions easily. They always listen first, think later, and then speak, and they have only a few fixed friends, like to be alone, quietly reflect and think moderately. It shows that most of the teachers in the School of Economics and Management are extroverted and good at communicating with others.

There are more sensory (S) teachers (34 people) than intuitive (N) teachers (9 people). In the MBTI personality theory, sensory (S) people pay attention to the information they see, hear, and smell, pay attention to details, don't like changes and innovations, care about the current feelings, and don't think long-term. It shows that most of the teachers in the School of Economics and Management do not like change in their personalities.

Teachers of thinking (T) (20 people) and feeling (F) (23 people) are roughly equivalent. It shows that teachers of the School of Economics and Management are partly rational, speaking rules and so on; other teachers are emotional, paying attention to human feelings and so on.

The number of teachers of judgment (J) (39 people) is much larger than teachers of perception (P) (4 people). In MBTI personality theory, judging (J) people like to follow procedures, control at any time, pay attention to order, work in a planned way, be organized, and be able to make quick judgments and decisions. It shows that most of the teachers in the School of Economics and Management are serious, careful and not sloppy, but they are not very adaptable to changes.

B. Analysis of 16 types in MBTI personality

It can be seen from the MBTI personality type statistical table that among the 16 personality types in MBTI theory, 7 types of the full-time teachers of the School of Economics and Management are missing, and the remaining 9 personality types are mainly ESTJ and ESFJ, of which the ESTJ (14 people) is the most, followed by ESFJ (11 people). ESFP (4 people), ISTJ (3 people), ENFJ (3 people), INTJ (2 people), INFJ (2 people), ISFJ (2 people), and ENTJ (2 people) are relatively few.

C. Analysis of 4 categories in MBTI personality

In fact, these 16 types of MBTI personality theory can be further classified into four categories. Here four major categories are selected and summarized as follows: SJ (30 people), SP (4 people), NF (5 people), and NT (4 people). The characteristics of these four categories are as follows:

- SJ — "Loyal Guardians"
- SP — "Adaptive Realists"
- NF — "Enthusiastic and Insightful"
- NT — "Logical and Smart"

D. Analysis of the development path of teachers in entrepreneurial universities

After conducting research on the construction of entrepreneurial universities in undergraduate colleges, Chinese scholars such as Fu Bajun, etc., mostly set the goal of transformation of university teachers to realize the professionalization of academic professions. But for the current situation of Lingnan Institute of Technology, Guangdong, the construction of an entrepreneurial university doesn't mean that all teachers and students have to start businesses. Students in entrepreneurial universities should pay attention to the cultivation of innovation awareness and entrepreneurial skills; teachers in entrepreneurial universities can improve their teaching and research capabilities and social service capabilities and ultimately achieve the goal of academic entrepreneurship.

In Lingnan Institute of Technology, Guangdong, the most realistic goal of teacher transformation is to select the main path of development that suits the school's entrepreneurial construction needs and suits their own development according to their own personality types during the transformation of the school to create an entrepreneurial university. The construction of entrepreneurial universities can't be completed overnight, and the transformation of entrepreneurial university teachers can't be accomplished overnight. Both of them need to be done step by step. Based on the school's existing teacher development path foundation, it should serve the construction of entrepreneurial universities through continuous learning and improvement. Lingnan Institute of Technology, Guangdong, now roughly divides teachers into three categories: teaching type, research type, and teaching and research type. Due to the nature of its professional liberal arts, most of the teachers in the School of Economics and Management belong to the teaching type, some of them belong to the teaching and research type, and there are almost no pure research type teachers. Based on the current status of the School of Economics and Management, all teachers take teaching as the main body. The short-term goal of teacher
transformation can guide some teachers to dig the potential of social services and divide teachers into teaching type, teaching + research type, and teaching + social service type. Teachers of teaching type have almost no research and social service projects, and they mainly conduct regular teaching; teachers of teaching + research type mainly focus on teaching, but they have some teaching and research projects; teachers of teaching + social service type mainly focus on teaching, but they have some social service projects. With the deepening of the establishment of entrepreneurial universities, the long-term goal of teacher transformation is to train teachers whose main body is research or social service, named teaching, research, and social service teachers according to their main components. Teachers of teaching type can be the original kind of teachers who only conduct regular teaching, but also include teachers who are the main body of teaching with some research or social service; teachers of research type can be pure research teachers or teachers whose main body is research and supplemented by teaching or social services; teachers of social service type can be purely social service teachers or teachers with social service as the main body and teaching or scientific research as supplementary.

VI. THE DIFFERENTIATED MODEL CONSTRUCTION OF MBTI PERSONALITY TYPES AND ENTREPRENEURIAL UNIVERSITY TEACHER DEVELOPMENT PATHS

Based on the above analysis of MBTI personality types and teacher development paths, a differentiated model of MBTI personality types and entrepreneurial university teacher development paths can be constructed, as shown in "Fig. 1" below:

![The differentiated model of MBTI personality type and entrepreneurial university teacher development paths](image-url)

As can be seen from the above "Fig. 1", teachers in the SJ category can transform to a teaching or social service type; teachers in the SP category can transform into a social service type; teachers in the NF category can develop toward teaching or social service type; teachers in the NT category can transform into research or social service type.

VII. SUGGESTIONS FOR SCHOOLS TO ESTABLISH GUARANTEE MEASURES FOR TEACHERS’ DIFFERENTIAL TRANSFORMATION AND DEVELOPMENT

A. Schools promote the teachers’ professional development of teaching type

1) The teaching-type teachers of entrepreneurial universities are able to understand the industry and enterprises better: On the one hand, schools can support teachers to obtain industry-related vocational qualification certificates and establish incentive and restraint mechanisms for vocational qualification certificates; on the other hand, schools can actively
build a part-time enterprise platform, and support corresponding subsidies and restraint policies to promote teachers to actively accumulate enterprise experience.

2) The teaching-type teachers in entrepreneurial universities should innovate teaching methods: Schools should actively provide various opportunities and resources to allow teachers to improve their classroom teaching ability through teaching observations, and out-of-home training and learning and so on.

B. Schools promote the teachers' professional development of research type

1) The competent department of the school needs to improve relevant policies and form a good policy environment for teaching and research: The school should improve the relevant policies to increase the enthusiasm of faculty and staff to participate in teaching and research. For example, funds should be provided for successfully established projects and material rewards should be provided to enhance the motivation for teacher transformation.

2) It can set up special funds to strengthen the research and studies and training of teachers' teaching and research capabilities: For example, it can encourage and support teachers to participate in "national training" or "provincial training" projects.

3) It should focus on the role of leaders in teaching and research: The school should pay attention to the role of leaders in teaching and research, pay attention to the construction of a high-level research team, and around the prominent problems of the school, it should organize a team to carry out continuous and in-depth public relations research.

4) Attention should be paid to the construction of research echelons: It is necessary to encourage and cultivate young teachers with scientific research ability to carry out teaching research, for example, the professor's "mentoring".

5) Special research institutions should also be established: It is necessary to establish a multi-level, multi-field, and horizontal and vertical research team to improve the overall research level of the faculty, for example, the establishment of teaching and research or scientific research teams on specific topics.

C. Schools promote the teachers' professional development of social service type

1) It needs to provide a stage for social service teachers to display their talents: For example, it can cooperate with the community to develop a series of courses suitable for community residents, etc.

2) A reasonable social service income distribution system must be formulated: For example, it can charge reasonable management fees for teachers' social service income, etc.

3) In terms of professional title evaluation, promotion, etc., it can treat social service and teaching and research capabilities equally: For example, social service can be equated with academic ability.

VIII. CONCLUSION

In this study, MBTI personality type theory is applied to the transformation of teachers in higher vocational colleges against the background of the establishment of entrepreneurial university, and reasonably matches the personality type with the role type of entrepreneurial university teachers, so that the transformation of teachers has a scientific theoretical basis. Of course, this study also has some limitations, such as: after the MBTI personality scale, we did not interview and clarify each teacher. There may be some deviation in the evaluation results of individual teachers' personality types. In the future research, it is necessary to strengthen the communication with the evaluated teachers through various channels to improve the accuracy of the assessment.

References


