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A Pilot Result on Applying the Vocational School-based Program for Vietnamese High School Students based on a New Individual Guidance Approach

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Abstract: Vocational orientation is a concerned topic in the Vietnamese new general education program. However, the current high school vocational programs have not yet met the need for innovation in the student competence development orientation, thus leading to high school vocational orientation has not been effective. This study proposes a vocational school-based program approached from a new individual guidance. By using the pre-experiment and post-experiment questionnaire to evaluate the feasibility and effectiveness of the proposed program to the quality of vocational orientation, the results showed that students' awareness of vocational school-based programs changed in a positive direction. The proposed program proves its effectiveness when applied in schools by combining the practical career experience and vocational counseling, or the combination of individual experience and social interaction in choosing a suitable career. This finding overcomes the disadvantages of the old vocational school-based program and can be applied to adapt the student competence development orientation in the Vietnamese general education program.

Keywords: *Vocational orientation, vocational school-based program, pilot result, individual experience, social interaction.*

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Introduction

Over the past few years, vocational school-based program (VSP) has developed in parallel with modern teaching in many models of school psychology. It has brought positive results in vocational orientation for high school students. Jarkawi et al. (2018)'s study showed that the counseling and guidance program management is an integral part of education services in school requires the executors to continue to improve and develop the service quality. The counseling and advice have a role to help the learners to be independent, to grow, and to be able to solve their problems. Grimes et al. (2017) stated that one of the duties of a school counselor is to provide VSP to students. School counselors conceptualized their role in preparing students for the world of work with the term career and college readiness. In terms of school counseling programs, Gysbers (2013) suggested school counselors deploy the VSP. Researchers, educators, and policymakers agree that college and career readiness are essential in the P-12 curriculum (Curry & Milsom, 2013). Those school counselors played a vital role in the preparation of students to be career-ready through their work (Alger & Luke, 2015). Kolbert et al. (2016) also agreed that the development of VSP could not be separated from school psychology. Thanks to the vocational orientation programs, which have significantly reduced the unemployment rate, career choices, and dropouts at university for high school students. According to Henriques (2018), whereas vocational education appeared to be successful in engaging students "at-risk," it seemed to prejudice the academic success of the high-achievers. Apart from past school performance, previous retention, college expectations, and parents' education seemed to be good predictors of both educational decisions and outcomes.

In Vietnam, VSP development is quite late compared to other countries. Therefore, Vietnam has both advantages and disadvantages to acquire, learn from experience, and implement this work. According to Huynh (2017), the VSP in Vietnam is still quite heavy in theory; less practice and students are less likely to go on field trips to get knowledge

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about their careers. The vocational counselors are still limited and cannot meet the needs of students' VSP. In many high schools, the VSP is even performed by subject teachers, homeroom teachers, or learning assistants. This leads to poor vocational orientation quality. Pham (2012) also agreed that the VSP in Vietnam is still facing many difficulties and the lack of adequate application models. Although in this current educational program, Vocational Education has been integrated, due to the limitation of qualified personnel, the output standard of the course is not sufficient. This result was reflected in the 2018-2019 Vietnamese academic-year, hundreds of students in Ho Chi Minh City were warned with their academic achievements and forced to discontinue their study (Giang, 2019). The primary reason was due to their inappropriate career choice. According to Ho Chi Minh City Center for Human Resource Forecast and Labor Market Information, the proportion of students choosing the wrong major is about 60%, only 5% of students know their major. In particular, 75% of students lack knowledge about the selected major in university. That led to the result that after graduation, only 50% of students would find a suitable job according to their capacity (Nam, 2019).

Given the current limitations of the VSP in Vietnam, this study focuses on developing a VSP, which is to raise the career-awareness for high school students and about the importance of active participation in career pursuits.

Vocational School-based Program for high school students

Globally and locally, the VSP is very diverse and dependent on the characteristics of the economies of countries. Some VSPs are proposed and used in vocational orientation (VO) for students:

The Hierarchical Model for the Structure of Vocational Interests of Gati (1979) is based on the assumption that occupations can be characterized as collections of attributes or features. These features are the characteristics of the working environment (e.g., indoors or outdoors), the type of social relations (e.g., having or not having contact with other people), and the level of independence in decision making, as well as the types of reinforcements (intrinsic or extrinsic) one receives. Following from the strengths-based inclusive theory of work, fulfilling work is a central goal of career and work counseling, Allan et al. (2019) developed an operationalized program of fulfilling work contained four components: (a) job satisfaction, (b) meaningful work, (c) work engagement, and (d) workplace positive emotions. These components capture the hedonic, eudaimonic, cognitive, and affective dimensions of fulfilling work.

The program of development theory states that career development is a long process, and career advice for individuals must be appropriate for the development stages of life. Healy's VSP (1982), consisting of four steps: (1) Identifying clients' characteristics; (2) Identify and select strategies; (3) Carry out training and assistance; (4) Determine goals to be achieved. The program emphasized the individuality of the client and the unique characteristics of each individual. This information is used to set goals and subsequent strategies to accomplish the goals. Identifying and clarifying existing issues and potential problems that can reduce the effectiveness of the VC process is essential.

VSP in Singaporean high schools is integrated into educational activities suitable for ages from high school to post-high school. Singaporean VSP consists of 3 stages: Career awareness, explore a career, career execution plan. This process helps each student realize his or her own identity, discover his or her superiority, realize the career values to pursue, and then have feasible plans for development. Career development aims to build human emotional capacity, which helps students become active, flexible, and adaptable to the living environment (Tucker, 2012).

In Malaysia, the VSP is effective from four activities: Vocational education begins with classroom teachers; vocational guidance from primary school; provide vocational guidance through vocational clubs, so students have the opportunity to discuss, debate and gain insights as well as self-discovery, discovery, exploitation, and negotiation of issues related to their respective career; encourage self-employment (Minghat & Yasin, 2010).

Hong Kong offers nine career areas: Applied Science, Business Administration, Textile, Tourism and Hospitality Services, Information Technology, Electrical and Electronics, Mechanics, Law, Defense, and Security. Usually, at the end of the secondary school level, students often decide to choose one academic program and two vocational programs. Secondary vocational education is conducted concurrently with the four-year mainstream program. Many students enroll in vocational training programs after graduating from secondary school at vocational institutions with vocational certificates, although they can study this program at the following levels (Hui & Cheung, 2015).

Integrating cultural and vocational education is the current major trend in VSP at US high schools. To help students identify the right career, the counselor team (3-5 people) will accompany students from the beginning of grade 11 to the end of class 12. The counselor does not teach any subject. Most schools, on average, will have one lesson a week with a counselor. Besides, these teachers also contact the universities and companies to inform and facilitate students to attend events like an official member of that unit. These orientations help students determine their direction and prepare them for future careers (Kincheloe, 2018).

In New Zealand, high school education is divided into four national framework programs and career orientation in 13 different fields. There are 39 vocational training organizations (ITO) funding occupational training activities. A unique feature is that ITO organizes training, but it also sets a common standard based on the requirements/views of businesses on skills needed for the labor market. The VSP is mainly done through a "double system": students take part in vocational schools, a section in internships in companies (Rother, 2019).

Based on the research on the VSP implementation experience globally, it is shown that: VSP is directly implemented in the educational program in schools from the primary level; the teachers are all involved in the VO process and at the same time have a team of highly trained experts on vocational counseling for students; vocational training institutions, enterprises deeply engaged in vocational education activities in schools. Most importantly, VSPs focus primarily on bringing students into the real environment to experience and choose careers very early, combined with professional advice from the career counselor. This practical experience orientation, combined with this expert advice, is a valuable lesson for developing VSPs in Vietnam.

In Vietnam, many studies have mentioned the development and application of VSP in high schools. Tran (2010) built a personality approach VSP. In this research, the author emphasized the stages and steps in VSP: Step 1 - Assess the personality and capacity of the student; Step 2 - Analyze the career requirements for employees; Step 3 - Compare the physiological characteristics of students to the needs of the career, thereby helping students to make smart and right choices, eliminate risks and lack of maturity to make sure while choosing a career. At the same time, Dang (2010) pointed out that the VSP included the following steps: Step 1 - Understanding the students' aspirations, strengths, interests, career competencies, academic qualifications, and family background; Step 2 - Carry out the necessary measurements; Step 3 - Study the career description and draw out the career requirements; Step 4 - Compare the physiological characteristics of the students with the requirements of the career and draw initial conclusions; Step 5 - Studying the labor needs of the labor market; Step 6 - Compare the results obtained in step 5 with the initial findings in step 4 and give advice; Step 7 - Guide to looking for the suitable universities. Pham (2012) researched and applied VSP to approach students' needs, to help students easily understand themselves and choose suitable careers. When choosing a career, students must answer three questions: (1) What do I like to do?; (2) What can I do?; (3) What do I need to do?. However, to find a genuinely suitable career, apart from personal personality and social factors, the counselor needs to help students understand their own characteristics such as ideals, value orientations, personalities and perceptions of the individual, besides the requirements of the career with the students' health status, family conditions should also be considered. Also, VSPs in Vietnam are still entirely theoretical. Students only know about jobs through advising from teachers and social networks. They have not been exposed much to the career environment to have proper awareness about the career. This is the current limitation of the Vietnamese VSP in high schools.

In this article, the researcher will develop a new individual guidance approach VSP and experiment this program for high school students in the context of restructuring the Vietnamese general educational program.

The individual guidance Vocational School-based Program

Approaching the VSP according to the students' needs and practical experience from the previous study, in combination with the educational orientation for developing learners' competencies in the Vietnamese general educational program, the researcher designed a VSP to meet the requirements of:

- (1) Students choose a career that suits their capacity, interests, and the needs of the regional labor market.
- (2) Students can visualize and outline career portraits, not only from knowledge but also from reality. This is a way to overcome the previous limitations when the old VSP focused on providing students with vocational experience but did not provide the actual situation and the exact career requirements.
- (3) Students are strengthened career confidence as well as an overview of the profession through interacting with their predecessors.
- (4) Students are given career tests to assess their suitability for that career. This is the experiential factor - the primary educational method that the Vietnamese general education program is aiming for.

Based on those four requirements, the researcher outlined the specialized the VSP for high school students as follows:

Content	Collective vocational counseling at high school, topic: "I choose a career or a career choose me" and "Career triangle"	Individual vocational counseling for high school students	Implementing professional exchanges	Deploy "My career" tours
Objective	<ul style="list-style-type: none"> • Help students identify their qualities, competencies and interests, as well as gain an overview of career categories • Provide the national future human resource projection • Provide career indicators for specific occupations • Provide individualized study directions for apprenticeship or further study. 	Support students specifically identify their qualities, competencies, interests, academic capacities, and appropriate careers to orient their future.	<ul style="list-style-type: none"> • Help students better understand the career they are choosing as well as be more confident about their own orientation • Help students identify the pros and cons in their career selection. 	Help students have a realistic view of career types and make career goals more effective.
Process	<ul style="list-style-type: none"> • Step 1: Stable the crowd • Step 2: Introduce vocational orientation theory • Step 3: Learn the Holland theory of vocational personalities and work environments, and the Platonov's career triangle • Step 4: Advising education enrollment. 	<ul style="list-style-type: none"> • Students do the vocational orientation test under the supervision of school counselor • Exchange of personal information such as cognitive capacity, learning capacity, family background, family tradition to make necessary sharing. 	Organize the exchange meeting "Labor Market" (Exchange at the high school according to the exchange script with with professional achievements' individuals).	<ul style="list-style-type: none"> • School cooperates with industrial zones to organize field trips • Have students collect data on recruitment, human resource projection and specific requirements of a number of career corresponding to competencies and qualifications through job descriptions • Organize for students to visit colleges, universities and vocational schools to give them the opportunity to learn about the training facilities and interact with undergraduate students and lecturers at the school.

Figure 1. The new individual guidance approached Vocational School-based Program

With four main contents of the proposed program, the researcher expects to achieve when experimenting with this VSP will prove the effectiveness of the program when the general education program is applied in Vietnam.

Methodology

Study Design

This study used the questionnaire as the primary method, combined with the experiment of the proposed VSP. The questionnaire was built with a question system with five levels of selection based on the Likert-5 scale (Murray, 2013). The original questionnaire consisted of 50 items about the status of VSP needs, career orientation problems, and the response of the current VSP used in Vietnamese high schools. The initial pilot surveyed 50 participants who were grade 12 students in Ho Chi Minh City. Based on the initial results, with a reliability level of $\alpha = .853$, the researcher proceeded to remove ten unnecessary items that did not match the psychological characteristics of high school students. The final questionnaire after adjustment included 40 questions, including:

- (1) 20 items surveying on the need for VSP of high school students
- (2) 10 items scanned the problems encountered in the vocational orientation of high school students
- (3) 4 items are studying the impact of VSP on high school students' vocational orientation.
- (4) 6 items are surveying the feasibility of the proposed VSP in the context of the new general education program.

In this article, the researcher used the results on the impact of the VSP on high school students' vocational orientation as analytical and discussion data.

The process of surveying and experimenting with the program included the following stages in 3 months:

Stage 1: Pre-experimental survey and experimental impact preparation

- (1) Identify the participants involved in the experiment: contact, meet, and collect data from the participants.
- (2) Agree in the content, time, and experimental location.
- (3) The researchers are using questionnaires to assess the awareness and the level of need for VSP before the experiment.

Stage 2: Conducting the experiments

Conducting four contents in the established VSP:

- (1) Collective vocational counseling at high school with the topic "I choose a career or a career choose me" and the "Career triangle."
- (2) Individual vocational counseling for high school students.
- (3) Implementing professional exchanges in high school.
- (4) Deploy "My career" tour to help students experiencing a career in reality.

The (1) is presented by the researcher group (with vocational counseling expert). The (2), (3), and (4) is conducted by the school psychologist or part-time teacher-school counselor with the support of the researcher group in contacting the career predecessor and career facilities (industrial parks, export processing zones and hi-tech parks).

Stage 3: Evaluate and conclude experiments

After implementing 4 main contents of the proposed VSP for 3 months, the researcher used the 40-items questionnaire again to assess the difference before and after the experiment. The measurement of pre- and post-experiment had a normal distribution with $Z = .0596 (>0,05)$, therefore, a parametric test (paired-sample T-test) was used to find out the difference among two stages of this study. This is also an empirical result for comparing the difference in vocational orientation of students after participating the proposed VSP - the data that this study wants to detect.

Participants

According to Huynh (2017), the VSP in Vietnamese high schools is currently conducted by school psychologists or teachers who are also part-time psychologists. Therefore, the first criterion for the researcher to select participants to get an overview of the proposed VSP implementation is: (1) the school has a school psychologist, and (2) the school has a part-time teacher-school counselor. The second criterion is about the survey area. Because in the proposed program, there is a discussion with vocational counseling expert (collective vocational counseling), information exchange of successful people in various industries (implementing professional knowledge interaction) and trips to production establishments (deploy "My career" tours), the researcher selected the survey area as Ho Chi Minh City (the city with the largest concentration of economic, financial and service sectors in Vietnam). This guarantee area for the cooperation about the distance traveled and funding when inviting vocational counseling experts, successful people in various industries, as well as arranging tours to industrial production establishments, and hi-tech parks. The third criterion is about the survey subjects. The subjects of this study are 12th-grade students preparing for university entrance exams. The researcher selected five high schools in Ho Chi Minh City which had five different educational program can be represented for the Vietnamese high school educational system: 2 public high schools (1 specialized and 1 non-specialized), 1 private high school, 1 international high school, and 1 gifted high school. Through discussions with the school administration about the purpose of the study, the researcher exchanges in-depth expertise with the person responsible for implementing the VSP at the school. During the implementation of the VSP, the researcher will be in charge of "Collective vocational counseling" as a vocational counseling expert. The remaining contents will be implemented by the person in charge of the VSP (school psychologist, or part-time teacher-school counselor) with the researcher's cooperation and support.

From the above selection criteria, the researcher generated 450 questionnaires and collected 435. Through the processing, there were 55 invalid questionnaires. Thus, the number of valid votes is 380 votes, with 380 participants being high school students. These 380 participants was selected to participate in both pre- and post-experiment stages of the study to test the difference after experiencing the proposed VSP. Based on research by Hair et al. (1998) for reference on the expected sample size. Accordingly, the minimum sample size is five times the total number of observed variables. The questionnaire of the study has 40 items, so the minimum sample is 200. Thus, the number of 380 participants is reasonable and ensures representation in this study.

Data Analysis

This study used SPSS 20.0 software to process data related to Mean (M), Frequency (F), Percentage (%), Paired-samples T-Test (for finding the difference between pre- and post-experiment stages of high school students who experienced the proposed VSP). The mean score is converted into the following content: Unnecessary: $M < 1.80$; Less necessary: $1.81 < M < 2.61$; Optional: $2.62 < M < 3.42$; Necessary: $3.43 < M < 4.23$; Very necessary: $4.24 < M < 5.00$.

Result

Findings of high school students' awareness of the need for a VSP are shown in Table 1:

Table 1. The perception of high school students pre- and post-experiment about the necessity of the VSP

Level	Pre-experiment		Post-experiment	
	N	%	N	%
Unnecessary	19	5.3	0	0
Less necessary	38	10.5	0	0
Optional	132	34.2	41	10.5
Necessary	141	36.8	160	42.1
Very necessary	50	13.2	179	47.4
Sum	380	100	380	100

After the experiment, high school students' awareness of the VSP has increased significantly. Specifically, before the experiment, 5.3% supposed that VSP was not necessary, 10.5% rated it as less essential, and 34.2% said that the VSP was optional in the school. After the experiment, none of the respondents felt that VSP was unnecessary. The optional level was also reduced from 34.2% to 10.5%. Nearly half of the participants (accounting for 47.4%) changed to aware that the VSP is very necessary, rated at 42.1%.

The results of high school students' awareness of the benefits of the VSP are presented in Table 2:

Table 2. The perception of the benefits of the VSP

Variable	Stage	M	SD	t	p
Relieve the concerns and problems of the student in choosing a career	Pre	3.61	1.211	-0.62	.01
	Post	4.21	.803		
Understand some of the capacity, interest, personality of the student	Pre	3.71	1.017	-0.53	.01
	Post	4.23	.751		
To voice the feelings, aspirations, and desires for the student's career	Pre	3.73	.951	-0.56	.01
	Post	4.28	.637		
Have faith and affection for the chosen career	Pre	3.35	1.027	-0.62	.01
	Post	3.97	.741		
Understand the responsibilities of the family and society	Pre	3.32	.999	-0.53	.01
	Post	3.85	.703		
Get more information on career-related issues	Pre	3.74	.961	-	.01
	Post	4.23	.651		
Sum	Pre	3.39	.416	-0.66	.01
	Post	4.05	.284		

In the pre-experiment stage, most students have not seen the clear benefits that the VSP brought; the assessment level is only optional ($M = 3.39$). In the post-experiment stage, when the students are satisfied with the VO needs, their awareness of the benefits of the VSP is more transparent, with the specific expression of M increasing to 4.05 (necessary level). The effect size is 1.586 when $p = .01$. This shows that the four implemented contents of the experimental VSP have been useful and given the students certain benefits in the VO process. Testing the results on the interests that the VSP gives students pre- and post-experiment with a significant level of $p < .05$. This proves that the VSP experiment process in schools is beneficial.

The results on student satisfaction with the content of the VSP are presented in Table 3:

Table 3. The students' satisfaction with the VSP

Level	Pre-experiment		Post-experiment	
	N	%	N	%
Completely dissatisfied	3	7.9	0	0
Dissatisfied	5	13.2	0	0
Normal	23	60.5	2	5.3
Satisfied	3	10.5	20	52.6
Very satisfied	4	7.9	16	42.1
Sum	38	100	38	100

In the pre-experiment stage, 7.9% of students rated the VSP as completely dissatisfied, 13.2% at the unhappy level, and 60.5% at the average level. Only 10.5% were satisfied, and 7.9% were delighted. In the post-experiment stage, the average level decreased to 5.3%, the satisfaction level increased to 52.6%, and the very satisfying level increased to 42.1%. No students did not satisfy with the VSP. That is, the students' satisfaction changes after the empirical impact.

There are specific changes in the level of VSP needs of students before and after the experiment. The data in Table 4 below show that the VSP needs have been satisfied to a certain extent (for the labor market, career, and personal characteristics) (see Table 4).

Table 4. The change in the need for VSP before and after the experiment (labor market, career characteristics, personal characteristics)

Variable	Stage	M	SD	t	p
The need for counseling on the labor market	Pre	3.82	.950	-0.45	.01
	Post	4.27	.535		
The need for counseling on the features and requirements of the career	Pre	3.75	.845	-0.49	.01
	Post	4.24	.524		
The need for counseling to understand the conditions and psychological characteristics which can be suitable for the career	Pre	3.64	.713	-0.57	.01
	Post	4.21	.495		
Sum	Pre	3.62	.635	-0.58	.01
	Post	4.20	.495		

The results show that there has been a change in the level of the need for VSP in all the following experimental content (increased from 3.62 to 4.20). This demonstrates the effectiveness of the VSP to support students in choosing a suitable career.

Paired-sample T-test was used to find the difference in the VSP needs of high school students before and after the experiment. With $p < .05$, it can be stated that there is a significant difference between the pre- and post-experiment stage. The effect size is 0.913 when $p = .01$. Therefore, the need for VSP of high school students after the experiment has changed markedly compared to before the experiment. The change is reflected in almost all contents that need to conduct VSP in school.

Discussions

The proposed VSP has greatly benefited from the achievements of the US and New Zealand's VSP. Although, under limited conditions of highly qualified vocational counselors (such as the US program in Kincheloe's study), Vietnam has very strong inheritance steps, going from semi-professional (using the part-time teacher-school counselors to do vocational counseling) to professional (using only the well-trained vocational school counselors). The support of the collective vocational counseling, combined with career experience trips and interaction with successful people, has helped semi-professional counselors share the professional pressure, as well such as providing students with the most practical experiences and knowledge about the careers. If the New Zealand's VSP takes place at the same time as a vocational school and internship facility (Rother, 2019); In Vietnam, this VSP is applied during the regular school hours in all school systems (public, private, international, gifted high schools) to target all students, as well as to meet the standards of the current Vietnamese education. This is a great contribution of this VSP because it can be applied in many different types of schools, besides combining with extracurricular sessions to experience careers at production and exchange facilities, learning experiences from successful predecessors.

Compared to Hong Kong, Malaysia and Singapore's VSPs, this proposed VSP is limited. Firstly, not yet emphasizing the cooperation of homeroom teachers and subject teachers in career guidance for students. Secondly, there is a lack of consistency between the educational levels: this current VSP only applies to high schools, lack of linkages with previous levels (primary and secondary school). The advantage of this VSP is the succession of a career-focused organizational focus on student competencies. Students are provided with the essentials for choosing a career (through personal counseling, collective counseling, career experience, interaction with successful predecessors). Therefore, the limitation of the continuity in educational level of this VSP will be a further development orientation for the successive and more complete VSP programs in Vietnam.

After applying this new individual guidance VSP, the awareness of high school students has changed positively, they were aware of the importance of the VSP at different levels. The limitations in Pham's VSP (Pham, 2012) on the stage of career experience, the current proposed VSP has overcome. High school students interacted with successful people in each career, as well as a practical visit to production facilities, factories to understand better career specifics, as well as the requirements which can not be taught in a school of some careers in Vietnam. In addition to real-life career experience, high school students also received vocational counseling under the guidance of school psychologists and experts. This vocational counseling process helped many students become more aware of their careers, as well as their

capacities and interests in their chosen careers. This result reflects that the practical experience model combined with vocational counseling applied by developed countries globally can be implemented in Vietnam. Vietnamese schools can research VSPs from regional countries such as Singapore, Hong Kong, and Malaysia to design the program accordingly, (especially the acquisition to design inter-school VSP, from primary to high school). Thus, with the four requirements set out when planning the VSP to meet the criteria of enhancing career experience and vocational counseling for students, the proposed program effectively complies.

Comparing the pre-experiment and post-experiment stage results of the study, the level of satisfaction with the contents in the proposed VSP in the post-experimental group accounted for a higher percentage. There was no student evaluated at dissatisfaction. It could be said that if the proposed VSP could get interested and investment, it would better meet the needs of students. However, there were still a certain number of regular level assessments, which proved that although the VSP has tried even to need more investment. The study by Bratucu, Madar, Neacsu, Boscor, and Baltescu (2014) on the VSP deployed at high schools in Romania indicated that parents, professors or representatives of educational institutions had an essential role in establishing high school students' educational path. Only 2.2% of the high school students had mentioned that school psychologists/school counselors and professional guidance guided them in choosing the school path, while the percentage recorded among university students was only 1.6%. Thus, it is not possible to assert that the content of the proposed VSP is not very useful, but also it must be taken into account other objective factors coming from the living and learning environment around the students (parents, school counselors, successful predecessors). This group of objective factors could be an advantage for developing more effective vocational programs, and also could hinder students' vocational orientation.

Conditions and psychological characteristics of the students which are suitable for a career are relatively diverse and complex content. This issue was mentioned in the study of Tran et al. (2019) on the relationship between self-awareness and VO of Vietnamese high school students. If students do not understand their psychological characteristics, interests, and capacities, the VO process will be difficult and ineffective. However, this content has been met and satisfied the needs of VSP through the implementation of individual/group vocational tests and counseling in the proposed VSP. In other words, the proposed program has gained significant results and has assisted students in solving difficulties in the career selection process and satisfying their VO needs.

It can be said that changing the awareness and applying this new individual guidance VSP for high school students is useful for solving problems that they encounter during the career selection process. This is proved by nearly 100% of students participating; after the experiment, they are satisfied with this VSP and partly satisfied their VO need. Some students find it interesting to be involved in visiting several universities, colleges, production facilities, career exploration, and self-discovery activities. This finding is entirely appropriate in the context of the general education program being implemented in Vietnam; the issue of Vocational Education is very focused and integrated into all subjects. Besides, Vietnam's new educational program also devotes 105 periods per year for new subjects - Experimental activities and Vocational Orientation, to serve the purpose of vocational education (Ministry of Education and Training, 2018). Therefore, it can be said that this individual guidance VSP that this study proposed meets the educational goals of Vietnam in the coming period. School psychologists or part-time teacher-school counselors can apply this program to career guidance for high school students.

Conclusion

The VSP for high school students based on a combination of school and other social forces is an essential basis for VO to meet the needs of students. The combination of practical career experience (interacting with successful people, and visiting production facilities) and vocational counseling (interacting with vocational counseling experts, and group and individual vocational counseling) has proven effective in supporting high school students choose the suitable careers. This proposed program contributes to strengthening the effectiveness of practical career experience combined with vocational counseling applied by other countries. At the same time, this program is entirely in line with the orientation of developing learners' competence that the Vietnamese general educational program aims to: Students experience and develop personal competence in choosing a suitable career.

Suggestions

The implication of this study is that this VSP can be applied at Vietnamese high schools (in all educational school system: public, private, international and gifted schools) in particular and high schools in developing countries with social and cultural similarities with Vietnam in general. Besides, the findings have overcome the limitations of stereotyping, theory, and social interaction in the career guidance process for students that previous VSP in Vietnam have implemented. The results have opened the direction of developing school-based vocational programs which are oriented to create learners' competence and meet the needs of learners in Vietnam. The implementation steps may have many obstacles when putting into a mass application. Still, the overview of the theoretical framework and content can completely meet the new requirements for vocational education in the Vietnamese new general education program.

Limitations

In parallel, the study also has certain limitations. The number of participants is quite small, not reliable enough about the feasibility of the program when applied to multicultural education. Also, the factor of professional quality of vocational counselors has not been mentioned in the model to ensure professionalism when conducting the VSP. The program has only been tested in Ho Chi Minh City - a large city with conditions to ensure the interaction with experts, successful people in the career, as well as visiting production facilities. Testing of this VSP in small localities, as well as in remote areas, remains an unsecured issue in the program content. Therefore, the design of a VSP dedicated to areas with limited financial and transportation conditions is necessary to develop this program at a higher level.

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