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Effectiveness of Diversity Integration in Cosmetics Career Curriculum

Ju-Hsuan Yeh

Department of Cosmetic Applications and Management, Cardinal Tien Junior College of Healthcare and Management, New Taipei, Taiwan (ROC)

*Corresponding author: aliceyeh@ctcn.edu.tw

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Abstract. This study aims to investigate the effectiveness of applying diverse teaching methods in career development guidance for students majoring in beauty-related disciplines at a five-year vocational college in Taiwan. A quasi-experimental design was adopted, targeting two classes of third-year students from the cosmetics application and management department. The study compares the impact of these methods on students' self-awareness, career awareness, and career planning. The experimental group received diverse teaching throughout the semester, while the control group followed a theoretical approach for the first nine weeks and diverse teaching thereafter. Results showed that all students in the experimental group passed, while the control group had a 7.5% failure rate. Significant improvements were observed in career awareness and planning ($p<0.05$), though self-awareness was less affected, likely due to external factors such as peer influence and environmental background. The study recommends scheduling career development courses before internships, enhancing self-awareness through visits and lectures, and utilizing collaborative teaching and VR simulations to support career planning.

Keywords: Diversity instruction, mind map, self-awareness, career awareness, career planning.

INTRODUCTION

Lifestyle changes and the increasing frequency of interpersonal interactions have led to the emphasis on grooming one's appearance and using cosmetics and skincare products. In turn, these have spurred the growth of the beauty and fashion industry. After conducting a survey on the actual operations of retail businesses in 2018, the Ministry of Economic Affairs, R. O. C. (MOEA) (2019) found that cosmetics and skincare products accounted for 51.5% of all retail products, with physical stores being the main sale channels. The number of employees in Taiwan's cosmetics industry increased from 8,000 in 2007 to 14,000 in 2015, representing an average annual increase of 6.5%. The industry's export value in 2017 reached 730 million USD, with an annual growth rate of 13.2% (MOEA, 2021).

Taiwan's two major job search platforms are 1111 Job Bank and 104 Job Bank. As of July 13, 2021, the former platform had 3,567, 735, 889, and 1,399 vacancies for cosmetologists, makeup artists, spa and wellness therapists, and hair stylists, respectively; while the latter platform had 7,725, 2,399, and 1,311 vacancies for cosmetologists, hair stylists, and fashion stylists, respectively. These job vacancies reflected the industry's development potential.

Although job opportunities abound in the cosmetics-related industry, there is also the issue of employment choices. The Directorate-General of Budget, Accounting, and Statistics of the Executive Yuan, ROC (2019) surveyed a total of 287,000 people who failed to secure any job opportunity because of their qualifications or limitations arising from personal conditions. Among the participants, 15.79% cited "age limit" and 11.29% cited "mismatch in professional skills (including license qualifications)." Among those who thought that there was no suitable job opportunity, 35.09%

said, “they could not find the type of job that they wanted,” and 26.69% stated that “the remuneration offered did not meet their expectations.”

The various responses stated above indicated that most of the participants were unclear regarding the concept of having a career, lacked thorough self-awareness, and had vague career awareness. Consequently, they were unable to identify the direction in their career planning. These phenomena highlighted the importance of early integration of career development (CD) counseling into general education to help students cultivate self-awareness, career awareness, and career planning.

The cosmetology technical and vocational education program is one of the tracks under the five-year junior college program. The role of technical and vocational education is to assist students in selecting appropriate and relevant courses and industries based on their personal characteristics, interests, and expertise, thereby avoiding wasting learning costs (Billett et al., 2016). The age of students attending a 5-year junior college (5YJC) is approximately 15–20 years. Erikson (1982), an expert in the psychosocial developmental theory, believes that students of this schooling age are at the stage between late adolescence and early adulthood, and are in strong need of an adequate support system provided through their school, family, and society. You and Cheng (2018) noted that the skillful application of diverse teaching strategies in school education, combined with flipped learning, can effectively overcome the resource limitations in large-class teaching and improve students' attitudes towards professional courses. Many teaching practice studies in Taiwan have also highlighted the positive outcomes of diverse teaching strategies, including increased student interest in learning, effective achievement of teaching objectives, high levels of course satisfaction, and significant improvements in students' learning attitudes (Chien & Liang, 2017). It is critical to help students realize the cognition of their own CD. The proposed method for teaching practice aims to examine diversity instruction (DI) and its application to students of a 5YJC’s cosmetics-related department, as well as the effectiveness of CD counseling.

METHOD

The teaching methods employed by the teacher have the most immediate impact on their students’ learning effectiveness (Lepareur & Grangeat, 2018). The methods practiced in this study are listed below.

RESULT AND DISCUSSION

Didactic Teaching Method

Effective didactic teaching must be matched with teacher–student interactions and the use of questioning skills and group discussions (Ernst & Colthorpe, 2007; Greenop, 2007). Gülpinar and Yeğen (2005) suggested that arranging a 10-15 minute question discussion session after a 15-minute lecture helps enhance the comprehension and integration of learning. In this study, the pedagogical application focused on the first 8 weeks of the course. The course contents were divided into the following teaching modules: career overview, CD theories, vision setting, self-awareness, understanding the working world, career decisions, finding joy in work, and self-growth. The subjects were divided into the experimental and control groups according to the class that they were in. Mind maps and SWOT analysis were frequently incorporated when teaching the experimental group, whereas the control group was taught using theories only.

Inquiry Method

After conducting an examination, Chang (2000) concluded that modern pedagogy was quite similar in purpose to the tenets of “being erudite, interrogated, deliberate, discerning, and persistent” as taught by Confucius, the ancient Chinese educator. This was especially the case while fostering active exploration, independent thinking, and problem solving, with the results of students’ inquiry being used in research and school activities (Bergmark & Kostenius, 2018). This teaching method involved separating the students into groups to explore the world of cosmetics-related careers and conducting exclusive interviews with industry practitioners. The contents of the working world were then organized using SWOT analysis, thereby achieving the CD teaching goal.

Expressive Teaching Method

During the teaching process, the teacher provides strategies to guide learning, thereby enables students to acquire new knowledge on their own initiative. Through self-integration of knowledge, students can spark new ways of thinking or creativity, which allows them to develop their potential (Meissner & Timmers, 2019). The role of the teacher in expressive teaching is that of an instructor, whereas students integrate their learning experiences before presenting them (Zoss & White, 2011). This teaching method allows students to form groups and then present their joint ideas on careers and the working world. Through understanding the work environment and its forms, students can establish their own career values. Teachers can also provide feedback as a basis for evaluating the CD course.

Role-Playing Method

Teaching based on role-playing was carried out in a lively way, which helped sustain students' concentration during the learning process (Stefan & Christina, 2014). The students personally experienced specific situations when simulating the tasks of the assigned role, giving them an in-depth understanding and knowledge of the course contents (Istanda et al., 2010). During role-playing, the students were arranged to attend a 5-minute simulated interview for either further studies or employment, depending on their interests. Teachers and experts in the field worked jointly as members of the interview panel and provided each student with comments after the session.

Team Teaching Method

According to Friend (2007), team teaching allows teachers with different expertise to work together. It is not premised upon any specific form of communication, and it has the ability to increase the depth and breadth of teaching (Lepareur & Grangeat, 2018). In the role-playing method, students were taught to prepare their own resumes based on the course module they were attending. Interview scenarios—either further studies or employment—were simulated based on students' interests, with each student taking turn to attend a 5-minute session jointly conducted by their teachers, experts, and scholars in the field. The panel members would comment on each student's performance after the interview so that they could gain the experience of attending interviews during the CD course.

Super (1980) proposed that a person's CD undergoes five stages: growth, exploration, establishment, maintenance, and disengagement. The exploration stage (15–24 years old) coincides with adolescence and early adulthood, during which a person develops the ability for self-review, role exploration, career exploration, and understand specific career preferences, leading to the possibility of determining preliminary career choices. The developmental tasks of 5YJC students are in the exploration stage. Students can learn about their own abilities, interests, and values through various career exploration courses and activities before determining their career direction. DI was incorporated in the CD course attended by students of a 5YJC's cosmetics-related department with the aims of sparking in them an in-depth understanding of future career choices and providing them with a reference for making those choices. During the duration of the CD course, the students established their cognition of self-awareness, career awareness, and career planning. These proved useful for them while attending future course modules, and for selecting internships they were interested in and their future career direction. These show that the CD course as an educational measure is a major and necessary subject for the 5YJC education system.

Research Framework

The aim of the study was to compare the impact and effectiveness that integrating diversity instruction into the career development (CD) course has on students' self-awareness, career awareness, and career planning (**FIGURE 1**).

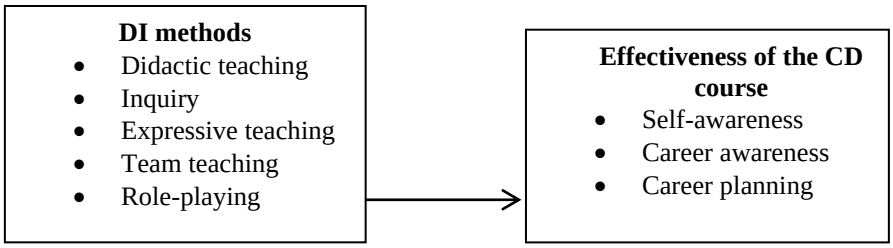

FIGURE 1. Research framework.

Research Questions

The research questions were as follows:
1.To explore the impact of incorporating DI in the CD course on students' self-awareness
2.To explore the impact of incorporating DI in the CD course on students' career awareness
3.To explore the impact of incorporating DI in the CD course on students' career planning
4.To explore the effectiveness of incorporating DI in the implementation of the CD course

Research Method and Tools

1. Qualitative Level
   Interviews with the Students. To understand the implementation situation of the CD course, interviews were conducted with 6 students (3 students each from the control and experimental groups were selected using random sampling) (**TABLE 1**). The topic outlines were based on Research Questions 1–3.

TABLE 1. Codes for the students interviewed.

Control Group (Code)	Experimental Group (Code)
Student 1 (S1)	Student 4 (S4)
Student 2 (S2)	Student 5 (S5)
Student 3 (S3)	Student 6 (S6)

2. Interviews with the Experts
   The experts interviewed had previously served as the subjects of inquiry for exploring and publishing teaching in students' classroom reports. The students were divided into groups to find out about the working world through the careers of experienced experts in the cosmetics and hairdressing industries (**TABLE 2**). The topic outlines were based on Research Questions 1–4.

TABLE 2. Specialized fields of the experts.

Expert	Code	Industry	Position	Years of Experience
Professional 1	P1	Skincare spa	Manager of a franchised spa	10
Professional 2	P2	Nail care	Nail stylist	15
Professional 3	P3	Wedding services	Bridal stylist (assistant)	18
Professional 4	P4	Hair salon	Hair stylist	10
Professional 5	P5	Medical cosmetology and aromatherapy	Beautician in a medical cosmetology clinic	8
Professional 6	P6	Pet beauty	Pet beautician	8
Professional 7	P7	Cosmetics biotechnology	Manager of cosmetics preparation department	14
Professional 8	P8	Funeral services	Mortuary makeup artists	10
Professional 9	P9	Branded cosmetics counter	Manager of a franchised cosmetics company	15
Professional 10	P10	Technical and vocational education	Teacher in a school's cosmetology department	12

3. Analysis of Documents
   The mind maps, SWOT study sheets, career resumes, business cards, and assessment papers prepared by the students during the course were all used as references for the study.
4. Participatory observation
   Behavioral observations were made to check the students' situations during their report presentations and career interviews. The natural atmosphere of the classroom was maintained during the research process to avoid the Hawthorne effect, It's mean People's behavior changes when they know they are being observed.

Quantitative Level

Questionnaire Survey. A quasi-experimental research method was adopted. The experimental subjects, 3rd year students from two classes in the Department of Cosmetics Application and Management of a 5YJC in Taiwan, were divided into the control and experimental groups. Prior to course commencement, students of both classes took the pre-test CD scale, which was evaluated at mid-term to check their learning effectiveness. They then took the post-test CD scale at end-term. The data were statistically analyzed using the independent samples t-test and paired samples t-test.

RESULT AND DISCUSSION

DI Enhanced the Students' Learning Effectiveness

The samples of this study were from two different classes (the control and experimental group). The same CD scale was applied for the pre- and post-tests. These were coded using the students' identification numbers so that the differences between the two tests could be compared. DI was used to teach the experimental group right from the beginning of the course, whereas the control group was only taught theories in class for the first 8 weeks. Following the school's mid-term examinations in the 9th week, DI was used to teach both classes in the 10th week. The results of the two classes are shown in **TABLE 3**. Diverse teaching methods are better able to address the individualized needs of students, aligning with Cheng's (2021) argument. Numerous studies on diverse teaching approaches indicate that in vocational education and training programs, designing diverse teaching strategies and assessment methods, along with reflective adjustments to the teaching process, can significantly enhance students' learning outcomes.

TABLE 3. Distribution of students in the experimental and control groups by their test scores.

Group	Test Scores	> 90	80–89	70–79	60–69	50–59	40–49	Highest Score	Lowest Score	Failure Rate (%)
Control (n = 40)	Mid-term	11	15	5	3	3	3	97	48	15
	End-term	9	17	9	2	2	1	96	52	7.5
Experimental (n = 34)	Mid-term	12	16	5	1	0	0	98	64	0
	End-term	10	20	3	1	0	0	99	68	0

As can be seen from **TABLE 3**, the experimental group outperformed the control group. Some students said that the CD course helped them awaken their self-awareness. S1: "(I) will think about what work I want to do in the future." S5: "(I) will think about my future." S2: "I will start thinking about what I want to do,... because of my abilities, interests, family expectations... more exploration is needed." This shows that self-awareness is adjusted at the appropriate time according to the students' aspirations, abilities, personality, expectations, and other factors.

The control group was exposed to DI after the mid-term examinations, after which their learning effectiveness improved significantly. Their career awareness and career planning abilities were also greatly enhanced. S3: "Group assignments and report presentations trained us to be cooperative and practice division of labor." This shows that DI strategies consider individual learning, help develop students' abilities to cooperate and work in teams through the preparation of group reports, and improve their interpersonal and communication skills.

DI methods laid the foundation for the students' career planning. S4: "The module on simulated job interviews helped me better understand how to prepare for those in the future." S6: "(I) learned that career planning comprised short, medium, and long terms." This indicates that DI methods had both theoretical and practical effectiveness.

The CD Scale Was Useful for Checking the Students' CD Cognitive Process

The suggestion by Hair et al. (2009) was referred to for analyzing the reliability of the various facets. Specifically, Cronbach's $\alpha > 0.7$, and 0.8 or above was ideal. Questions for the revised items with a total correlation of > 0.5 were retained. The correlation between questions was > 0.3, mainly because the Cronbach's α increases with additional questions. The reliability also increases under the condition that the correlation remains identical. In this study, the CD scale was applied quantitatively to check the developmental process of the students' self-awareness, career awareness, and career planning. For the various facets, the correlation between the questions and the total correlation and reliability of the revised items fully complied with the reliability standards recommended by Hari et al. (2009). This analysis shows that the various facets had good internal consistency（**TABLE 4**.

TABLE 4. Correlation and reliability between the content items in the pre- and post-tests.

Stage	Effectiveness of the CD Course	Cronbach's α
Pre-test	Self-awareness	0.84
	Career awareness	0.91
	Career planning	0.90
Post-test	Self-awareness	0.92
	Career awareness	0.94
	Career planning	0.95

DI Improved the Students' Career Awareness and Career Planning Skills

The independent samples t-test was used to compare the pre- and post-test scores under the different teaching methods. Specifically, the average scores for the six facets (including pre- and post-test self-awareness, career awareness, and career planning) were compared（**TABLE 5**）. The results indicated that based on the difference in the averages of the test scores, there was no significant difference between the teaching methods in relation to the three facets during the pre-test ($P > 0.05$). The 95% confidence interval (CI) included 0, meaning that for both classes of students, the three facets of their self-awareness, career awareness, and career planning were not affected during the pre-test held on the first week of class. After the post-test held in the 18th week, the average scores of the three facets were compared again. Except for self-awareness, for which there was no significant difference ($p = 0.11 > 0.05$), there were significant differences for career awareness and career planning ($p < 0.05$), and the 95% CI did not contain 0. As Yan and Chang (2013) noted, self-awareness during adolescence is often influenced by peer interactions. To help students focus on career planning, schools can provide a range of career planning and development resources during career development courses, including hosting relevant seminars. These initiatives can assist students in exploring different career paths, helping them to establish clearer directions for their personal career planning and development.

TABLE 5. Independent sample *t*-test of the research facets for the control and experimental groups during the pre- and post-tests

Facet	Group	Basic Statistics			*t*-test for Equal Averages					
					Test for Significant Difference				95% CI	
		N	Average	Standard Deviation	*t*	*df*	*p*	Diff.	Lower Limit	Upper Limit
Pre-test										
Self-awareness	Control	40	3.75	0.50	0.26	72	0.80	0.03	-0.22	0.28
	Experimental	34	3.72	0.57						
Career awareness	Control	40	3.58	0.54	0.78	72	0.44	0.12	-0.19	0.42
	Experimental	34	3.46	0.77						
Career planning	Control	40	3.62	0.57	0.06	72	0.95	0.01	-0.28	0.30
	Experimental	34	3.61	0.68						
Post-test										
Self-awareness	Control	40	3.91	0.71	-1.64	72	0.11	-0.23	-0.52	0.05
	Experimental	34	4.14	0.47						
Career awareness	Control	40	3.90	0.65	-2.28	72	0.03	-0.31	-0.58	-0.04
	Experimental	34	4.20	0.49						
Career Planning	Control	40	3.80	0.70	-3.33	72	0.00	-0.46	-0.73	-0.18
	Experimental	34	4.26	0.43						

A comparative analysis was made based on the averages for the post-test, and significant differences were noted for both career awareness and career planning ($p < 0.05$). However, there was no significant difference for self-awareness ($p = 0.11 > 0.05$). This phenomenon could be explained through the views of P10: “Students’ exploration of their self-awareness includes their own interests, sexual orientation, values, and personality traits…. Sometimes, they are additionally influenced by the expectations of their parents and peers, which affects their values and visions in relation to their CD.” P8: “I was influenced by my good friend to join this industry and it has been more than a decade since… my friend’s influence was definitely greater than that of my parents.” P6: “I used to dislike dogs very much because I was bitten by one when I was young... Later, after growing up, I changed my mind due to my boyfriend having a dog as a pet.” It could be inferred from the interviews that self-awareness could be adjusted at any time arising from various factors, including the environmental background, interpersonal interactions, conditions, and abilities. The influence of one’s peers must certainly not be underestimated.

The CD Course Incorporating DI Should Be Implemented in the Semester Prior to Internship

For all the samples (74 students), the paired-samples t-test was used to make a comparison of the averages for the facets of self-awareness, career awareness, and career planning between the pre- and post-tests. Specifically, the results of the CD scale completed by the students during the pre- and post-tests were checked and compared. The results of comparing the averages for the pre- and post-test indicated that for the control group, there was no significant difference in the two facets of self-awareness and career planning ($P > 0.05$) and the 95% CI contained 0. However, there was a significant difference for career awareness. For the experimental group, there were significant differences for all three facets ($P > 0.05$), and the 95% CI did not contain 0. The results of the two classes are shown in (**TABLE 6**).

TABLE 6. Comparison of the difference in averages between the control and experimental groups during the pre- and post-tests.

Facet	Basic Statistics			Difference in Paired Averages	Standard Deviation	95% CI of the Difference		Paired *t*-test		
	N	Average	Standard deviation			Lower limit	Upper limit	*t*	Degree of freedom	*p*
Control Group										
Pre-test										
Self-awareness	40	3.75	0.50	-0.15	0.92	-0.45	0.14	-1.05	39	0.30
Career awareness	40	3.91	0.71							
Career Planning	40	3.58	0.54	-0.32	0.93	-0.62	-0.02	-2.18	39	0.04
Post-test										
Self-awareness	40	3.90	0.65							
Career awareness	40	3.62	0.57	-0.18	1.00	-0.50	0.14	-1.16	39	0.25
Career planning	40	3.80	0.70							
Experimental Group										
Pre-test										
Self-awareness	34	3.72	0.57	-0.42	0.70	-0.66	-0.18	-3.51	33	0.00
Career awareness	34	4.14	0.47							
Career planning	34	3.46	0.77	-0.75	0.91	-1.07	-0.43	-4.76	33	0.00
Post-test										
Self-awareness	34	4.20	0.49							
Career awareness	34	3.61	0.68	-0.65	0.78	-0.92	-0.38	-4.87	33	0.00
Career planning	34	4.26	0.43							

A comparison of the pre- and post-test scores for the control group revealed a significant difference only for career awareness. According to P3: “The control group was exposed to more lively and diverse teaching strategies in the 10th week... Through role-playing based on the script of having a career... the students gained a stronger impression.” P7: “Preparing a report on job interviews in the 12th–13th week… had a direct impact on career awareness.” S1: “I found the course contents after the mid-term examination to be more interesting.” These interviews indicated that DI strategies could liven the ways that classrooms are run.

P1: “There would have been more complimentary effects if the skills on mind map and SWOT analysis were taught as early as possible or even right from the beginning.” S6: “The guidance provided during the course allowed me to know myself better.” P9: “I feel that it should be arranged such that the CD course was conducted in the semester prior to the internship... so that students could identify their career aspirations first before entering the workplace.” The interview contents and statistical analysis of the experimental group’s data indicated that there were significant differences in self-awareness, career awareness, and career planning ($P < 0.05$). This points to the appropriateness of implementing the CD course in the semester prior to the internship so that students’ interests and career can be aligned.

The research findings suggest that career development courses should be scheduled according to curriculum design and internship timelines, ideally before students begin industry internships. This aligns with Yeh's (2021) argument that career development courses should be planned before students enter the workforce. For instance, if students are to participate in on-campus internships in their fourth year and off-campus internships in their fifth year, career aspirations should be clarified beforehand. In this case, career development courses are best scheduled in the third year. However, if internships occur in the fifth year, the course should be offered in the fourth year. These courses help students engage in early self-awareness, understand their career aptitudes, and develop career planning skills. They also assist in preparing and organizing personal career portfolios and making decisions about further education or employment after graduation.

Effectiveness of DI toward the Students' Career Awareness and Career Planning

The independent samples t-test was similarly employed to compare the different teaching styles used for the control versus the experimental groups. The control group did not show a significant difference in the averages of the two tests; in contrast, the experimental group showed significant differences for two facets: career awareness and career planning ($P < 0.05$). The results of the two classes are shown in **TABLE 7**. The findings of this study align with Yeh (2021) proposal regarding the effectiveness of integrating career development courses with simulations of further education and job application scenarios. Based on the research, it is recommended that career development courses incorporate career exploration topics and interviews with senior professionals to help students construct their career visions. In terms of teaching strategies, collaborative teaching methods can be employed to conduct simulated interviews, deepening students' learning impressions and enhancing their practical experience in academic and job application interviews. Diverse teaching strategies also involve incorporating various educational resources into classroom management.

TABLE 7. Independent samples *t*-test used to compare the facets for the control and experimental groups between the pre- and post-tests.

Facet	Stage	Basic Statistics			*t*-test for Equal Averages					
					Test for Significant Difference				95% CI	
		N	Average	Standard deviation	*t*	*Df*	*p*	Diff.	Lower limit	Upper limit
Control Group										
Self-awareness	Pre-test	42	3.78	0.51	-0.83	80	0.41	-0.11	-0.39	0.16
	Post-test	40	3.89	0.72						
Career awareness	Pre-test	42	3.63	0.59	-1.80	80	0.08	-0.25	-0.53	0.03
	Post-test	40	3.88	0.69						
Career planning	Pre-test	42	3.66	0.60	-0.83	80	0.41	-0.12	-0.41	0.17
	Post-test	40	3.78	0.73						
Experimental Group										
Self-awareness	Pre-test	37	3.73	0.55	-1.64	69	0.10	-0.24	-0.53	0.05
	Post-test	34	3.96	0.68						
Career awareness	Pre-test	37	3.46	0.74	-3.65	69	0.00	-0.58	-0.90	-0.27
	Post-test	34	4.04	0.59						
Career planning	Pre-test	37	3.59	0.67	-2.67	69	0.01	-0.42	-0.74	-0.11
	Post-test	34	4.02	0.67						

The experimental group's CD cognition was better than that of the control group. P2: "The students in the experimental group had better organizational skills... and were better able to plan their career roadmaps." P4: "I did not have a particular preference for this profession initially, but (I joined) because I found the job of a hair stylist to be quite fashionable, the type of work, the salary." The interviews indicated that when selecting a profession, people prioritized various factors (including the background conditions, salary, environment, and working hours) ahead of their personal interests.

For 5YJC students, their self-interests are still largely unknown. S4: "Many students still do not know what they are more suited for." S5: "My good friend still does not know the type of job that he is suitable for." P9: "Many students still do not have a definite idea of what they want... career visits and seminars by industry practitioners can be incorporated to provoke self-reflection in students… so that they can cultivate self-awareness as soon as possible." Research has confirmed that more time is required when exploring the concept of self. Career visits and seminars by industry practitioners can be used to enable students to generate self-awareness through self-exploration, before developing the concept of self-identity further.

Regarding the students' establishment of their concept of self-identity, some experts propose that in addition to standardized aptitude tests, online gaming experiences can also be incorporated to simulate professional roles in virtual reality. Doing so will stimulate their subconscious cognition of career aspirations. As stated by P6: "Students can use some apps to play online games... to identify their own interests subconsciously." It was verified through Table 7 that DI methods could indeed help students establish good career planning. S6: "(I) learned that the goals in life can be arranged based on the short-, medium-, and long-term." P5: "When students have not set their aspirations, they are

like boats without a rudder or horses without a bridle. For a complete career plan, they need to have long-term goals for lifelong learning, supplemented by short-term goals that are flexible."

CONCLUSION

Based on the survey results, this study provides the following feasible recommendations, specifically focusing on how to effectively implement diversified integration within similar educational programs, while offering directions for future research, particularly in assessing the long-term impact of diverse teaching methods on career success. Technical and vocational education (TVET) bears the responsibility of cultivating students' professional knowledge and skills, while also guiding them in developing career goals and directions. As a crucial part of the TVET system, five-year junior college education is dedicated to enhancing students' awareness of future careers and preparing them with skills that align with industry needs. This is one of the key missions of five-year junior college education. Draaisma et al. (2018) pointed out that, since students continuously accumulate personal growth experiences, the career development process is highly unpredictable. However, through the guidance and inspiration of school education, students can enter the job market with intrinsic motivation, develop their professional abilities, and adopt a vocational trajectory. Even after entering the workforce, students are encouraged to continue regarding career planning as their personal responsibility.

Based on the findings, the following recommendations are made:

1. Curriculum Planning
   Timing of Career Development Courses: It is recommended that career development courses be scheduled in the semester prior to workplace internships. This will help students clarify their career interests, understand workplace responsibilities, and create career portfolios, thereby ensuring a seamless connection between career development courses and internship programs.
   Strengthening Self-Awareness: Students should be encouraged to establish self-awareness in a timely manner. This can be achieved through career visits, industry lectures, and participation in senior students' internship presentations, all of which can help guide students in determining appropriate career paths.
2. Faculty and Teaching
   Collaborative Teaching and Mock Interviews: It is suggested that end-of-term mock interviews be organized, with industry supervisors and teachers from extension programs acting as mock interviewers. This allows students to experience realistic interview scenarios and improve their interview skills and practical experience.
   Assessment Tools for Learning Outcomes: Tools such as student-drawn mind maps, exam papers, SWOT analysis worksheets, and resumes or business cards for further education or employment can be used as references for advising students and evaluating their learning outcomes, thus improving teaching quality.
3. Infrastructure and Equipment
   Gamification of Teaching and Self-Identity: To enhance the liveliness and engagement of the curriculum, in addition to aptitude tests, students could experience online games related to the fashion industry. Through these games, students may discover their latent career interests and further deepen their self-identity.
   Virtual Reality Applications in Career Simulation: By utilizing virtual reality (VR) technology, realistic workplace environments can be simulated, providing students with sensory experiences such as visual and auditory stimuli. This enables students to immerse themselves in career-related scenarios and lay the foundation for future career development.
4. Recommendations for Future Research
   Future research should focus on evaluating the long-term impacts of diverse teaching strategies in TVET-related curricula. A modular concept could be adopted in categorizing the curriculum based on course objectives, with each module focusing on foundational, practical, and advanced courses. More specialized studies could then assess the impact of these diverse teaching strategies on students' vocational competencies over time. In this study's context, the curriculum modules could be divided into cosmetic formulation and total styling modules. Within these two major curriculum chains, an in-depth exploration of curriculum continuity could be conducted to analyze how diverse teaching methods enhance students' employability and career development potential in different educational contexts.

In conclusion, the integration of diversified teaching strategies and technologies contributes to improving educational outcomes, enhancing students' professional skills and career planning abilities, and positively influencing their long-term career success.

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