The Evaluation of a Career Planning Course at a Chinese University

By

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Statement of Originality

I, SHENG, Meng, hereby declare that I am the sole author of the thesis and the material presented in this thesis is my original work except those indicated in the acknowledgement. I further declare that I have followed the University's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and no material in this thesis has been submitted for a degree in this or other universities.

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Abstract

Graduates' employability has been one of the primary goals of higher education (HE) in the rapidly changing global context. Employability refers to the ability of individuals to meet the demands of a knowledge-based workforce. Career development education (CDE) courses has been recognised as a powerful tool to support HE students in raising their career awareness, equipping them with the necessary competencies to determine their future career paths, and preparing them to tackle challenges they may face. Although myriad empirical studies have evaluated the effectiveness of CDE courses in the Western context, in China, there is no widely accepted comprehensive evaluation framework to assess the effectiveness of these CDE course in terms of their design and implementation practices. This thesis presented an evaluation framework designed for the Chinese context by modifying and adopting evaluation models established and applied in the Western literature. The framework includes three focuses of analysis: content evaluation (referring to the curriculum structure), process evaluation (referring to the context and process of curriculum delivery), and outcome evaluation (referring to the instructors' and students' perceptions as well as the students' career competencies gained). This framework was used to assess one CDE course at a university in Mainland China as a single-case study for this research. A mixed-method approach was adopted for the research design. In Focus One, both the planned and delivered curricula were analysed based on the seven critical factors identified in international literature as criteria for an effective CDE course design. It was found that both the planned and delivered curricula theoretically addressed enough critical factors to ensure effectiveness. However, these observed critical factors were rendered ineffective due to a lack of elaboration, insufficient support from structured content, and misalignment between the components delivered and the terminology defined in the literature. Focus Two evaluated the implementation of the delivered curriculum by

examining the instructors' and students' perceptions. Four themes of misalignment between the instructors' and students' perspectives were identified, each representing a distinct aspect regarding the course' effectiveness: aims, curriculum content, learning expectations, and teaching approaches. Focus Three assessed the effectiveness of the CDE course by measuring students' career development competencies using validated scales from previous research. The results indicated that while some of the students' career development competencies showed statistically significant improvement, they still did not gain concrete, tangible competencies such as career planning strategies, career decision-making approaches, and problem-solving skills. The following factors were identified as reasons: first, the course objectives were not explicitly and clearly addressed; second, the curriculum delivery was inconsistent with poor implementation fidelity; and third, teaching practice and classroom environment did not effectively engage or motivate students. To conclude, the study contributed to the development of CDE course guidelines in China by identifying key factors and elements considered essential by Chinese undergraduates. It also proposed evidence-based pedagogical and curricular strategies tailored to these students' distinctive learning behaviours and career outlooks, establishing a foundation for designing more effective and contextually relevant CDE courses in the future.

Keywords: Career Development Education (CDE); CDE Course Evaluation; Students' perceptions of CDE Courses; CDE Curriculum Design; CDE Courses Effectiveness and Implementation Fidelity

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Table of Contents

List of Abbreviations

BA	Business Administration
CA	Career Adaptability
CAAS-CF	Career Adapt-Abilities Scale- China Form
CASVE	Communication/Analysis/Synthesis/Values/Execution
CCT	Career Construction Theory
CDE	Career Development Education
CDDQ	Career Decision-Making Difficulty Questionnaire
CDSE	Career Decision Self-Efficacy
CDSE-SF	Career Decision Self-Efficacy- Short Form
CES	Career Exploration Survey
CIP	Cognitive Information Processing Theory
CIPP	Context/ Input/ Process/ Product Evaluation Model
CP	Career Planning
CV	Curriculum Vitae
CVEA	Career Vocational Education Association
DOTS	Decision-making/Opportunity awareness/Transitions/Self-awareness
E-Commerce	Electronic Commerce
EE	Environment Exploration
Gen Z	Generation Z
GPA	Grade Point Average
GS	Goal Selection

HE	Higher Education
HREC	Human Research Ethics Committee
MBTI	Myers-Briggs Type Indicator
MoE	Ministry of Education of China
NACE	National Association of Career Education
OI	Occupational Information
P	Planning
PPI	Pre-Professional Identity
PS	Problem Solving
SA	Self-Appraisal
SCCT	Social Cognitive Career Theory
SE	Self-Exploration
SWOT	Strength/Weakness/Opportunity/Threat

List of Figures

List of Tables

Chapter 1   Introduction

The issue of graduate employability emerged and grew alongside the onset of the fourth industrial revolution (Hirschi, 2018; Maree, 2017). The rapid advancement of technology and digital innovations, such as artificial intelligence, cloud computing, and nanotechnology, has significantly reshaped society both economically and socially (Hirschi, 2018). Lifelong learning perspectives, which emphasise continuous learning and adaptability, have become a predominant approach for individuals to cope with and thrive in this information-driven society (Alves, 2017; Coetzee, 2017). In the current fast-changing global context, the fundamental structure of the workforce has shifted from somewhat predictable, secure, and lifelong employment (Pope, 2015; Savickas, 2013) to a knowledge-based labour force, characterised by ever-changing, complex, and uncertain conditions (Bridgstock, 2017; Bright & Pryor, 2012; Pope, 2015).

In the current "liquid society" (Bauman, 2007) and digital-global era (Pope, 2015), the overarching objective of higher education's (HE) has been debated to cultivating and supplying "high-quality" graduates to meet labour demands (Wang & Han, 2017). Moreover, some scholars argued that equipping graduates with traditional generic knowledge and skills alone is no longer sufficient. These has been ongoing debate among HE institutions, policymakers, employers, and educational researchers regarding several key issues: a) emphasising the objectives of preparing graduates as high-quality professionals with employability and lifelong learning skills in the current HE education curriculum (Coetzee, 2017; Greenbank, 2017; Mok et al., 2019); b) the role of society, politics, and the labour market in supporting HE institutions with adequate resources, responsibilities, and assistance to address graduate employment issues, ensuing that graduates achieve global competitiveness (Holmes, 2013; Tomlinson, 2017b); and c) recognising the multidimensional nature of graduates employability, which refers to the societal, economic,

political, and shifting labour market demands that should all be considered as collaborative factors in developing and advancing effective and efficient frameworks for supporting students career development and employability enhancement from a lifelong perspective (Bridgstock, 2009; Dacre Pool et al., 2019).

1.1 The Purpose of Career Development Education (CDE)

Over decades, employability enhancement has become a critical issues for worldwide HE institutions to be considered due to the current societal changing, technology innovations, economic crisis, political pressures, and the labour market demand (Tomlinson, 2017b). Nonetheless, in order to fulfil the demanding of the labour market for high-quality and competitive graduates, and prepare students adapt to the rapid-changing information, career development education (CDE) has been incorporated into the curriculum as the dominant means of facilitating students in gaining sufficient career awareness and relevant career development competencies, thereby preparing them for the challenging school-to-work transition (Reardon et al., 2020). In general practice, career courses are the most prevalent approaches to implementing CDE in HE settings, both internationally and in the local context (Hansen et al., 2017; Jin, 2018; Lam & Santos, 2018). Therefore, from both theoretical and practical perspectives, CDE courses are purposefully designed to facilitate students' proactive career planning mindsets, cultivate their career exploration and career decision-making skills, promote their psychological well-being, boost their "retention in and graduation from college" (Reardon et al., 2020, p. 15), and equip them for satisfactory life and work roles beyond higher education (Hansen et al., 2017; Reardon et al., 2020).

Noticeably, the recent conceptualisation of employability, elucidated from a capital formation perspective, is denoted as human, social, cultural, identity, and psychological capitals, respectively (Tomlinson, 2017a). This has expanded the scope of employability by integrating more facets of

employability formation, combining tangible skills, knowledge, and social relations that should be addressed in practice. Meanwhile, it also emphasised that enhancing these capital gains among students requires the efforts and resources of various shareholders surrounded HE, along with relevant policies and social reforms to facilitate and support this enhancement (Rothwell & Rothwell, 2017). More essentially, some scholars argue that to enhance graduates' employability from a lifelong learning perspective, the key is to integrate the conceptualization of career development theories and utilise the abundant empirical evidence from the career development domain in practice alongside employability learning. As Healy (2023) suggested, career development learning should not be positioned as a discrete component for enhancing graduate employability, as is the contemporary practice in the field. Instead, the author proposed the concept of "career and employability learning" to establish a comprehensive approach for educators and career practitioners, enabling them to draw the strengths and resources of both fields and achieve the mutual goal of supporting and facilitating students' sustaining employability and career success.

Therefore, although graduates' employability enhancement is a broader, multifaceted issue requiring the individual student, internal and external stakeholders of HE institutions, and societal factors (family, labour market demand, and economic status) to work collaboratively for sustainable outcomes, CDE is considered the key component within the broader employability framework that HE institutions can emphasise and address (Jackson & Tomlinson, 2020; Small et al., 2017). The widespread overarching purposes of CDE are facilitating students' competencies and lifelong learning abilities to attain and sustain a successful careers (Rothwell & Arnold, 2007), and generating adaptability for smooth transitions at each career stage and establishing subjective well-being in their career and life roles (Rossier et al., 2017; Savickas, 2020).

1.2   Career Development Education (CDE) Courses Worldwide

In HE settings, and given the need to accommodate a large number of students for CDE purpose, most career courses are designed and delivered in a lecture-based modality for cost-effective purposes. As indicated in many empirical studies, although these CDE courses are structured largely in an instructor-led format, they often include group activities, students-centred exercises and discussions, guest speakers, and extracurricular assignments to engage students in collaborative learning and achieve more effective outcomes (Dordel, 2018; Reese & Miller, 2006, 2010). Furthermore, several influential career theorists and numerous empirical studies emphases that the structure and delivery of CDE courses must be guided by clearly theoretical underpinnings to serve as instructional guidelines (Brown & Ryan Krane, 2000; Reardon et al., 2020; Reese & Miller, 2010). According to Reese and Miller (2010), the "theory-to-practice" (p. 217) framework and well-elaborated curriculum components, supported by empirical evidence, form the basis for structuring and delivering course content to generate more effective outcomes.

Some scholars have synthesised the critical factors or components that influence the effectiveness of CDE courses based on meta-analytical studies of diversified career interventions (Brown et al., 2003; Whiston et al., 2017). Many empirical studies on CDE courses have also validated course structure or curriculum design based on these factors, reporting promising findings for achieving effective outcomes (Fouad et al., 2009; Green et al., 2019; Lam & Santos, 2018). However, there is limited research in the Mainland China context on this issue, making it unclear whether these critical factors identified in Western context are applicable for structuring CDE courses in China and whether they impact their overall effectiveness.

1.3   Career Development Education (CDE) Courses in China

Historically, the formation and instruction of vocational guidance and education in China date

back to 1917, when the Chinese Vocational Education Association (CVEA) was established in 1918 and promote vocational education within the education system at that time (Zhang et al., 2002). However, due to political and social revolution incidents, China did not refocus on CDE in HE until 1993, following the reform of the market-oriented economic system (Zhou et al., 2016). To equip graduates for challenges arising from globalisation and alleviate pressures from increasing labour market competition, the Ministry of Education of China (MoE hereafter) released a document in 2007 requiring all higher education institutions to provide CDE courses and embed them in the compulsory curriculum (Jin, 2018; The Ministry of Education, 2007). In 2010, the MoE issued another document highlighting the need to offer individual career counselling by progressively establishing a comprehensive career guidance service system (The Ministry of Education, 2010).

Nearly two decades after these requirements, almost all tier-one and tier-two universities have included at least one CDE course in their undergraduate curricula (Jin, 2018; Qiao et al., 2013). Typically, most CDE courses and career services aim to provide students with career information and skills, such as relevant occupational information, employment policies, career planning and exploration skills, job searching, resume preparation, and alumni career experiences sharing (Jin, 2018). Moreover, these CDE courses are often taught by academic or administrative staff due to the lack of professionally trained career practitioners at universities (Qiao et al., 2013). Since no specific CDE guidelines exist, the structure of each curriculum varies based on instructors' knowledge and perspectives on CDE. A traditional lecture-based approach is generally adopted, although a recent study has demonstrated the effectiveness of flipped classrooms that incorporate pre-class video learning and in-class activities for CDE courses (Jin et al., 2021).

To establish valid guidelines for the CDE course curriculum in the Chinese context, further

research is needed to understand and investigate the critical factors and components that should be included to ensure positive outcomes.

1.4 Effectiveness of Career Development Education

CDE courses have been widely adopted in HE settings as cost-effective and efficient career interventions to promote graduates' employability or increase graduates' employment rate (Fouad et al., 2009), supported by the flourishing development of career development theories and practices. Extensive research has examined the effectiveness and impact of CDE courses in Western HE (Cheung & Jin, 2016; Gallo & Roberts, 2019; Green et al., 2019; Reardon et al., 2020). In contrast, research on the impact and effectiveness of CDE courses in the Mainland China context has only recently emerged (Jin et al., 2021). There remains a lack of evidence on the structure of an effective CDE course curriculum or guidelines for widespread implementation (Hao et al., 2015; Jin, 2018).

1.4.1 Worldwide

A comprehensive reports by Reardon et al. (2020) summarises findings on the effectiveness of career courses in higher education from 1976 to 2019 internationally. The authors reviewed 120 studies and categorised findings based on differentiated variables of interest, denoted as output and outcome effects. They report that 90 per cent (74 out of 82) of studies found significantly positive output findings, such as vocational identity, career decision-making, and career maturity. Additionally, 95 per cent (36 out of 38) of studies report positive results when measuring outcome variables, including course satisfaction, major decision-making, graduation rate, cumulative grade point averages (GPA), and job satisfaction. These findings provide strong evidence of the effectiveness of CDE courses internationally.

1.4.2 China Context

Contemporaneously, the rising unemployment rate in China (Mok et al., 2016) and findings from the national graduates' employment survey indicate that over 80 per cent of Chinese graduates pursue further education or non-traditional employment to avoid the stress and challenges of an oversupplied and competitive labour market (Ma & Bennett, 2021). Furthermore, these studies highlight insufficient competencies among graduates to transition advantageously from school to work. Moreover, they struggle to adapt to the uncertainties of the work world (Mok et al., 2016). This issue has generated debate and discourse on facilitating the implementation of CDE courses in tertiary education in China.

Due to the late incorporation of CDE courses into the HE curriculum in Mainland China, research on their effectiveness remains scarce. Studies investigating CDE courses among Chinese undergraduates (Jin et al., 2021; Zhang et al., 2019; Zhao & Wu, 2022) have explored their impact on facilitating students' career maturity, career awareness, career planning ability, career decision-making difficulties, and career exploration. These studies report varying levels of impact on students' career competencies but lack detailed explanatory data on course structure, theoretical underpinnings, or teaching practices. Although some resource-rich universities have established comprehensive systems for career services (Jin, 2018), including CDE courses, the effectiveness and quality of these courses in producing desirable career outcomes remain underexamined (Hao et al., 2015).

To address these gaps, more studies are needed to develop comprehensive CDE curriculum structures and practical teaching approaches. This is particularly important in the current Chinese context, as there is a dearth of indigenous career theoretical frameworks and appropriate curriculum designs.

1.5   The Current Study

Thus, it leads to the overarching purpose of the study, which is to evaluate a current career development education (CDE) course (entitled "Career Planning Course with Credits") for undergraduates at a university in Beijing, Mainland China. Specifically, this study will probe into four objectives, categorised under three evaluation types. The details are as follows,

Content evaluation:

1) To evaluate whether the design and the delivery of the curriculum are fit for purpose with respect to what is stipulated in career development education courses' criteria.

Process evaluation:

2) To evaluate the delivery of the career development education course against the planned curriculum.

Outcome evaluation:

3) To evaluate the students' and instructors' perceptions of the career development education course.

4) To evaluate the effectiveness of the career development education course regarding career development competencies.

Content evaluation aims to examine whether the design and delivery of this CDE course are aligned with the criteria (seven critical factors) stipulated in the international literature on career development education (CDE). Process evaluation aims to investigate whether the delivery of this CDE course is aligned with the structured and planned curriculum in practice. Lastly, outcome evaluation aims to examine the course's effectiveness from two aspects: the participants' (both the instructors and the students involved) perceptions after interacting with the delivered content, and the outcomes of career development competencies gained after taking this CDE course.

1.6   Significance of the Study

Despite extensive empirical research testing the applicability and reliability of indicators and variables in well-developed Western career theories within the Chinese context, no practical frameworks or models have yet emerged as systematic guidelines for structuring effective CDE course curricula based on these findings. For example, while career adaptability in Career Construction Theory (CCT) and self-efficacy in Social Cognitive Career Theory (SCCT) have been widely adopted and measured among Chinese participants (Guan et al., 2017; Guo et al., 2014; Hou et al., 2012; Jin et al., 2009), few studies have addressed a key issue: what factors might affect the effectiveness of CDE courses in Chinese context?

This thesis is significant in its description and interpretation of a comprehensive evaluation of the effectiveness of an ongoing CDE course in the Chinese context, presented as a single case study. It examines the course's effectiveness and implementation fidelity across three aspects: content, delivery process, and outcomes. The study aims to contribute to the practical advancement of the CDE curriculum in China.

First, the thesis modified and designed an evaluation framework based on core concepts and a synthesised data-gathering matrix extracted from Stake's countenance and responsive models, as well as Stufflebeam's context, input, process, and product (CIPP) evaluation approach. This framework proposed a comprehensive and systematic method for evaluating CDE courses. Second, the thesis offered a refreshed interpretation of the case study's effectiveness by examining the perceptions and requirements of different participants (instructors and students) for effective CDE courses. Lastly, the thesis proposed several potential factors that could enhance the effectiveness of the CDE course. These suggestions were derived from new insights gained during the evaluation process and evidence collected from the various participants, and hence could serve as guidelines

for structuring effective CDE course curricula in the Chinese context.

Chapter 2   Literature Review

This chapter reviews existing literature on the objectives of career development education (CDE) courses in international and local settings, enablers of employability, contributing factors to enhancing graduates' employability, and criteria for evaluating the effectiveness of CDE courses. In the first section, the objectives of CDE courses are reviewed, focusing specifically on the evolving purposes and refined outcomes of CDE courses in higher education settings. In the second section, the concept and enablers of graduate employability, as the ultimate goal and fundamental purpose of CDE, are reviewed. The third section highlights the determining factors of CDE courses in facilitating graduate employability. Because the thesis focuses on evaluating an ongoing CDE course, the fourth section outlines the criteria affecting the overall effectiveness. As the thesis targets a case study involving students from Generation Z and current teaching and learning styles in the HE, the fifth section review the characteristics of this generation and present contemporary teaching practices in CDE courses. Next, as the objectives of the thesis are set for evaluation purposes, the approaches to curriculum evaluation are laid out. In the final section, building upon the literature review, the research gaps, designed evaluation framework, and research questions are presented.

2.1   The Objectives of Career Development Education (CDE) Courses

According to the literature, career courses are the most pervasively adopted intervention in HE for facilitating students' career planning and career developmental strengths, such as career exploration, career decision-making self-efficacy, and planning skills, both international and in China context (Hansen et al., 2017; Jin, 2018). A recent survey by the National Association of Colleges and Employers (NACE) in the United States reported that 40% of responding institutions offered students career courses with credits (NACE, 2019). Similarly, a nationwide survey among

106 Chinese tertiary institutions revealed that that all provided at least one career development course to students (Qiao et al., 2013).

Despite the popularity and validated general effectiveness of these courses, researchers argue for further studies to evaluate their implementation fidelity (Reardon et al., 2021; Spokane & Nguyen, 2016). Additionally, several studies criticise the narrow scope of existing CDE courses curricula (Dean et al., 2022; Healy, 2023). Scholars suggest that CDE courses should explicitly integrate graduate employability enhancement by fostering proactive mindsets and adaptive competencies that enable individuals to learn, explore, and adapt to changing employment contexts (Savickas, 2020). This approach shifts the focus from simply acquiring career development and management skills to cultivating the ability to attain and sustain desirable employment in a lifelong learning perspective (Bridgstock et al., 2019; Bridgstock & Jackson, 2019; Healy, 2023).

2.1.1 Evolving Objectives of Career Development Education (CDE) in Higher Education (HE) Worldwide

Historically, the objectives of CDE courses in HE were primarily driven by the need to develop skills deemed essential by employers (Reardon et al., 2021; Williams, 2020). Over time, these objectives have evolved alongside societal transformations, shifting from the industrial period to the current digital-global era (Pope, 2015).

Initially, CDE courses focused on helping students explore their career interests and beliefs, acquiring competencies necessary to succeed within within hierarchical, bureaucratically structured workplaces. However, the ongoing digital revolution has significant reshaped contemporary careers and job requirements (Savickas, 2019).

In this information age, students are required to become lifelong learners capable of utilising advanced technologies. Savickas (2019) asserted that CDE should incorporate an understanding

of constructing and managing one's own career through lifelong learning. This approach helps individuals cope with the uncertainty, anxiety, and responsibility of navigating a lifetime of job changes. Consequently, the objectives of CDE courses should shift from solely focusing on competency development to integrating elements fostering adaptability, resilience, and self-awareness. These qualities are essential for students to reflect on themself and their environment, enabling meaningful career constructions (Rossier et al., 2017; Savickas, 2020).

Currently, the structure and objectives of many CDE courses still focus on cultivating students' career-related skills, such as career planning, problem-solving, teamwork, and proactivity, as key outcomes (Bridgstock et al., 2019; Ho et al., 2022; Jackson & Tomlinson, 2020; Small et al., 2018). However, Healy critiqued this narrowed perspective, suggesting that career development or employability enhancement should be seen "as a transformative process of reflection, exploration, and adaptation, rather than as just career management skills" (p. 1306). He proposed expanding CDE courses to integrate graduate employability as an interactive and psychosocial learning process. The structure of CDE courses should facilitate students' career self-concept formation, proactivity in reflecting on experiences and personal characteristics, adaptation to changes and transitions, and the generation of meaningful professional identity narration (Healy, 2023; Ho et al., 2022; Meijers & Kuijpers, 2014). These components are also emphasised in the career development theories.

Several influential career development theorists highlighted not only developing personal strengths, interests, and decision-making strategies but also viewing career development as a lifelong learning process. For instance, Career Construction Theory (CCT) stresses that a career is constructed through an identity individuals co-created via interpersonal processes, guiding their career behaviours and generating a plausible career narrative (Savickas, 2020).

Similarly, Social Cognitive Career Theory (SCCT) emphasises the critical role of learning experiences in shaping individuals' career decision-making self-efficacy (Lent, 2020). According to its choice model (Lent et al., 1994), learning experiences influence self-efficacy beliefs and outcome expectations, which in turn affect an individual's interests and goals (Lent, 2020, p. 135). Therefore, as supported by career development theories and advocated by scholars in career education and graduate employability, restructuring the career curriculum to focus on career development as a learning process is essential. Healy, Brown, et al. (2022) emphasised that the objectives of CDE courses should encompass facilitating students' professional identity establishment, career self-concept formation, adaptability to changing contexts, and proactivity in pursuing their goals, components defined as psychosocial qualities and resources. Only through this expanded perspective can the goal of enhancing graduates' employability and achieving long-term subjective well-being be profoundly attained from a lifelong learning perspective (Bridgstock, 2017; Coetzee, 2017).

2.1.2 Objectives of Career Development Education (CDE) Courses in the Chinese Context

Since 2008, CDE courses have been widely integrated into undergraduate curricula in China (Zhou et al., 2016). Following the MOE's 2007 directive to develop and offer CDE courses in HE institutions, after almost two decades, the majority of universities had implemented at least one such course (Zhao & Wu, 2022). Nonetheless, their objectives and theoretical frameworks were heavily influenced by dominant Western career development theories.

Given the scarcity of research, only a few studies explicitly demonstrated clear objectives and theoretical underpinnings for their CDE course structures (Jin et al., 2021; Zhao & Wu, 2022). Accordingly, most programmes drew on CIP theory, SCCT theory, career developmental theory,

and person-environment fit theory (Jin et al., 2021; Xie et al., 2019), yet none articulated indigenous adaptations made during implementation. Specifically, mainstream CDE courses were theoretically and intentionally designed to: a) cultivate students' career awareness; b) foster decision-making skills; c) enhance career planning competencies; d) provide opportunities to develop practical skills such as information gathering and scrutinising, resume design, and interview techniques. In practice, however, dominant CDE courses merely emphasised occupational information and substituted explicit learning outcomes with ad hoc guest lectures and campus job fairs (Jin, 2018).

From social and political perspectives, in response to rising graduate unemployment and heightened pressure to secure satisfactory employment (Ma & Bennett, 2021), the MOE issued successive policy documents to strengthen CDE integration (The Ministry of Education, 2010) and, more recently, promoted "application-oriented university" reforms to bridge industry and education, aiming to cultivate undergraduates with soft skills and job-ready competencies (China Daily, 2023; Zhang, 2018). Nevertheless, scholars noted that despite challenges such as insufficient implementation mechanism and guidelines to restructure curriculum and weak enterprise partnerships for industry-education integration (Sun & Yao, 2022), noticeably, CDE courses have not been fully in this transformation, potentially impeding efforts to enhance graduate employability as ultimate goal. Empirical studies therefore emphasised the importance of utilising CDE courses or career services to help students integrate discipline-knowledge with career development strategies, reflect on personal characteristic, values, strengths, and weakness, and connect these insights with work-integrated learning experiences from CDE curricula and work placements, thereby developing the awareness and soft skills necessary to articulate their employable capabilities to prospective employers (Bridgstock et al., 2019; Clarke, 2018).

Therefore, within this context of national policy priorities on graduate employability and application-oriented education, scholars have called for further research to explore instructors' and students' perceptions of challenges in developing tangible career-management competencies through effective CDE course implementation. They have also urged investigation into how to embed work-integrated learning component into CDE curriculum objectives and structures (Jackson & Edgar, 2019). Such embedding would cultivate career awareness, generate practical soft skills, and form coherent career identities that align with labour-market demands (Hansen et al., 2017; Jackson & Tomlinson, 2020; Xie et al., 2019).

2.2 Employability in Higher Education (HE) Context

Employability, as a multi-faceted issue, primarily concerns How graduates can be equipped with the necessary skills to succeed in the labour market (Tomlinson, 2017b). It has become a key theme within HE institutions due to the shifting nature of the labour market, from secure, lifelong employment to uncertain, short-term, self-managed careers (Nilsson, 2017). Consequently, graduates must adapt to this changing work environment by developing competencies that allow them to orient themselves and learn effectively throughout their careers. These competencies extend beyond discipline-specific knowledge, emphasising generic meta-skills for lifelong learning (Nilsson, 2017).

Employability is widely portrayed and accepted as "a set of achievements- skills, understandings and personal attributes- that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefit themselves, the workforce, the community and the economy" (Yorke, 2006, p. 8). Although other scholars have discussed the importance of clearly representing and negotiating the generic knowledge and skills graduates acquire through HE to potential employers (Hillage & Pollard, 1998), there has been a considerable narrowing of focus

to skills acquisition alone (Clarke, 2018).

The Enablers of Graduate Employability

Instead of merely expanding the definition of employability based on dominant skill-focused approaches, Tomlinson (2017a) proposed a nuanced conceptualisation of employability by drawing an analogy to graduates' capital gains. This model includes five dynamic and interactive factors: human capital, social capital, cultural capital, identity capital, and psychological capital. These factors serve as critical resources enabling students to smoothly transition from school-to-work, helping them integrate accessible capitals to attain meaningful and sustainable career trajectories beyond HE.

Human capital is regarded as the core component determining one's sustainable employability and employment outcomes (Nilsson, 2017). Tomlinson (2017a) defined human capital as "what and how graduates can make connections between their formal education and future employment outcomes" (p. 341). Acquiring human capital through HE equips graduates with the specific knowledge and skills valued by employers, addressing the demand for "work-ready" graduates in the labour market (Clarke, 2018). However, There has been substantial criticism regarding the extent to which these employability skills can effectively be taught and transferred into the workplace through conventional education strategies (Boden & Nedeva, 2010; Holmes, 2013).

Social capital refers to the "sum of social relationships and networks" (Tomlinson, 2017a, p. 342) which associated with one's social class, connecting individuals' human capital to accessible occupational information and opportunities. Literature highlights ongoing debates regarding the impact of social capital and social class on graduates' employability, particularly influencing the level of university one can attend and the degree classification attained (Burke et al., 2017, p. 91; Tomlinson, 2012). Empirical studies, however, suggest social capital indirectly affects graduates'

perceived external employability by providing beneficial access to occupational information and opportunities through privileged networking (Burke et al., 2017; Clarke, 2018; Okay-Somerville & Scholarios, 2015). Conversely, limited social resources can negatively affect graduates' self-confidence and ability (i.e., career self-management and career adaptability) to transition effectively from school-to-work (Burke et al., 2017).

Cultural capital refers to " culturally valued knowledge, dispositions and behaviours aligned to the workplaces that graduates seek to enter" (Tomlinson, 2017a, p. 343). Tomlinson highlighted various aspects of cultural capital, including added-value knowledge (e.g., rewards, work experiences), personal attributes (e.g., accent, body language, and humour), and achievements (e.g., qualifications valued by potential employers). These elements collectively enhance graduates' access to employment opportunities and self-confidence (Burke et al., 2017; Lindberg, 2012). However, it is argued that cultural capital is often acquired outside formal education settings (Bathmaker et al., 2013). Nevertheless, Tomlinson (2017a) underscores the responsibility of HE institutions in promoting graduates' self-confidence and self-awareness through career-oriented training, enabling students to better understand targeted employment opportunities and broaden their job search scope (p. 344).

Identity capital manifests as "the level of personal investment a graduate makes towards the development of their future career and employability" (Tomlinson, 2017a, p. 345). Effective development of identity capital involves recognising emerging professional identities and applying them practically in entry-level roles. Identity formation in HE involves developing awareness of personal values, beliefs, and goals through practice and interaction with disciplinary knowledge, non-technical skills (gained through career development services and extra-curricular engagement), and "other forms of experiential learning" (p. 346) as the basis for sensing emerging

identities (Jackson, 2016). This identity formation contributes to development of constructing meaningful career and life projects that regulate employability (Tomlinson, 2017a).

Psychological capital pertains to psychosocial resources such as career adaptability and resilience, that "enable graduates to adapt and respond proactively to inevitable career challenges" (Tomlinson, 2017a, p. 347). These resources support proactive job search behaviours, facilitate change-making "in self and situation" (Hartung & Cadaret, 2017, p. 15) and coping strategies essential for navigating the contemporary uncertain labour market (Savickas & Porfeli, 2012). Scholars advocate developing psychosocial capital within HE through career guidance or career education, fostering adaptive mindsets and behaviours to overcome difficulties encountered in the non-linear and unstable employment situation (Coetzee, 2017; Duarte et al., 2017; Simosi et al., 2015; Tomlinson, 2017a).

Tomlinson (2017a) presented a broader perspective on graduate employability by linking various capitals or resources acquired across various domains and "graduates' lived experiences" gained "through and beyond higher education" (p. 348). This "expands the parameters of their [career] choices and capacity to act in economically advantageous ways" to construct satisfactory careers (p. 348). Importantly, Tomlinson (2017a) highlighted identity and psychological capital as key areas that HE institutions should actively empower students to develop at individual-level, and effectively utilise all forms of capital for optimal career self-management (Tomlinson, 2012).

Recent critiques emphasise the insufficient integration of empirical findings and practice from career development domain into the employability enhancement (Healy, 2023). Healy introduced the term "careers and employability learning", aim at "supporting students on their journeys of personal and professional self-actualisation" (p. 1312) through self-awareness, critical reflections, and pre-professional identity formation (Bridgstock & Jackson, 2019; Holmes, 2013; Jackson &

Tomlinson, 2020; Tomlinson & Jackson, 2019).

Given employability's complexity and the dynamics of global labour market, this study recognises that CDE courses alone in HE cannot comprehensively address all employability aspects (Nilsson, 2017). Employability involves inherited, possessed, and acquired resources shaped by diverse context factors and stages of development (Holmes, 2013; Okay-Somerville & Scholarios, 2015; Tomlinson, 2017a). Consequently, identity capital and psychosocial capitals should be particularly emphasised. This preparation equips graduates with adaptative mindsets and capacities to utilise their personal values, behaviours, and dispositions to address the challenges that may arise continuously throughout their lifespan (Clarke, 2018).

Thus, identity and psychological capitals represent more tangible and malleable competencies that can be developed and enhanced through effective CDE courses (Clarke, 2018; Rothwell & Rothwell, 2017). Accordingly, this study focuses on identity and psychosocial resources (referring to psychological capital) in the context of employability formation.

2.3   The Importance of Career Development Education Courses in Enhancing Graduate Employability

Holmes (2013)'s perspective of graduate employability as processual denotes that graduate employability is a construction process determined by the alignment between individually constructed identity and "the field of employment opportunities" (p. 550). This assertion resonates with the assumption conceptualised in Career Construction Theory (CCT, Savickas, 2013). From both perspectives, individuals are active agents (Coetzee, 2014; Savickas, 2013) who take direct actions and decisions to construct their career and social identities (Holmes, 2015). These actions and decisions should also be fuelled by sufficient social affirmations (i.e., ascribed professional identities valued by potential employers) and adaptive resources (i.e., adaptability) to generate identity formation and adaptation outcome (Savickas, 2011; Savickas & Porfeli, 2011, 2012). Accordingly, from the standpoint of career psychology, employability is expressed as an "adaptive functioning" (Rossier et al., 2017, p. 72) process, driven by the combination of career identity, personal adaptability, human and social capital (Fugate et al., 2004; Rossier et al., 2017).

2.3.1   Graduate (Pre-Professional) Identity Formation

Over the past three decades, multiple scholars have asserted that HE institutions need to take responsibility for preparing graduates with enhanced employability to meet future employers' criteria, adapting to a fluid and turbulent global context driven by social and economic trends (Clarke, 2018; Jackson, 2017). Nevertheless, recent studies have criticised that, despite configuring employability as graduates' human, social, cultural, identity, and psychological capital gains, HE implementation primarily encapsulate lists of competencies expected to be obtained by graduates through curriculum study and transferred into working performance (Caballero et al., 2020; Healy, 2023; Hinchliffe & Jolly, 2011).

However, several scholars explicitly noted that this skills approach does not comprehensively grasp the "complexity of graduateness" (Hinchliffe & Jolly, 2011, p. 2). This approach predominantly relies on graduates' skills performance in work settings, which is difficult to assess within the context of university learning. Performance is mainly determined by the "interpretation of a situation" in the workplace, that is complex and hardly measured straightforwardly. According to these authors, grounded in Holmes (2006), this interpretation emerges from understanding the practical situation and one's identity as an agent within that context (p. 2).

Thus, graduates' practice can only be satisfactorily performed with an appropriate perception of a specific professional domain (including manner, communication language, culture, and values expected in the broader environment), and through a crystallised identity aggregating strengths to execute effectively. In other words, facilitating graduate (or pre-professional) identity formation during the higher education is, therefore, essential for enhancing their employability meaningfully. Many scholars advocate that only through a well-established pre-professional identity can students tangibly connect relevant campus-acquired knowledge and non-technical skills to meet professional practice expectations (Holmes, 2013; Jackson, 2016; Tomlinson & Jackson, 2019).

Pre-professional identity (PPI) is defined as "the sense of being a professional" (Paterson et al., 2002, p. 409) and further interpreted by Jackson (2016) as the "understanding of and connection with the skills, qualities, conduct, culture and ideology of a student's intended profession" (p. 926). Undergraduate students must engage dynamically in this emerging stage, negotiating between diversified identities. According to Tomlinson and Jackson (2019), this involves reconciling personal and professional values, critically evaluating oneself, and learning from reflections. Tomlinson and Jackson (2019)'s empirical study investigated predictors influencing professional identity among undergraduate and postgraduate students. The study concluded that familiarity with

a working context facilitates the PPI formation, enabling professional socialisation through understanding "professional ideology and expected responsibilities and performance standards" (Tan et al., 2017; Tomlinson & Jackson, 2019, p. 896). Additionally, proximity between graduates' pre-existing identities, HE-acquired knowledge and practices, and targeted professional requirements significantly influenced PPI formation. Students' ability to reflect on and interpret what they have learned, the practices they experienced, and their choices based on their recognised and clarified personal values further facilitated building the connections between their extant identities and the PPI as future employees. Furthermore, forming social capital significantly supported students' PPI establishment. Social relationships and networks (social capital) provided valuable resources, granting occupational opportunities and professional interactions, thereby further enhancing accurate and enriched professional knowledge through these "bonding and bridging activities" (Tomlinson, 2017a; Tomlinson & Jackson, 2019, p. 896).

Thus, based on these empirical findings and assertions from other scholars, students' PPI formation, as one of the essential factors to contemporary employability construct, should be promoted and developed within HE learning processes (Holmes, 2015; Jackson, 2016). Crucially, Tomlinson and Jackson (2019) suggest, career development education (CDE) in HE could facilitates students' PPI through intensive engagement in self-awareness and career exploration activities. These components help students discern desired future selves and connect their unique characteristics and personal values to potential professional domains. Consequently, students can better prepared to demonstrate knowledge and strengths to future employers and perform competently as novel professionals (Daniels & Brooker, 2014).

The above-demonstrated arguments align with Career Construction Theory (CCT, Savickas, 1997, 2002, 2013), where Savickas identifies individual identity and career adaptability as essential

meta-competencies for twenty-first century career construction (Savickas, 2013, p. 151). In CCT, individual identity is elaborated as self-authoring narrative process, integrating their past experiences and social context into a unique interpretation, which explains one's "particular context by articulating goals, directing adaptive behaviours, and imposing meaning on activities" (p. 163).

Additionally, career interventions in CCT encourage students to develop deeper self-understanding or "sense of identity", associated with explicit occupational action plans meaningful to the identity formed during this progression (Savickas, 2013, p. 167). Savickas (2020) further describes career adaptability as motivational resources and competencies enabling students to "select goals and make plans" (p. 172) during transition or changing conditions. These goals and plans as ongoing and flexible-to-change components then support the emerging PPI, helping students pursue congruent professional and occupational opportunities. Clearly, career adaptability is another essential concept in CDE, aiming to enhance employability as the ultimate goal.

2.3.2   Career Adaptability

2.3.2.1   Formation of Career Adaptability

Career adaptability first appeared as an expanded component in the evolution of Super (1990)'s life-span, life-space theory. The construct broadened the understanding and grasp of the "dynamic nature" of human career development, described as an "ongoing, unfolding, and evolving process…" (Hartung & Cadaret, 2017, p. 19). In the final stage of forming his career theory, Super explained adaptability as a resource that augments career maturity and fosters choice readiness. Super further elucidated that career adaptability assists individual growth and helps individual cope with developmental tasks encountered at different career stages over the lifespan (Hartung & Cadaret, 2017; Super, 1990).

Alongside establishing career construction theory (CCT, Savickas, 2002, 2005), Savickas developed a rationale interpreting career adaptability as resources. He described the notion as "a sequence ranging across adaptive readiness, adaptability resources, adapting responses, and adaptation results" (Savickas & Porfeli, 2012, p. 661).

Accordingly, CCT depicts adaptation as a series of results aiming to "bring inner needs and outer opportunities into harmony" (Savickas & Porfeli, 2012, p. 662). In other words, adaptation represents a positive, unifying condition established among individuals' beliefs, generating behaviours (adapting responses), and changing environmental tasks, or the goodness of fit of their work roles, generally manifesting as "success, satisfaction, and development" (p. 662).

Career adapting refers to a series of responses performed through adapting behaviours to "master career developmental tasks, handling work transitions, and resolving work traumas" (Savickas, 2013; Savickas et al., 2009). These adapting behaviours are energised by particular attitudes, guided by individual beliefs, and determined by competencies used in "career decision-making and problem-solving" (Savickas, 2013, p. 158). Adaptivity denotes the readiness or willingness to adapt to career transitions or changes (Rudolph et al., 2017; Savickas & Porfeli, 2012). As Savickas elaborated in CCT, the term represents the "stable and durable" (Savickas & Porfeli, 2012, p. 662) psychological traits differing among individuals, including cognitive ability, proactivity, and personality traits. Consequently, differentiated adaptivity affect the process of developing and performing career adaptability as resources (Savickas, 2013). Career adaptability thus represents a psychosocial construct of resources supporting individuals and serving as self-regulation strengths to initiate actions or responses that "cope with current and anticipated tasks, transitions, and traumas in their occupational roles…" (Savickas, 2013, p. 157).

Therefore, these elements establish the interactive sequence defined by Savickas (2013): "better

outcomes (adaptation results) are achieved by individuals who are willing (adaptive readiness) and able (adaptability resources) to perform coping behaviours that address changing conditions (adapting response)" (p. 162). This sequence illustrates a structural model of adaptability rooted in CCT (Hirschi et al., 2015).

2.3.2.2   Career Adaptability Dimensions

In the structural model of career adaptability, Savickas (2013) interpreted three differentiated levels that dominate the developmental process of adaptability acquisition (see *Table 2-1*). He defined the four dimensions, viz. concern, control, curiosity, and confidence, as constituting "the highest and most abstract level" of the model. Next is the intermediate level, which comprises four "distinct sets of functionally homogeneous variables for each of the general dimensions" (p. 158). For this intermediate level, Savickas articulated that each set incorporates "specific attitudes, beliefs, and competencies", described as the ABCs of career construction, generating resources to implement adapting responses (or coping behaviours). These attitudes and beliefs are denoted as planful, decisive, inquisitive, and efficacious, whereas the competencies refer to planning, decision-making, exploring, and problem-solving. Thus, attitudes and beliefs motivate students to "form dispositional response tendencies" (p. 158) to utilise their adapting competencies. Competencies imply cognitive abilities to comprehend personal and environmental conditions and implement specific career plans and career choices. These cognitive competencies generate "the third and most concrete level" (p. 158) in the structural model: coping behaviours, which guide actual performances in occupational development and career construction.

Table 2-1 Career Adaptability Dimensions

Adaptability Dimension	Attitudes and Beliefs	Competence	Coping Behaviours
Concern	Planful	Planning	Aware

Adaptability Dimension	Attitudes and Beliefs	Competence	Coping Behaviours
			Involved
			Preparing
Control	Decisive	Decision-making	Assertive
			Disciplined
			Wilful
Curiosity	Inquisitive	Exploring	Experimenting
			Risk-taking
			Inquiring
Confidence	Efficacious	Problem-solving	Persistent
			Striving
			Industrious

Note. This is adopted from Savickas (2013)'s presented model in the book of Brown and Lent (2013)

Career concern is perceived as the first and most decisive dimension (Chen et al., 2020; Savickas, 2013). Career concern is rooted in predominant career development theories (Savickas et al., 1984), underpinned by planfulness, anticipation, orientation, and awareness to construct preferred careers in advance (Savickas, 2013). It provides individuals with preparation and consciousness to engage in experiences to enhance competencies for career planning. The essence of career concern is the capacity to consider one's future careers strategically, coping with transitional tasks over the lifespan (Chen et al., 2020; Clarke, 2018).

Career control, the second crucial dimension, fosters self-regulation through abilities to make career decisions and assume responsibility for one's future (Hartung & Cadaret, 2017; Savickas, 2013). Career control means proactively engaging in vocational tasks and negotiating occupational transitions, rather than avoiding changes. Savickas (2013) further illustrated that exercising career control catalyse specific personal meanings and generates action plans, intentionally directing educational and occupational pursuits. It is particularly beneficial for individuals from socio-economically disadvantaged backgrounds or those with limited career options (p. 160).

Career curiosity indicates an inquisitive mindset to explore the environment and oneself to make realistic, objective "educational and vocational decisions" (Hartung & Cadaret, 2017; Savickas, 2013, p. 161). It embraces career exploration, open-mindedness, risk-taking, and information-seeking behaviour prominent in major career development theories (i.e., Holland's theory, Super's theory, and Cognitive Information Processing theory). Curiosity is strengthened by the competence to systematically explore and reflect on environment and opportunities, deepening self-knowledge and understanding of the work world (Savickas, 2013).

Career confidence refers to individuals' expectations and perceptions of efficacious abilities to achieve desirable outcomes when confronting challenges and obstacles. In CCT, Savickas (2013) emphasised confidence arising from increased "feelings of self-efficacy concerning one's ability to successfully execute a course of action needed to make and implement suitable educational and vocational choices" (p. 161). Greater career curiosity engages individuals in exploratory experiences, reinforcing career confidence and enhancing problem-solving abilities for career construction and self-development. Confidence has been viewed as a prerequisite in career construction, associated with self-esteem, self-efficacy, and encouragement in prominent career development theories (Lent, 2013).

In sum, career adaptability originated in Super's life-span, life-space theory and evolved through Savickas' career construction theory to address "the changing economic conditions and job climate of the twenty-first century" (Hartung & Cadaret, 2017, p. 21). The four adaptability dimensions represent various career attitudes and behaviours supported by prominent career development theories and interventions (e.g., career planning, career exploration, career decision-making self-efficacy, Big Five traits, proactive personality) (Duarte et al., 2017; Hartung & Cadaret, 2017; Savickas, 2013). Relationships among these variables have been validated through extensive

empirical research worldwide (Guan et al., 2013; Hirschi et al., 2015; Koen et al., 2012; Li et al., 2013; Rudolph et al., 2017).

From the standpoint of conceptualising employability as graduate capital formation, identity capital and psychological capital (career adaptability) significantly enable graduates to acquire suitable attitudes, beliefs, competencies, and consistent narratives. They empower graduates to handle transition from school-to-work and career challenges beyond HE (Savickas, 2013; Tomlinson, 2017a).

Thus, according to Savickas (2012, 2013), career education as intervention aim first to facilitate assessment of students' developmental status. Second to promote and develop adapting behaviours to face "imminent developmental tasks and occupational transitions". And finally, to cultivate students' "coping attitudes, beliefs, and competencies" (Savickas, 2013, p. 167) as resources for establishing PPI and enhancing graduateness or employability beyond HE (Hartung & Cadaret, 2017; Holmes, 2015; Tomlinson, 2017a).

However, few studies have investigated whether existing CDE courses effectively build students' career adaptability. Most CDE courses prioritise students' career planning, exploration, decision-making, and problem-solving abilities as primary objectives (Jin et al., 2021). These align closely with the conceptual construct of career adaptability. Thus, this investigation will be the first explore whether increased capacities in career planning, self and environmental exploration, and career decision-making self-efficacy enhance career adaptability, as theoretically posited by Savickas (Duarte et al., 2017).

2.3.3 Self-awareness

Self-awareness has been a fundamental component in many influential career development theories and is recognised as essential for individual growth from a lifelong learning perspective

(Lent, 2013; Sampson et al., 1992; Savickas, 2020; Super, 1990). To cultivate students' employability, many scholars asserted that self-awareness should serve as the foundation for exploration. Only through a broadened awareness of their personal characteristics, interests, beliefs, values, concerns, and goals could students effectively explore, formulate, and organise resources, capabilities, and opportunities. This process enabled them to establish and develop ongoing employability competencies, helping them navigate career challenges across various life stages, especially in rapidly changing work environment (Coetzee, 2017; Dacre Pool, 2017; Watts, 2006). Due to its complexity and multiplicity, self-awareness has been perceived and defined from different perspectives (Carden et al., 2022). However, from a broad, multidisciplinary viewpoint, self-awareness comprises two distinctive dimensions: intra-personal (internal) and inter-personal (external) components (London et al., 2023). The intra-personal dimension refers to the "awareness of one's own resources and internal frame of mind" (Carden et al., 2022, p. 157), including individual affect, personability, beliefs, values, interests, motivation, and thoughts or emotions. In contrast, the inter-personal dimension emphasises "awareness of one's impact on others" (Carden et al., 2022, p. 157), reflecting social and interactional aspects, focusing on self-evaluative awareness based on feedback from others and sensitivity to how one's behaviours affect others.

More importantly, London et al. (2023) argued that although many studies investigated educational interventions for improving students' self-awareness, empirical evidence on how these interventions were structured, implemented, and their longitudinal impact was lacking. Notably, interventions often failed to address the inter-personal component of self-awareness (Carden et al., 2022). Furthermore, scholars suggested that by providing constructive feedback, once a rapport and trustworthy working alliance between students and instructors was established, could facilitate

students' deeper reflections on self-awareness, and help them explore internal and external understandings (London et al., 2023; Taylor, 2010). Scholars also emphasised the importance of students realising their values and beliefs (values clarification) as an effective approach for fostering the long-term self-awareness (Carden et al., 2022; Rasheed et al., 2019).

Several recent systematic literature reviews pointed out that no distinctive definitions differentiated self-awareness, self-consciousness, and self-knowledge. As a result, these terms were used interchangeably in theories and literature (Carden et al., 2022; Feize & Faver, 2019).

In the career development domain specifically, self-awareness refers to building an individual's career identity and supported career exploration from lifelong perspective. However, theorists defined the concept using different terms. For instance, in Cognitive Information Processing (CIP) theory, self-knowledge refers to "one's interest, abilities, skills, and values based on an ongoing construction of one's life's experiences…" (Sampson et al., 2020, p. 680). Likewise, in Social Cognitive Career Theory (SCCT), self-awareness was disassembled into self-efficacy belief, outcome expectations, and personal goals, considered basic cognitive-person elements (Lent, 2013). In Career Construction Theory (CCT), the term self-concept was initially used and later expanded to self-construction, encompassing both intra- and inter-personal dimensions of self-awareness (Savickas, 2013). Specifically, Savickas (2020) emphasised that not only should internal self-consciousness, such as personal characteristics and interests, be cultivated, but also the interpersonal experiences shaping individuals' behaviours and providing a basis for self-evaluation should be appropriately guided and organised for further development and decision-making.

Despite the long-standing recognition of self-awareness as a fundamental element in individual and career development, empirical studies rarely investigated the practical impacts of educational

interventions designed to develop students' self-awareness in specific aspects. Few studies tested how these conceptual and theoretical frameworks could be translated into workable procedures or demonstrated clear approaches for students to practise their awareness. Therefore, further research is needed to explore potential intervention frameworks that integrate the complexity of the multidimensional aspects of self-awareness.

In conclusion, this research reveals that employability enhancement is inherently multi-faceted and depends on collaborative efforts among individuals, families, HE institutions and their internal and external stakeholders, as well as broader social, economic and political actors within a lifelong-learning framework. Consequently, HE alone cannot bear full responsibility for developing graduate employability. This study therefore positions CDE courses as an effective means to foster key career competencies, capabilities that can be cultivated within HE curriculum. These include self-awareness, pre-identity formation, self-career management, adaptability and resilience, and career decision-making strategies. By developing these skills and a proactive and adaptive mindset, students can better integrate their personal capitals and experiences acquired both within and beyond the HE settings, to support their lifelong employability sustainment.

2.4 The Effectiveness of Career Development Education Courses

According to the literature, CDE courses as a career intervention in higher education settings "have a surprisingly long and robust history" (Reardon et al., 2020, p. 3) in the United States. Evidently, they have also been a widespread teaching approach adopted and the most cost-effective way that almost all tertiary institutions in China implement to facilitate and develop students' career planning and career development competencies (Jin et al., 2021; Zhao & Wu, 2022).

One of the reports on career courses systematically reviewed relevant studies that examined diversified CDE courses and categorised the findings based on their effectiveness concerning career outputs and outcomes. Career outputs are defined as "the skills, knowledge, and attitudes acquired by participants as the result of an intervention" (Reardon et al., 2020, p. 14). Additionally, the authors clarify the output variables as including "positive career planning thoughts, increased career decidedness, vocational identity, internal locus-of-control, and career maturity" (p. 14). In contrast, they distinctively denote that career outcome criteria refer to consequences that emerge over time following a career intervention, such as "course satisfaction, level of personal adjustment, deciding on major, timely graduation from college, cumulative GPA, and job performance" (p. 14).

Among the 120 studies identified, 82 focused on investigating the outputs of career courses, while only 38 examined outcome-related variables. Although the general effectiveness of career courses as an intervention has been well established, the authors emphasised the need for further consideration of "the ultimate value of career courses in higher education"(p. 15). This refers to outcomes criteria that influence students' abilities to adapt to their environment, make decisions aligned with their values and opportunities, and ultimately thrive in their professional and personal lives. Moreover, they elaborated that these long-term and "resultant effects"(p. 14) of career

courses contribute to enhancing students' "quality of work and life roles" beyond college or university (Reardon et al., 2020, p. 15).

Regarding outputs findings, Reardon et al. (2020) demonstrated that 74 out of 82 studies reported positive career outputs. Further, it is worth mentioning that of the 82 studies in total, they revealed the emerging attention of evaluation on career courses in the international context, especially among Asian scholars. They have only previously located six research conducted outside the United States between 1976 and 2014. However, the number expanded to ten merely from 2015 to 2019, with half designed and proceeding involving the Asian population (Cheung & Jin, 2016; Lam & Santos, 2018; Mahmud et al., 2017; Zhang et al., 2019).

On the other hand, regarding the outcome findings, Reardon et al. (2020) elucidated that nearly 95 per cent of studies (36 out of 38) obtained promising improvements in course satisfaction (Peng et al., 2017), cumulative GPA (Hansen et al., 2017), graduation rate and advanced overall exploration behaviours (Reardon et al., 2015). Also, throughout the period from 1976 to 2019, over one-third of studies were published after 2015, and almost all of them were conducted employing western countries' participants (Buford & Nester, 2019; Buford et al., 2018; McDow & Zabrucky, 2015; Reardon et al., 2015; Stebleton & Franklin, 2017).

Additionally, multiple scholars argued that most research examining the effectiveness of career interventions primarily relied on self-reported measurements that might have potential social desirability biases (Brown & Ryan Krane, 2000; Reardon et al., 2021; Spokane & Nguyen, 2016). Also, quantitative measures might not be able to discern the entire spectrum of factors or observable performances that could affect the overall effectiveness of the course.

Thus, this present study intends to fill this research gap by investigating a career planning course's procedural implementation (Spokane & Nguyen, 2016) and exploring the experiences participants

shared after taking it (Brown et al., 2003; Jin et al., 2021).

2.4.1 The Effectiveness of Career Development Education Courses Within Chinese Higher Education Context

One study identified in Reardon et al. (2020)'s report was conducted in Taiwan involving Taiwanese undergraduates. The study evaluated two models of career planning courses: one followed a traditional approach focusing on enhancing career self-understanding, while the other integrated spiritual components, such as role models, guest lecturers from alumni, and interactive activities (Peng et al., 2017).

Peng and her colleagues used a survey method to examine students' attitudes toward course satisfaction. They employed a "Satisfaction" questionnaire consisting of six categories reflecting various aspects. However, the study did not clarify the questionnaire's theoretical framework, specific components, or validity and reliability. Results were based on a single-group post-test experimental design using *t*-tests and descriptive statistical analysis. Although findings indicated students' preference for courses incorporating spiritual components, evidence showing whether the course effectively improved students' career-related competencies was absent. Peng et al. (2017) suggested adopting qualitative methods such as interviews for further research to understand students' "specific changes in responses, attitudes, perceptions, and behaviours"(p. 60) changes comprehensively.

Two recent empirical studies involving Chinese undergraduates were also identified (Jin et al., 2021; Zhao & Wu, 2022). Zhao and Wu (2022) examined career development courses' impact on undergraduates' career-awareness, job search self-efficacy, and career planning ability using survey data from 703 students. They found a positive relationship between the number of career development courses taken and increased career competencies through *t*-test and regression

analyses. Nonetheless, the study lacked clarify regarding specific measurement or theoretical framework underpinning the survey. Additionally, while the authors reported a positive association, specific course objectives, curriculum content, or instructional modalities linked to these measured outcomes and competencies remained unidentified. Consequently, the observed positive relationship offered limited insights into effective CDE course design or critical components contributing to CDE courses effectiveness. (Zhao & Wu, 2022).

A longitudinal quasi-experimental study by Jin et al. (2021) compared effectiveness of traditional lecture-based and flipped-classroom CDE courses in reducing students' career decision-making difficulties and enhancing their career exploration. Pre-post-test data were collected using the Career Decision-Making Difficulty Questionnaire (CDDQ) (Gati et al., 1996) and the Career Exploration Survey (CES) (Stumpf et al., 1983). Paired-sample t-test and two-factor (Time × Group) ANOVAs (analysis of variance) were conducted. Despite significant differences favouring the flipped-classroom approach in reducing lack of information and boosting environmental exploration behaviours, no differences emerged between the two instructional formats in overall career-related outcomes. Jin et al. (2021) suggested future research should evaluate higher-level outcomes such as decision-making skills and career adaptability, incorporating subjective measures like participants' perceived benefits gained from the course, to provide deeper insights. Clearly, there is a lack of empirical studies investigating the effectiveness of CDE courses in the Chinese context on a larger scale. Additionally, none of the identified studies explored specific components act most critical for enhancing students' career-related competencies or investigated participants' perceptions of course effectiveness. This research gap hampers the development and establishment of essential guidelines and structures for effective CDE course design and implementation in the Chinese context.

2.4.2   The Criteria of Effective CDE Courses

To evaluate the effectiveness of a particular CDE course as an intervention, this study identifies seven factors through meta-analyses that affect the overall effectiveness of career interventions (Brown & Ryan Krane, 2000; Whiston et al., 2017; Whiston & Rose, 2013). Several studies validated these factors for producing significant impacts on career decision-making self-efficacy (CDSE) (Reese & Miller, 2010), career planning and career exploration (Cheung & Jin, 2016), vocational identity (Green et al., 2019), and career decision-making difficulty and life satisfaction (Lam & Santos, 2018).

Brown and Ryan Krane (2000), based on Ryan (1999)'s meta-analysis of 62 studies, addressed five critical components considerably affecting the effectiveness of career interventions. They suggested implementing at least three out of five components significantly enhances intervention effectiveness (Brown & Ryan Krane, 2000).

Numerous studies confirmed the necessity of involving these critical factors in CDE courses. Reese and Miller (2010) emphasised incorporating these components as a guiding framework, thus enhancing the ultimate effectiveness of CDE courses. An experimental study at a Malaysian university designed a course based on career maturity theory (Crites, 1978) and self-efficacy theory (Bandura, 1977), integrating the five critical components, and confirmed improvement in CDSE, diminished career indecision, and reduced decision-making difficulties (Lam, 2016).

Conversely, a recent meta-analysis study by Whiston et al. (2017), replicating Brown and Ryan Krane' earlier study, identified three additional critical components determining the effect size of career interventions: counsellor support, values clarification, and psychoeducation interventions. Despite the inconsistent findings, Whiston et al. (2017) noted counsellor support was indirectly included in Brown and Ryan Krane (2000)'s "attention to building support" component.

Additionally, written exercises or workbooks were essential in both studies. However, few studies evaluated the effectiveness of CDE courses using all seven components as appraisal criteria. These components are: 1) workbooks and written exercises, 2) individualised interpretations and feedback, 3) in-session occupational information exploration, 4) modelling, 5) attention to building support (including counsellor support) (Brown & Ryan Krane, 2000), 6) values clarification, and 7) psychoeducation intervention (Whiston et al., 2017). Each components is detailed below.

2.4.2.1   Written exercises

Written exercises include activities or workbooks for practising self-analysis, future career planning, and decision-making. These written activities should be designated with two specific functions: a) through intentionally practising written activities to explore and compare different potential occupations; b) based on these explored and compared exercises to practise further in writing their future career planning and goal-setting (Brown et al., 2003; Whiston & Rose, 2013).

2.4.2.2   Individualised interpretation and feedback

This involves individualised interpretation on students' assessment results or consultation on career plans (Brown & Ryan Krane, 2000). According to Brown and Ryan Krane (2000), regardless of modality, career practitioners should provide personalised dialogue and feedback about their career development problems. Additionally, if the intervention involves written exercises on students' career plans, career practitioners should provide feedback on these exercises or offer individual guidance regarding their decision-making strategies. Furthermore, practitioners should synthesise students' self-interpreted information collected during the intervention, delivering insightful information to help students adjust or revise their plans for subsequent stages.

2.4.2.3   Occupational information

This involves gathering and integrating external occupational information within sessions. Indeed,

it has been common practice to utilise occupational information in career developing exercises since Frank Parsons (1909) established his tripartite model of career counselling a century ago. His theory and practice have persisted in CDE intervention, assisting students or clients in making career or educational decisions. However, as a critical component defined by Brown and Ryan Krane (2000), attention should be given to effectively integrating externally gathered information into within-session processes. In other words, sharing and discussing relevant occupational information gathered outside the classroom can produce more efficacious outcomes (Brown et al., 2003; Whiston & Rose, 2013).

2.4.2.4   Modelling

This includes presenting lived examples of individuals who have successfully navigated career challenges and transitions, either through practitioners' self-disclosure or by inviting relevant professional experts, such as former graduates or professionals. Brown et al. (2003) highlighted that intervention effectiveness is enhanced when models shared similar educational and socioeconomic backgrounds with the audience, enabling students to resonate and learn from their experiences. Furthermore, they emphasised that models should elaborate on difficulties they encountered during career decision-making processes, as well as their successful strategies in overcoming these problems and achieving satisfactory outcomes. According to Brown et al. (2003), such vicarious information enable participants to empathise and accurately predict their performance under certain conditions and specific situations.

2.4.2.5   Attention to building support (including working alliance)

This component highlights social and environmental factors influences students' attitudes and behaviours, and resources to make their career choices (Whiston et al., 2017; Whiston & Rose, 2013). Parental support and work alliance, as two critical indicators regarding relational factors

and relationship building, significantly impact career decisions and career adaptability among emerging adults (Blustein, 2011; Guan et al., 2018; Savickas, 2013).

The working alliance was defined by Bordin (1979) as the trusted relationship established between individuals who "seek changes and the change agent, applicable to psychotherapist and client, teacher and student, or even parent and child" (p. 252). Many empirical studies have validated Bordin's three aspects of a strong working alliance in career counselling: agreement on goals, agreement on tasks leading to productive outcomes, and the emotional bond between involved parties (Elad-Strenger & Littman-Ovadia, 2012; Milot-Lapointe et al., 2021). Establishing mutual understandings and agreeing on congruent goals and tasks form a solid working alliance (Whiston et al., 2016), positively influencing outcome variables (i.e., CDMSE, life satisfaction, and satisfaction with the intervention).

Milot-Lapointe et al. (2021) suggested that the working alliance significantly impacts career counselling effectiveness. Career practitioners should thus dedicate sufficient effort to building a trusted working relationship early with participants (Elad-Strenger & Littman-Ovadia, 2012) and maintain this alliance throughout the intervention to maximise outcomes. Therefore, the work alliance is essential for facilitating effective career education results (Milot-Lapointe et al., 2018).

2.4.2.6   Values clarification

This indicates exercises or discussions on the importance of exploring and clarifying students' personal values and beliefs when considering career options and aligning their motivations with career pursuits to enhance job satisfaction and overall well-being (Rossier et al., 2017; Rounds & Jin, 2013; Ryan, 1999; Savickas, 2013; Whiston et al., 2017). Values clarification implies the interactive role personal and work values play in career decision-making progress, generating choices that lead to greater job performance and satisfaction (Rounds & Jin, 2013; Ryan, 1999).

This aligns with Rounds and Jin (2013)'s assertion that clarifying values aids early adults, such as college students, in better understanding their personal needs and vocational identity, leading to meaningful career choices congruent with their beliefs.

Work values are interpreted as "the general and relatively stable goals that" individuals presume and achieve through their jobs (Savickas, 2014, p. 19). They represent intrinsic and extrinsic outcomes individuals seek in their careers. Decades of research confirmed work values have been verified for their predominant role in predicting and determining individuals' career aspirations, career decision-making, job satisfaction, and life satisfactions (Jackson & Tomlinson, 2019; Jin & Rounds, 2012; Sortheix et al., 2015; Yu, 2016). Thus, values clarification is emphasised as a core factor in many influential career theories (Abessolo et al., 2017; Harris-Bowlsbey, 2014).

For instance, Cognitive Information Processing theory (CIP) consolidated its career decision-making model by incorporating work values as cognitive reflection influencing how individuals process knowledge about themselves and occupations (Sampson et al., 2020). The authors work values as essential in guiding career decision-making, facilitating deeper self-knowledge, and forming rational and mindful decisions (Rounds & Leuty, 2020; Sampson et al., 2020).

According to Abessolo et al. (2021), supported by other research, work values comprise four dimensions. First, the intrinsic dimension includes independence, creativity, variety, achievement, challenge, and intellectual stimulations. Second, the extrinsic dimension encompasses security, salary, and work environment. Third, the social/relational dimension relates to interactions, altruism, work-life balance, or societal contribution. Lastly, the status dimension refers to management, prestige, influence, or career mobility.

Empirical studies found students' intrinsic work values positively correlated with proactive career management behaviours (Abessolo et al., 2017; Jackson & Tomlinson, 2019). Students with a

boundaryless mindset also showed positively associations with intrinsic and social/relational values. Additionally, Jin and Rounds (2012) concluded that college students' work values were "more stable than personality traits and less stable than vocational interests after adolescence" (p. 336).

Therefore, undergraduates appear optimally positioned to explore and clarify internalised work values based on prior experiences and conditions. By doing so, students gain clearer insights in the four dimensions of work values, supporting crystallised and congruent career choices aligned with their unique characteristics.

2.4.2.7 Psychoeducation intervention

This refers to systematic methods of the decision-making process taught to students. With these learned strategies and tactics, students could make satisfactory and realistic career decisions or choices in the imminent and distant future (Whiston et al., 2017). In addition, psychoeducation interventions are characterised by Ryan (1999) as information or education concerning the process of career decision-making, career certainty, or career satisfaction offered by the counsellor, group members, or outside speakers (p. 117). Thus, as highlighted by Whiston et al. (2017), it was essential to encompassing the psychoeducation strategy as the means to cultivate students with a "systematic method" (p. 180) for decision-making, which could be beneficial to face future career problem-solving and decision-making across the lifespan.

To conclude, in accordance with the seven critical factors widely identified through ample empirical studies primarily conducted in the Western context, this study adopts these factors as critical criteria for evaluating the effectiveness of the current case study in the Chinese context. Additionally, this study seeks to explore the potential perceptions of instructors and students regarding these critical factors.

2.5　The Teaching Practice and Learning Environment in CDE

From a cost-effectiveness standpoint and the need to instruct larger class sizes, most career courses have ubiquitously adopted a teacher-centred and lecture-based teaching approach. Although career courses have predominantly been validated as effective, scholars question whether this teaching approach meets the needs of the current generation in an increasingly dynamic world (Bridgstock, 2016; Monteiro & Almeida, 2021). With the increased awareness and implementation of CDE courses among diversified disciplines in HE internationally, researchers emphasise the importance of a well-defined theoretical foundation for course curriculum and consistent fidelity in the course delivery (Reardon et al., 2021; Spokane & Nguyen, 2016).

As articulated by Spokane and Nguyen (2016), fidelity refers to how closely a course's structure and implementation align with its intended design and syllabus. They further emphasises the need for more research on the course design, implementation strategies, and teaching approaches adopted in its delivery (Monteiro & Almeida, 2021; Williams, 2020). This would significantly contribute to the understanding the refinements needed for the paradigms shift demanded by the targeted audience and the changing context and requirements of the work world.

Recent studies have examined how different teaching approaches and content structures affect the overall course effectiveness and student satisfaction. Peng et al. (2017) compared two specialty-oriented career planning courses among undergraduates in Taiwan. The first focused on self-understanding (e.g., interests, values, and beliefs) and knowledge of the financial employment market. The second integrated spiritual components, including role models, guest speaks, and learning examples from social platforms. Findings indicated that spiritually enriched course was more effective in enhancing students' career decidedness and motivation to plan proactively. However, the study relied on students' feedback from course's satisfaction questionnaires and did

not assess measurable changes in career-related competencies or behavioural performances.

In a subsequent study, Peng and Lin (2019) tested a case-based teaching approach using pre-post-test design without a control group. The study demonstrated reduced career indecision and increased learning satisfaction among participants. This teaching approach contributed to these significant findings through establishing student-centred learning environment and engaging discussions with real-life scenario cases.

A longitudinal quasi-experimental study by Jin et al. (2021) compared traditional lecture-based teaching with a flipped-classroom approach among Chinese undergraduates. The flipped-classroom approach combined pre-class learning materials, such as preview learning videos, with abundant interactive in-class activities and discussions. Results showed that the flipped-classroom approach was more effective in reducing student's lack of information difficulties on the Career Decision-Making Difficulties Questionnaire (CDDQ), and improving environmental exploration (EE) on the Career Exploration Survey (CDE) by the end of the course and two months later (Jin et al., 2021). Evidently, the two approaches did not significantly differ in improving or crystallising students' career values and career readiness. Thus, the authors recommended that future research explore participants learning process variables, such as participants' course experiences and perceptions of interactive teaching approaches.

These studies collectively highlight the essentiality of engaging role models, establishing interactive and collaborative learning environment, and promoting students' independent thinking skills. Meanwhile, they also underscored the need for educators to receive professional training in designing, structuring, and implementing the content effectively. Maintaining implementation fidelity and achieving meaningful course outcomes require logical content organisation, structured activities, and preparedness for smooth class operations (Reardon et al., 2021).

Ultimately, effective instruction and classroom organisation remains key factors for sustaining student engagement. Additionally, educators need to encourage reflective practices that help students connect classroom learning with real-world applications. This reflective approach equips learners with problem-solving skills, adaptability to diverse scenarios and tasks, and a mindset for lifelong learning. (Bridgstock, 2016; Knight & Yorke, 2002; Monteiro & Almeida, 2021).

Generation Zers' Characteristics and Educational Perspectives

The current research student cohort comprises undergraduate students born between 2002 and 2005. In the generation literature, they are categorised as Generation Z, which refers to the cohort born between the years 1995 and 2012 (Ozkan & Solmaz, 2015). To understand and interpret students' experiences of the course and their perspectives toward it more accurately and precisely, it is imperative to understand the unique characteristics of the generation, as researched and asserted in the literature.

As this generation has grown up and permeated tertiary classroom while beginning to assume roles in the workforce, there has been extensive research aimed at analysing and understanding the distinctive attributes of this emerging generation. Meanwhile, to better teach, guide, facilitate, and collaborate with this generation, many studies have emphasised exploring the attitudes, preferences, and expectations they collectively hold regarding educational and learning perspectives.

Generation Z has been referred as the "Digital Natives", the "Me Generation", and the "Mobile Generation" (Barreiro & Bozutti, 2017; Ozkan & Solmaz, 2015; Schwieger & Ladwig, 2018). Evidently, they were born and raised in a world with more technological innovations than any previous generations before had ever experienced. Not to mention, they have never lived in a world that cannot make an instant connection with the world or with each other (Schwieger & Ladwig,

2018). As a result, the shared characteristics among Gen Z are described as sophisticated in understanding and utilising technologies, multitasking, fast and impatient, interactive, self-sufficient, and highly resilient (Fernández-Cruz & Fernández-Dîaz, 2016; Schwieger & Ladwig, 2018; Stillman & Stillman, 2017).

Thus, in one of the studies investigated effective teaching and learning approaches for Gen Z in business law classes, the authors noted the current generation values information they can absorb, stimulation they can receive, and connection they can establish (Cameron & Pagnattaro, 2017). In other words, they stated that this generation shares a short attention span, "shrunk to eight seconds" (p. 318). The authors further indicated that meaningful stimulations allow Gen Z to promptly process and discern useful information from the vast resources they access for answers or solutions. Thereby, they suggested that educators need to find ways to engage students with constantly stimulating content and immediately beneficial experiences. Moreover, the study highlighted the importance of establishing rapport and building emotional connections with students. According to their findings, these physical and emotional connections form the fundamental basis for providing students with engaging environmental dynamics to learn effectively.

Furthermore, multiple studies and reports align with the characteristics summarised above. For instance, this generation is considered pragmatic (Ernst & Young Report, 2016) and prefers learning by doing (Barnes & Noble College, 2018). Meanwhile, researchers have reported that Gen Z values trust and fairness. They expect to be treated respectfully and to receive transparent and fair communication and interaction, especially regarding their future working environment and career development opportunities (Ernst & Young Report, 2016).

Notwithstanding, referring to their learning behaviours, some researchers have identified that Gen Z habitually learns through creative teaching formats and hands-on experiences (Adobe Report,

2017). Essentially, they expect to be guided with clear logic flows and demonstrated experiential examples. This approach enables them to comprehend and utilise the knowledge or information more practically and adapt to diverse real-life scenarios in the future (Cameron & Pagnattaro, 2017). Therefore, some studies have suggested that educators should structure their curriculum with more concrete and clear goals, sufficient interactive and collaborative class activities, and adequate individual feedback to establish engaging and effective teaching and learning dynamics (Barreiro & Bozutti, 2017; Palacios, 2019; Schwieger & Ladwig, 2018). Nonetheless, some studies have concluded that neither the educators nor employers have yet understood this generation comprehensively (Barreiro & Bozutti, 2017). Hence, more efforts should be made to generate appropriate teaching, learning, cooperation, and communication approaches to prepare for and interact with this unique generation cohort.

As substantiated and asserted by the aforementioned research, it seems that this current generation needs to be understood and treated distinctively compared to any generation before them. Thus, more research should be conducted to investigate effective teaching and learning approaches alongside appropriate communication strategies for this particular generation as learners and in their work roles. More importantly, studies should strive to explore their perspectives using qualitative methods to generate an in-depth understanding of their needs and expectations regarding knowledge acquisition, habitual interaction, and communication.

2.6 Curriculum Evaluation Model

Curriculum evaluation spans two complex and non-uniformed discipline areas. According to Mutlu (2020), this complexity arises from the "many different perspectives or approaches to define and conceptualise" (p. 229) these two separate terminologies and their diversified sub-characteristics (Christie & Alkin, 2012). The most prevalent definitions and approaches to

curriculum evaluation are derived from the broader conceptualisation of evaluation, particularly from program evaluation models.

Evaluation, in general, is defined as a systematic process of gathering data to make decisions about an object's merit and worth (Scriven, 1967). Guba and Lincoln (1981) described merit as "the intrinsic quality or excellence of an evaluation object" (p. 39) and worth to "the values and usefulness of an evaluation object in a specific context" (p. 40). From their constructivist and relativist epistemologies, effective evaluation considers a program's design, implementation, and outcome. Judgements should be grounded in the program's quality to meet the needs, expectations, and priorities of its intended beneficiaries or stakeholders (Christie & Alkin, 2012).

In the 1960s, Robert Stake introduced the countenance model of educational program evaluation within the context of federal regulations for national program evaluation in the United States. Later, he developed the responsive approached, becoming known as a "Value Branch" theorists (Alkin & Christie, 2023; Mertens & Wilson, 2019, p. 135). His pluralistic and constructivist approaches focus on understanding diverse values and perspectives of stakeholders and participants "in and around" the program (Guba & Lincoln, 1981, p. 30). Stake's models, characterised by "pluralistic, flexible, interactive, holistic, subjective, constructivist, and service-oriented" approaches, have solidified his position as a leading theorists in evaluation (Stufflebeam & Coryn, 2014, p. 374).

Concurrently, Daniel Stufflebeam, proposed his improvement-and-accountability-oriented approach, known as the Context, Input, Process, and Product (CIPP) model for evaluation (Stufflebeam, 2003). Categorised under the "Use Brach", this model reflects pragmatic epistemology, prioritising the utilitarian purpose of evaluation (Alkin & Christie, 2023; Mertens & Wilson, 2019, p. 88). The CIPP model aims to produce accurate and retrospective information "to guide and strengthen" the evaluand (Stufflebeam & Coryn, 2014, p. 313). Consequently, the

CIPP model has been highly influential and widely implemented for formative evaluations. For instance, it facilitates the collection of timely and accurate information to generate feasible goals, activity plans, budgets, and alternatives for achieving targeted outcomes. Additionally, it is applied in summative evaluations, providing retrospective information for beneficiaries to assess the quality, cost, utility, and competitiveness of programs across various disciplines, settings, and objects (Stufflebeam, 2003; Stufflebeam & Coryn, 2014, p. 336).

In the subsequent sections, the core concepts of Stake's and Stufflebeam's evaluation approaches will be elaborated on separately. Following this, the similarities and shared underpinnings regarding the data-gathering matrices and processes of these approaches will be discussed. These interpretations will form the theoretical framework that guides this study, structuring its research questions and methodology.

2.6.1 The Core Concepts of Stake's Program Evaluation Approaches

Stake was known as the pioneer in implementing his countenance model. In this approach, Stake proposed that evaluators should not only structure their evaluation framework based on the objectives of the evaluand but also include context factors, perspectives, and objectives held by teachers and other relevant agents (Guba & Lincoln, 1981). Stake emphasised that the essence of this evaluation approach is to function as a data-gathering, syncretising, and interpreting process that leads to improvement and provide rationales for decision-making (Stufflebeam & Coryn, 2014).

In his countenance evaluation approach, Stake highlighted seven factors to produce a comprehensive and sound evaluation. These factors encompass all possible perspectives considered by different stakeholders in the evaluative procedures and processes. They include: 1) description and judgment of a program; 2) data-gathering format to represent the program's

intended and observed antecedents, transactions, and outcomes; 3) the program's rationale; 4) analyses of congruence and contingencies; 5) identifying the pertinent (and possibly conflicting) standards and judgments of the program; 6) a variety of evaluation tasks and associated procedures; and 7) formative and summative uses of findings (Stake, 1967; Stufflebeam & Coryn, 2014, p. 376).

After years of applications and experiences gained through national program evaluations, Stake proposed an expanded, more audience-oriented evaluation model: the responsive approach (Stake, 2011). In this approach, the organiser of evaluation is clearly defined and set as the concerns or issues of the evaluand's relevant audiences (Guba & Lincoln, 1981). Stake later elaborated, emphasising "the uniqueness of the mission, context, culture, and people of the evaluand" as the evaluation's core values (Stake & Visse, 2023, p. 103).

The fundamental purpose of responsive evaluation, which differentiated it from other conventional approaches that are generally objective-oriented and based on *a priori* hypotheses, is to provide targeted, responsive information and understanding of the evaluand. This helps all beneficiaries, such as policymakers, administrators, teachers, students, and parents, to "understand problems and uncover strengths and weaknesses in a program" (Stufflebeam & Coryn, 2014, p. 386) in a thorough and interactive approach.

Stake emphasised that the data-gathering format, a core component in his countenance approach, should remain the key method for collecting information. It should be used to explore and identify the issues and concerns of different audiences. Additionally, evaluators should function as human instruments, observing, investigating, and comprehending the evaluand through continuous communication with all involved audience. Stake underscored the importance of ensuring the validation of a credible outcome by using diversified and credible sources for information

gathering (Stake, 2013; Stufflebeam & Coryn, 2014).

2.6.2 The Core Concepts of Stufflebeam's CIPP Model

The CIPP model is primarily decision-oriented, designed to guide decision-making and support program improvements (Guba & Lincoln, 1981). It systematically investigates the values of the evaluand, including "its quality, worth, probity, equity, feasibility, cost efficiency, safety, and/or significance" (Stufflebeam & Coryn, 2014, p. 315). This approach equips decision-makers with evidence-based insights and enables program administrators to implement continuous improvements effectively (Mertens & Wilson, 2019).

Stufflebeam emphasised that the core purpose of CIPP evaluation extends beyond identifying deficiencies. It aims to generate actionable improvement plans, offering strategies for enhancing resource allocation, instructional practices, cost-efficiency, and utility values. Ultimately, the evaluation seeks to serve beneficiaries' desired outcomes while contributing to "societal progress and well-being of individuals and groups" as long-term objectives (Stufflebeam, 2003; Stufflebeam & Coryn, 2014, p. 336).

The CIPP model comprises four interconnected evaluation types, viz, context, input, process, and product. Each type a distinct perspective and can be applied systematically or individually, depending on the evaluation objectives.

Context evaluation identifies issues, concerns, needs, and relevant contextual conditions that stakeholders or decision-makers consider valuable. This approach helps a program or evaluand establish goals and priorities to address targeted needs and achieve justifiable purposes. Input evaluation examines the evaluand's system capabilities, resource allocation, and design alternatives, ensuring effective planning and accountability. Process evaluation assesses the fidelity of program implementation, identifying deviations and providing evidence for procedural

improvements. Product evaluation interprets and judges both intended and unintended outcomes by combining findings or information obtained from context, input, and process evaluations, as necessary, to determine the program's overall worth and merit. (Guba & Lincoln, 1981; Stufflebeam & Coryn, 2014).

2.6.3 Synthesised Evaluation Framework: Data-Gathering Matrix

Although Stake's and Stufflebeam's evaluation models differ in their epistemologies and evaluation purposes and perspectives, they share a similar logical evaluation process and adopt a comparable data-gathering format. Both emphasise the importance of providing accurate, descriptive information about the evaluand and generating evidence-based judgments to serve stakeholders at all levels (Stufflebeam & Coryn, 2014). More importantly, the structures and procedures for gathering supporting information in these models are fundamentally parallel. Stake suggests that evaluators should describe and judge the evaluand based on antecedents, transactions, and outcomes to generate countenance and responsive findings. Similarly, Stufflebeam advocates for providing "descriptive and judgemental information about the merit and worth of some object's goals, design, implementation, and outcomes…"(Stufflebeam, 2003, p. 34) through the lenses of context, input, process, and product evaluation.

In the CIPP model, context evaluation investigates the needs, assets, and goals of stakeholders, along with the "relevant contextual conditions and dynamics" (Stufflebeam & Coryn, 2014, p. 312) surrounding the program. Input evaluation examines existing practices, including work plans, execution strategies, materials, and assets to meet the program's needs and goals (Stufflebeam, 2003). Comparably, Stake antecedent factor aligns with these aspects, in system terminology (Guba & Lincoln, 1981), referring to any "relevant background information" (Stufflebeam & Coryn, 2014, p. 377), such as pre-existing condition before the program (or curriculum) was

implemented, curriculum content, students' learning intentions and conditions, and teachers' preparedness and status quo for teaching practices (Stake, 2011).

Process evaluation in the CIPP model investigates program implementation, focusing on whether delivered activities algin with the intended plan (Stufflebeam & Coryn, 2014). It provides feedback on "the extent to which the program was carried out as intended and required" (Stufflebeam & Coryn, 2014, p. 312). Similarly, Stake's transaction factors examine instructional transactions, including interactions between students and teachers, resources allocation, time investment, and "expressions of worth" (Stake & Visse, 2023, p. 108) that experienced and perceived within the broader context. Stake recommends using process evaluation to "discern and document the program's actual operations" (Stufflebeam & Coryn, 2014, p. 378) as supporting data.

Product evaluation in the CIPP model assesses intended and unintended outcomes, interpreting evidence gathered from context, input, and process evaluations to deliver comprehensive judgements. It evaluates both "positive and negative outcomes" (Stufflebeam & Coryn, 2014, p. 329) using multiple data sources and techniques to generate comprehensive judgments. Similarly, Stake's outcome factor focuses on results such as participants' abilities, achievements, attitudes, and aspirations, reflecting both intended and unintended effects (Stufflebeam & Coryn, 2014, p. 378), which also refers to output factors in system terminology (Guba & Lincoln, 1981). Additionally, Stake advises evaluators to obtain the evidence through various data collection methods and approaches, such as direct observations, formal interviews, and informal conversations with different participants involved.

Despite their differences, both Stake's and Stufflebeam's models share a common foundation. They both aim to guide evaluation in generating responsive, evidence-based outcomes that contribute to "understanding of the merit and shortcoming of the evaluand" (Stake, 2013, p. 195).

Both theorists prioritise accurate evidence, offering concrete directions for stakeholders, decision-makers, and conductors to justify program merit and worth through consistent improvements in implementation, strategic adjustments, or effective resource allocation (Stufflebeam & Coryn, 2014).

Notwithstanding, Stake's evaluation models are generally applied to large-scale curriculum reforms and federal-level, multiple-site program evaluations, while Stufflebeam's approach is widely used for evaluating organisations, personnel systems, or policies. Both approaches typically require a team of professionally trained evaluators (Stufflebeam & Coryn, 2014). Additionally, certain concepts and aspects of these evaluation models address higher-level intentions, such as system reforms, policymaking, program establishment, or fundings support. These evaluations demand detailed scrutiny of resources, goals, needs, assets, budges, and opportunities to address specific issues and meet the needs of relevant stakeholders. However, these aspects fall outside the scope of this study's research objectives.

As Stake emphasised, evaluation approach should be structured to serve the best interests of the evaluation's intended purposes. Furthermore, he highlighted that valid and valuable evaluation outcomes are derived from continuous observations, communications, and feedback from participants involved in the evaluation process (Stake, 1976).

While it is beyond the scope of this research study to address all the factors within these models, their comprehensive rationales for conducting evaluations, along with the structure of the data-gathering matrix, will be adopted as the theoretical framework for this study. To address the specific objectives of this research project (see Section 1.5), this study will integrate the aforementioned components of the data-gathering matrix to guide the structure and procedure of its evaluation process.

2.7   Summary, Research Gaps, and Research Questions

Grounded on the above introduced development and context of CDE courses both internationally and locally, there seems no study targeted on the systematic evaluation of CDE courses existed in the Chinese context. Under this perspective, there are two aspects of research gaps identified. First, a theoretical gap was detected regarding the alignment between the current curriculum of CDE courses and the evolving purpose of CDE theoretically. Second, three practical gaps were identified in the Chinese context, referring to lack of research on the quality and fidelity of the CDE courses, insufficient studies that focus on systematic investigation into both instructors' and students' perceptions of CDE, and a scarcity of research that explores the effectiveness and impact of CDE courses based on different teaching approaches and course modality.

Alignment Between Career Development Education (CDE) Course and Career Education Objectives (Theoretical Aspect)

According to the literature regarding both employability and career development, enormous efforts and contributions have been made to update the theoretical frameworks of how these concepts should be revised and restructured. These revisions serve the purpose of applying and fitting the requirements elicited by the fast-changing global and social contexts and the shifted modality of the current work world (Bridgstock, 2017; Bridgstock & Jackson, 2019; Clarke, 2018; Savickas, 2020; Tomlinson & Jackson, 2019). However, little empirical research has been conducted to explore by what means and with what approaches these evolving theoretical frameworks could be applied and employed by career practitioners to benefit their daily practical implementation. More crucially, there seem to be no previous studies investigating how the current CDE courses serve to fulfil the broadened purposes of CDE and employability at large that are requested by the evolving societal and economical changes in this new digital era.

Specifically, due to the lack of professional career practitioners in each HE institution in China, evaluating and understanding how the current CDE courses align with the up-to-date perspectives and purposes of CDE in the international literature is more urgent. This evaluation will contribute to further establishing plausible theoretical structures and instructional guidelines for these in-service instructors to follow.

The Implementation of the Career Development Education (CDE) Courses (Practical)

With the century-long development of career theories and CDE courses in particular, fruitful empirical findings have testified to the positive relationship between career interventions and desirable career abilities gained as outcomes. These outcomes include career awareness, career maturity, career decidedness, career decision-making self-efficacy, and career exploration, among others. Compared to diversified career interventions, CDE courses have been widely verified as cost-effective in generating the above-mentioned career outcomes to a larger audience (Reardon et al., 2020; Whiston et al., 2017). Additionally, several critical components have been identified to guide the structure of CDE curriculum and have been confirmed by empirical research to augment the effectiveness of CDE courses (Brown & Ryan Krane, 2000; Jin et al., 2021; Reese & Miller, 2006). In contrast, little effort has been dedicated to evaluating the potential impact of the quality of the curriculum syllabus and implementation fidelity on the overall effect of the CDE courses.

Furthermore, serval scholars have urged more research to explore and understand how and why these critical factors work in the instructional process through in-depth inquiries into their functional reasons (Brown et al., 2003; Reardon et al., 2021; Spokane & Nguyen, 2016).Thus, evidently, more studies are needed to investigate and understand how these CDE courses are designed and delivered, specifically under the unique Chinese social and economic context.

Systematic Investigation into Students' Perceptions of Career Development Education (CDE) (Practical)

Under the scope of inquiring about the quality and fidelity of the CDE courses implementation, one of the most important factors is the perceptions students hold and the experiences they undergo during the delivery process, as they are the beneficiaries of the CDE courses. Yet, it seems no previous study has specifically involved a systematic investigation regarding students' perceptions of CDE courses.

In the current literature, most research gathers and examines students' comments and experiences of the CDE courses they took through open-ended questions embedded in the course satisfaction surveys or open-ended feedback collected by the standard course evaluation system (Peng et al., 2017). A few studies have demonstrated that student interviews were included in their research design (Peng & Lin, 2019; Zhang et al., 2019). However, neither of these studies explicitly illustrated the procedure or the aspects addressed by the interview questions. Additionally, regarding their results, no interpretation discussed or demonstrated how their qualitative interview findings resonated with or explained the significant impacts on students' career-related competencies gained. Thus, as suggested by Peng et al. (2017) and her colleagues, future research should focus on exploring "a more in-depth understanding of students' specific changes in responses, attitudes, perceptions or behaviours" towards participating in the CDE courses by adopting more structured and systematic qualitative approaches.

Career Development Education (CDE) Teaching Practice (Practical)

Although the effectiveness of CDE courses towards the original skills approach and purposes has been widely accredited, still, little is known regarding how the CDE courses should be restructured and instructed to fulfil the newly broadened and evolving aspects and purposes of CDE and

employability from a lifelong learning perspective. Teaching practice in CDE courses should also be reconsidered and re-evaluated based on this evolved scope and criteria.

In the literature, some studies have explored and investigated different teaching modalities for CDE courses. However, most of them were examined using the traditional skills-gaining aspects as the evaluation criteria, and inconsistent findings were obtained and reported among these studies (Jin et al., 2021; Lau et al., 2021; Peng & Lin, 2019). Therefore, more research is needed to evaluate the teaching practice and implementing processes by adopting class observations and exploring and grasping the instructors' perceptions of the CDE courses.

To potentially contribute to the future restructuring of the CDE curriculum and effectively serve the evolving purposes of CDE and employability, as asserted in the literature (Bridgstock et al., 2019; Healy, 2023; Jackson & Tomlinson, 2020), three types of evaluation are set for this research study: content evaluation, process evaluation, and outcome evaluation of an ongoing CDE course.

Designed Evaluation Framework of the Study

Based on the conceptualisations of Stake's and Stufflebeam's evaluation models (Stake, 1967; Stufflebeam & Coryn, 2014), this present case study forms a modified framework to guide the evaluation procedure and to address the four objectives (see section 1.5).

Figure 2-1 below demonstrates the detailed steps for the evaluation process. Content evaluation refers to the antecedent aspect in Stake's models, or context and input factors in Stufflebeam's model. This procedure attempts to understand the case study's background information and reveal the context, as its unique condition, in which the case study undertakes and is implemented. Process evaluation refers to the transaction aspect in Stake's models, or the process evaluation denoted by Stufflebeam. This procedure attempts to discern the actual practice of the case study and the instructional transactions that occurred in the implementation process on-site. Finally,

outcome evaluation refers to Stake's outcome aspect, or the product evaluation addressed by Stufflebeam. As the case study's results, this procedure intends to investigate and understand the perceptions of all participants (instructors and students) regarding the interactions during the implementation process. It also attempts to understand students' perceptions and needs toward their expected CDE courses. Further, as a triangulated data source, students' career competencies attained will be measured and interpreted as supplemented evidence to support the evaluation findings above.

Likewise, this evaluation framework understands and analyses this case study through the lens of intended and observed antecedents (context and input), transactions (process), and outcomes (product), as structured in both Stake's and Stufflebeam's models. This will provide the evaluation process with a broadened scope and interpret the findings with more comprehensive perspectives, thereby generating meaningful insights for this case study's future improvement and refinement.

Figure 2-1 Designed Evaluation Framework for this Case Study
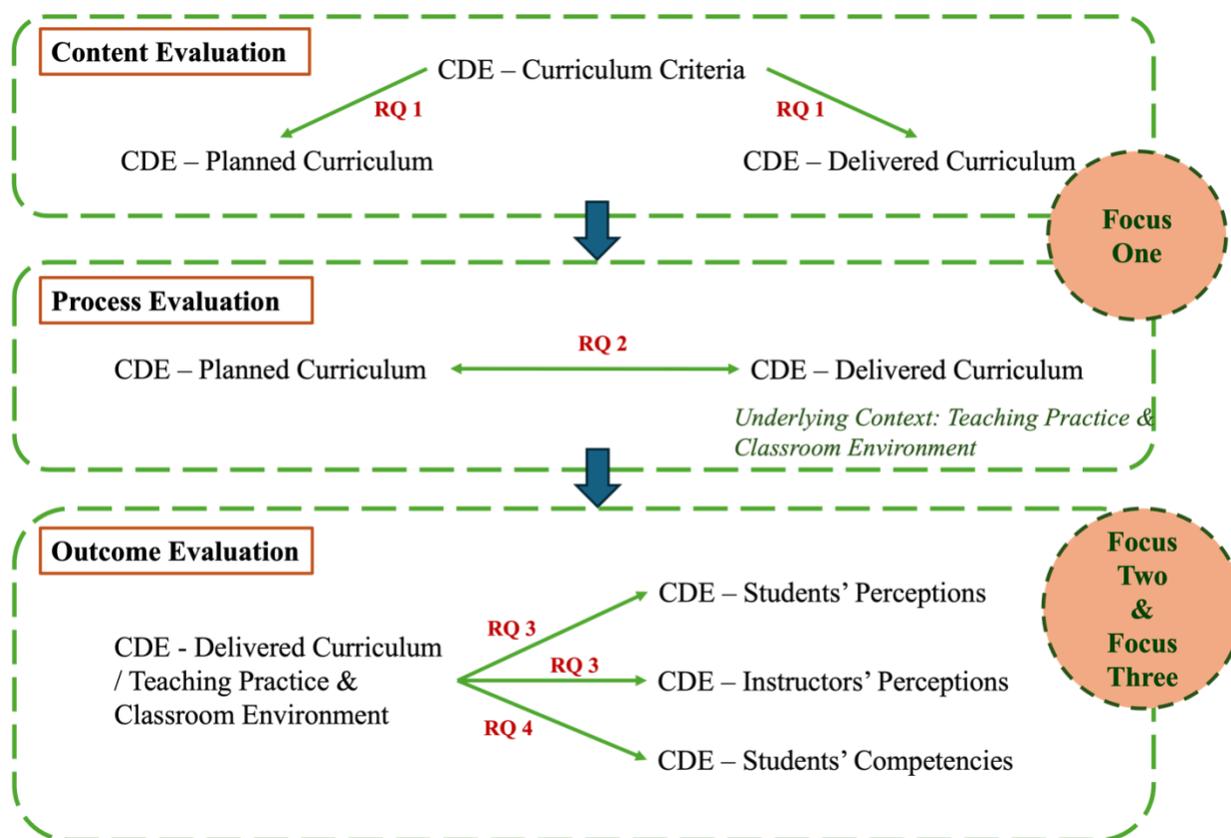
Based on the objectives this study addressed in Section 1.5, and research gaps identified through literature review, four research questions are proposed.

To address the first objective, content evaluation, one research question is proposed:

- RQ1) To what extent do the planned and delivered curriculum of the CDE course align with the seven critical factors identified in effective CDE course curricula (viz. written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support, values classification, and psychoeducation intervention)?

To address the second objective, process evaluation, one research question is proposed:

- RQ2) To what extent does the planned curriculum of the CDE course align with the delivered curriculum?

To address the third and fourth objectives, categorised for outcome evaluation, two research questions are proposed:

- RQ3) What are the perceptions of students and instructors towards the delivered curriculum of the CDE course?

- RQ4) How does the CDE course affect students' career planning and career exploration behaviours, career decision self-efficacy (CDSE), and career adaptability?

In three focuses of analysis, the four research questions are addressed. Focus One addresses RQ1 and RQ2, examining the case study's unique curriculum, its delivery, and the alignment between the two, based on the seven critical factors identified (see Section 2.4.2). From the antecedents or input perspectives, the pre-existing implementation conditions and context of this case study were described and investigated (details in Section 4). Meanwhile, RQ2, which includes teaching practice and classroom environment as part of the underlying context, revealed the observed interactional transactions that emerged during actual teaching practices. These transactions, or process factors, associated with the delivered curriculum content as background context, were analysed to interpret the alignment and misalignment between the planned and delivered curriculum (details in Chapter 4).

Focus Two addresses RQ3 using qualitative approaches to evaluate the outcomes evidence that emerged during the process. RQ3 targeted the perceptions held by the students and the instructors, respectively, after participating in the curriculum delivery process. In turn, a series of qualitative analyses were conducted to discern the differences in perceptions regarding the delivered curriculum between instructors and students. The focus was on evaluating and identifying the differences between students' perceived and expected viewpoints towards the CDE curriculum (details in Chapter 5).

Focus Three addresses RQ4 using questionnaires to measure students' obtained career-relevant competencies after taking the course. Paired t-tests without a control group were conducted to evaluate the identified career competencies attainment. These tests were used to objectively measure effectiveness and provide additional evidence to support findings from other focuses of analysis (details in Chapter 6).

Chapter 3   Methodology

This chapter first describes the background information and the current context of the CDE course's establishment and instructional environment. Secondly, it demonstrates the three focuses of analysis comprising this research design. Thirdly, the methodological approaches, participants selection, the instrument adopted, data collection, and data analysis procedures are illustrated separately according to each focus's purpose. Lastly, the ethical considerations that this study followed, as well as the role of the researcher positioned during the research process, are elaborated. The study was conducted in a top thirty university in Beijing, China. The CDE courses are elective and have been offered to all full-time undergraduate students since 2008. As CDE courses are discipline-dependent, course instructors develop and deliver the content to students from their respective faculties only (i.e., instructors are commonly administrative teachers or school counsellor from each faculty).

In detail, the researched CDE course is offered to students majoring in Business and Administration (BA), Economics, Accounting, Finance, and E-Commerce, etc. The course usually takes place during the second semester of the first year for two hours every week. The course is worth 1.5 academic credits. There are eight lectures throughout the semester with two practical activities (one mid-term and one end of term), two written exercises (one mid-term and one end of term).

3.1   The CDE Course Context in Chinese Higher Education

This present CDE course (referring to the Career Planning Course under study, CDE course hereafter) was historically designed to fulfill the requirements of a document announced in 2007 by the Ministry of Education (MoE), China. This document, *The Requirements on the Career Curriculum for College Students*, aimed to promote the integration of the career development

components into the tertiary education curriculum (The Ministry of Education, 2007). In the following year, the MoE released instructional guidelines to assist colleges and universities in designing and implementing their own career development courses. However, these guidelines primarily grounded the outlined principles and requirements on concepts to establish a curriculum for entrepreneurship development. Thus, from the origin of these documents, they intertwined the notions of CDE and entrepreneurship development to foster students' career competencies and facilitate their employability for the future development as a whole. In 2010, another document was published to promote the establishment of systematic career counselling and guidance services for all undergraduates by the MoE (The Ministry of Education, 2010). The intention was to stimulate colleges and universities to set up career centres and provide personalised career counselling, alongside career courses, as the basis for facilitating student's career development.

To fulfil the requirements of the aforementioned documents and to facilitate students' preparedness for their future careers and enhance their employability as the ultimate goal, the specific CDE course was designed in 2008 and offered to undergraduates majoring in Business Administration (BA) firstly. Later, due to the augmented focus on enhancing graduates' employability and rapidly increasing competitiveness in the current labour market, this particular CDE course was included in all elective modules for each major in this faculty. This allowed students within the faculty to select it as needed.

3.1.1 Role of the Career Centre

The graduates' employment rate, along with students' indecision and anxiety about their future careers, has been a critical concern for the university's stakeholders to address, both internationally and domestically, especially given the consistently rising unemployment rate in the current economic climate.

In this particular case study, the university is a comprehensive institution, part of the "Double First-Class" initiative, and also listed in the "985 Project" in Mainland China. Furthermore, it is one of the pioneers in establishing its career centre at the early stage. The university has emphasised the importance of facilitating students' career development and the augmentation of skills in career planning by providing CDE courses at the university level and within several specific faculties, to adhere to the propositions addressed in the MoE documents.

Currently, the career centre has one administrative staff member who undertakes tasks related to the management of CDE courses. The staff is responsible for integrating and organising CDE courses and activities hosted at the university level. However, this specific staff is only in charge of administrative affairs, and does not undertake any instructional duties. At the university level, the instructors who were designated to teach CDE courses are administrative staff entitled as school counsellor, under the Communist Youth League of the university. None of them have majored in or specialized in career guidance and counselling. This means the career centre lacks specific professionals or career practitioners to supervise the CDE courses or career development activities that it carried out, or those held by faculties.

Meanwhile, the career centre dedicates most of its efforts to assisting graduates with employment contract procedures. Besides, its other predominant duties are collecting and reporting data on graduates' employment outcomes annually, issuing recruitment information, organising campus job fairs, and conducting career or entrepreneurship seminars, etc. Although the career centre is ostensibly responsible for the overall development and implementation of CDE courses, little support appears to be provided for instructors' professional development and curriculum content development (personal communication with one of the career counsellors). Consequently, the career centre solely provides career counsellors in each faculty with newly issued employment

policy documents, up-to-date notifications regarding graduates' employment requirements, and arrangements for scheduled job fairs on campus. In contrast, it seldom interferes with or regulates the specific curriculum content and structure of the CDE course delivered.

3.1.2 Rationale for Choosing the CDE Course for Case Study

Under this specific context, the CDE course prompts a significant case study worth an in-depth investigation. Additionally, it is valuable to explore the effectiveness and the quality of the CDE course regarding its curriculum structure and implementation in the current circumstances in China, from both theoretical and practical perspectives. Specifically, three aspects need to be highlighted as reasons for choosing this CDE course as a single-case study research design.

Firstly, the CDE course is established and conducted as one of the first batches of CDE courses at the tertiary level since the document "*The Requirement on the Career curriculum for College Students*" was released by the MoE (The Ministry of Education, 2007) in 2007. With years of instructional experience accumulated, this CDE course should be a valuable case study to explore its effectiveness and the quality of its curriculum in actual practice. Additionally, the CDE course is carried out at a comprehensive university in Beijing and financed directly by the MoE. As one of the first-tier universities, both entitled in the "Double First-Class" initiative and listed in the "985 Project" as pivotal institutions, the CDE course is representative, demonstrating the average developmental status of CDE courses in the current Chinese HE context.

Secondly, this university constitutes a diverse group of students from different regions in China. Many of its popular programmes are related to agricultural development disciplines, attracting a large number of students from developing cities and rural areas. As a result, the demographic structure of its students consists more of families with medium to lower-medium socioeconomic status than upper-medium or higher socioeconomic status families. Moreover, these students might

have less family support, employment opportunities, and economic resources compared to those from first-tier cities. This creates a meaningful and targeted sample case study for investigation within the domain of CDE. Consequently, it can contribute theoretically and practically to the body of knowledge, particularly within the contemporary Chinese context. Meanwhile, the scarcity of qualitative inquiries into the perspectives and insights of instructors and students towards the CDE course's effectiveness makes this case study particularly significant.

Lastly, the researcher's working background is another critical reason for choosing the case study as a convenience sample. The researcher is a former staff member with over eight years of working experience in this faculty. Her connections allow her to negotiate the authorisation to research the course. She can also easily access various data collection sources. This well-established relationship between the faculty and the researcher allows her to delve deeply into the field. It enables her to experience more closely the real scenarios of the implementation process and provides more opportunities to communicate with individuals within the context.

Therefore, these reasons form a purposeful and significant single-case study worthy of investigation. Considering the unique socioeconomic diversity of the participants, it is meaningful to explore their understandings of the topic. Specifically, their perceived insights regarding effective curriculum structure and critical components need to be emphasised as valuable and indispensable sources to improve the practical aspect of the CDE curriculum development. In turn, this might contribute to the theoretical foundation of how to structure for more effective CDE courses in Chinese context in the future.

3.1.3   The CDE Course Context in the Case Study

3.1.3.1   Regulation from the Undergraduate School

Based on the outlined general procedure and regulations for curriculum management of this

researched university, its Undergraduate School has documents that explicitly state and encompass detailed terms and requirements for curriculum design and development, teacher professional development and awards, teaching pedagogical guidelines, and curriculum evaluation criteria (personal communication with the administrative staff in the faculty). Each academic department is responsible for the supervising and developing its discipline's curricula. Every five years, the MoE arranges for experts from various areas to conduct on-site evaluations of the curriculum implementation. Meanwhile, the Undergraduate School also initiates internal evaluations every four years. These evaluations are designed to scrutinise the quality of the curriculum and assess whether they are conveyed appropriately and effectively to accomplish the set objectives.

Since this particular CDE course was integrated into the BA programme in 2008, it has undergone two major evaluations arranged by the MoE and three internal evaluations by the university. However, during these five evaluations, none paid particular attention to evaluating this CDE course in detail. The staff further revealed that most experts invited by the MoE are experienced professors from mainstream disciplines who might not be familiar with the guidelines and structure of this curriculum. Also, although this course's textbooks are available, there are no standardized criteria yet established to evaluate its effectiveness and quality (personal communication with the instructor).

3.1.3.2   Career Counsellor Setting Among Faculties in the Selected University

In 2016, the MOE issued another document emphasising undergraduates' employment matters. This document specifically included the job description of career counselling in the general recruitment of school counsellors. Furthermore, it encourages colleges and universities to employ career counsellors at the faculty level. It aims to assist and guide students who are confused and indecisive regarding their future career development in different majors and with diversified career

desires. Consequently, starting in 2018, this university gradually added recruitment for school counsellors who handle career and employment matters in each faculty.

For the researched faculty, a specialised career counsellor was recruited in 2020. The counsellor had just retired from China Air Force service, with no experience or certification related to career guidance and counselling (personal communication with the counsellor). Moreover, after he and other career counsellors had been employed, no pertinent training for career guidance and counselling was provided. Additionally, no self-paced learning material was available to strengthen their professional development and fulfil their job descriptions. Career guidance and counselling are not the only tasks in their job description. Generally, they also undertake work related to student management and affairs within the faculty. The counsellor described his work regarding students' career development as primarily focused on releasing and promoting employment information. Meanwhile, he is also responsible for gathering and filing students' employment outcomes before graduation (personal communication with the dean of this faculty).

Therefore, although the career counsellors' job descriptions include duties related to career guidance and counselling, it seems their routine tasks are not dominated by the relevant work. Additionally, it appears they have not received any sort of training and resources from the career centre or the university to support and improve their professional skills in aiding students' career development.

3.1.3.3   The CDE Course Instructors

Initially, as the CDE course was originally configured in the elective module for students majoring in Business Administration (BA), it was taught by an associate professor subordinate to the Department of BA in the initial stages, beginning around 2008. However, after establishing the career centre at the university level, CDE and graduates' employment outcomes evolved into a

significant criterion affecting the university's overall ranking and reputation. As a result, all career-related courses were allocated to the student affairs domain. In other words, the career centre has been responsible for the overarching management of all courses regarding CDE and entrepreneurship development since 2010. Consequently, the faculty followed the reallocation of responsibility of the CDE course and transferred the instructional duties to the faculty's student affairs office.

This led to the current arrangement. Since 2015, the current instructor has taught the CDE course. This instructor is responsible for student development and affairs issues in the faculty. Additionally, this instructor stated that he usually invites 3-4 school counsellors from the faculty to co-instruct the course. These co-instructors are designated to instruct specific content referring to their personal experience and job expertise (personal communication with the co-instructors). The career centre is also accountable for the instructors' professional training and the provision of materials and resource support.

3.1.4 Case Study Students' Demographic Characters

In general, roughly half of the total students majoring in BA and E-commerce might choose to register for the course in their first year. Meanwhile, a few sophomore and junior students from other majors might register for this course due to a lack of elective course credits. Thus, each year, approximately 75 per cent of students were freshmen, with the remainder being sophomores and juniors. According to the documentary recordings, over 80 per cent of students in this faculty were from third- or fourth-tier cities in China. Among them, roughly half were from rural areas and were likely the first generation in their families to attend university.

For this specific case study, according to the registration records, approximately 70 per cent of the participants were from third- or fourth-tier cities in China, with some from rural areas. Furthermore,

based on participants' self-reported status concerning their family's monthly incomes and their parents' educational level, over half came from families with a monthly income ranging from 3001 to 10000 yuan, and approximately 60 per cent of their parents had completed high school education. Therefore, although the course was conducted at one of the 985 project universities in Beijing, it drew a diverse group of students.

3.2   Research Design

This study adopts a mixed-method research design to thoroughly investigate the effectiveness of the case study, and understand the nuanced attitudes and perspectives of both instructors and students. The rationale for selecting a case study method is underpinned by Yin (2017)'s twofold definition of the approach. First, the scope of a case study pertains to investigations requiring an in-depth understanding of a "contemporary phenomenon (the 'case')"(p. 15), within its real-world context, need to address the interplay of situational and environmental factors. Second, the distinctive feature of lies in its capacity to accommodate research inquiries involving complex, contextually embedded variables that extend beyond quantitative data points. This approach relies on the integration of "multiple sources of evidence" and triangulated data analysis to systematically address the emergent issues (Yin, 2017, p. 16). Consequently, the case study method aligns seamlessly with the defined objectives and research questions of this study (see Section 1.5 and 2.7).

Furthermore, Stake (1995) suggests that the effectiveness of a case study is often evaluated using quantitative measurement outcomes, while its quality is assessed through qualitative approaches, such as content analysis, observation, and interviews. These techniques enable a thick and in-depth interpretation of emerging issues and themes. Specifically, interviews, serving as the data collection tool, will generate "narrative description and interpretive assertion" (p. 96) to capture

the complexities of the investigated case.

This research design incorporates three distinct focuses of analysis, with two types of data collected to address different research questions within each focus. The study employs a convergent design, as suggested by Creswell and Poth (2018), which involves simultaneously gathering both quantitative and qualitative data during the collection stage. This approach allows each data type to complement the limitations of the other, enabling "a more complete understanding of a research problem…"(p. 551).

Focus One aims to address the first and second objectives. This refers to the content evaluation, process evaluation, and "teaching practice and classroom environment" aspect as the underlying context. As the case study needs to be understood and evaluated as a "round" implementation and performance (Stake, 2013), neither the designed curriculum, the delivered curriculum, nor the teaching practice and classroom environment as a specific context can be described and evaluated separately. Therefore, Focus One intends to tackle relevant targeted research questions (RQ1 and RQ2) intertwined with its unique background context. This approach allows the researcher to examine and interpret the case study comprehensively regarding the CDE course's designed, intended, and observed curricula in its instructional process, alongside the teaching and learning environment established.

Focus Two aims to address the third objective, outcome evaluation. Students' and instructors' perceptions of the delivered CDE curriculum are considered the case study's outcomes. It addresses the third research question (RQ3) proposed in this research project. The study first discusses students' and instructors' perceived perspectives on the curriculum. It then compares their differing views on the purpose and needs of the CDE curriculum. Finally, it illustrates students' perceived and expected CDE curriculum outcomes. Since this research question is intertwined

with other factors (e.g. teaching practice, the classroom environment, interactions with instructors, and feedback received), the study presents and interprets findings according to the themes and categories that emerged from the data. This approach follows a sequential process that the case study naturally and logically considers and proceeds as a curriculum.

Focus Three aims to address the fourth objective, serving as a triangulated source to evaluate the effectiveness of the case study in facilitating students' attainment in career-relevant competencies as outcome variables. Meanwhile, this focus demonstrates and interprets the results associated with the findings and evidence obtained through Focus Two. It serves the purpose of generating creditable overall evaluation findings with triangulated data sources and diversified investigation approaches.

Table 3-1 Data Sources for RQs

Focus of Analysis	Research Questions (RQs)	Data Sources
Focus One	RQ1) To what extent do the planned and delivered curriculum of the CDE course align with seven critical factors identified in effective CDE course curricula (viz. written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support, values classification, and psychoeducation intervention)?	Content Analysis (the Planned and Delivered curricula
		Class Observations
	RQ2) To what extent does the planned curriculum of the CDE course align with the delivered curriculum?	Content Analysis (the Planned and the Delivered Curricula)
		Class Observations
Focus Two	RQ3) What are the perceptions of students and instructors towards the delivered curriculum of the CDE course?	Semi-Structured Interviews
		Class observations
Focus Three	RQ4) How does the CDE course affect students' career planning and career exploration behaviours, career decision self-efficacy (CDSE), and career adaptability?	Career Planning Scale
		Career Exploration Survey (Self & Environment)
		Career Decision Self-Efficacy Short-form (CDSE-SF)

		Career Adapt-Ability Scale-China Form (CAAS-CF)

3.3 Participants

This case study involved a population comprised of undergraduates who studied in economics and management-related majors, as well as instructors who worked in the same faculty and delivered the researched curriculum. As the semi-structured interview was conducted among some of these participants, all of them were presented with pseudonyms in direct quotations and theme interpretations.

The students were from the Faculty of Economics and Management. During the research semester, fifty students registered for the CDE course. This course was scheduled for each Friday night during the spring semester of 2023. Forty-five students participated and completed both the pre-test and post-test questionnaires. In practice, the course consisted of seven sessions in total. The last session was arranged for students to visit a job fair event and interview a working role model of their choice in their preferred spare time. Meanwhile, four instructors took part in the instructional process. The core instructor led four sessions, while the other three instructors each led one session. Approximately two-third of the students in this faculty were females, and a similar gender distribution was expected in this particular case study.

For the semi-structured interview, three types of student interviewees were included in the data collection and analysis process. First, students were primarily recruited from those who enrolled in the CDE course and had completed all the pre- and post-test measurements. At the last session of the CDE course, the researcher invited students to participate in the interview with a brief introduction to the purpose of this research study and the interview procedure. Seven students voluntarily contacted the researcher to participate. Second, the core instructor recommended three

potential interviewees. Only two of them accepted the invitation and participated in the interview. Lastly, by posting the research recruitment message to the current students' WeChat groups, five students who had taken the course previously accepted the invitation.

The core instructor and one of the co-instructors (the faculty's career counsellor) were interviewed as instructor interviewees. Additionally, one administrative staff member, who has been working in the faculty and in charge of undergraduates' educational plan management for over 30 years, was interviewed.

Table 3-2 Student Interviewees' Demographic Information

Student Interviewees' Demographic Information

Category	Subcategory	Frequency (n=14)
Gender	Female	10
	Male	4
Academic Level	Freshman	5
	Sophomore	4
	Junior	3
	Postgradate	2
Major	Finance	3
	E-Commerce	3
	Agricultural Economic	2
	Accounting	1
	Business Administration	5
Geographical Origin (Province)	Shandong	2
		2 (Rural Area)
	Hunan (Rural Area)	1
	Tianjin	2
	Xi'an	2
	Shanxi	2
	Heilongjiang	2
	Guangxi (Rural Area)	1

Thus, see Table 3-2, the study included 14 student interviewees, with 9 from the current CDE course who had finished both the pre- and post-questionnaires. In contrast, the rest had taken the CDE course previously and had not participated in the analysis of Focus Three. Meanwhile, to establish triangulated data sources and increase the credibility and validity of the results (Creswell & Poth, 2018), the research embraced interview data from two instructors and one administrative staff member who were knowledgeable about the CDE course's establishment and the instruction process. This approach allowed the researcher to gain a deepened understanding of this case study and generated a thorough interpretation of the research questions addressed.

The sample size has been a central focus of debate for qualitative studies for years. However, many experienced methodologists and qualitative researchers agreed that the sample size in a qualitative study should not be restricted to a specific number, as in traditional quantitative studies, for generalizability purposes. Instead, qualitative researchers needed to consider the sample size as a parameter for reaching data saturation (Creswell & Poth, 2018; Stake, 1995). This meant the sample size should be determined and settled when no additional significant codes or themes emerge from the analysis process. Moreover, for case study evaluation in particular, Patton stated that the quality of the qualitative inquiry should be judged by "the information richness of the cases selected", not merely by its sample size (Patton, 2015). In other words, the key is to achieve a truly in-depth understanding of the phenomenon with validated and meaningful evidence emerged from triangulated data sources.

Therefore, this case study encompassed three divergent data sources - content analysis, class observations, and interviews with the instructors, current and previous students, and the administrative staff - to establish a triangulated dataset in order to achieve data saturation.

3.4 Focus One: Curriculum Design and Practice, a Content Analysis and Observational Study

Focus One addressed research questions one and two, that is, RQ1 (To what extent do the planned and delivered curriculum of the CDE course align with seven critical factors identified in effective CDE course curricula?) and RQ2 (To what extent does the planned curriculum of the CDE course align with the delivered curriculum?). Meanwhile, the seven critical factors as evaluation criteria were written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support (counsellor support), values clarification, and psychoeducation intervention (details in Section 2.4.2).

Specifically, content analysis was adopted to address RQ1. Both planned and delivered curricula were examined according to the seven critical factors identified in international literature. Class observations, field notes, and reflective memos were adopted to address RQ2. The alignment and difference between the planned and delivered curricula were discussed. Subsequently, along with the delivery process, the established teaching and learning environment was described and interpreted.

3.4.1 Material and Data Collection Procedure

Planned curriculum. The planned curriculum examined was provided by the core instructor of the CDE course, which is officially approved by the Undergraduate School of the university. In 2008, a former associate professor from the BA department designed and structured this curriculum. He followed the guidelines issued by the MoE and adopted the theoretical underpinning of one of the most influential career theories, Cognitive Information Processing (CIP) Theory (Sampson et al., 1992). The curriculum was also constructed with some components based on its textbook, "Career Development and Planning" authored by Reardon et al. (2016). Since

2008, as the curriculum has been approved by the authority, the content has not been revised or updated ever since.

Delivered curriculum. The delivered curriculum was structured by the current core instructor. The evaluated curriculum content was based on the course delivery schedule information the instructor presented at the first session. According to the instructor, the content was revised based on the planned curriculum and the materials he could get access and utilise currently.

3.4.2 Data Collection Procedures

First, content analysis aimed to identify the theoretical underpinning adopted, the strategic toolsets employed, and the critical factors involved in structuring the syllabus. Second, direct class observations were conducted to collect immediate and contextual data. The criteria guiding the protocols for content analysis and class observations were derived from the literature review and the seven critical factors identified (see section 2.4). The researcher undertook seven on-site observations throughout the whole session period. The purposes of the observation were to: a) scrutinise the process of the curriculum delivery; b) observe and identify those critical ingredients required for structuring an effective CDE course; c) understand how the participants interact with each other; and d) evaluate the level of students' engagement regarding their interactions with course contents delivered and with the instructor during each session.

Class observation process. Class observation was permitted by the Undergraduates School and the Dean of this studied faculty. Consent was also obtained from each instructor teaching the session. The curriculum delivery process was recorded by digital video equipment and simultaneously taped by a digital audio recorder for backup. These generated video and audio recordings were extracted from the devices and transferred directly to the researcher's personal computer for later transcription and data analysis, after each session was completed. To analyse

data immediately after recording, video and audio files were imported directly into the qualitative analysis software Maxqda for review and data processing.

3.4.3   Data Analysis Procedures

To address RQ1 and RQ2, which concerned the critical factors involved in the planned and delivered curricula, as well as the actual content delivery practice, both content analysis and deductive to inductive analytic approaches were adopted (Patton, 2015). A list of a priori codes was developed based on the critical factors identified (details in Section 2.4.2). The process began with first-cycle coding to detect patterns and assign codes based on them. Subsequently, second-cycle coding was employed to summarise and generate explanatory themes and categorised phenomena that emerged from data collected through class observations (Miles et al., 2020). Meanwhile, personal communications with key persons for off-record conversations have been conducted during class observations and in the field. In addition, reflective field memos were generated based on the observed and communicated information for later evaluation.

3.5   Focus Two: Instructors' and Students' Perspectives on the Effectiveness of the CDE Course

Focus Two addressed research question three (RQ3): What are the perceptions of students and instructors towards the delivered curriculum of the CDE course? To explore this research question in detail, it investigates participants' (students' and instructors') perspectives separately. It also discussed the emerging themes related to the differing views on the CDE course, along with students' expectations and needs for the course. Specifically, semi-structured interviews were employed to understand participants' perceptions. These interviews, together with class observation data, served as triangulated sources for follow-up questions and provided in-depth insight into participants' interpretations.

3.5.1 Instrument: Semi-structured Interviews

Semi-structured interviews were conducted with 14 students, 2 instructors, and 1 administrative staff member from the faculty. Questions were organised around four particular aspects prior to the commencement of the interview. First, questions seeking basic demographic information were addressed as an icebreaker. Second, inquiries were made regarding participants' expectations and perceptions of the course. Third, the discussion embraced their experiences with the course, including significant moments (positive or negative) noted during the process. Last, questions anchored primarily on the seven critical factors listed in the literature. Participants were asked for their insights on how and why they perceive these factors as practical and efficacious or not in achieving the course objectives. For the interviews with instructors and the administrative staff, demographic questions were omitted. Instead, the focus shifted to the history of the course's development and their insights on the instructional process and content preparation.

In addition, besides the formal interviews conducted, several personal communications and casual dialogues with participants also occurred during the field study.

3.5.2 Data Collection Procedure

To generate rich and thick qualitative data and to further guarantee the possibility of gaining meaningful and trustworthy evidence, this study was designed to utilise multiple sources to collect data and achieve data triangulation (Yin, 2017). For instance, except the interview data, reflective field memos were recorded simultaneously. As emphasised by Miles et al. (2020), the researchers are strongly advised to conduct data collection and analysis concurrently. This practice allowed researchers to understand their data iteratively, generating new insights and appropriate strategies to collect "new, often better data" (p. 117). Therefore, during the data collection period in the field, the researcher maintained this practice, processing the data and reflecting on it simultaneously.

Collecting data. Semi-structured interviews were conducted with targeted students and its instructors after the course was completely delivered.

Conducting the interviews. For student interviews, each was conducted at a coffee shop located outside and nearby the campus, to protect their privacy and for their convenience. For instructor interviews, based on their requests, one was conducted in the core instructor's office and another in a meeting room, both within the faculty building. The interviews were recorded with an audio recorder, as informed, and permitted by each participant before it started. These recordings were subsequently extracted and saved to the researcher's computer directly after each interview was completed. Pseudonyms were assigned to each interviewee, with their real names coded and stored in a separate file linked to their assigned pseudonyms. The interview data were transcribed solely by the researcher. Each transcript was checked and proofread for data accuracy and for the later coding process.

Interview Protocol

The interviews were arranged after the course had been completed and the time was agreed upon with each interviewee. Typically, each interview lasted for one hour, with some extended up to three hours. Before each interview began, the researcher briefly introduced the purpose of the study, and outlined the topics that might covered during the interview process. Additionally, the researcher clarified and assured confidentiality for any information shared by the interviewee. They were further reassured that they could speak freely and express their genuine feelings and viewpoints based on their understanding and experience concerning the discussed topics. Finally, a consent form was offered for review, and permission was obtained before beginning the formal interview process.

The semi-structured interview began with questions inviting interviewees to share general

information about their majors, hometowns, and university life. The purpose of this was to alleviate their nervousness and establish a friendly rapport with the participants, thereby creating a relaxed atmosphere to comfortably discuss their views on the questions asked later. At the conclusion of each interview, the researcher conveyed her gratitude and thanked for their time and effort. The researcher also reflected on and wrote memos about her insights and impressions from the interactions.

3.5.3   Data Analysis Procedure

Once the interview data and observation data were freshly collected, they were immediately imported into the analysing software Maxqua for the initial raw data transcription. Simultaneously, field notes and reflective memos were written to record the researcher's first impressions of the data. The purpose was to describe the data with flesh memory and to facilitate further data processing and sense-making at later stages of analysis.

To explore the participants' perspectives of the CDE course, and to further understand their experiences throughout its delivery process, first-cycle and pattern coding processes for data sense-making and categorising explanatory codes were adopted. Additionally, the researcher extensively utilised the analytic memoing strategy. As indicated by Saldaña (2021), analytic memo writing should not merely describe the collected data or serve as extended reflection by the researcher. It should also focus on "researcher reflexivity on the data corpus" (p. 132). The purpose was to critically and systematically reflect on the data corpus, connect frustrated puzzles, find possible solutions, generate insightful explanations, or prompt future directions. Thus, as a research diary, this process assisted the researcher in teasing out strands and generating a more dynamic understanding of the data, the participants, and the context of this case study.

These emerged themes were categorised based on the literature reviewed and the evaluation

framework structured. Further, each theme was interpreted with supporting evidence extracted and synthesised from the data cohort.

3.6   Focus Three: A Pre-Post-Test Study on the Effectiveness of the CDE Course

Focus Three addressed research question four (RQ4): How does the CDE course affect students' career planning and career exploration behaviours, career decision self-efficacy (CDSE), and career adaptability? The questionnaire used was modified by four specific scales that measure the career-relevant competencies as benchmarks.

3.6.1   Sample Demographics

In this sample data, 74 pre-tests and 49 post-tests were collected, with 45 (90%) of them completing both the pre- and post-test. Thus, only those who completed the questionnaire at the two time points were included in the data analysis process. The students' mean age was 19.16 (SD=1.09). Thirty-three (73.33%) students were female, and 12 (26.67%) were men. Thirty-four (75.56%) students were freshmen, 3 (6.67%) were sophomores, and the remaining 8 (17.78%) were juniors. Among these students, 14 (31.11%) were reported to be majoring in Finance, 18 (40%) in E-Commerce, and 13 (28.89%) in Business Administration (BA). In terms of their parents' highest education level, 14 (31.11%) reported their parents had middle school education, 12 (26.67%) had high school education, 15 (33.33%) had a bachelor's degree, 2 (4.44%) had a master's degree, and the remaining 2 (4.44%) reported unknown. Regarding their reported family income range (monthly), 26 (57.78%) were from the range ¥3001 to ¥10000, 12 (26.67%) from ¥10001 to ¥20000, 3 (6.67%) from the range ¥20001 or above, 2 (4.44%) from the range ¥3000 or below, and the remaining 2 (4.44%) reported unknown.

3.6.2   Instruments

To address RQ4, a questionnaire was collected at two-time points: the first session (pre-test) and

the last session (post-test) of the CDE course. The questionnaire comprised two parts: one containing demographic information of students, and the second combining four existing measurements, the Career Adapt-Abilities Scale- China Form (CAAS-CF), Career Decision Self-Efficacy- Short Form (CDSE-SF), Career Exploration Survey (CES), and Career Planning Scale (CPS).

Career adaptability was examined by adopting Career Adapt-Abilities Scale- China Form (CAAS-CF). It has been adapted by Hou et al. (2012) from the original version developed by Savickas and Porfeli (2012). Furthermore, Hou et al. (2012) reported that the China Form substantiated its internal consistency following its theoretical model and is consistent with the linguistic terminology of the four adaptability resources. Moreover, the China Form Scale has been popularly practised among Chinese undergraduates and employees to measure their career adaptability and testify predictors or outcome variables associated with career adaptability (Cai et al., 2015; Guan et al., 2013; Guan et al., 2018). These further confirmed the applicability of the scale to practice with Chinese populations. For previous studies, the reported global indicator with Cronbach's alpha ranged from .92 to .94. For the present sample, Cronbach's alphas were .88 (post) for concern, .92(post) for control, .88 (post) for curiosity, .87 (post) for confidence, .92 for total.

The scale measures career adaptability through 24 items categorised in four dimensions: concern (e.g., "Thinking about what my future will be like"), control (e.g., "Taking responsibility for my actions"), curiosity (e.g., "Exploring my surroundings"), and confidence (e.g., "Performing tasks efficiently"). The scale uses a 5-point Likert-type that ranges from 1 (not strong) to 5 (strongest), and participants will report on all items individually. The scale was measured at two points: the first at the beginning of the first session of the course (pre-test) and the second at the end session of the course (post-test). According to the theoretical framework, the study considers career

adaptability as a higher-order construct (Savickas, 2013) and the four dimensions are highly intercorrelated. However, referring to the current study design, to detect the nuanced changes in each dimension, each sub-score was analysed and discussed separately.

Career decision self-efficacy was evaluated with the Career Decision Self-Efficacy Scale- Short Form (CDSE-SF) developed by Betz et al. (1996). The scale is made up of 25 items, including items such as "Determine what your ideal job would be", and participants need to report on a 5-point Likert-type scale ranging from 1 (not confident) to 5 (complete confident). The scale was established and grounded in the social cognitive theory and used the concept of self-efficacy generated by Bandura (1986). Also, the scale comprises five career decision-making competencies formed by Crites (1978), viz accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem-solving. This scale has been testified by enormous empirical research using the Chinese population (Cai et al., 2015; Creed et al., 2009; Wu et al., 2020; Xue & Rojewski, 2018) and provided with Chinese translated version by the original developers. According to these previous studies, its reported Cronbach's alpha was ranged from .88 to .95 for the total score.

Career exploration was measured using Career Exploration Survey (CES) developed by Stumpf et al. (1983). The survey contains 11 items and includes both self-exploration (SE) and environment exploration (EE) scales. There are 6 items to measure the exploration activities regarding jobs, occupations, and organisation in the past three months. In contrast, the other 5 items measure the self-exploration activities, including self-assessment and self-reflection in the past three months. Participants need to rate each item on a 5-point Likert-type scale, ranging from 1 (little) to 5 (a great deal). Xu (2008) developed the Chinese version of the CES, and further empirical research has validated the reliability of measuring career exploration among Chinese

undergraduates (Xu et al., 2014). In Xu's study, the revealed Cronbach's alpha for each subscale was .87 (EE) and .79(SE).

Career planning was examined by employing the 6 items scale, i.e. Career Planning Scale (CPS), developed by Gould (1979). Sample items include "I know what I need to do to reach my career goal" and "I have not really decided what my career objectives should be yet (reversed score)". Participants reported on each item as 6-point Likert-type, from 1 (strongly disagree) to 6 (strongly agree). The validity of the scale has been testified in previous empirical research (Hirschi et al., 2015; Taber & Blankemeyer, 2015). However, this scale has not been used in the Chinese context previously. This study produced a Chinese version of the scale and test its applicability among undergraduates in China.

In addition, two confounding variables were presupposed and considered in the data collection process, namely, gender and socioeconomic status. The socioeconomic status was reported by indices of the parent's highest education level and family income range.

3.6.3   Data Collection Procedure

A pre-post-test design was adopted in this study. According to the sample demographic information, students from the E-commerce major constituted over 80 percent of the students in this CDE course. In this case study, finding a comparable sample population as a control group was unrealistic. Meanwhile, this CDE course was this faculty's sole career development specific curriculum. For these reasons, no control group was adopted in this study. Furthermore, as the pre- and post-test scores were obtained from the same individuals, a paired *t*-test was used for data analysis.

Inviting students and administering the questionnaire. At the first session, the researcher briefly presented the purpose of the study and introduced the objectives of the questionnaire, inviting students to participate. The research study and the accompanying questionnaire had been

authorised by the dean of this faculty and the core instructor of the course. Due to time constraints and technological concerns, the questionnaire was designed in a pen-and-paper format. To ensure voluntary participation, each student received a consent form alongside with the questionnaire at the beginning of class, and they could choose to accept the invitation to complete it. Then, they could submit it directly to the researcher during the break. This procedure was repeated for the second time collection at the last session.

After the questionnaires were completed at each time point, the data were extracted and entered into an Excel file by the researcher alone. Only those who completed and submitted both the pre- and post-surveys were included into the final dataset and were coded with pseudonyms. Once the Excel file was properly organized, the dataset was imported into SPSS for further analysis.

3.6.4 Data Analysis Procedure

To address RQ4 and investigate changes in the variables made by students before and after taking the course, paired sample *t*-tests were conducted for each item individually. Given the single-case study approach and considerably smaller sample size involved, the study deems the results of the paired t-test as statistically significance at the level of $p<.05$. However, exact p value for each item was reported in the result tables. Additionally, the reported p values were calculated by two-sided tests, as the study did not presume the changes of test scores would be solely positive (details in Chapter 6).

Meanwhile, effect size was calculated and reported using Cohen's *d*. This study followed theoretical guidelines for interpreting the magnitude of Cohen's *d* in terms of practical significance of the study findings. As Cohen (1988) stated, a small effect size ($d = 0.2$) indicates a small but possibly trivial change; a medium effect size ($d = 0.5$) indicates a moderate but noticeable and possibly meaningful change; and a large effect size ($d = 0.8$) indicates a large and substantial

change.

Additionally, based on a power analysis conducted using G*Power software (Faul et al., 2009) with an alpha level of .50 (two-tailed) and a statistical power of 0.80, detecting a large effect size ($d = 0.8$) required a minimum of 15 students, a medium effect size ($d = 0.5$) required approximately 34 students, and detecting a small effect ($d = 0.2$) required a larger sample size (approximately 199). Thus, with current sample of 45 students, the study was adequately and reliably powered to detect medium and large effects, ensuring robust statistical validity and practical significance. Although this sample was insufficient for detecting small effects, supplementary qualitative data analysis was employed to triangulate the findings and elucidate nuanced impacts, thereby enriching the interpretation of the quantitative results.

Furthermore, since the data came from the same sample (pre- and post-tests were conducted with the same individuals), the assumption of homogeneity of variances does not require to be considered or tested.

Moreover, in line with previous research, there were inconsistent findings regarding the differentiated level of competencies from career development perspectives caused by gender differences (Ho et al., 2018; Liu et al., 2014). Additionally, scholars argued that socioeconomic status (SES) affects students' perspectives and self-efficacy toward career decision-making activities in the Chinese context (Hsieh & Huang, 2014; Wu et al., 2020).

However, after analysing the students' demographic data, the distribution of SES was convergent to similar categories, and only roughly one-fourth of the students were male. Thus, theoretically, the sample was not eligible to control these factors as biases. Therefore, the results were obtained using a paired *t*-test alone.

3.7   Protection of Human Participants and Ethical Considerations

In accordance with the guidelines and regulations of the Human Research Ethics Committee (HREC) at the researcher's institution, the study adhered to all ethical considerations to protect and respect the rights and confidentiality of participants. To ensure fair recruitment and voluntary participation, the researcher emphasised participants' rights to engage or decline to participate voluntarily during the brief session and within the consent form. It was clearly stated that participants were free to withdraw from the study at any time, whether before, during, or after the data collection procedure was completed, without any consequences for declining or withdrawing. The consent form was included as the front page of the questionnaire. Additionally, the consent form was provided to interviewees before officially commencing the interview.

Each student received a voucher of 25RMB for the T-Mall online shop upon completing both pre- and post-questionnaire as compensation for their time and effort. Interview participants received a voucher of 100RMB for the T-Mall online shop to compensate for their extra time and effort devoted to the study.

Basic personal and demographic information was requested at the beginning of the questionnaire. Although some identifiable information, such as names and student ID numbers, was collected, the researcher ensured that this information was immediately coded with numbers and stored in a separate file after being collected. These files were only accessible to the researcher and solely for the purpose of the research. For the interview data, all interviewees were referred to using pseudonyms when quotes were cited in the results.

3.8   Role of the Researcher

This study embraced a mixed-method approach as its research design. The purpose was to investigate the practical effectiveness of a CDE course and the quality of its implementation within

a specific educational context in China, particularly in a university teaching environment. Consequently, the qualitative inquiry part of this study was a primary approach to understanding and perceiving the experiences as interpreted by both the instructors and the students. As asserted by many qualitative theorists, particularly Stake, the role of the researcher in qualitative study is pivotal (Stake, 2010). From his statement, it is clear that the researcher functioned as the instrument during data collection process.

The interpretation and empathic understanding of the researched participants, the context, and the case study's situation enable the researcher to generate a thick description of the case study as valuable results (Stake, 2010, pp. 36-50). Thus, scrutinising the subjectivity held by the researcher is essential. It is important to outline the strategies the researcher intends to adopt for avoiding any potential biases, misunderstandings, omitted details, or stereotyped descriptions that might be unconsciously influenced by her subjectivity, thereby compromising the creditability of the findings.

The researcher worked as an administrative staff member at this targeted faculty for over eight years. She was responsible for curriculum management and student development affairs for two professional master's programmes. Additionally, she undertook tasks related to undergraduates' management and affairs during this period, especially for one class of students majoring in Business Administration and another in E-Commerce. Throughout her interactions with undergraduates and postgraduates, the researcher witnessed their eagerness to learn about career skills emphasised by future employers and strategies to make satisfying career decisions. In contrast, through her daily interactions with the instructors of the studied course, as her former colleagues, she also observed the limited career guidance and CDE services students received during this process. Therefore, this was the original impetus for the researcher to consider what

factors or components in the current CDE course might essentially affect students' career development mindsets and skills.

During her working experiences, the researcher strived to gather career-related resources and provide her students with as much careers assistance as possible to help build their self-understanding and make appropriate career decisions. Thus, the researcher might have preconceptions regarding career education and career guidance based on her subjectivity and personal characteristics. For example, under her assumptions, fundamental knowledge of career decision-making and theoretical principles of career planning should be emphasised the most during CDE. However, since the current students are all from Generation Z, their learning preferences, growing environments, and expectations towards their future careers might be completely different from those of the researcher's generation.

Therefore, the research kept several prompts in mind to continuously scrutinise her presupposed subjectivity, interpret the data, and comprehend the participants' experiences as accurately and empathically as possible. She also adopted several strategies for collecting and analysing the data. First, she used triangulated data sources to increase the confidence in data interpretation. Second, she remained open-minded and did her best to be empathic with any insights and experiences shared by the participants. Lastly, she carefully deliberated the contexts and situations of the case study as background information, considering them as factors during the analysis process and as part of the specific characteristics to understand the data.

With the realisation of the subjectivity held by the researcher and the continually scrutinised mindset and strategies adopted, the researcher aims to comprehend and present as accurate, creditable, and unbiased an interpretation of the case study as possible during the research process.

3.9   Data Translation Process

The process and strategies adopted for data translation need to be elaborated. The aim was to demonstrate how the original data were analysed and how codes and themes were derived from native language to the reported language. This section also outlined the steps and strategies the researcher used to ensure the quality and accuracy of the translated data corpus, thereby enhancing the reliability of the translation and trustworthiness of the research findings.

As the case study was centred on a CDE course taught at a Chinese university, where Chinese was the medium of instruction, all documents reviewed, data collected from the field, and interviews were originally in Chinese. Consequently, adhering to the rigorous research and data translation standards for qualitative studies conducted in native language, as outlined by Abfalter et al. (2020), a specific translation process was undertaken.

All participants were native Chinese speakers, generally educated with Chinese as the medium of instruction. The researcher, also a native Chinese speaker, is proficient in both Chinese and English. Since both the researcher and the participants naturally use Chinese for their daily communication, all the interviews were conducted in their native language. Because the qualitative inquiry aimed primarily to understand participants' personal perspectives and perceptions concerning the course they experienced, a substantial portion of the data pertained to nuanced and intuitive interpretations. Therefore, during the analysis process, a hermeneutic approach was utilised. The researcher iteratively analysed the original texts, extracting codes and themes directly in English. At this stage, all generated codes and themes, along with summarised transcriptions, were regularly discussed with two bilingual professional analysts: one specialised in Comparative Education and the other in English and Sociology. This ongoing dialogue and reflection helped minimising potential translation errors and prevent distortion of the original texts (Abfalter et al., 2020). In the final

stage of compiling the study, and given the time constraints, the researcher translated only selected quotes involved in the results section. To further reduce the possibility of misinterpreting the meaning and discourse of the participants, these translations were subsequently reviewed and discussed for potential revisions between the two professionals and the researcher.

In conclusion, given that qualitative data constituted the majority of the dataset, the translation process was approached with extra sensitivity to ensure that participants' intended meaning were accurately represented and interpreted. These aforementioned steps were essential to ensuring the validity and trustworthiness of the findings presented.

3.10 Summary

CDE has been a pivotal aspect that HE institutions strive to facilitate among emerging adults and the future employees, as endorsed by China's economic status and society as a whole. In response to the rapidly changing contexts and modalities of diversified emerging careers, competencies in career planning and employability enhancement have become paramount skills necessary throughout one's life. Furthermore, the current generation of students holds a firm perception and awareness of the need to plan their future careers in advance and pursue a satisfactory life (Schwieger & Ladwig, 2018). This awareness is predominantly shaped by heightened competitiveness in the current labour market, the surging unemployment rate, and the information explosion in their daily lives.

As a result, students need assistance in career guidance and counselling more than ever. Thus, it is imperative to investigate the effectiveness and quality of current CDE courses offered to them. Some empirical studies have been conducted to investigate the effectiveness of and compare different teaching approaches for CDE courses among different cohorts of Chinese undergraduates (Cheung & Jin, 2016; Jin et al., 2021; Peng & Lin, 2019). Nonetheless, there seems to be a lack of

research targeting the exploration and investigation of factors perceived as essential components in CDE courses from students' perspectives.

Hence, this study aims to fill these research gaps by adopting a mixed-method design to collect and analyse qualitative and quantitative data. Through detailed methodological approaches and procedures, the three focuses of analysis aim to systematically evaluate the effectiveness of the CDE course. Specifically, Focus One evaluates the alignments and differences between the planned curriculum, the delivered curriculum, and the critical factors identified in the literature. Focus Two explores the case study through the perspectives of students, instructors, and the administrative staff, examining how and why they perceive the course as effective. Finally, Focus Three investigates the course's impact on students' attainment of career-relevant competencies. It also serves as a triangulated source to support or explain the findings obtained from the other two focuses of analysis.

In the following chapters, three focuses of analysis were conducted to address targeted research questions. The respective findings from Focus One to Focus Three will be detailed.

Chapter 4   Results – Focus One: Curriculum Design and Practice, a Content

Analysis and Observational Study

This chapter aims to evaluate the alignments and the differences among the planned curriculum, the delivered curriculum, and the seven identified factors in structuring the current CDE course. It also seeks to understand how these factors are intertwined and delivered by the instructors in practice. Accordingly, this section specifically addresses the RQ1 and RQ2 of the thesis. This study used content analysis, on-site class observations, and reflective memos to generate results. Content analysis was conducted to examine the curriculum's structure and identify each factor indicated therein. On the other hand, class observation aimed to triangulate the actual practice of these factors in the content delivery process and to understand the observed responses of students to these factors in practice. Additionally, the reflective memos recorded during the process facilitated the systematic analysis of the data gathered and identified the themes that emerged.

4.1   The Planned Curriculum

This section addresses the first research question (RQ1). It aims to examine and compare the alignment of the planned curriculum with seven critical factors identified as criteria of effectiveness. These critical factors encompass written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support (including working alliance), values clarification, and psychoeducation intervention.

Table 4-1 The Designed (Planned) Curriculum and Identified Critical Factors

The Designed (Planned) Curriculum and Identified Critical Factors				
Course Module	**Course Content and Suggested Teaching & Learning Activities**	**Credit Hours**	**Course Intended Learning Sub-objectives**	**Identified Critical Factors (Criteria)**
Introduction	The objectives of the course, the content, and the assessment requirement	1	a	Self-awareness/ Values Clarification/

The Designed (Planned) Curriculum and Identified Critical Factors				
Course Module	Course Content and Suggested Teaching & Learning Activities	Credit Hours	Course Intended Learning Sub-objectives	Identified Critical Factors (Criteria)
	Up-to-date occupational information and employment polices			Occupational Information
Self-Awareness	Instruction on MBTI personality test concept	4	a	Self-awareness/ Values Clarification
	Class activity: Analysing personal characteristics and exploring possible career options; Group discussion for sharing personal resume			
Career Exploration	Career professionals interviewing; Visiting career job fairs; Participating in at least one internship experience	6	b	Modelling/ Values Clarification
	Class activity: Group discussion and previous internship experiences sharing			
Career Planning	CASVE cycle, SWOT analysis tool, Dinklage's decision-making styles, and the Five-step model for career planning	8	c	Psychoeducation Intervention/ Values Clarification
	Class activity: Applying these toolsets to analyse personal career choices and designing personal career planning diagram			
Career Development Competencies	Career development competencies enhancement	5	d	Self-awareness/ Psychoeducation Intervention/ Modelling
	Class event: Inviting guest speaker sharing their career stories			
Course Assignments	Written Exercise: 3000 words report regarding personal career planning in the next 5 years	NA	a & b & c & d	Written Exercises
	Role model interviewing exercise	NA		Modelling/ Values Clarification

Upon initial examination, and as illustrated in Table 4-1, the planned CDE curriculum appears to

be structured based on theoretical underpinning, and its designated content seems aligned with the

general criteria reported and formulated for effective CDE courses in the literature. As the

curriculum clearly indicates, its overarching aim is to prepare students' readiness for the school-

to-work transition and to develop adaptability for coping challenges after entering the social and working environment. To achieve this overarching objective, it further designates four sub-objectives to cultivate students with knowledge and methods of developing their career planning competencies, alongside practical activities, to equip them with strengths needed to adapt to their future career roles.

The four delineated sub-objectives are: a) Establishing self-awareness: to foster students with knowledge of self-awareness, by using tools such as the Myers-Briggs Type Indicator (MBTI) personality test and resume design strategies to explore potential career inclinations and future directions (Self-awareness); b) Career exploration, involving activities such as interviewing professionals, attending job fairs, and participating in internships to establish appropriate career outlooks, perspectives for job choices, and an understanding of career success (Modelling/Values clarification); c) Gaining skills for analysing personal career paths and strategies for decision-making. This refers to learning decision-making strategies such as the CASVE (Communication, Analysis, Synthesis, Values, and Execution) cycle from Cognitive Information Processing (CIP) theory, the SWOT (Strength, Weakness, Opportunity, and Threat) systematic analysis tool, and Dinklage's decision-making styles (1968), to evaluate one's internal and external factors for certain career choices (Psychoeducation intervention); d) Enhancing career development competencies (e.g. interview skills, CV design, and occupational information exploration, etc.), referring to cultivating proactive attitudes and behaviour for gaining relevant career capabilities and developing realistic perceptions about oneself, future career, and satisfactory life goals (Self-awareness/Values clarification).

Moreover, the planned CDE curriculum continues with a detailed instructional plan for each section, spanning a total of eight sessions. For instance, the first and second sessions cover

providing students with up-to-date occupational information and employment policies (Occupational information), and explaining the concept of the MBTI personality test, along with practice for personal personality analysis (Self-awareness). The third and fourth sessions include class activities such as sharing students' resumes, group discussions on reflections and findings from interviewing professionals in participants' chosen career fields, and sharing experiences related to previous internships or relevant activities (Occupational information/Psychoeducation intervention). The plan for fifth and sixth sessions involves activities to practice and apply the above-mentioned toolsets of career decision-making for analysing personal career goals and designing their own life diagrams or career plans (Values clarification/Psychoeducation intervention). Finally, the seventh and eighth sessions integrate knowledge about enhancing career developmental competencies and establishing career ethics, along with inviting guest speakers to share their experiences on certain topics (Modelling). Additionally, the course assessment requires each student to submit a written report of at least 3000 words regarding their future career plan, serving as the course completion assignment (Written exercises).

Hence, throughout its structured curriculum, it seems that, except for the individualised interpretation and feedback, and attention to building support (Counsellor support), the remaining five critical factors have been constructed and serve as fundamental elements to achieve the course objectives gradually and systematically. Notably, it appears that three components are emphasised and comprised most of the credit hours (19 out of 24), specifically, career exploration, career planning skills, and career development competencies. In other words, and in accordance with the aforementioned arranged session content, the course curriculum underscores the importance of occupational information, psychoeducation intervention, and values clarification.

Notwithstanding, from the perspective of engaging students with methods and activities to acquire knowledge of career planning and skill sets, the approaches to facilitating them with more proactive attitudes and behaviours towards their future career planning were not explicitly demonstrated in the curriculum. In turn, the intention to foster students with realistic and appropriate values and beliefs about themselves, their career choices, and their long-run success was not specifically allocated with content, methods, or exercises for enhancement.

4.2 The Delivered Curriculum

Section 4.1 discussed the planned curriculum through content analysis. Section 4.2 will discuss the delivered curriculum using content analysis and direct class observations. This section addresses the second part of the first research question (RQ1). It aims to observe and examine the delivery process of the curriculum, comparing it with the criteria set in the study. This involves first describing the content planned by the instructors for delivery, followed by an evaluation of actual delivery process. More importantly, it explores whether the seven identified critical factors are reflected in the teaching materials or within the delivery process.

4.2.1 The Intended Simplified Curriculum

This CDE course comprised seven sessions in total, not eight as structured and planned in its syllabus. Throughout the class observation process, it was evident that the course centred on content that was guided and structured based on a diagram. This diagram was presented by the instructor in almost every session. The diagram is illustrated as flows,

As showed in this diagram, there are five components highlighted, namely, "self-understanding" (知己), "comprehensive understanding of the employers and the labour market environment" (知彼), "career choices" (选择), "career goal setting" (目标), and "taking action" (行动). Accordingly,

as the instructor presented the course's arrangement at the first session, its content was initially

planned based on this diagram and the themes illustrated in it.

The following table (4-2) demonstrated the intended but simplified curriculum by the core

instructor. Meanwhile, it also indicated the identified critical factors based on the content.

Table 4-2 The Intended Curriculum and Identified Critical Factors

The Intended Curriculum and Identified Critical Factors			
Course Module	**Course Content**	**Class Sessions**	**Identified Critical Factors (Criteria)**
Introduction	Success starting from planning for your life and career	1	**Occupational Information**
Self-awareness (知己)	Building Self-confidence: self-awareness recognition (What do I want to do? What can I do?)	2	Self-awareness
	Self-understanding: Occupational psychology exploration (What am I suited to do? What fundamentally motivates the selection of a certain profession?)	3	**Values Clarification**
Career Exploration (知彼)	Career Exploration: Experiencing the work world	4	**Occupational Information**
Person-Job Fit (人职匹配)	Career Decision-Making Strategies	5	**Psychoeducation Intervention**
	Taking Action: Changing from now on	6	**Occupational Information**
Personal Growth & Re-evaluation	Extra-curriculum Activity: Interviewing professionals from career domain interested you	7	**Modelling/ Psychoeducation Intervention**
	Course Assignment: My career plan		**Written Exercises**

At the first session, the instructor elaborated on his plan for the content delivery. The first class

served as the introduction to demonstrate the reasons why students should be concerned with issues

of career planning. The second and third sessions focused on the first component, viz, self-

understanding or self-awareness, and titled 'self-confidence building and self-understanding

exploration', respectively. Based on a detailed demonstration, the content stemmed from the five-step career planning model and was structured to address two steps within it: reflecting on and sorting out what one wants to do since childhood, and the jobs suited for and supported by one's current condition, both personally and environmentally. The fourth session emphasised the component of a comprehensive understanding of the work world. It was planned to explore career information and experience scenarios to broaden students' perspectives and horizons regarding their future career. The fifth and sixth sessions, emphasised as the person-job fit section, assigned content for learning career decision-making strategies and taking action for career goals. Lastly, the seventh and eighth sessions, entitled 'personal growth and re-evaluation', referred to extracurricular activities (interviewing professionals from students' desired career fields) and a course assignment (write a personal career plan).

Therefore, according to the intended curriculum presented and scheduled, it seems the instructor structured it based on his own understanding of the subject and the knowledge obtained from textbooks. Despite this, there was a noticeable lack of detailed elaboration on methods or approaches for building self-awareness and self-confidence. Also, it did not list specific decision-making strategies or outline activities for career exploration. Nevertheless, the instructor appeared to have covered most of the components from the initial designed curriculum, except for the last module. This final module, which concerned the acquisition of career development competencies, was not addressed.

Specifically speaking, and comparing Table 4-1 and Table 4-2, there were two main aspects omitted in the simplified curriculum. Firstly, the simplified curriculum omitted the component in the planned curriculum regarding self-awareness. This component refers to introducing and instructing the MBTI personality test and class activity, engaging students to share and discuss

their career thoughts and plans for interaction. Secondly, it omitted the parts regarding career decision-making strategies and relevant class activities. In this simplified curriculum, the instructor ambiguously structured these contents into two sessions without a detailed demonstration of strategies or exercises that would be applied during delivery. It omitted the theoretical factors and original planned strategies and approaches adopted in the curriculum (details in Table 4-1).

4.2.2 The Delivered Curriculum

Nonetheless, throughout the observation period, it appears that the instructors did not deliver the content that coincides with what was presented at the first session. The course was conducted by four instructors: the core instructor. Zhu (session 1, 3, 4, and 7), followed by three co-instructors, Long (session 2), Tong (session 5), and Cheng (session 6). According to personal communications with all instructors, it seems that Instructor Tong and Cheng have been participating in teaching the course for years, since Instructor Zhu began teaching it. However, each only undertook one session per semester, with fixed teaching content related to their daily job duties. Tong was responsible for sharing her personal overseas study experience in Europe, providing information on overseas master's degree admissions and applications, while Cheng shared information regarding government servant employment applications. On the other hand, Long was undertaking the instructional task for the first time, as he is new to the faculty and oversees students' career development and employment affairs. Thus, with only the session themes outlined, the actual content structure was largely dependent on the specific instructor who prepared and delivered it. Consequently, compared to the planned course content by the core instructor, three significant content deficiencies have emerged from the actual content delivery process.

Table 4-3 The Delivered Curriculum and Indicated Aspects of Identified Critical Factors

The Delivered Curriculum and Indicated Aspects of Identified Critical Factors			
Subject	**Course Content**	**Session**	**Identified Critical Factors (Criteria)**
Introduction	The introduction of the purpose for career planning	1	Career Planning Skills
	Postgraduates Applications and Examinations Information		**Occupational Information (Postgraduates)**
	Career Planning Procedures		Career Planning Flowchart
	Anecdotal examples of others' career experiences shared		Experiences Sharing
Self-confidence Building	Conceptual Information of Self-confidence	2	Theoretical Information
	Class Activity 1: Self-portrait		Self-understanding
	Class activity 2: Write one complimentary comment to each group member		Self-Confidence Building
Career Analysis	The Current Status Quo of China's Labour Market Issues	3	**Occupational Information (Environmental)**
	Conceptual Facets of Career Exploration		Career Exploration Aspects
	Anecdotal Videos of Labour Market and Others' Career Plights Sharing		Environment Exploration Aspects
	Written Exercise: Reflect on your perception regarding the major and expectation towards your future career		**Written Exercises**
Labour Market Analysis & Career Interview Skills	Phenomenon of the Downsizing Trend in Current Labour Market	4	**Occupational Information (Environmental)**
	Macroscopic Perspectives on Avoiding being Downsized in the Future		
	Introduction of Job Interview Styles		Career Interview Skills
	Class Activity 3: Self-introduction		
Overseas Study Experiences Sharing	Postgraduates Study in France	5	**Modelling**
	Pathways for Preparing Postgraduates Programme Admission		**Occupational Information (Postgraduates study application)**
Goal Setting & Taking Action	Career Planning Factors Review	6	Career Planning Flowchart
	Requirements and Pathways for Government Servant Employment Applications		**Occupational Information (Government Servant)**

The Delivered Curriculum and Indicated Aspects of Identified Critical Factors			
Subject	**Course Content**	**Session**	**Identified Critical Factors (Criteria)**
Career Planning	Guest Sharing: Human Resources Manager from an Electrical Equipment Firm	7	**Modelling**
	Occupational Information Sources (Official Websites)		**Occupational Information (Sources)**
Assignments	Extra-curriculum Exercise: Interviewing role model who worked in your interested professional fields	NA	**Modelling**
	Written Exercise: My career planning report		**Written Exercises**
Note. The components involved or indicated as identified critical factors are illustrated in red and bold font. Others, in standard font, indicate the non-identified critical components but were included in this particular CDE delivered curriculum.			

Table 4-3 illustrates the detailed content of the delivered curriculum. Meanwhile, the included CDE factors (non-identified) and those identified as critical factors for evaluative criteria were also demonstrated. According to the theoretical definition of the seven critical factors previously described (see Section 2.4.2), three misalignments between the delivered curriculum and the effective CDE course curriculum were assessed and interpreted.

4.2.2.1   Gap in Guidance: The Absence of Methods to Foster Self-awareness in Instruction

Self-awareness is highlighted as a component in both the designed and intended curriculum. However, during the delivery process, methods or activities regarding instructing and exercising self-awareness or exploring career possibilities appeared nonspecific or omitted. Based on the presented designed and intended curricula (see details in Table 4-1 and Table 4-2), the second and third sessions should involve teaching materials that foster students' self-confidence through self-awareness. Additionally, the designed content needs to include class activities for exploring self-understanding through analysing occupational information and practicing values clarification.

Nonetheless, in practice, the second session merely included some basic demonstrations of concepts regarding the importance of building self-confidence and the factors that comprised it. In addition, two class activities were involved: one for self-portrait, and another for group activity, which required each group member to write complimentary comments about the impressive characteristics of all other members. Nonetheless, neither of the activities was described or addressed with clear instructions and objectives as a precondition. Hence, almost all participants practiced without the mindset to consider aspects that relate to reflecting on and seeking understandings of oneself or others with respect to career-beneficial factors.

During the third session, instead of facilitating participants to practice and generate a deepened understanding of oneself through the designed approaches, the actual content referred to lecturing on general trends in the labour market and indicating facets for exploring the career environment in broad terms. Meanwhile, while demonstrating facets of career environment analysis, the instructor mentioned two critical factors that participants should consider when analysing their own career choices. These are the personal values and beliefs, and the attention to building support. However, the demonstration did not include any further activities or opportunities for participants to understand how they might identify their values and beliefs in relation to their career or success, nor were there exercises on building supportive relationships.

Thus, without specific methods adopted and structured hands-on exercises to practice with, participants may find it difficult to grasp practical approaches for self-awareness, or to connect the content for self-practice afterward. Therefore, the sub-objective of fostering participants' self-awareness would be disrupted.

4.2.2.2   Focus Shift: From Career Exploration to Analysing Labour Market Issues

Career exploration is another component that stands out in the syllabus and is emphasised in the planned content. Notably, for most career education courses, career exploration is a predominant facet that cultivates and facilitates students with clearer views of professions they are interested in. In turn, it helps them decide on distinct career option to pursue further. Based on the theme of fourth session, the content was planned to lead participants to explore occupational information and experience authentic scenarios in the work world. However, in practice, three aspects of information were taught during this session: a) the phenomenon of the downsizing trend in current labour market; b) macroscopic perspectives on avoiding being downsized in the future, and c) a brief introduction to job interview styles. Admittedly, the content presented and delivered were not associated with the set sub-objectives.

In addition, the instructor expended most efforts in explaining the industries, jobs, and personal characteristics that might be targeted for downsizing in general terms. Evidently, this was also the part where participants demonstrated the most disconnection and non-engagement with the instructor. On the contrary, after the instructor turned to instruct on styles and forms of job interviewing, some participants showed a bit more attention to the content than at the beginning. It appears that participants were selectively engaged with the content whenever they felt it was necessary. Moreover, during this part of the session, one class activity was conducted, where participants were invited to find partner and pair up to conduct personal introduction to each other. Still, the instructor did not specify the purpose and the key points to be included in the personal introduction. Thus, for most participants, the activity turned into a small chat between them. Therefore, it is evident that this session did not offer participants the methods and opportunities to explore different occupational information or to experience real scenarios they might encounter in

the work world as planned. In contrast, the content delivered did not seem to resonate with the audience according to their observed reactions.

4.2.2.3 Overlooked Elements: The Lack of Emphasis on Career Decision-making Strategies

The career decision-making strategy is central and functions as the analytical toolset for making sense of career choices and setting goals to further action within each career development intervention. Hence, as indicated in the syllabus, it emphasised and specified several methods in detail to equip students with skills for analysis and practice to reach an appropriate career choice. Albeit the planned content did not describe particular strategies to be taught explicitly, nevertheless, it scheduled and allocated two sessions (5 & 6) to demonstrate pertinent methods and practices regarding this subject.

However, during the actual content delivery, it seems these two sections were replaced by content that referred to experiences of studying overseas and pathways demonstrations for a series of government servant employment applications. As mentioned earlier, these two sessions were designated to two instructors (Tong and Cheng) from the faculty for instruction. This is because Instructor Zhu, their supervisor, works with them in the same department and because they oversee and administer tasks relevant to all student affairs within this faculty. Like Instructor Zhu, they are not trained career guidance practitioners.

Meanwhile, according to personal communications with both instructors, they indicated that the core instructor (Zhu) had informed them to instruct the session just one day before it was to be conducted. However, because they had been assigned to instruct it previously, they knew the requirements of the course and the gist of the content that needed to be delivered. Therefore, usually, Tong shares her experience of studying in France and demonstrates approaches for

preparing and applying overseas postgraduate programmes. Meanwhile Cheng explains various pathways for government servant employment applications and demonstrates the standard procedures for applying to them.

Thus, based on the evaluation of the curricula planned and delivered, alongside the class observations, it was evident that the CDE course did not deliver its curriculum as designed. More crucially, there were three major misalignments between the delivered curriculum and the critical factors defined as effective criteria. Firstly, methods and practice for self-awareness building were omitted. Secondly, occupational information was excessively addressed and focused primarily on interpreting obvious and general labour market issues. Lastly, regarding career decision-making strategies, no specific methods or exercises were addressed throughout the process.

4.3 Observed Teaching Practice and Classroom Learning Environment

This section addresses the first part of the second research question (RQ2). It aims to discuss the teaching practices observed and the classroom environment established throughout the curriculum delivery process, as the underlying context of curriculum implementation. Based on the data gathered through class observations, it appears that each instructor employed a traditional lecture-based teaching style for content delivery. For a large proportion of each session, the instructors delivered their prepared materials via slides, receiving scant attention from the audience. As a result, there was a discernible non-interactive and negative learning atmosphere, as evident both in the lecture style of instructors and in the participants' reactions throughout the entire lecture process.

4.3.1 The Undertone Set for the Class

It is noteworthy that, in the first session, Instructor Zhu explicitly communicated to the class that students were permitted to engage in any activity they liked, except for sleeping or engaging in

conversation with others. Later in the session, Zhu underscored once more that students had the option to withdraw from the course after acquiring the necessary information and procedures related to postgraduate study admissions. From this, it can be inferred that Zhu believed students were primarily motivated to gain information and advice on securing postgraduate admissions rather than showing a real interest in developing and exploring their career planning.

On the other hand, regarding attendance, around 100 students were present at the outset of the first session. Initially, there was a high level of enthusiasm, with participants paying close attention to the instructor's presentations and explanations regarding the course objectives. However, as the session progressed and the focus shifted to general labour market information and anecdotal examples from other students' career experiences, which were not directly relevant, the participants' connection with the instructor weakened, and their interest in the content waned. When the instructor transitioned to the core material, presenting conceptual knowledge on career planning factors, many participants were already preoccupied with tasks at hand, and the content seemed less significant or engaging compared to the activities they were already involved in. As a result, only about half of the initial attendees returned for the second session and made the decision to register for the course.

4.3.2 Observed Teaching Practice

In turn, it is evident that a permissive learning environment was pervasive throughout the entire process of content delivery. The additional three instructors not only employed a lecture-based teaching approach, identical to that of the core instructor, but they also appeared to be accustomed to the persistent state of non-responsiveness from the audience during content delivery. In other words, they exhibited a passive attitude towards the importance of the course or the content they

were delivering. Consequently, from their perspectives, it was deemed acceptable for participants to remain unengaged with or unresponsive to the information conveyed.

Ostensibly, it seems the permissive learning environment created by the instructor fostered a negative perspective regarding the expectation and outcomes of the course among both the instructors and the participants. Furthermore, this environment seemingly affected the participants' enthusiasm to engage more deeply with the content. Likewise, this passive and interaction-deficient teaching approach adopted by the instructors seemed to diminish the opportunity for participants to become re-engaged with the delivery process again.

4.3.3   Observed Classroom Learning Environment

In the process of content delivery, exercises or interactive class activities that allow participants to practice were seldom involved. It seems that the instructors habitually utilised videos to provide participants with opportunities to experience situations or scenarios that other graduates may encounter regarding career challenges or to gain insights into the work world. Additionally, after the viewing of these subject-relevant videos, the instructors rarely offered opportunities for participants to engage in further discussions, reflections and sharing of comments within groups or with the class openly. Moreover, the class activities incorporated within the teaching materials were not instructed and performed during the sessions, such as those for career planning and values clarification. Consequently, this created an environment that left participants to fully immerse themselves in the at-hand tasks that they opted to engage with.

Noticeably, three class activities and one written exercise were involved throughout the entire course. Two activities were conducted in the second session, one was practised in the third, and the written exercise was assigned for the fourth. However, after each activity, instructors provided only a few opportunities for participants to share their results. Yet, they did not offer any form of

review, summary, or feedback to the work contributed by the participants. Consequently, this seemed to hinder the participants' chances to reflect on and improve upon what they had composed during these activities. Furthermore, the absence of feedback and insufficient discussion about the students' input seemed to lessen their incentive to actively participate in further activities, for some students at least.

Conversely, students did not exhibit a genuine lack of interest or intention to engage with the content or to learn from the subject. Whenever information or content related to career planning procedures, employment data of previous graduates, or anything they perceived as useful was presented, they immediately paid attention and recorded it for subsequent review. Furthermore, in the three class activities that participants practised, they appeared highly engaged, approached these tasks with organised steps, and participated seriously. Even though the instructor did not provide many detailed procedures for each activity, some participants endeavoured to elucidate and standardise the process for other group members. Additionally, on several occasions when instructors randomly selected audience members to respond to questions, every chosen student expressed their perspectives or insights genuinely. Moreover, some participants voluntarily requested opportunities to share their viewpoints on certain topics.

Therefore, this observed lack of interaction within the teaching and learning process affected the enthusiasm of both the instructors and the students to engage with the content. In other words, the lecture-based teaching approach adopted by the instructors evidently impeded students' passions to participate and interact with the instructors. In turn, the detachment and lack of responsiveness among students hindered the instructors' incentive to invest further in additional interactive opportunities with the audience.

4.4 A Comparison Amongst the Identified Critical Factors, the Planned Curriculum, and the Delivered Curriculum

This section addresses the second part of the second research question (RQ2). It aims to discuss the alignment and misalignment between the planned curriculum and delivered curriculum, using the seven identified critical factors as the baseline for comparison.

In the analysis of the planned curriculum, five critical factors were identified: written exercises, occupational information, modelling, values clarification, and psychoeducation intervention (details in *Table 4-1*). Meanwhile, according to the intended but simplified curriculum, which was structured by the core instructor and demonstrated in the first session, these factors were still included despite some changes in sequence and specification, with several factors presented in diminished details and omitting theoretical underpinnings. Nonetheless, in the observed delivery process, each critical factor indicated in the curriculum was not effectively composed and delivered to the class.

Specifically, only three critical factors were addressed, but with trivial aspects indicated or distorted information included. The three addressed factors, i.e. written exercises, occupational information, and modelling, will be described and interpreted. Next, the two critical factors missing in the delivered curriculum and those not included in the planned curriculum will be discussed.

4.4.1 Written Exercises

Within this course, two written exercises were incorporated. The first was designed for students to reflect on their perceptions regarding their majors and expectation towards their future career choices. The second pertained to the course completion assignment, which involved writing a 3000-word report on personal career planning. As outlined by Instructor Zhu, the purpose of these

exercises was to augment participants' understanding of their majors and to crystallise their thoughts on future career possibilities. Nonetheless, the instructional process did not introduce specific content related to self-exploration methods, practical environmental analysis approaches, or career decision-making tools to the participants.

Therefore, without theoretical guidance on, and an analytical mindset developed towards, these aspects, it might be challenging for participants to delve into their thoughts and reflect on with diverse threads and approaches, to reach a deepened understanding of these topics.

Additionally, after each written exercise submitted, the instructor did not provide any form of review or feedback to participants. Only for the course completion assignment (My career plan), in compliance with the requirements of the Undergraduate School, did each student receive a final grade based on their report. Still, there was no written feedback alongside with it. Also, it is noteworthy that the instructor alluded to the reason for conducting the written exercise within the session, by stating, "It was solely for attendance recording…" (personal communication). On the contrary, the students explained their anticipation of receiving feedback on these written exercises to researcher during the field study. As one student expressed, "It would always be more helpful to get some review or comments on the exercises we've done…". Furthermore, other students implied that they had not invested much effort into composing these assignments, because they were aware that the instructors would not review them thoroughly and take them seriously (personal communication).

Thus, in accordance with these observed practices regarding written exercises, the function of the written exercise appears diminished. The attitudes and behaviours exhibited by both the instructor and the participants have exacerbated this effect.

4.4.2 Occupational Information

According to the defined scope of occupational information, or as termed "information on the world of work" by Brown and Ryan Krane (2000), it refers to up-to-date information regarding accurate "opportunities, skills, requirements, training needed, and likely outcomes of a particular set of occupational preferences" (p. 749). This information is provided to students during career interventions or courses. Specifically, Brown underscored the necessity to engage students with in-session occupational information gathering and discussion to enlarge the effectiveness of the intervention.

In this particular case study, based on the instructors' consensus understanding and previous data on graduation directions and career choices, they devoted most of their efforts to demonstrating information regarding postgraduate degree applications (studying abroad included) and a series of government servant employment applications. From their perspectives, they recognised these two aspects as the most popular and desired occupational information that was needed by these targeted participants. Besides, a larger proportion of the content was incorporated with information regarding the general knowledge of China's labour market and the current challenges confronted by employees (corporate downsizing trend).

However, except for the general requirements and procedures regarding the two aspects demonstrated, no other specific and detailed skills, training opportunities, or preparation strategies were shared or discussed during the process. Moreover, it seems that no interactive exercises or information-gathering databases were provided for participants to practice exploring and seeking potential information they were interested in within the session. Additionally, the instructors seldom offered opportunities for participants to work with peers to immerse themselves in discussion or understand certain occupations or relevant information through teamwork. Therefore,

by merely listening to the instructors' demonstrations, the participants seemed to lack interest in engaging with the process and found it difficult to resonate with the information conveyed by the instructors alone.

Thus, even though occupational information as a critical factor was incorporated in the content, the viewpoints that the instructors perceived, and the chosen aspects of the information involved, seemed to affect participants' aspiration to get engaged. In addition, the instructional approach adopted by the instructors further hindered the participants' inclination and opportunity to practice hands-on experience and discuss for an intensified understanding of certain occupation choices.

4.4.3   Modelling

As previously cited and defined, the criterion of modelling as a critical factor for career intervention involves engaging models who share their detailed experiences regarding the difficulties they encountered and their successful overcoming of obstacles during their career decision-making processes. Meanwhile, as Brown et al. (2003) have remarked, the essence is to establish a tangible and comparable target. By demonstrating similarities in personal characteristics, relevant growth backgrounds, and comparable attributes to the participants, it allows the model to stimulate and provide participants with accurate and meaningful information for evaluation and forecasting in relevant situations.

Accordingly, throughout the delivery process, two notable sources of modelling components were utilised by the instructors. The first was from the instructors, who, as facilitators, shared their personal study or working experiences during the process. Another source was from an invited professional (guest speaker) in a certain field to share her successful experiences and insights towards her chosen careers. Furthermore, the course provided an opportunity for participants to interview a person who was working in their interested professional domains and serving as a

model to learn from and to make projections about their own capabilities and performances in certain career paths.

From the class observations, it appears that both the instructors and the guest speaker primarily focused on narrating their personal studies and career choices as a form of anecdotal sharing. Yet, they did not endeavour to establish a relatable connection between their experiences and the audience by demonstrating on similar characteristics and pertinent backgrounds or attributes. Moreover, they also did not highlight any critical events or factors that influenced their decision-making process, nor did they share experience on how they overcame or coped with challenges and obstacles during that process. On the other hand, for the extracurricular assignment, participants were able to choose their own role models to interview and ask questions relevant to their personal concerns. Thus, based on the personal communication with previous students who took the course, nearly each of them specifically mentioned the insights gained and knowledge learned from undertaking this assignment. Consequently, students felt a strong resemblance to and drew more inspiration from the experiences and information shared by the role model they had chosen according to their unique needs.

Therefore, it seemed that the models within sessions failed to attach the audience to empathise with the experience they shared. As a result, participants did not express much interest in or engagement with the stories shared by these models. In other words, evidently, the modelling component included in the content did not provide participants with emulated references to learn from. In turn, it also did not offer them tangible examples to comprehend the career decision-making processes and strategies. In contrast, evidence suggested that participants formed more substantial connections and were more profoundly stimulated by the role models they personally chose to interview, as opposed to the models provided during the sessions.

4.4.4 Missing Critical Factors in Delivered and Planned Curriculum

In the delivered curriculum, values clarification and psychoeducation intervention were missing, although they were previously included in the planned curriculum. Moreover, individualised interpretation and feedback, as well as attention to building support (counsellor support), were the other two factors not included in the original planned curriculum.

Merely relying on data obtained through content analysis and class observations, the reasons these critical factors were omitted in the delivered process or missed in the planned curriculum cannot be described or evaluated. However, in the next section, based on the core instructor's reflection on curriculum delivery, the reasons and possible implications for these omissions might be explained and interpreted to some extent.

4.5 Instructor's Reflection on Curriculum Delivery

Throughout the class observations and the delivery process, it was observed that most of the components in the planned curriculum were not included in the delivered one on-site. During a field visit (personal communication with Instructor Zhu), the researcher inquired about how and who was supervising the composition and evaluation of the course curriculum. Zhu stated that the current curriculum was constructed by the first instructor in 2008, who was previously an associate professor from the Department of Business Administration within this faculty.

Since Zhu began instructing the CDE course in 2015, he had not made any changes to the planned curriculum. He mentioned that he did not utilise it as a guideline. In other words, he implied that the delivered curriculum was not planned and structured in accordance with the original curriculum. He explained that the planned curriculum serves merely for documentation and illustration purposes in the educational plan of the BA programme. Because according to the university's requirements for curriculum regulation, each course needs to submit its curriculum in both Chinese

and English. Additionally, the educational guidelines stipulated that each curriculum should be revised and updated according to practical requirements or empirical data. Evidently, for this particular CDE course, its curriculum has not undergone any revisions or updates since it was first designed and structured by the prior instructor.

In contrast, he stated that he had purchased several available textbooks on career planning online to learn some concepts and ideas for content structuring. Thus, he indicated that the actual curriculum delivered was structured and inspired by the models of career planning illustrated in these textbooks, such as the Five-step method and career planning approach (Zhang et al., 2019). Additionally, given that the CDE course has not been officially evaluated since the initial curriculum was scrutinised and authorised by the Undergraduates School, the structure and delivery of its curriculum were entirely dependent on the actual instructor. In other words, Instructor Zhu re-organised its curriculum based on his understanding, knowledge, and experience accumulated over years of working with students on this subject. As Zhu further hinted, at both the faculty and university levels, the CDE course has not captured much attention, not only regarding its curriculum design but also concerning the instructional process.

Accordingly, the researcher further inquired why the instructor did not adhere to the planned curriculum and organise its content as structured. Zhu explained that he had not received any training or acquired knowledge in CDE since he had been assigned to teach this course. In other words, he had not been trained to understand the fundamental logic of the curriculum structure, nor the purpose of each integrated component.

Similarly, he was not familiar with or had not practiced in using these components to systematically structure the content or to deliberately deliver it to the on-site audience. For instance, he had not been trained to use the MBTI personality tool, and furthermore, the faculty did not provide any

funding for accessing this professional toolset. Moreover, he mentioned that he only knew of the CASVE cycle for decision-making strategy from the textbook he purchased online. However, he was not acquainted with how to apply it or teach students to apply it in real-life scenarios for practice. Nor was he familiar with the Cognitive Information Processing (CIP) theory, which is the foundational theory that initiated the aforementioned strategy and is adopted by the curriculum as its principle and theoretical underpinning.

When the researcher cautiously inquired whether he had attempted to learn these theories or toolsets on his own through the textbooks he obtained online, Zhu did not directly answer the question. Nonetheless, he did convey that, from his perspective, the encompassed theories and career development strategies were "way too profound and inscrutable" for him to utilise.

However, on the other hand, he emphasised that he had revised the content several times after having undertaken the task of instructing for almost eight years now. He mentioned that he strived to provide students with as much as information and as many resources as he could assemble, to cultivate their awareness of forming proactive career planning skills. Meanwhile, he also expressed his intention to make more efforts to achieve the set goals of the course.

Therefore, according to the core instructor's narrative, it is apparent that the actual function of the curriculum syllabus serves mainly for documentation and mandatory requirements, as dictated by the educational system. The curriculum delivered was not based on its syllabus as a foundation. Thus, these five identified factors, namely, written exercises, occupational information, modelling, values clarification, and psychoeducation intervention, which are included in the documented curriculum syllabus, did not authentically contribute to the actual content structure, nor did they impact the ultimate effectiveness of the course outcomes.

4.6 Summary

In this chapter, the focus of analysis examined the alignments and differences among the planned curriculum, the delivered curriculum, and the critical factors defined as effective criteria. This was done by analysing each curriculum separately and in comparison. The results were generated from content analysis, class observations, and reflective memos recorded.

First, to address RQ1, the focus of analysis described and examined the alignments between the planned curriculum and the identified seven critical factors. Second, to continue addressing the second part of RQ1, it examined the alignments between the delivered curriculum based on the same criteria set. Third, to address RQ2, the observed curriculum delivery process and class atmosphere, including interactions between instructors and students, were first described and interpreted. This provided background information for the findings and themes presented in later sections. Fourth, to address the remaining part of RQ2, the alignments and differences among the planned curriculum, the delivered curriculum, and the defined effective criteria were discussed. These evaluation findings also considered the responses and interactions observed during the process. Lastly, the core instructor's reflection on curriculum delivery was represented and interpreted, offering insights into the structure and delivery of the curriculum from the instructor's perspective, adding to the overall understanding of the case study.

Regarding the critical factors as effective criteria for CDE courses, five out of seven were identified: written exercises, occupational information, modelling, values clarification, and psychoeducation intervention. Noticeably, although these factors were indicated in the planned curriculum, the delivered curriculum was not grounded in them. The core instructor revealed and expressed the obstacles they were facing and the lack of support and training they could receive from the

institution as an explanation. In other words, the instructors were not capable or trained to instruct participants on these components in practice.

Further, there was a widespread lack of confidence among instructors towards the fundamental theories of CDE. They primarily adopted a permissive teaching approach during sessions. They did not expect students to fully engage in the content, nor did they intend to provide them with a collaborative learning environment and interact with them during sessions. Therefore, this created a passive learning environment among students, who gradually lost their enthusiasm to devote more attention to the content delivered.

Nonetheless, three critical factors were observed in the delivered curriculum: written exercises, occupational information, and modelling. Yet, the reactions and interactions among students regarding these components were not favourable. Personal communications with them during session breaks revealed that most were not enlightened by these factors indicated. However, the students highlighted insightful perceptions and knowledge gained through one assignment. This assignment required them to interview one professional individual they admire (as a role model) working in their interested career domain.

In sum, although both the planned and delivered curricula comprises sufficient factors to ensure its effectiveness, many of them were rendered ineffective due to a lack of explicit elaboration and unsystematic structuring of relevant content. Most crucially, none of these critical factors were delivered in the manner or form defined in the literature. Therefore, appropriate training for instructors in implementing these factors is essential. Such training would ensure that instructors properly utilise and deliver the content to achieve its intended and overall effectiveness. The unfamiliarity with the theoretical underpinning of the curriculum and limited knowledge of CDE in general diminished instructors' confidence. This lack of familiarity also affected their readiness

to prepare structured teaching materials and exercises, ultimately impacting their ability to engage students effectively and enhance the anticipated outcomes.

Thus, in the next chapter, Focus Two will delve into the perspectives and attitudes of instructors and students towards the CDE curriculum delivered. It explores the distinct angles that might be grasped by the practitioners and the beneficiaries.

Chapter 5   Results – Focus Two: Students' and Instructors' Perceptions on the Effectiveness of the CDE course

This chapter aims at understanding and comparing the perceptions of both students and instructors after the completion of the career course. It also seeks to explore their initial expectations of it before participating in the course. Specifically, the chapter addresses RQ3 of this thesis. Data collection and theme generation were accomplished through both semi-structured interviews and class observations. The semi-structured interview was used to facilitate a thorough and nuanced understanding of the varied perspectives held by both groups. Field memos and reflective memos based on class observations allowed for a deepened and triangulated understanding of their expressions, combined with their interactions observed during these sessions.

The overarching theme was identified as a misalignment of perspectives between students and instructors regarding the purpose of career development education and the structure and delivery of this CDE course. The emergent themes of mismatched perceptions toward the CDE course content are presented in four areas: the course's aim, curriculum, learning and teaching. Table 5.1 demonstrates the summary of each theme and sub-theme that will be discussed in detail within their respective sections.

The third research question (RQ3) will be discussed and interpreted as intertwined, based on the four main themes. The four themes are categorised according to the sequential process that is naturally and logically considered during curriculum implementation. Meanwhile, these extracted themes and subthemes are built up and presented as elaborations of this focus of analysis based on participants' (instructors' and students') diversified and specific perspectives toward the case study. Furthermore, associating with the findings demonstrated in the previous focus, as the course's curriculum delivery background condition, students' perceptions towards their expected CDE

courses are synthesised and highlighted.

Table 5-1 Theme Matrix of Mismatched Perspectives of Instructors and Students

Theme	Instructors' Perspectives	Students' Perspectives
Theme 1 (Aim): Mismatch between course aim and students' intention		
(Sub-theme 1A) Mismatch: Building self-awareness	To teach the importance of career planning in advance.	To increase self-awareness for better career planning.
(Sub-theme 1B) Mismatch: Establishing pre-professional identity and career direction	NA	To find answers on the profession that best suits their personal characteristics.
Theme 2 (Curriculum): Mismatched curriculum expectation		
(Sub-theme 2A) Mismatch: Linking personal values to career choice	NA	Content on how to explore and confirm their career preferences given their individual values.
(Sub-theme 2B) Mismatch: Personalised career counsellor support	NA	One-to-one support to address individual concerns.
(Sub-theme 2C) Mismatch: Paths/processes required in approaching career goals	Lacking theoretical underpinning and systematic strategies to structure relevant content.	Desired to learn from relevant others regarding their career decision-making processes and steps to attain their goals.
(Sub-theme 2D) Mismatch: Increasing career adaptability amid rapidly evolving world	NA	Acknowledging the imperative task of developing career adaptability to overcome challenges in rapidly changing future context.
(Sub-theme 2E) Mismatch: Providing occupational information	Provide generic information on career options.	Lived examples and statistic data from previous cohorts on their career paths; Generic information not needed as it can be found online.
Theme 3 (Learning): Mismatched effort expectation		
(Sub-theme 3A) Mismatch: Easy credits ≠ No expectation to learn	Students signed up for easy credits, low teacher expectation.	Still want to learn and solve personal concerns and explore career options in spite of easy credits.
(Sub-theme 3B) Mismatch: Learn only if it is useful	Low motivation and lack of resources to invest more effort in content development.	Engage with the course content whenever deemed necessary.
(Sub-theme 3C) Mismatch: High motivation and low engagement	Students lack motivation and intention to engage due to the limited future study pathways or career options available to them.	Although intrinsically curious about the subject, the content delivered was not very attractive.
Theme 4 (Teaching): Mismatched expectation of teaching styles and learning environment		
(Sub-theme 4A) Mismatch:	Traditional lecture-based	Expect more interactive and

Theme	Instructors' Perspectives	Students' Perspectives
Teaching practice - traditional vs. collaborative learning approach	teaching approach	personalised classroom delivery
(Sub-theme 4B) Mismatch: Needs for feedback	NA	Expect individual feedback from classroom exercises and assignments.

5.1　Theme One: Mismatch between Course's Objectives and Students' Intention

5.1.1　Sub-theme 1A) Mismatch on Building Self-awareness

It was the first sub-theme emerged from all the collected interview data and emphasised both by the participants and instructors. Despite this, they perceived and recognised the theme with a deviated interpretation and aimed at misaligned anticipations of the course.

Instructors. During the instructor interviews, the core instructor Zhu deliberately expressed his primarily anticipation of the course: to raise students' awareness towards planning for their future and careers development ahead. In addition, he explicitly described that, during these years immersed in working and dealing with student affairs, he believes most students did not pay much attention to even consider planning for their future or career at this stage (freshmen undergraduates). He articulated,

> *They're right to prioritise their core curriculum and strive for a higher GPA to secure their path to success in the competitive postgraduate admission process. We all know that having a master's degree is crucial for landing a better job, so students tend to focus more on career planning only after reaching that stage. So, my goal through this course is to help students recognise the importance of career awareness earlier. Career planning shouldn't wait until they're about to graduate. I encourage them to think ahead and make decisions now, as early as possible, to achieve their goals systematically and smoothly in the future. It's crucial that they understand this… (Zhu, 4th July 2023)*

The researcher further asked whether he meant the "awareness" regarding themselves (self-concept or self-knowledge), or "awareness" toward consciously planning for their future career. Zhu (*4th July 2023*) interpreted that "The main point is that they need to recognise the importance

of planning ahead and creating a schedule to reach their goals. This is especially crucial since most of them aim to apply for postgraduate programmes…"

Accordingly, from the instructor's perspective, Zhu set his aim to facilitate students on raising their awareness, not prioritised on advancing their self-understanding or self-concept awareness, but primarily emphasised on awareness about this future career planning subject. In addition, the instructors hold the opinion that students manifest little interest in attempting to acquire knowledge of planning their career. Thus, the course provided the opportunity to assist them to recognise the importance to plan it at the beginning of their university journey.

Subsequently, the researcher pursued additionally and mentioned, during the class observation, the course content included the term "知己知彼" (Attain thorough self-awareness and comprehensive knowledge of the employers and the environment) almost every session. Both instructors, Zhu and Long, responded instinctively that self-awareness is essential in career decision-making. However, they could not provide assistance to enhance students' self-awareness through the course, and claimed that it should be their personal issue: "If they do not understand themselves, what could I do to help?" Long expressed clearly about his insight of this issue. Thus, through the lens of the instructors, it seems they did not consider the aim of the course should be set to facilitate students' self-awareness, even though they thoroughly understand that, for certain, the concept is crucial for career or life decision-making. Still, they did not think they could achieve it by means of the course.

Students. In contrast, during the student interviews, 7 out of 14 interviewees explicitly articulated they anticipate the course could help them enhance their self-understanding or provide tools and approaches for self-exploration. One participant, pseudonym Xiao, mentioned the term that was continually referenced during the course, "知己知彼", and she stated that,

I think a lot about this term [知己知彼]. The instructor emphasised this term [知己知彼] throughout the course. But, I believe, that knowing others, like a company, a job position, or an industry, isn't the toughest part. The hardest part is knowing yourself. There are plenty of ways to learn about the outside world, but not so many when it comes to figuring out who we are and what we truly want. I mean, sure, I understand my responsibilities to my family and friends, I'm aware of my interests, like what I enjoy or dislike. Plus, I know I'll need at least a master's degree to get a decent job. There are also career limitations because of my major. But what I don't fully grasp is exactly what I want to be in the future, where to find the motivation to reach my goals, and how to figure out my priorities and what I should focus on. These thoughts constantly weigh on my mind… (Xiao, 15th June 2023)

Obviously, self-understanding or self-awareness was an essential concept and topic that most students desire to dive into and learn more about. One other interviewee, pseudonym Zhou, anticipated the course could teach them with methods to understand oneself. She further elucidated the reason why she thinks it should be emphasised. As she was born in and categorised as Generation Z according to the literature, she believed their generation was proficient in planning ahead. She expressed that with all sorts of the information resources available online and offline, they could utilise many means and materials to learn knowledge and pursue their goals effectively, with precautionary experiences shared and technique guides to follow, at least during their educational stage. However, they seemed always to follow or be affected by choices or decisions that others made, advice that others suggested, achievements that others chased, or life patterns that others preferred. Hence, they urged to know how to identify their unique and the most significant desire or goal intrinsically inside their mind. This viewpoint was endorsed by another interviewee, Ning. She elucidated: "It is difficult to devise plans for matters or subjects that are yet unknown and not understood to us". Therefore, regarding their future career development, they were yearning for assistance and guidance to discover more potentialities that still remain within themselves. In addition, another interviewee Xing, who took the course previously, further stated and highlighted the importance to cultivate self-awareness or self-exploration through the course,

At that stage [as a freshman or sophomore], I wasn't sure about my strengths, weaknesses, skills, or things and jobs that interested me. I had a clear understanding of my options for future studies or a career, and I knew about my family obligations. But the one thing I needed most from the course was understanding myself and figuring out why I should choose any particular path. How could I balance between the choices I wanted and my family's expectations? The course would have been a huge help if it had guided me through these issues at that stage… (Xing, 28th April 2023)

Moreover, when the researcher asked interviewees to suggest additional content to be included or aspects of career development they were particularly interested in, 12 out of 14 expressed it might be most beneficial to them if the course could involve methods and exercises that facilitate their self-awareness establishment.

Subsequently, this emerged "Mismatch on building self-awareness" situation catalysed the second misalignment condition arising among students and the instructors.

5.1.2 Sub-theme 1B) Mismatch on Establishing Pre-Professional Identity and Career Direction

Instructors. The researcher further probed into the perspectives of two instructors regarding the objective of the course by posing the question, "What do you think are the most crucial aspects of career planning and development that students lack and need from the course?". Both instructors concurred that most students failed to engage in or realise the necessity of self-directed planning for their four-year university journey, let alone devising or formulating a long-term career plan. Additionally, Long interpreted that the majority of students took this course in their first year of university. During that stage, from Long's perspective, they did not consider the issue of preparing or planning their career as an urgent and imperative task. Therefore, he believed students had little interest and a limited understanding of occupational information and trends in the labour market in general. Thus, through the lens of his understanding, he prioritised the goal of cultivating and furnishing students with potential occupational information and feasible future pathways for career planning. From his perspective, these contents would affect and stimulate students' intentions and

motivations to take actions and start planning for their future, or at least start to thinking about the issue at this stage. Besides, Zhu verbalised his concern,

> *They [students] often say they're confused or uncertain about their future, lacking a clear goal or direction to pursue. It's really a straightforward choice: either apply for a postgraduate programme or find a job, easy. They need to decide as early as possible, make plans, take actions, and work towards that goal. There's not much to be confused about... (Zhu, 4th July 2023)*

Therefore, viewed from Zhu's standpoint, he believed the effective approach to make students becoming aware of the significance of this subject and alleviating their feelings of confusion regarding the future was through illustrating and enumerating each possible future option and pathway of the mainstream majority. Consequently, he thought these emphases and information would stimulate their awareness and motivation to undertake more actions for future career planning.

Students. Notwithstanding, student interviewees did not perceive these aspects as being helpful regarding career planning at the current period. "This subject is definitely important, but the content wasn't all that engaging…" Yi expressed her feeling after finishing the course. When the researcher asked why she felt that way, she explained the occupational information involved and potential pathways introduced as "I've already heard this a million times before from other resources – there wasn't much new or unique content…" (*Yi, 13th April 2023*). Researcher proceeded with further inquiry about what she might need to obtain from the course. She answered distinctly that it would be more effective and beneficial if the course could assist them in making connection between what characteristics their future profession might require, and what they have possessed currently as strengths and weaknesses. It would provide them with practical direction to make efforts and acquire knowledge and skills to achieve their goals. Moreover, another interviewee Meng emphasised that she was curious the most regarding how others feel about after working in a certain position or profession. As she illustrated in detail,

I am curious to know what they believe are the top strengths or qualities their jobs or professions truly value in them. Also, I'd love to hear about what aspects—whether skills, values, knowledge, or expectations -- have evolved since they started working in the field or took on their current roles… (Meng, 29th June 2023)

Additionally, these above-mentioned expressions resonated with what Xing explicitly stated,

The challenges we face when planning our future careers aren't about a lack of information or options. The real question is why I should choose a particular path and how I can be sure it's the right one that will help my long-term growth and development… (Xing, 28th April 2023)

Accordingly, through the lens of interviewees, they shared a strong sensation toward identity formation, not merely restricted to establishing their personal identity, but more sharply concerning about navigating their future professional identity. At the current stage, indeed most of them might not determine entirely on what pathways to choose or decide completely on what career to pursue in the future. Conversely, the cause of indecision was not rooted in non-realisation of the importance to plan ahead or not sensing the urgency to think about this issue. It was attributed to the unclear self-awareness and unestablished pre-professional identity formation. Meanwhile, it seemed students grasp the essence of making a meaningful decision. That is to say, they expressed unambiguously that only after they could ascertain a clearer perception of themselves, and figure out how to make sense of the characters, interests, values, and strengths they hold, together with the connections they might navigate and attach with assistance toward their potential identity (personal or professional), would it efficiently facilitate them to create a vivid landscape and construct their own meaningful and satisfactory career pathway and life image in sequence, and realistically.

The theme "Mismatch between the course's aim and students' intention" stemmed from both instructors' and students' expressions and understandings of the course. It seemed evident that instructors hold divergent intentions toward the course, which differed from students' needs and aspirations. From the instructors' viewpoint, they primarily attempted to raise students' awareness

of career planning through the course. By providing information on potential options, they considered it promising to motivate students to make concrete action plans and attain their goals in the process.

Students did not endorse the position instructors held toward the course aim, as they considered this subject more pragmatically. They desired to obtain a satisfactory life or career path and attain happiness and fulfillment by understanding their own characters and connecting what they possessed and learned within the university curriculum to the professional field they were targeting. Thus, they conceived that the assistance in self-awareness and pre-professional identity formation would facilitate them with extended and profound competencies in career planning.

Furthermore, students appeared to reckon with the perception that this subject should be a lifelong task for solving and resolving challenges and transitions encountered at different life stages.

Therefore, it led to the next theme, which further explored the aspects from which the mismatched and divergent perceptions of instructors and students regarding career planning extended onto the curriculum content.

5.2   Theme Two: Mismatched Curriculum Content Expectation

In accordance with the compiled responses and perspectives regarding this subject matter from both parties, it appears that students have recognised and expressed a differentiated demand for curriculum content in comparison to what was actually provided by the instructors. This need pertained to five specific areas: values clarification, counsellor support or working alliance, psychoeducation intervention, career adaptability practice, and occupational information.

5.2.1   Sub-theme 2A) Mismatch: Linking Personal Values to Career Choices (Values Clarification)

Students. As student interviews progressed, the researcher initiated a discussion on the most essential factors they thought should be emphasised and embodied in this career planning course, among the seven factors listed in the criteria (Section 2.4.2). Amongst the fourteen students interviewed, 8 out of 14 rated the factor of values clarification as the most imperative component that should be discussed during the course. Values have been studied as the backbone of comprehending "the meaning of work and the reasons why people work" (Rounds & Leuty, 2020, p. 405) in social psychology and career counselling over three decades. Hence, in the literature, values have been attended to functioning as the motive for decision-making and impacting people's life choices as the desired outcome. Thereby, in accordance with the pervasive assertion of the important position of values, most students interviewed also deemed it as the indispensable part, which was critically required yet not actually instructed in the curriculum.

In Dan's words,

> *It feels like everyone these days is emphasising the urgency and importance of choosing a direction or making decisions quickly. But, if we don't understand what matters to us, the values we hold, and the lifestyles we'd like to pursue, it's unrealistic and pointless to just analyse our options based on their pros and cons. We all know that every choice has its advantages and disadvantages. But once we have a deeper understanding of ourselves, making decisions doesn't seem that difficult after all… (Dan, 14th June 2023)*

Apparently, students might not be familiar with the theoretical terminology and empirical models necessary for making a proper and feasible decision; however, they understand the underlying rationale required to make a meaningful decision. That is to say, from students' understanding, regardless of the theoretical approaches adopted or decision-making strategies employed, the foundation of any analysis should be derived from an accurate knowledge of oneself. In this manner, Yi extended her impression,

> *Obviously, to make a career decision, I need to know my strengths, knowledge, values, and interests so I can choose and decide on those characteristics. But, the challenge is figuring out how to connect those unique traits I have with real job options in the working world… (Yi, 13th April 2023)*

Moreover, another interviewee, Ning added,

> *Things [available career options] are changing so quickly. Right now, I can only think of a few options I might take, based on what I know and what I'm qualified for. But I really want to learn more about what I can do and what's out there, to discover other career opportunities I might have … (Ning, 17th April 2023)*

Evidently, students clearly sought not only guidance in clarifying the values they deemed important but, more critically, required support in linking and associating these values with tangible career choices. This association was vital for further clarifying their initial motivations behind decision-making and action-taking.

Therefore, their expressions aligned with the definition of twenty-first-century careers as "protean" (Hall, 1996) and "boundaryless" (Arthur, 1994), which referred to the characteristics of a frequently changed environment, self-managed and self-directed responsibilities, and values-driven career satisfaction (Bravo et al., 2015). It seemed that these future employees recognised the significance of navigating careers should be congruent with their personal strengths and work values. As Xiao stated, "I hope I can choose a career that is both meaningful to me and to others as well…" (*15th June 2023*). Thus, to enhance the efforts catalysed by the compatibility between their unique characteristics and the work environment, and to increase the chances of establishing a satisfying self-identity, as well as to promote balanced subjective well-being in the long run, values clarification appeared to be a pivotal component required by students.

Instructors. Throughout the content delivery process, instructors merely alluded to the importance of identifying values that could help students make better career decisions, and there were no specific content or exercises that provide them with approaches or practices for further clarification. Meanwhile, during the interviews, both instructors ranked the factor "Values Clarification" as the

top three critical components that should be included in the career courses. Nevertheless, when the researcher probed into the reason why the current career course did not cover this topic, instructor Zhu (*4th July 2023*) stated, "I think, at this stage, it's sufficient to emphasise the importance of considering values when making career decisions. Besides, since value is such a broad topic, it's challenging to cover it thoroughly in this course alone…". Likewise, the other instructor Long expressed that

> *Of course, values are important factors in career decision-making in general. But from what I understand, this specific career course is focused on sharing potential career options and occupational information relevant to these students. It's not specifically designed to clarify their values… (Long, 5th July 2023)*

Consequently, from the instructors' perspectives, despite recognising the significant impact of personal values or values clarification on facilitating students' decidedness for career planning and decision-making, it seemed they did not perceive it as essential as students. They did not afford students with many opportunities to explore the unique personal values in constructing their underlying goals. Additionally, they did not fully comprehend the imperative need for students to link their identified personal values to tangible career choices, thereby generating their initial motivation towards their goals. Despite all this, the instructors did point out the current dilemma they were facing. Even though they perceived values clarification as a critical factor to involve, without sufficient guidelines and trainings in utilising effective tools and approaches, it was difficult to formulate a potent practice within the course to facilitate students' values clarification.

5.2.2 Sub-theme 2B) Mismatch: Personalised Career Counsellor Support (Working Alliance)

Students. During student interviews, when the researcher brought up the question "With whom did you discuss your future career issues normally?", approximately half of the interviewees stated they discuss these issues with their parents most often, while the other half articulated they prefer

contemplating these issues independently, or occasionally, discussing them with their close friends.

Accordingly, the researcher continued to inquire question on "How about teachers or school counsellors? Or any staff from the faculty with whom you would like to discuss this subject matter?". Nearly all interviewees replied that they did not know who the right person would be to talk with regarding this issue.

Regarding what one interviewee, Xiao, stated,

> *I think it would be helpful and insightful if I could discuss this with teachers or counsellors from the faculty. But only if I know them well enough and feel I can trust them to discuss these issues ...This isn't something you can casually discuss with just anyone... (Xiao, 15th June 2023)*

Additionally, another interviewee, Qian, expressed,

> *It would be great if I knew someone, like teachers or counsellors in the faculty, that I could talk to about these topics. Because you see, my parents are farmers and have worked in our small village for their whole lives. They can't give me much advice as they've never been through this progress and aren't familiar with the situation or options I have right now.... (Qian, 27th April 2023)*

Besides, as further elucidated by one other interviewee, Wen *(19th June 2023)*: "Sometimes, parents just don't fully understand my situation and can't give useful advice…".

In addition, the interviewee, Xing expound,

> *Sometimes, I feel, we really need help from others to figure things out about our future choices. I think about it a lot, and sometimes my classmates and I might share our thoughts. But it's hard to figure everything out on our own, and parents usually have their own plans for us to follow. I need to know what I want to choose, while balancing and negotiating with my parents' expectations. There isn't really anyone I feel comfortable talking to about this. Of course, if this course could address this, it would be really helpful... (Xing, 28th April 2023)*

Hence, it was evident that, undoubtedly, students recognised the necessity to seek advice or guidance toward issues of their career decision-making from others. Particularly, they were holding in high regard for consultation and suggestion from relevant teachers or professional

sources they could engage with. However, they inclined to seek these supports and discussions only after a reliable and trustful relationship has been established.

That is to say, to facilitated students' level of engagement and the extent of participation willingness, the fundamental issue was to create a supportive and trustful environment and establish the working alliance between the instructor and students. Thereby, in accordance with the theoretical framework and previous meta-analytic findings, it was essential for instructors to initiate this positive bond with students as early as possible during the intervention process (Whiston et al., 2017; Whiston et al., 2016).

Instructors. On the other hand, it appears that the instructors also discerned the importance of establishing a trustful relationship with students. Although their remarks were not specifically directed at this course, they generally recognised the essential nature of forming such working relationships with students in their everyday interactions. As the instructor, Zhu elucidated,

> *These days, it's not easy to get students following your [teachers'] way of thinking or instructions or directions. They might ask, why should I [students] listen to you? The only way to build trust is through regular daily interactions and conversation with them, to achieve some level of trust. Once this trust is there, they're more likely to pay attention to your [teachers'] advice... (Zhu, 4ᵗʰ July 2023)*

Nonetheless, the other instructor, Long indicated that,

> *I'm not sure I'll have enough time to really connect with the students or build a strong relationship, especially since I'm only here for one session of this course. Plus, I think we're really here to give them more practical, future-focused [postgraduates and occupational] information... (Long, 5ᵗʰ July 2023)*

Nevertheless, the working alliance between the instructors and students was unable to establish due to three reasons. First, the instructors merely prioritised and intended to build an affective bond with student in general; they did not recognise the importance of establishing a rapport-based working alliance as essential, specifically to the students in the course. Second, they neglected the other two interdependent components comprising the concept of working alliance, viz., the

mutually valued and agreed-upon goals to be achieved through the course, and the approaches and processes adopted to achieve them. That is to say, at the beginning of the course, the instructors insufficiently coordinated their intended goals with those desired by the students. Consequently, during the content delivery process, the instructors did not embrace components that students thought relevant and effective to attain their perceived goals. Lastly, the current instructional plan may led some instructors to believe that establishing such connection or trusted relationship with students is difficult or unnecessary, given their involvement in only one session per semester.

As a result, several interviewees disclosed their congruent perceptions of the course: "It's got to have some benefits for someone out here…" (*Xiao, 15th June 2023*), nevertheless, they uniformly concluded their remarks with: "It just wasn't for me…It missed the mark in addressing what I needed help with…" (*Dan, 14th June 2023*)

5.2.3 Sub-theme 2C) Mismatch: Paths/Processes Required in Approaching Career Goals (Psychoeducation Intervention)

Students. Five student interviewees (Xiao, Meng, Xing, Dan, and Qian) verbalised deliberately that they were curious the most regarding what make others decide and settle down to the decision they choose, and how they manage the process and steps to attain their goals. Besides, they were also interested in knowing the feelings and changes others experienced after certain choice has been made and attained. One interviewee, Ning, implicitly expressed views on career development, discussing it in general terms, "I believe career education shouldn't be delivered in traditional lectures. It's more about engaging in a process, experiencing, feeling, and understanding…" *(Ning, 17th April 2023).* It followed with another interviewee, Dan, who stated explicitly, "The course should include more content that helps us grasp real-world scenarios and understand crucial

concepts like career decision-making or career choosing, through actual experiences or at least stories shared by the right people…" *(Dan, 14ᵗʰ June 2023)*.

Nevertheless, this course did not provide any relevant content on these subjects. During the class observation, Instructor Zhu merely described the necessary steps for career planning. It appears that he did not intend to delve into the processes of executing the plan, nor did he seek to assist participants in understanding the challenges they might encounter, through sharing real-life experiences either from himself or others.

Accordingly, the researcher asked students for further clarification regarding the meanings and approaches they expected to employ to fulfil these needs. Most of them mentioned the means by inviting recent graduates with similar background and working in relevant professional domains to share their experiences. However, as Xing highlighted: "We do not want merely hearing their successful stories, we interest in the process of how they make up their mind and persist with it till arriving the target outcome" *(28ᵗʰ April 2023)*.

Meanwhile, the other two interviewees, Yi and Mu, mentioned the method by embracing role-play activities during the course, to enable gaining collaborative learning experience, and to better engaged and internalised with thinking patterns and skills involved in the decision-making process. Thus, from theoretical viewpoint, students' desired assistance from the course was resonated with the assertion in the literature. As proclaimed by numerous career theorists and affirmed by abundant empirical studies (Whiston et al., 2017), career development interventions typically adopted the psychoeducational approach to serve this purpose. In principle, psychoeducation intervention refers to the approach adopted by career course to cultivate students with systematic procedures and tactics for deciding and reaching their career choices. Meanwhile, Ryan (1999) emphasised the attention should be designated to attaining a decision with certainty, commitment,

and satisfaction, while harmonising one's characteristic with the features of the particular work environment. In practical terms, guest sharing, role-play activity, and group discussion are three prevalent incorporated components for career course syllabus, to fulfil the function of assimilating and internalising a systematic strategy to achieving one's career decision with certainty, commitment, and satisfaction.

Instructors. While interviewing the instructors, the researcher brought up the above-mentioned subjects that students addressed. The core instructor Zhu responded implicitly,

> *Over the years of teaching this, I've kind of developed my own way of doing things, you know? But here's the thing: my background isn't in career counselling and guidance or HR management. So, I'm mainly relying on what I've learned on the job over the years. I try to share what I think is important, and I get other instructors to add their two cents with their own experiences, hoping it makes the material more relatable. Still, I can't help but think that we could seriously use more support from the university, like additional training to help us improve the curriculum and how we should teach it. Particularly the theory part, that would really solidify our understanding of career education… (Zhu, 4th July 2023)*

After inquiring further about the current status quo of the resources and supports they could receive from the university or any other stakeholders, both instructors emphasised that they did not get any teaching material or trainings from both the faculty and the university level. Not to mention, Long, as the counsellor who was supervising the career development affairs in this faculty, he highlighted "I've never seen the textbook for this course or received any training in career development since I started working here…" *(Long, 5th July 2023)*. Concurrently, Zhu interpreted they did buy some textbooks available for the higher education career planning course instruction. To some extent, he did revise and involve a portion of the themes into the content, based on these textbooks. Yet, he indicated "Some parts of these textbooks are just hard for me to grasp in terms of their underlying principles…" (Zhu, 4th July 2023). In addition, Instructor Long expressed a similar dilemma. He stated that,

Figuring out the right course content that'll really help students' career development isn't easy when you're doing it alone. I'm sure that Instructor Zhu probably has a wealth of teaching materials from his years of experience. But here I am, just staring out, and I don't have a clear set of guidelines or a structured approach to follow. It kind of, feels like we're stumbling around in the dark, and I can't shake the worry that we might be missing out on key opportunities to give our students the support they need… (Long, 5th July 2023)

Thus, it was evident that students clearly perceived the types of information and approaches necessary to assimilate knowledge and acquire valuable experiences for solving their own problems. On the other hand, it appears that instructors harboured a strong intention to assist students in developing skills essential for self-understanding and career goal formation. However, based on their expressions, they lacked the theoretical underpinnings and systematic strategies to structure content and provide the information desired by participants. Nonetheless, without receiving appropriate professional training or education in relevant knowledge, it would be impracticable for the instructors to grasp the essence of implementing career planning practices. Moreover, it was particularly challenging for instructors to design effective components relying solely on their personal work experiences. Consequently, it would be more difficult for instructors to promptly elaborate on and apply these critical elements during the content delivery process to meet students' genuine needs regarding this matter.

5.2.4   Sub-theme 2D) Mismatch: Increasing Career Adaptability Amid Rapidly Evolving World

According to the demographical data, students were from the age cohort 18 to 21, which was categorised and defined as Generation Z. Admittedly, Generation Z was biologically and socially rooted in the massive explosion of technology and digital information innovations. They have grown up in a fast-changing and ever-complex global context. Thus, inevitably, the precondition of this generation has been entitled as "all-embracing" hyperconnectivity with the world (Pavluković et al., 2022, p. 852). As a result, the saturation of information available worldwide

and conveniently accessible in their daily life has broadened their visions and perspectives toward education, careers, and life, respectively. Therefore, for this specific generation, they have been distinguished from other generations by different learning styles adopted (Palacios, 2019), characteristics such as being more adaptive to changing contexts and technology (Tang et al., 2020), and being more confident and self-promoting (Pavluković et al., 2022).

Students. To concentrate on the aspect of career development, and for this case study in particular, numerous interviewees interpreted that they do their own research constantly on jobs and occupations they were interested in and curious about. For instance, interviewees Mu, Xiao, and Min mentioned that they typically were browsing in social media platform, such as Xiao Hong Shu, Bilibili, and Zhi Hu (these three are dominant app platforms for knowledge content sharing in China), for occupational information and potential career exploration sources. Other interviewees, including Dan, Qian, Tan, Xing, and Yi demonstrated that apart from searching relevant information on these platforms, they also opted for discussing career subjects with their family, friends, or significant others who had experiences in the work world.

Thus, they all revealed their concerns and nervousness about confronting role transitions, specifically from students to employees, and from members of their family unit to independent individuals in the work world. Additionally, they expressed their worries about the uncertainty of the future and the intricate situations they might commonly experience in the workplace, such as inadaptation to the work environment, colleague relationships, workload stresses, promotion possibilities and obstacles, personal growth, and manifestation of self-worth.

Similarly, in the duration of class observation and at the third class, the instructor Zhu asked the class to provide their insights on the status quo of the mismatch between pursued academic

disciplines and subsequent employment opportunities amidst an oversaturated job market. One student from the class explicitly stated that,

> *I think this status quo is a fact and reality I must accept, no matter I like it or not. All I can do is to proactively adapt to this broader environment, and appropriately modify myself to align with it, thereby enabling the environment to contribute positively to my personal development, to some extent... (Student A, 28th April 2023)*

In addition, in the midst of interviewing Dan, she unambiguously stated,

> *In my opinion, one crucial skill that's often overlooked before entering the workforce, and wasn't covered by this course, or even the broader university curriculum, is teaching us the ability to deal with change. Change confronts us almost daily: grades might not meet our expectations, the reward outcomes may not align with our predictions, personal relationships can take unexpected turns, and some life-altering experiences might not end as we envision. Although our current academic journey provides a relatively predictable path, the workplace presents more complex situations where we must adapt to change more frequently... (Dan, 14th June 2023)*

Further, the researcher continued probing for clarification: "What do you mean by capacity to deal with change?" Dan proceeded to interpret that,

> *I mean the ability to accept and adapt to changes. I believe, often, things don't go as planned, we can't predict or control every aspect of our lives. So, what should we do? It is meaningless to dwell on regrets or sink into depression. I think our course should teach us on how to adapt to any situation or challenge we might face in the workplace... (Dan, 14th June 2023)*

Evidently, these students did not have previous experiences of participating in any work-related tasks, though some of them may have undertaken internships before. However, they seemed to comprehend a rather realistic outlook towards the work world and challenges they might confront in their future roles, considering their thoughts, plans, and competences they deemed necessary to succeed in the competitive job-hunting stage. Correspondingly, they acknowledged the imperative to cultivate their adaptabilities at this juncture, recognising it as a fundamental competency for surmounting challenges in any future context.

Equivalently to what Dan expressed as follows,

It's ideal to land a job that we truly enjoy, but realistically, there're too many constraints and obligations to consider. Often, it is highly probable we may not secure our desired first job or even work within our field of interest, especially given the current labour market in China. However, that's just the reality of it. Effective career education should teach us how to adapt to any job we might find ourselves in. It should guide us on adjusting our attitudes, leveraging our strengths, and aligning our goals to succeed in any position, thrive in any profession, and navigate any career path. Isn't learning to adapt more crucial than making a prefect decision once and for all? (Dan, 14th June 2023)

Apparently, among these students, they seemed to share a more proactive mindset toward their future career planning. Also, indubitably, they held a fairly realistic apprehension towards the labour market. Therefore, as a result, they shared relatively pragmatic standpoints on the capabilities and savvy they prefer to acquire and discern from the career development curriculum. They expected to elevate their preparedness for coping and withstanding unforeseen challenges they might encounter in their future roles. Besides, derived from the interviewees' narrations, they acknowledged the need to take a career planning course during their university stage. However, this held true only if the curriculum encompassed the above-mentioned themes and content, thus providing a clear understanding of their unique attributes and situations. Additionally, as previously evident, they perceived that the course should incorporate experiential activities that allow them to reflect on and apply what they have synthesised in future encounters.

Instructors. On the contrary, it appears that the instructors perceived the curriculum's purpose and the importance contrastingly compared to students. From the students' perspective, the instructors were primarily concentrated on presenting occupational information they deemed relevant. The curriculum's aim was not centred on facilitating the students' competencies and readiness for self-discovery and environmental exploration to identify a suitable career path, nor on equipping them with the necessary employability skills to secure a satisfactory life over the long term. As three interviewees (*Yi, 13th April 2023; Ning, 17th April 2023; and Meng, 29th June 2023*) expressed a comparable statement, and more than half of the remainder of the interviewees implicitly

suggested something similar: "They (instructors) were merely completing their tasks as required, without aiming to achieve anything specific…" (*Dan, 14th June 2023*).

However, it would be unjust to assert that the instructors lacked concern for the students' future career development and subjective well-being. During the interview, when the researcher inquired about the extent to which they thought the seven factors (Section 2.4.2) should be included in the curriculum, both instructors, Zhu and Long, highlighted that values clarification should be the most crucial component to engage with, theoretically speaking. Nevertheless, they also expressed their concerns regarding some factors, such as psychoeducation intervention and attention to building support, as valuable aspects to facilitate students' ability to build their future careers. Evidently, although the instructors recognised the essentiality of including the aforementioned components within the curriculum, they were unable to convey any specific content or activities on site during the process. When the researcher inquired about the reason for not providing these components, despite believing in its benefits for facilitating and cultivating students' career planning skills and competence to attain their goals, both instructors avoided the question.

In fact, since they were neither majored in or have been trained for career counselling and guidance, nor had they received any support and resources from other stakeholders, they were restricted in their capacity to design and deliver what they thought was essential to actual systematic content. In other words, even though they sensed that career adaptabilities were crucial to equip students with under the current context, they did not know which aspects should be emphasised or what approaches should be adopted for facilitation. Thus, they implicitly expressed their current situation, indicating that they were offering only what they possessed and understood at the time. Despite this, in the interview with instructor Long, he disclosed another significant reason for the course's current state: both the course syllabus and its delivery were treated as routine tasks merely

to be completed. This aligned with students' perceptions, which suggested that, rather than serving as a means to achieve specific outcomes on career planning skills, the course seemed solely targeted at fulfilling requirements. Furthermore, Instructor Long explicated,

> *I think the career centre (at the university level) didn't really prioritise this course. They didn't really focus on how it was designed or how it was taught. At the end of the day, what they really care about is employment rate of the graduates. They just want to see if the numbers meet their targets and that's pretty much it. They're not looking into anything more than that... (Long, 5th July 2023)*

In addition, during the interview, Instructor Zhu expressed a similar viewpoint on this issue. When the researcher asked him about the routine regulations of the course from any stakeholder, especially from the career centre, he explained that,

> *They [the career centre] didn't really get involved with the design of the syllabus or how we delivered the content. Honestly, they weren't too concerned about it at all. Their main focus was on the alumni resources we could offer for job fairs and tracking the employment rates of our graduates, as they requested… (Zhu, 4th July 2023)*

Therefore, it appeared that the indifferent attitudes of other stakeholders and the lack of regulations regarding the course primarily hindered the instructors' motivation and enthusiasm to devote more to content preparation and invest in personal development. Still, it seemed they overlooked the needs and aspirations of the actual audience and beneficiaries of the course. This was at odds with their initial intention, which had been to provide students with the opportunity to contemplate and reflect on their future career planning and to better pursue their career goals after graduation. Moreover, they neglected the appeals made by students during their daily interactions, and the integration of the competencies they deemed necessary into the course syllabus. Evidently, their expressed helplessness and negative attitudes towards the course affected their judgments regarding the content they chose to deliver.

5.2.5 Sub-theme 2E) Mismatch: Providing Occupational Information

During the class observation process, each instructor made most of their efforts to involve content that related to career options and pathways to obtain them, that they perceived as relevant to students' potential future directions. Indeed, occupational information is an essential component of effective career planning or career exploration interventions in any context. As resonated in the literature and advocated by numerous empirical evidence, vocational information serves as the resource that helps students develop a comprehensive and realistic view of the labour market. This, in turn, enables them to craft a tangible future career path.

Instructors' Perspective: General and Nonspecific Occupational Information Addressed

The relevant content delivered predominantly emphasised on two aspects regarding occupational information. Firstly, the general information relating to the present state of the labour market in China and the trends of industrial growth and development. Secondly, the instructors made their most efforts on introducing and interpreting the approaches and procedures of how to apply for and acquire eligibility to gain qualifications in: 1) Graduate recommended admission quota; 2) Postgraduate entrance examination; and 3) Government servant series recruitment. Correspondingly, at the core, the content solely implicated subject matter regarding broad contextual overview of the labour market: for instance, the general occupational classification information, the macro industry trend briefing, and the pervasively present issue of elderly workforce challenge. Besides, amongst the seven sessions, roughly speaking, the instructors spent one and half sessions outlining information toward variant approaches for graduate admission application, and one session briefing information regarding government servant series employment application.

During the instructor interview, the researcher asked Instructor Zhu, what the reasons were for encompassing these enriched contents toward the above-mentioned topics. Zhu indicated that, with the noticeably competitive status quo of the current job market, he must seek an approach and lead them to acknowledge the severe employment situation they might face after graduation. Therefore, Zhu *(4th July 2023)* interpreted specifically that, "I think it might be helpful to discuss some of the major issues and trends in the labour market…". Simultaneously, Zhu continued,

> *You know, nowadays, over 80% of undergraduates are choosing to go for master's degrees instead of diving straight into the job market after they graduate. And with the way the economy is, a lot of them are leaning towards jobs in the government or more stable places (state-owned companies). That's why I think it's super important right now (for freshmen) to have a clear roadmap for pursuing these kinds of jobs. A lot of them might not have started thinking about their career paths yet or might be undecided. Getting this info early can really help. It can get them excited about setting clear goals and encourage them to start acting on them sooner rather than waiting until it's too late… (Zhu, 4th July 2023)*

Obviously, the instructors were convinced the delivered content, and the relevant information provided, could equip students with generating an accurate portrait of the labour market. In addition, they believed the content would awaken students to the fact that they are necessitated to make decisions toward their careers or future stages promptly and immediately, with the aim of achieving their goals smoothly.

Students' Perspectives: Data-Driven and Practical Oriented Occupational Information Needed

Nevertheless, seemingly, students did not share the same perspective toward the demand for occupational information as perceived by the instructors. When the researcher asked the students how they felt after taking the course, 9 out of 14 interviewees manifested the course did not contain enough occupational information they seek for.

Firstly, students alluded to the general information regarding the broad labour market and industrial trend addressed during the course was non-relevant and meaningless to them at present. Several interviewees expressed their feelings toward this part of the content, as "It seems it [the

information provided] was rather too vague and too far away to me, for the current stage…" *(Meng, 29th June 2023)*. One of the interviewees, Guang, he pointed out,

> *We're only first-year students; it'll be at least 4-5 years before we start working. Plus, it's hard to predict what the job market or economy will look like, or which industries will still be around in five years. So, this info might not be as helpful or relevant as we think... (Guang, 20th April 2023)*

Moreover, another interviewee, Meng *(29th June 2023)* revealed "I'll be straightforward, the content felt rather empty, in my view…" She further articulated that everyone knows very well the competitive situation of the job market that they will face in the coming future. Also, for the information regarding the challenges confronting in the society and economic status, the industries with promising futures, or the competencies necessary to succeed in this ever-competitive labour market, they have already obtained these facts substantially from numerous other sources repeatedly (e.g., Xiaohongshu, Bilibili, Zhihu, other lecturers, etc.). She thought it seems the course does not embrace any new aspect, or any strategy contributing to better prepare or equip students with, to deal with these challenges and situation. Thus, from her perspective, it was pointless to merely address the facts once again without encompassing some fresh features of the current reality or coping strategies to facilitate their strengths to ease the situation.

Secondly, referring to the thoroughly imparted information related to postgraduate studies applications, most interviewees considered this section has been emphasised somewhat excessively. As the interviewee Dan *(14th June 2023)* indicated: "We already know our options and approaches for postgraduate studies, even before starting our undergraduate studies...". Further, she articulated that most students, especially those who entered the first-tier universities ("985" project and "Double First-Class Plan"), had already set the goal to gain at least master's degree before entering the workforce, due to the current status quo of the labour market. They had been planning to achieve this goal at the very beginning of their university journey. Hence, Dan *(14th*

June 2023) said "It doesn't seem necessary to go into too much detail each option repeatedly. Instead, we're looking for guidance in understanding the reasons behind choosing a specific option…". In other words, it appeared they seek instructions toward self-understanding, self-evaluation, and values clarification, to precisely evaluate their personal strengths, the context condition, and the meaning and expectation attached to their personal goals in the long run.

Therefore, when the researcher probed into the students' genuine needs of occupational information and their understanding toward the term with follow-up questions, they elaborated explicitly that, first, they expect to acquire more knowledge and information regarding the concrete data analysis of employment choices and outcomes from previous graduates and from relating majors and faculties; second, they want to familiarise themselves with information regarding trajectories of particular professional development and compensation structures within specific occupations, ideally complement with illustrative real-life case studies. Additionally, Xing (*28th April 2023*) explicitly stated that, "We're only interested in the trend analysis of recent graduates, not some reviews with historical data from ten years ago…", a sentiment echoed by eleven other interviewees.

Consequently, and finally, they wanted to understand how to utilise this discussed occupational information onto their unique situations. That is to say, they wanted to bridge the gap between their existing competencies and the envisioned future professional career requirement, through this ongoing knowledge and skills gaining stage. As interviewee Yi stated,

> *I think the course would be more useful if it showed how to identify and connect our strengths and skills to real work situations. That way, I'd have a better idea of how my unique traits and abilities could help me grow in my career… (Yi, 13th April 2023)*

Undoubtedly, students possessed a rather practical need and data-driven manner for obtaining occupational information. Their understanding and demand toward this subject were completely contrary to the instructors' perceptions. Primarily, this was due to the information saturation

experienced by participants, who had access to various sources for obtaining useful information, such as mainstream news, trending topic shared on social media platforms, and everyday discourse among family, friends, and teachers. As a result, they seemed to have already established a fair and accurate image of the context. Therefore, from their perspectives, merely providing relevant occupational information should not be the focal point. They needed more guidance in discussing tactics to utilise and make sense of this concrete and specific occupational information that is accessible and contributes to their self and career exploration process.

In conclusion, after integrating and assimilating students' reflections and responses to the relevant questions, it was evident that they shared a clear and uniform view toward career planning. Specifically, they anticipated that this course should give them an in-depth understanding of potential future career domains. This understanding would come from exploring trends through data analysis of recent graduates' employment status and sharing experiences, all within a framework of methods and strategies designed to teach logical, rational decision-making processes (referring to data-driven occupational information and psychoeducation intervention).

Beyond obtaining concrete occupational information, students also expressed concerns over how to make meaningful decisions for career satisfaction and personal fulfilment (referring to values clarification). Thus, from their understanding, the essence of solving this problem lay in engaging in activities and approaches that foster self-understanding and self-exploration. Moreover, they were eager to learn effective ways to prepare for future uncertainties and fluctuating situations in the work world (referring to career adaptability).

Therefore, according to their viewpoints, only after these aspects have been clarified and addressed with the instructor's support and guidance can they generate a realistic and more transparent image of themselves and their environment (referring to working alliance). This foundation would

empower them to formulate congruent and intentional decisions in any situation and at any stage of life. In other words, the findings above substantially verified the crucial impact of providing psychoeducation intervention, building a working alliance, emphasising values clarification, cultivating career adaptability, and facilitating students' career development of mindsets and skills for making meaningful career decisions at this stage.

It was also indirectly proven that the likelihood of its outcome being efficacious is high if the course can provide support and exercises to foster the competencies desired by students, which they perceive as necessary to thrive in this rapidly competitive labour market and ever-changing social context. However, it seemed the current curriculum failed to embrace and fulfil any of the above-mentioned factors that students highlighted and discussed as essential aspects regarding career planning.

This shortfall was not solely due to the instructors' lack of preparedness or misinterpreting the students' needs. In fact, the instructors acknowledged the importance of emphasising and facilitating these elements in the curriculum. Nonetheless, the deficiency in professional training and a lack of extra supporting resources have resulted in the status quo of curriculum delivery. As a result, the instructors merely touched upon general occupational information at a macro level and encouraged students to pursue secure, conventional future options and career paths.

Thus, the instructors' abilities have been significantly limited by apathetic and unsupportive attitudes and regulations within the broad managerial environment, not just at the faculty level but also across the university. This led to the third central theme from the data: mismatched effort expectations between instructors and students.

5.3   Theme Three: Mismatched Effort Expectations Between Instructors and Students

During the interview process, another significant difference that emerged from the data analysis was mismatched attitudes and expectations between the instructors and students, regarding the purpose and effect of this course. For instructors, their negative mindsets and passive perceptions toward the course permeated in their expressions and content preparation. On the other hand, students initially held a positive aspiration towards this subject. However, primarily, they demonstrated rather pragmatic attitudes and behaviours throughout the content delivery process.

5.3.1   Sub-theme 3A) Mismatch: Easy Credits ≠ No Expectation to Learn

Instructors. This career planning course was designated as a partially compulsory course for Business and Administration (BA) programme, while it served as an elective for other economic and management-related majors within this specific faculty. Nevertheless, although it has been a part of the compulsory curriculum since 2008, it appeared that the course has not received any particular attention, coinciding with the indifference and unstandardised evaluation criteria from the career centre at the university level. As a result, the instructors have come to regard the course and their roles within the curriculum as marginalised disciplines. Moreover, they were of the opinion that students register for this course primarily because it allows for easy passing and credits accumulation, rather than for the targeted acquisition of knowledge and skills relevant to their future career planning. As instructor Zhu stated,

> *I can't really measure what you might call "sophisticated self-interest" among the students. What I do know is that starting this year, we've updated the course grading system from a simple pass/fail to a detailed centigrade system that affects their GPA. So, it really makes you wonder, how are they expected to aim for higher grades if they weren't actively participating in class? (Zhu, 4th July 2023)*

During the class observations, it indeed became readily apparent that, for more than ninety per cent of the time, students did not raise their heads or listen to what the instructors' presentation.

Despite this, the lead instructor, Zhu, explicitly permitted students to engage in any activities they preferred, as long as it did not involve chatting, which could disturb the class order. Most students actually followed his directive and concentrated on their own tasks, with the exception that they did not attend to the content being delivered.

Students. When the researcher posed the question to the interviewees, "What is the true reason for you to enrol in the course?", it was surprising that 8 out of 14 interviewees revealed a genuine interest in this topic and an expectation to gain some practical knowledge about it. As interpreted by one of the interviewees, Yi *(13ᵗʰ April 2023)*, "I believe that the students who remained beyond the two-week course add/drop period ended were genuinely interested in the subject…". Following that, the research delved further with the follow-up question, "So, your choice of this course was not merely because it is an easy credit to earn and a course that is easy to pass?". Yi, along with two other interviewees Guang and Ning, expressed similar views,

> *Taking this course for just 1.5 credits might not be the best move if you're just trying to meet your credit requirements. You see, you'd have to find another 1.5 credit course to balance things out, or you'll end up wasting half a credit. Plus, there are plenty of other courses that are easy to pass and can give you the credits you need without the hassle... (Yi, 13ᵗʰ April 2023)*

Consequently, the researcher persisted in asking what students hoped to learn or gain from the course before it commenced. Most interviewees voiced their sincere concerns regarding the prospects for future development, especially in the current economic climate. As Guang *(20ᵗʰ April 2023)* stated, "I know it's pretty tough to find a satisfying job. That's why I want to be prepared by learning more about the skills employers valued and understanding the standard requirements in specific professional fields related to my major…". Another interviewee Yi *(13ᵗʰ April 2023)* expressed, "I believe the course will help us to understand our strengths, weaknesses, and interests while also providing methods to explore and identify a suitable career and future position...". It followed with the response by Wen *(19ᵗʰ June 2023)*: "I want to learn how to plan my four years

at university more effectively, so I'm better prepared for future challenges." Subsequently, the

researcher probed into the reason why he wants to learn about planning skills for university period

specifically. Wen continued,

> *I think the planning logic and skills we're supposed to learn should apply anytime, not just for far-off future careers. Planning career so far ahead doesn't really work for me right now. But if the course could teach us the real basics and strategies of planning, I could use that for important stuff I'm dealing with today. Plus, having solid planning skills and better knowledge means I could land a job I really want when the time comes… (Wen, 19th June 2023)*

It is noticeable that, right from the outset, students perceived the purpose and outcome of the course

through their own viewpoints, despite the ease of earning credits. They were also expecting and

preparing to acquire some knowledge regarding career planning, in addition to information and

skills, through the process.

Therefore, there was initially a significant mismatch in stand and aspiration towards the course

between the instructors and participants. However, the reason instructors believed that students

were primarily attending to earn credits, without a real concern for knowledge and information

regarding future career planning, was partly due to the level of engagement that participants

demonstrated and the attitude they exhibited throughout the entire process.

Thus, the explanations of the lack of engagement and interests demonstrated in the classroom, as

revealed by students' interpretations, led to the subsequent sub-theme.

5.3.2   Sub-theme 3B) Mismatch: Learn Only If It is Useful

As the researcher observed the classroom engagement and interaction between instructors and

students throughout the seven sessions, it became clear that the instructors' belief, that students

were disinterested in the subject matter or content pertaining to future career domains, was

reflected in the classroom dynamics. Moreover, it was both inevitable and reasonable for

instructors to hold this view, as most of the time, there was no response from the audience, making it feel as though they were lecturing to an empty room.

Students. The researcher directed this inquiry to student interviewees: "What is your opinion regarding some students who seemed disinterested in this subject and engaging in other activities instead of participating in the content?". One of the interviewees, Mu stated,

> *I think it mainly didn't connect because the content didn't really relate to our actual needs or directly help us out at the moment. However, the core instructor [Zhu] was still alright. He'd explain the content and info to us with real enthusiasm during class. The other instructors, though, they just read from the slides, which was honestly pretty boring… (Mu, 14th April 2023)*

Accordingly, another interviewee, Chang, similarly expressed that,

> *Sometimes, they [the instructors] just talked about these very broad concepts and life principles that felt kind of vague and generic. We come across this stuff all the time, and when it comes to career planning, I could just pick up a book and figure it out on my own. There really wasn't much point in sitting there listening to them read from the slides during class… (Chang, 3rd July 2023)*

It was followed with the other interviewee, Qian, who interpreted that,

> *They [the instructors] always focus on and stress the same old procedures and pathways for getting ready for postgrad exams, or qualifying for civil service jobs. They don't really talk about other career options pathways in the classes. Is it because the other options aren't really recommended, or because the potential for future development in those options isn't as promising as these? That's actually what we're curious about. Besides, we already know most of [the information] they talk about. I guess that's why a lot of us just tune out… (Qian, 27th April 2023)*

Consequently, the researcher delved into this inquiry and followed with another question as: "So, do you mean the content and aspects of career planning that the course covered do not arouse your interest?" Subsequently, Qian responded, "Yeah, I know that some of the content and materials weren't that engaging or practical. Still, I believe this subject is quite essential for us to learn and get ahead with…". This was followed by Mu's interpretation,

> *Actually, if they could make the content more practical, like including real-life cases and discussions, I'd definitely be more engaged. It would be a lot more interesting than just*

sitting there while the instructors read off the PowerPoint slides you know… (14th April 2023)

In addition, another interviewee, Guang, explicitly stated,

You know, back in our second semester, we were all stressed out with the core courses because GPA is pretty much everything at that point. So, sometimes we'd try to get ahead on other big assignments during some of the elective classes, especially if the lecture felt irrelevant. But, whenever the lecturers brought up something actually useful, like showing us how and previous graduates got jobs or strategies for planning our careers, everyone would immediately perk up and pay attention… (Guang, 20th April 2023)

Accordingly, several interviewees indicated that this phenomenon was evident in class as well, and the researcher also observed it during the process. When certain types of information were presented or addressed by the instructors, for instance data analysis of employment outcomes of previous graduates, career planning flowcharts, and personal or environmental factors analysis, students seemed to immediately refocus and pay attention to the content. As the interviewee, Meng *(29th June 2023)* interpreted, "We weren't completely detached from the class. We were paying attention even while doing other things. It's just that the content didn't require our full attention because there wasn't much useful information involved…".

Therefore, synthesised from these students' responses, it appeared they adopt a rather pragmatic stance toward the course. In other words, their displayed attitudes during the class did not stem from indifference to the subject matter or from a lack of interest in learning about future career planning, contrary to the instructors' perceptions.

Instructors. The development of instructors' negative mindsets and passive attitudes toward lecturing the course was not solely attributable to the misinterpreted needs and attitudes among students. To a significant degree, it was also the result of neglect and indifference to academic standards and administrative regulations, not just at the faculty level but also at the university level. As the instructor Long stated,

I don't feel quite ready to teach this course, to be honest. I've been here almost two years

now, and I haven't had any specific training or workshops on career guidance, even though a lot of my job is about helping students with their career and job plans. It feels like the career centre doesn't really prioritise this course either. There's no set textbook or clear guidelines on how to teach it. Ideally, I'd love to help students plan out their careers through this course, but it's tough doing it all on my own without clear support on how to guide them effectively… (Long, 5th July 2023)

Moreover, as the instructor Zhu emphasised several times and further expressed,

Unlike some of the other lecturers who've specialised in Human Resource Management, we aren't trained professionals in the Business Administration department. We've basically put together the course materials from years of experience working with students, pulling together what we've learned about their needs and my own insights on the issue. Teaching this course is quite a challenge for me. It really would help if we could get some support and professional training on the basics of career guidance and career development theories… (Zhu, 4th July 2023)

Clearly, both instructors have subtly indicated a persistent neglect of support in professional training, instructional guidelines, and resources from any stakeholders. Meanwhile, they have expressed their sense of helplessness and the difficulty they face in enhancing the quality and effectiveness of the course without any external support and standardised regulations for motivation. Therefore, in accordance with one of the administrative staff, Yuan, who has been working and in charge of undergraduate programme management in the faculty for almost thirty years, and as she observed,

This elective course has been a part of the BA programme for years, meant to round out the educational plan. But, whenever our curriculum gets reviewed, whether it's by internal or external evaluators, it seems like no one ever really looks at this course's syllabus or content, not even once… (Yuan, 6th July 2023)

Additionally, Yuan stated that the other elective courses were mostly taught by lecturers or professors from the respective departments, which were in charge of, and responsible for, the curriculum outcomes and academic evaluation of undergraduates' programmes within their specialties. Therefore, they have established exclusive instructional teams for each course, responsible for the curriculum construction, teaching materials preparation, and refinement. Yuan also emphasised that for most curricula, there were explicit and matured instruction guidelines,

with abundant materials and textbooks available to structure distinct course content for various academic purposes and outcomes. Moreover, with years of pedagogical experiences accumulated, alongside the sharing and teaching of successful experiences for professional training purpose, in general, each discipline has established systematic procedures and standards for academic evaluation to adhere to.

In contrast, it seemed that the current career planning course has not been organised or coordinated according to the routines of other curricula mentioned above. Despite this, the course has been listed in the curriculum plan as required by the MoE since 2007. Meanwhile, it has been implemented as an elective course for most undergraduates, particularly in this faculty. Still, it was treated as an extracurricular workshop in the entrepreneurship education section, with accountability falling under the student affairs domain.

Furthermore, none of the instructors were professionally trained or from specialised discipline, unlike in other courses. Moreover, due to the absence of a standardised syllabus structure, detailed instruction guidelines, and experienced outcome assessments, it was challenging for the instructors alone to create effective content and persist to achieve the course's goals. Nevertheless, the official evaluation did not prioritise this course. Just as Yuan described the situation: "The evaluators don't really know how to assess the course since they've never taught it and aren't familiar with it. So, they just skip it altogether."

Notwithstanding this indifference towards the course, what surprised Yuen the most was the constant number of students registering for it. As Yuan explained that,

> This course isn't mandatory, but every year, enough students enrol in it which keeps it active. Because you see, if the number drops below 30 [students] for two straight semesters, though, the course gets automatically removed from the selection list… (Yuan, 6th July 2023)

Consequently, it was evident that, although students demonstrated a rather pragmatic stand toward the course, interpreted as "learn only if it is useful", their motivations were not diminished by this. Thus, the next emerging sub-theme was elicited, exemplifying another set of mismatched effort expectations toward the course between instructors and students.

5.3.3 Sub-theme 3C) Mismatch: High Motivation and Low Engagement

According to the previous curriculum registration system record, approximately 30 to 35 per cent of students were from other majors within this faculty, who voluntarily registered for this course. This aligned with Yuan's observation that not all the students were from majors where the course was partially compulsory. For instance, students from the E-commercial, or those majoring in Finance and Accounting also chose to register to this course. Therefore, in contrast to the instructors' seemingly passive attitude toward the course, these students appeared to hold different perceptions and expectations. Similarly, this phenomenon also aligned with Yuen's curiosity about why this course has consistently maintained its enrollment numbers over the years. Based on her perspective and observation, neither the faculty nor the instructional team has invested significant effort in curriculum development or outcome evaluation.

Students. During student interviews, 9 out of 14 interviewees explicitly elucidated that, to some extent, they were intrinsically curious about methods and strategies for organising and utilising their possessed knowledge and resources to plan for and strive to accomplish a satisfactory career choice or decision. Moreover, regardless of the specific programme they took and experienced, all 14 interviewees articulated positive attitudes toward career planning education, considering it an essential domain that should be emphasised throughout their university journey. To exemplify, one interviewee, Meng, specifically demonstrated the reason why she is curious about the notion of career planning. She stated,

> *We all have limited time and energy to do things. We can't get everything we want or explore every option out there. It'd be better if we could figure out what we truly want to pursue and how to achieve it in a systematic and step-by-step way as early as possible... (Meng, 29th June 2023)*

Similarly, the other interviewee, Ning, expressed her curiosity about whether career planning could help her explore more career possibilities. Specifically, she denoted that the course would be beneficial if it could guide her in aligning careers with her personal expectations and achieving her life satisfaction goals. Ning (*17th April 2023*) interpreted this as, "I already have a career path my parents suggested I pursuit currently. But I'm still curious if the course could help me find out other potential possibilities that better align with my personality and needs…". In addition, another interviewee, Wen, who expressed his expectation of the course and articulated more on his unique curiosity toward it. More specifically, he shared his understanding of career planning at the current stage,

> *I am curious about how to effectively plan my four-year university life as I mentioned. Because you see, currently, my parents may have a bigger say deciding how to plan or choose my future career path. But I think if I can learn practical methods and strategies to effectively utilise the opportunities and resources at hand, and acquire and equip myself with competencies and knowledge as much as I can, then I may have a better chance to pursue the career or goal that I want in the future, with convincing and persuasive qualifications to win my autonomy… (Wen, 19th June 2023)*

Furthermore, when the researcher prompted Wen to provide a detailed explanation, from his perspective, on how the course could aid him in better planning for his university years, apart from the resources and requirements to gain more information and academic support he wishes to obtain, he particularly emphasised and iterated the benefit of grasping the rationale for career decision-making methods. As he explained,

> *Although I might not need the skills to make career decisions at present, I think I can apply them to make sensible decisions in my daily life. Because if I can make each decision reasonably and effectively, I think I will be more likely to acquire and accumulate experience necessary to make a satisfactory career decision when needed… (Wen, 19th June 2023)*

It was evident that the previously observed low engagement of students in class does not conflict with their perceived high motivation for the subject. Furthermore, despite the varying perspectives students have on career planning, they agreed on the fundamental insight that planning, as an essential competency, can be advantageous in leveraging available resources and capacities to solve current practical problems. This could enable them to seize opportunities to gain experience and skills effectively and purposefully, thereby furthering their pursuits of future career or life goals. In addition, it was substantiated that the observed passive participation should not be interpreted as genuine low motivation toward the subject. As reflected in the expressions among students, they seemed to perceive concrete requirements for the CDE course curriculum and expected to gain practical skills and strategies to address their daily challenges.

Instructors. Instead, the instructors reiterated that students lacked concern and intentionality regarding learning or planning for their future career at this stage. They emphasised a trend they observed that most students directed their efforts primarily toward achieving higher academic scores and GPA ranking, rather than dedicating any effort to understanding the concept of planning their career ahead. From the instructors' perspectives, they believed that students were constrained by the tendency to apply for postgraduate degrees and secure stable jobs. They emphasised that students were pressured to make these decisions, often endorsed by their parents, reinforced by mainstream media, and compounded by the fluctuating economic conditions in the current context in China. These factors further influenced their behaviour to follow the popular pattern of career choices. Consequently, the instructors expressed a passive attitude toward teaching the course, feeling powerless and helpless to change students' perception of their limited future career options. Instructor Long addressed the issue as follows,

> *It's tough for us to do this job [guide students in their career choices]. Most of them plan to go straight into postgraduate studies right after graduation. Each year, about 60% of*

undergraduates head to grad school, 20% might take government jobs, and the remaining 20% decide to retake the postgraduate entrance exam the next year. You see, first, they don't bother planning their careers right now because it's too far off for them to think about. Second, our advice to explore more opportunities seems weak and unconvincing compared to their families' advice and what's trending in society... (Long, 5th July 2023)

Conversely, it appeared that students understood this inevitable trend and the seemingly limited career paths quite differently from their instructors. As the interviewee Chang (*3rd July 2023*) pointed out: "Even though most of the good jobs I know of require a master's degree, another big reason we head straight into grad school is that we're unsure about what we really want to pursue…". Simultaneously, four other interviewees, Xiao, Ning, Meng, and Min, clarified that pursuing postgraduate studies was not their preferred option after graduation, at least for now. If they could identify their true vocational interests during this stage, they would first opt to enter the professional realm to gain practical knowledge and skills. Later, depending on their career development needs, they would consider the necessity of a master's degree. As Meng *(29th June 2023)* illustrated this viewpoint by saying, "I think that unless you're aiming for an academic career, getting into the real workforce earlier is better for personal growth and building skills than joining a postgraduate programme that isn't relevant…".

Therefore, it seemed evident that although both the instructors and students recognised the popularity and inevitability of pursuing a master's degree to find a decent job or to obtain more stable career options in the current labour market, they perceived this situation differently. Students gravitated towards these options only because they lacked adequate skills and strategies to determine what they most desired for their future career pathways and personal satisfaction in the long term. These options seemed like safe choices at present.

In contrast, instructors believed that students do not need more information or exploration to plan their future careers. They seemed focused on assisting students to act towards these popular choices endorsed and accepted by their parents and the society. Thus, to some extent, this mismatch

in perception toward CDE explained why students expressed a higher motivation to gain career planning competencies in general yet demonstrated lower engagement in practice.

To summarise, three factors evidently evoked and exacerbated the negative attitudes and expectations that instructors harboured towards the CDE course. Firstly, there was a lack of attention and engagement among participants during the delivery process. This led instructors to believe that students were not expected to learn anything from the course. Consequently, they adopted a passive stance and did not strive to attract their attention with updated and elaborate content.

Secondly, the persistent neglect of support and indifference towards providing professional training, instructional guidelines, and external resources from stakeholders at both the faculty and university level caused the instructors to lose motivation and fundamental support. This affected their commitment to personal contribution and course development for this subject.

Finally, combined with the negative manifestations from students and stakeholders, as well as employment data from previous graduates and years of working experience, instructors naturally presumed that students lacked intention regarding career planning at this early stage. Therefore, instructors gradually developed entrenched negativity toward the purpose and outcome of the CDE course. They also lacked the encouragement and motivation to enact or advocate for change, even though they fundamentally recognised the value of career planning for undergraduates' long-term career and life development.

Nevertheless, while students resonated with the instructors' acknowledgment of the indispensable value of career planning competencies, they adopted a more positive, functional, and practical attitude toward this course. From their viewpoints, if the course had been structured and implemented effectively, it could have provided them the opportunity to systematically

comprehend their strengths, weaknesses, and interests. They would have used methods and activities designed to reflect on their needs, values, and achievements they aim for. Consequently, integrating strategies for effective decision-making skills and realistic labour market exploration and analysis might have boosted their chances of utilising available resources and support to acquire the necessary competencies and knowledge, thereby increasing the likelihood of securing satisfying employment.

However, students' positive, functional, and practical outlook toward this CDE course was predominantly determined by the aforementioned aspects, information, and crucial components they expected to gain from it. Despite this, students' performance and engagement during curriculum delivery were pragmatically judged by the quality and relevance of the content delivered and the instructional methods and pedagogical strategy employed by the instructors. Consequently, this led to the last central theme that surfaced in data analysis: the mismatch between the teaching approaches and instructional styles employed by the instructors and those anticipated by the students.

5.4   Theme Four: Mismatched Expectation of Teaching Styles and Learning Environment

Throughout the class observation process, it was easy for the researcher to notice the disconnected atmosphere between the solitary lecturing instructor and the disengaged students. Typically, the instructors presented content displayed on slides or shared their personal experiences, or those of others, as illustrative examples. Yet, they appeared to capture the attention of less than ten per cent of the audience during the class. It often seemed that the instructor delivered a monologue while the students were preoccupied with their own concerns. However, conversely and surprisingly, whenever the instructors sporadically assigned students to answer questions or share their opinions

on relevant career topics, or invited the class to divide into small groups for activities or discussions, they appeared neither hesitate nor unwilling to engage in these class activities.

Furthermore, upon completion of this course, a majority of the interviewees (11 out of 14) reported that the most memorable part of the content was one of its assignments. This task involved interviewing one to three individuals (excluding family members) who have been employed in the interviewers' field of interest for less than ten years. According to responses from these interviewees, three prominent insights resonated among them, stemming from their conversations with these professionals. First, they learned that finding a sense of self-worth in one's job is essential, as its enhancement and achievement can significantly increase personal happiness and job satisfaction. Second, they discovered that personality or interests might not play a pivotal role in career determination; instead, more comprehensive factors should be considered, and an interest in the job can be developed over time. Lastly, they recognised that unjust or restrictive circumstances may arise in the workplace, necessitating preparedness and the development of strategies to cope with these challenges. In addition, some interviewees shared their personal reflections after completing this assignment. Foremost, they articulated an aspiration to find a career or professional field that could provide them with sustained self-worth and opportunities for personal development. Subsequently, they acknowledged that salary, rewards, and compensation were certainly primary factors to consider in career decision-making. However, they also recognised the importance of considering congruity with the person and the working environment in their career choices.

Consequently, it was evident that despite infrequent opportunities to share their perspectives and insights during the lecture or to engage in class activities, students still acquired certain experiential knowledge through the assignment. They effectively utilised the opportunity to explore and

integrate their curiosities about future careers and developed a personal comprehension of the subject.

Thus, it further underlined the final aspect of mismatch between instructors and students with respect to the incongruity in teaching approaches and learning environment employed by the CDE course.

5.4.1 Sub-theme 4A) Classroom Conundrum: Teaching Practice – Traditional VS Collaborative Learning Approach

The CDE course employed a traditional lecture-based and teacher-centred pedagogical approach and teaching style. According to the literature, this traditional lecture-based and teacher-centred teaching approach was characterised by the instructor playing an authoritarian role in class, leading and controlling the learning content and environment. Consequently, students were positioned as "passive recipients" and treated as "empty vessels to be filled with knowledge" (Stewart, 2012, p. 25)

Students: Needs for Interactive Teaching and Learning Environment

During the class observation process, researcher noted three distinct episodes where students appeared to be re-engaged with the content after being preoccupied with other personal tasks. Each time, this renewed engagement coincided with the instructors inviting them to participate in small group or paired class activities. The researcher observed that, compared to other content delivery methods, these interactive activities seemed to generate excitement and high involvement among nearly all students, who eagerly collaborated to complete the tasks. Albeit, in most scenarios, only a few had the opportunity to share their results or outcomes to the class, this limitation did not seem to affect their enthusiasm for participation and completion. In contrast, when the instructors resumed the lecture format and proceeded with slide-based content delivery, students promptly

reverted to silence and returned to their prior preoccupations.

Furthermore, among the fourteen students interviewed, nine expressed negative feedback regarding the predominant use of lecture-based teaching in the course. They described this approach as "not helpful" (Yi and Ning), "unattractive" (Mu and Xing), and "ineffective" (Qian and Dan) for achieving the intended goals of career information acquisition and career planning. Additionally, Dan suggested that the course should offer more opportunities for communication and discussion of opinions and thoughts with peers, as well as create a somewhat immersive environment that provides experiences akin to real workplace scenarios. This view was echoed by Qian's suggestion that the course could benefit from smaller class size, or at least be divided into small groups to allow more frequent personal interactions and communications with fellow students and the instructor directly.

These comments were in line with the views of other interviewees concerning the lectured content specifically. For instance, Chang *(3rd July 2023)* stated, "Simply dictating these concepts and theories of career planning did not help; I could easily learn them from textbooks if necessary…". Meanwhile, Ning *(17th April 2023)* mentioned that the information (referring to postgraduate degree application information) emphasised in the course had already been covered by other lecturers and sources, adding, "There's no need to repeat it again in class…". Moreover, Xing and Ning both highlighted that the focus should have been on contemplating the reasons behind certain decision-making and exploring more personal possibilities. Therefore, it was evident that students were keen to engage in more interactive exercises within the course to share, discuss, and reflect upon unique career issues relevant to their individual circumstances.

Instructors: The Status Quo of Teaching Practice and Their Perspectives

Meanwhile, it was evident that during the curriculum delivery process, the instructors

automatically performed and established a controlled and restricted learning environment to minimise the chances of involving participants in raising questions and interactive exercises.

Moreover, when the two instructors expressed their desire for more resource support and professional training, they articulated their need for training in fundamental career development theories and strategies. Additionally, they emphasised the need for information support, specifically in accessing and interpreting graduates' employment data and labour market trend analysis. However, they did not address the need for training to develop their teaching approaches and styles, which would further enhance the effectiveness and quality of this course. When the researcher asked about their opinions on whether the currently employed teaching approach, style, and class size might affect overall student engagement and the course outcomes, both instructors suggested that they did not believe these factors would significantly affect the results or improve student involvement. Nonetheless, according to Instructor Long's interpretation, he specifically mentioned that incorporating more practical-oriented exercises, for instance, mock interviews or CV writing, could help increase student engagement. Moreover, Instructor Zhu suggested that adding more extracurricular activities, such as company visits and guest lectures, could improve the effectiveness of the course and be advantageous for students, by providing them with more concrete career information and insight into the working environment. Thus, it appeared that both instructors postulated that the disconnected atmosphere and disengaged participants could be addressed by adding more attractive elements and class activities.

From a theoretical perspective, incorporating these aforementioned practical components and exploratory extracurricular activities could indeed contribute to improving the overall effectiveness of career courses. However, from the viewpoints shared by students, they seemed to perceive this issue through a profound understanding of their learning needs for the course, which

further clarified their expectations regarding the learning environment and teaching approaches.

Notwithstanding, combined with the background context information (details in Section 3.1) and the explanation stated by the instructors, the teaching approach currently adopted was primarily determined by the scarcity of professional career specialists within China's higher education setting and the large number of students needing to enrol in this course. Thus, the lecture-based approach appeared to be the most cost-effective way to deliver the content under the present circumstances (Jin et al., 2021). From another perspective, particularly appropriate for this specific CDE course under study, the instructors were neither trained nor specialised in career guidance and counselling. Therefore, this lecture-based and teacher-centred teaching style was a more plausible and feasible approach for the instructors to deliver the prepared content and activities at self-determined routines and paces.

Consequently, the mismatched expectations of teaching and learning styles were evoked by the above-mentioned reasons. Students preferred a more collaborative teaching and learning approach according to their unique generation characteristics and learning inclinations. Specifically, their need for an interactive class environment was not solely about adding more sections for activities and exercises. The emphasis was more on the quality of the interactive environment provided. This referred to the process and opportunity for stimulating and exchanging thoughts, viewpoints, and previous experiences with peers and instructors. Thus, by establishing such an environment, the intention was to generate more insights and deepen understanding of aspects and issues targeted by these interactive activities.

5.4.2   Sub-theme 4B) Mismatch: Needs for Feedback

Observed Instructors' Practice Towards Feedback

Throughout the entire field observation period and in several personal communications with the

instructors and some students, the researcher observed that the instructors were not accustomed to providing feedback to students. They neither commented on students' contributions or responses to questions posed during class, nor did they provide official written feedback on assignments after the course were completed and graded. Consequently, when the researcher inquired about the instructors' views on the significance of "individualised interpretation and feedback" in an effective career course, both instructors ranked it as the second least critical element. Upon further questioning about their perceived lack of importance of feedback compared to other factors, instructor Long (*5th July 2023*) explicitly stated, "I don't think it's possible, especially with this current course format (larger size and lecture-based), to offer personalised feedback. I guess it might be more suitable for one-on-one career counselling that kind of thing…" Meanwhile, Instructor Zhu did not directly respond to the question regarding feedback. Instead, he explained that students might not need advice from him alone. Thus, he reiterated and emphasised that an effective way for students to gain a comprehensive understanding of how to plan their careers would be to organise on-site company visits and attend job-fairs. He further stated, "It's important for them to experience the pressure of job searching and feel the real environment and atmosphere of the workplace and the scene through their own eyes…" (*Zhu, 4th July 2023*).

Students' Perceptions and Expectations Regarding Feedback

On the contrary, students seemed to value and perceive this "individualised interpretation and feedback" factor as more primary and essential for a career course than their instructors did. This was reflected in the interviews, where 9 out of 14 participants identified it as one of the top three crucial components that determine the effectiveness of the course from their perspectives. With the researcher's follow-up questions, these interviewees further explained why they thought it was that important for them to receive individualised feedback or interpretation. Their reasons can be

synthesised into three main aspects,

1) Personal viewpoint refinement and affirmation: The majority of students underscored the primary benefits of receiving feedback or individualised interpretation, whether for assignments they composed, or contributions made during class exercises. They specifically emphasised the values of such reviews in refining their viewpoints and receiving affirmation or encouragement to continue their efforts. As Meng illustrated,

> *You see, often, we aren't sure if our thoughts are right or wrong, or if we're moving in the right direction, particularly without any feedback or reviews from our instructor. I realise there aren't simple answers to these career development challenges, but we would still appreciate some comments or feedback to help refine our ideas and make adjustments, guiding us to strive for the right goals… (Meng, 29th June 2023)*

Whereas another interviewee, Zhou, stated,

> *Receiving all the occupational information is one thing, but connecting it to my personal character and situation is entirely different. I'd love to get personalised interpretations and feedback that address my unique concerns. Sometimes, we just need that affirmation and encouragement to act. You know, especially from a professional outside of my family... (Zhou, 26th June 2023)*

2) Inclination for personalised guidance: Some students mentioned that if the instructors could provide them with valuable and insightful feedback during the interactive process or comments on their contributions, it would made them more willing to share their thoughts and discuss more, not only during the class activity but also feel more inclined to ask for support and guidance on their personally encountered career issues off-class. As Tan described,

> *I think the instructor should show that they're willing and capable of offering us feedback from the start. That way, I'll know if I can approach them for personal advice, similar to how we reserve academic guidance appointments with clear instructions and advisors that we can choose from… (Tan, 21st June 2023)*

It followed with Min who expressed that,

> *Sometimes I hesitate and am afraid to ask for advice or feedback regarding these career*

questions. It seems there aren't many teachers we can approach. So, if the course could provide this option and opportunity, it would be more convenient and less intimidating to ask, at least for me … (Min, 27th June 2023)

3) Stimulation for making more efforts: One interviewee, Xing, directly addressed, and some other interviewees indirectly implied that if they know in advance the instructor will provide them feedback or interpretations on assignments and activities, they will invest more energy and make more efforts to prepare and complete the task. To illustrate, Xing stated the reason as,

> *You see, we are not naïve; we're all strategists when it comes to saving time and energy. If we know that some instructors won't pay much attention to our homework or seriously review it with feedback, we'll just go through the motions to finish it. But if we know they'll review our work seriously, we'll approach it with a totally different attitude. We just want to ensure that the effort we put in leads to meaningful learning... (Xing, 28th April 2023)*

In sum, it appeared that a lack of feedback or personalised interpretation was another theme that caused the mismatch in expectations and low encouragement to participate or endeavour during the process among students. It was evident that the instructors' indifference to providing feedback, along with their neglect in creating an environment conducive to offering individualised interpretation or guidance, diminished students' enthusiasm for engaging in activities or completing assignments. Meanwhile, this, in turn, reduced their inclination to seek deeper consultation from the instructors. On the other hand, feedback played a pivotal role in motivating students to invest more time and effort into achieving meaningful personal growth in this area. Moreover, students appeared to desire advice and feedback from professionals with a neutral point of view, which became meaningful only after establishing a trustworthy relationship.

5.5 Summary

This chapter addressed RQ3. The focus of analysis intentionally adopted a qualitative approach, by interviewing two instructors, one administrative staff member, and 14 students, alongside class

observation recordings, to explore the perceptions held by different parties regarding the delivered curriculum. According to the interpretations and perspectives expressed during the process, four major themes emerged: the mismatched expectation of the course aim, the curriculum content, the effort, and the delivery approach. As a result, in combination with the four themes, the degree of alignment between students' perceived and expected CDE curriculum was presented in sequence. Regarding the course aim, instructors merely emphasised facilitating students' realisation of the importance of early career planning. However, students focused more on the guidance they needed for self-awareness and pre-professional identity formation. This mismatch in objectives led to the next major misalignment in curriculum content expectations. Due to the current resources and support available to the instructors, and based on their knowledge and competencies, they understood their limitations. They provided only what they possessed and perceived as essential for preparing students' mindsets for career planning. Nevertheless, it seemed that the students expected to learn more systematic and rational skills and strategies to make meaningful career decisions and contribute to their personal growth in the long run.

Consequently, these diverse expectations regarding curriculum content further resulted in differing attitudes and efforts toward the course. For instructors, the indifference and apathy of other stakeholders, along with the lack of attention received from the audience, undermined their passion and motivation to dedicate more to curriculum improvement. As a result, the effort shown by instructors further affected students' engagement. They adopted a practical stance to participate only when they deemed it necessary.

Regarding the teaching practice employed by this CDE course, instructors primarily and habitually used the traditional lecture-based teaching approach. At the same time, students believed that a more interactive and collaborative approach would benefit them, allowing them to exchange

thoughts and challenges and generate an integrated and deeper understanding of their unique career concerns.

In conclusion, although it was evident that instructors and students held divergent perspectives and mismatched attitudes toward this CDE course, it is still complicated to judge the quality of the course based solely on these themes and identified mismatches. Considering the current instructional context and regulatory background of the course, it appeared that, to a large extent, indifference and apathy from other stakeholders, along with non-specific standards or guidelines and the lack of professional training and resource support from the career centre, have heavily restricted and eroded the instructors' competencies and motivation to invest more efforts in personal development and curriculum improvement.

Furthermore, compared to students' comprehension and expectations of the course, the current curriculum cannot fulfil their career development needs. Specifically, considering the rapidly changing conditions, students perceived that gaining career competencies was necessary not only for the competitive job market they face but also for balancing careers with their lifelong personal satisfaction and subjective well-being. Thus, exploring both the instructors' and students' sides appears essential to understanding their needs, dilemmas, and perspectives towards the CDE course. This will generate more plausible and practical suggestions for future curriculum development.

In the next chapter, Focus Three will investigate the course's effectiveness by analysing the measured variables, which are considered the core benchmarks for CDE courses in the literature. This will serve as a triangulated aspect, aiming to examine its effectiveness and statistically assess the outcomes achieved.

Chapter 6   Results – Focus Three: The Course Effectiveness Against Core CDE Course Benchmarks

This chapter aims to investigate changes in students regarding the four identified variables measured before and after taking the CDE course as outcome benchmarks achieved through its completion. Specifically, it addresses the fourth research question (RQ4) with a series of paired t-tests. The evaluation hypothesis of RQ4 is that the CDE course will positively affect students' career planning ability, career exploration behaviours, career decision self-efficacy, and career adaptability after taking it.

In the following sections, first, the results of paired t-test analyses for each measurement scale were presented and interpreted in detail and individually. For those with sub-scales, the findings of each sub-scale were discussed separately. The percentage point changes for each item were presented as the proportion of student shifts relative to the total sample size (N=45). These changes were calculated as the difference in the number of students selecting a response between the pre-test and post-test, divided by the total sample size, and expressed as a percentage. This approach was consistently applied throughout Sections 6.1 to 6.4. The purpose was to thoroughly understand the changes that occurred among students after completing the course. Second, the quantitative data findings were triangulated and integrated with the findings obtained from qualitative data, to provide a comprehensive interpretation and understanding of the effectiveness and quality of the CDE course from different perspectives.

6.1   Career Planning

The career planning scale measures students' self-initiated career planning activities. For instance, it assesses to what extent they have an existing career plan, the frequency with which they change their career plans, the clarity of their plans, and whether they have a strategy to attain their career

plans (Gould, 1979). Since the course aims to help students determine clearer career goals and generate plans to act towards these goals, their career planning activities should increase after taking the course.

Table 6-1 indicated that there was a significant change in the total scores between pre-test ($M =$ 21.8, $SD = 5.31$) and post-test ($M = 24.07$, $SD = 4.76$) for career planning ($t(44) = 3.924$, $p < .001$, $d = .585$, 95% CI [1.10, 3.43]). Meanwhile, to comprehend the findings for individual items, three items exhibited significant changes among students: CP1 "I have not really decided what my career objectives should be yet. (reversed)" ($t(44) = 3.922$, $p < .001$, $d = .585$, 95% CI [0.28, 0.88]); CP3 "I have a strategy for achieving my career goals." ($t(44) = 3.541$, $p = .001$, $d = .528$, 95% CI [0.22, 0.80]); CP 5 "My career objectives are not clear. (reversed)" ($t(44) = 2.847$, $p = .007$, $d = .424$, 95% CI [0.14, 0.80]).

Figure 6-1 illustrated the changes in students' reported levels of agreement regarding career-planning thoughts and activities before and after participating in the course. The items that significantly changed and were highlighted pointed to a cognitive shift that appeared among students, reflecting their increased engagement and deeper consideration of the topic. For CP1, their responses reflected an increased recognition and articulation of their ambivalence about their career objectives after taking the course ("Disagree" increased by 20 percentage points, while "Somewhat Disagree" rose by 8.9 percentage points, and conversely, "Somewhat Agree" decreased by 22.2 percentage points).

For CP3, despite not finalising or establishing a robust and practical plan, the data revealed that students seemed to develop or recognise a possible strategy for achieving their career goals (with an 8.9 percentage point increase in "Agree", a 6.7 percentage point increase in "Strongly Agree", and a 13.3 percentage point decrease in "Somewhat Disagree").

Regarding CP5, the change indicated that students seemed to obtain a better sense of their career objectives compared to their outright confusion depicted at the beginning of the course (reflected by a 26.7 percentage point increase in "Somewhat Disagree", accompanied by a 13.3 percentage point decreases in "Somewhat Agree"). These shifts reflected a somewhat increased level of clarity, but no fully crystallised decisions were made regarding their career objectives after participating the course.

These findings suggested that, after the course, students appeared more decisive about their career objectives (CP1) and more specific in developing strategies to achieve them (CP3). However, the results for CP5 indicate that, while students claimed some level of assurance regarding their career goals, this confidence remained tentative, as reflected by the prevalence of "Somewhat Disagree" responses. This suggested lingering hesitation about their ultimate career objectives.

Accordingly, the findings implied that, even though the overall career planning score significantly changed after taking the course, it may only stimulated students' cognitive engagement with thoughts or activities regarding career planning. However, without acquiring practical skills or adequate strategies to formulate a finalised plan, it would have been difficult for students to actively implement their plan into practice or to identify a specific and determined career goal to further serve their future needs of career decision-making.

Table 6-1 Paired t-test Results: Career Planning Scale Analysis

CP	Pre-test		Post-test		$t(44)$	p	Cohen's d
	M	*SD*	*M*	*SD*			
CP 1 (reversed)	3.16	1.78	3.73	1.37	**3.922**	**<.001**	.585
CP 2	3.69	1.15	4.00	1.17	1.444	.156	.234
CP 3	3.58	1.01	4.09	1.02	**3.387**	**<.001**	.528
CP 4	4.11	0.98	4.36	0.99	1.052	.299	.238
CP 5 (reversed)	3.13	1.34	3.60	1.18	**2.847**	**.007**	.424
CP 6 (reversed)	4.13	1.25	4.29	1.08	1.266	.212	.189

CP	Pre-test		Post-test		$t(44)$	p	Cohen's d
	M	SD	M	SD			
CP total	21.80	5.31	24.07	4.76	**3.924**	**<.001**	.585

Note. N = 45. CP = career planning.
p-values were calculated with two-sided test.

Figure 6-1 Item Plots of Pre-Post-Test for CP
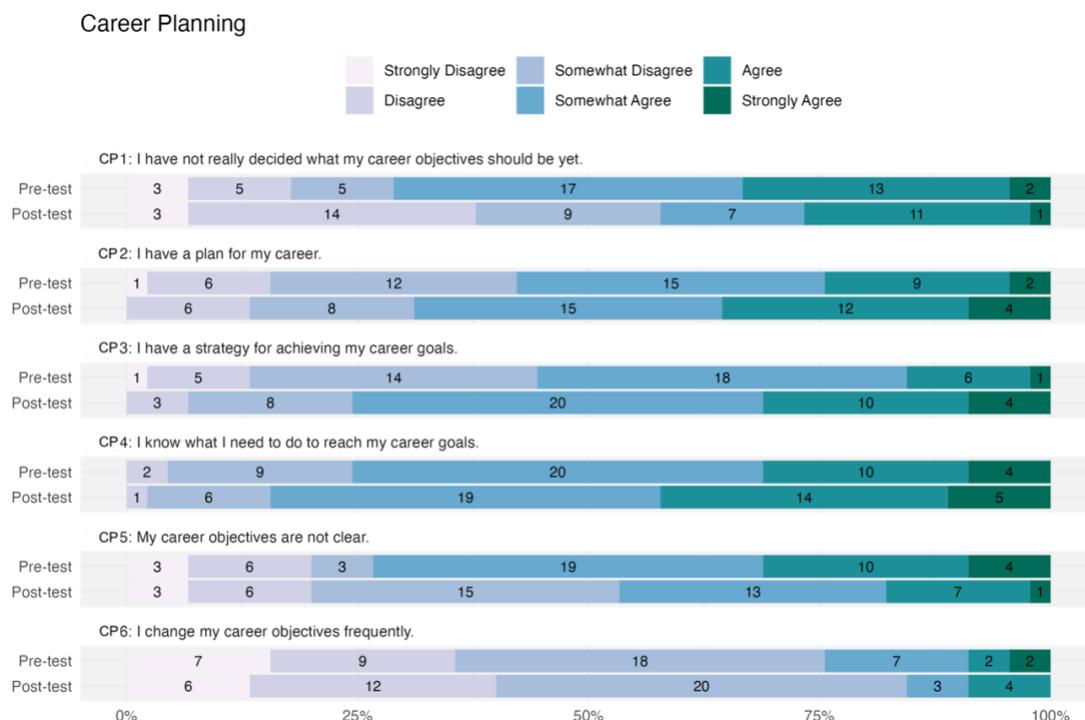
6.2 Career Exploration Survey

The full career exploration survey measures career-searching behaviours (self and environment), reactions to career exploration findings, and beliefs about the explored career information obtained (Stumpf et al., 1983). Considering the current study's research scope and the researched curriculum's objectives, only the environment exploration (EE) and self-exploration (SE) sub-scales were measured. According to the planned and delivered curricula, students' self and environment exploration behaviours should be positively affected after taking the course.

Table 6-2 demonstrated that there was a significant change between pre-test ($M = 29.33$, $SD = 9.46$)

and post-test total scores for the CES ($M = 33.33$, $SD = 9.97$; $t(44) = 3.713$, $p < .001$, $d = .553$, 95% CI [1.83, 6.17]). In addition, for each sub-scale, both EE and SE indicated significant changes in scores among students before and after taking the course. Students' environment exploration (EE) behaviour increased from pre-test ($M = 14.40$, $SD = 6.00$) to post-test ($M = 16.89$, $SD = 6.20$; $t(44) = 3.693$, $p < .001$, $d = .551$, 95 % CI [1.13, 3.85]), whereas their self-exploration (SE) behaviour rose from pre-test ($M = 14.93$, $SD = 4.61$) to post-test ($M = 16.44$, $SD = 4.26$; $t(44) = 2.607$, $p = .012$, $d = .389$, 95% CI [0.34, 2.68]). Specifically, for the EE subscale, only EE5 indicated a moderate effect size, while the rest of the items merely demonstrated weak effect sizes. For the SE subscale, each item that showed significant changes was associated with a small effect size.

In Figures 6-2 and 6-3, the analyses of pre- and post-test scores for each item were illustrated, with significant score increases highlighted. Overall, and as aligned with the findings for career planning (Career Planning Scales), students' cognitive engagement and self-awareness regarding career exploration (both environmental and self) were stimulated by this course. Particularly, regarding environment exploration, EE2 ("Obtained information on specific jobs or companies"), EE3 ("Obtained information on the labour market and general job opportunities"), and EE6 ("Initiated conversations with knowledgeable individuals") all demonstrated increases in students' self-initiated information-gathering behaviours but only showed changes at moderate levels (e.g., both EE2 and EE6 showed a 15.6 percentage point increase in "A Moderate Amount", and EE3 showed a 6.7 percentage point increase in "A Great Deal"). This implied that the course merely stimulated students with surface-level changes regarding career information exploration. For instance, the labour market information and general job opportunities were illustrated or involved in some of the sessions delivered. Meanwhile, the content of EE6 was directly related to one of the course assignments that required students to interview their role models. These factors may

have explained, to some extent, why these changes occurred.

Noticeably, for EE5 ("Went to various career orientation programs", depicted with a 15.6 percentage point increase in "A Moderate Amount" and 8.9 percentage point increase in "A Great Deal"), the significant changes reflected students' increased and active participation in career-related activities. Interestingly, during student interviews, most of them expressed that they had accounted for enrolling in and completing this course as their major approach to career exploration and information-gathering activities.

Regarding self-exploration, the changes in SE2 ("Been retrospective in thinking about my career") and SE5 ("Understood a new relevance of past behaviour for my future career"), both revealed students' cognitive shifts, which led to more reflective and retrospective thinking about their future careers (e.g., SE2 showed an 11.1 percentage point increase in "A Great Deal", whereas SE5 showed an 11.1 percentage point increase in "A Moderate Amount"). However, the nonsignificant changes in other self-exploration aspects, such as "Focused mu thoughts on me as a person" and "Contemplated my past", suggested that these cognitive shifts were not pervasive across all aspects of self-exploration.

These findings suggested that, despite the statistically significant behavioural changes observed in both environmental and self-exploration activities, these behaviours largely remained at the cognitive level and were partially driven by the compulsory activities and assignments required by the course. Thus, these findings implied that the changes in career exploration behaviours should not be interpreted or understood in isolation. Students needed to be equipped with sufficient skills and actionable strategies to attach practical meaning to these exploratory behaviours for concrete decision-making.

Table 6-2 Paired t-test Results: Career Exploration Survey Analysis

CES		Pre-test		Post-test		$t(44)$	p	Cohen's d
		M	*SD*	*M*	*SD*			
EE	EE1	2.73	1.05	3.04	1.13	2.006	.051	.229
	EE2	2.11	1.17	2.58	1.14	**2.572**	**.014**	.383
	EE3	2.44	1.18	2.80	1.27	**2.072**	**.044**	.309
	EE4	2.67	1.26	2.89	1.15	1.348	.184	.201
	EE5	2.22	1.33	2.91	1.29	**4.266**	**<.001**	.636
	EE6	2.22	1.44	2.67	1.35	**2.282**	**.027**	.340
EE total		14.40	6.00	16.89	6.20	**3.693**	**<.001**	.551
SE	SE1	3.09	1.06	3.40	0.91	1.823	.075	.272
	SE2	3.09	1.08	3.49	1.01	**2.602**	**.013**	.388
	SE3	2.96	1.17	3.09	1.20	0.771	.445	.115
	SE4	3.18	1.19	3.42	0.99	1.378	.175	.205
	SE5	2.62	1.30	3.04	1.21	**2.581**	**.013**	.385
SE total		14.93	4.61	16.44	4.26	**2.607**	**.012**	.389
CES total		29.33	9.46	33.33	9.97	**3.713**	**<.001**	.553

Note. N = 45. CES = career exploration survey; EE = environment exploration; SE = self-exploration.
p-values were calculated with two-sided tests.

Figure 6-2 Item Plots of Pre-Post-Test for EE

Environment Exploration

| Little | Somewhat | A Moderate Amount | A Substantial Amount | A great deal |

EE1: Investigated career possibilities.

Pre-test	6	11	20	5	3
Post-test	3	11	19	5	7

EE2: Obtained information on specific jobs or companies.

Pre-test	18	12	9	4	2
Post-test	9	12	16	5	3

EE3: Obtained information on the labour market and general job opportunities in my career area.

Pre-test	13	9	15	6	2
Post-test	9	9	14	8	5

EE4: Sought information on specific areas of career interest.

Pre-test	10	11	12	8	4
Post-test	5	13	13	10	4

EE5: Went to various career orientation programs.

Pre-test	19	9	9	4	4
Post-test	7	10	16	4	8

EE6: Initiated conversations with knowledgeable individuals in my career area.

Pre-test	21	9	4	6	5
Post-test	11	11	11	6	6

0%   25%   50%   75%   100%

Figure 6-3 Item Plots of Pre-Post-Test for SE

Self Exploration

| Little | Somewhat | A Moderate Amount | A Substantial Amount | A great deal |

SE1: Focused my thoughts on me as a person.

Pre-test	3	10	16	12	4
Post-test	8	16	16	5	

SE2: Been retrospective in thinking about my career.

Pre-test	3	11	14	13	4
Post-test	8	16	12	9	

SE3: Reflected on how my past integrates with my future career.

Pre-test	4	13	15	7	6
Post-test	3	12	17	4	9

SE4: Contemplated my past.

Pre-test	4	9	14	11	7
Post-test	9	15	14	7	

SE5: Understood a new relevance of past behaviour for my future career.

Pre-test	10	14	9	7	5
Post-test	5	10	14	10	6

0%   25%   50%   75%   100%

6.3   Career Decision Self-Efficacy (CDSE)

Career decision self-efficacy measures the extent to which an individual believes in their competencies to successfully complete tasks that are essential for making career decisions. The sub-scales indicate five specific competencies that are necessary for the career choice process and facilitate making appropriate career decisions (Betz & Luzzo, 1996). Hypothetically, after taking the course, students' degree of belief or confidence regarding career decision-making should increase through the acquisition of the five specific competencies and the relevant information obtained.

Table 6-3 depicted that there was no significant difference between pre-test ($M = 3.34$, $SD = 0.60$) and post-test ($M = 3.43$, $SD = 0.60$) for the CDSE total score ($t(44) = 1.498$, $p = .141$, $d = .223$, 95% CI [-0.03, 0.23]). For the five sub-scales, there was a significant change in scores between pre-test ($M = 3.29$, $SD = 0.73$) and post-test ($M = 3.52$, $SD = 0.69$) for GS ($t = 2.701$, $p = .010$, $d = .403$, 95% CI [0.06, 0.41]). For the remaining sub-scales, there was no significant difference in scores between pre- and post-test: OI ($t(44) = 1.105$, $p = .275$, $d = .165$, 95% CI [-0.07, 0.24]), P ($t(44) = 0.342$, $p = .734$, $d = .051$, 95% CI [-0.15, 0.21]), PS ($t(44) = -0.055$, $p = .957$, $d = -.008$, 95% CI [-0.17, 0.16]), and SA ($t(44) = 1.491$, $p = .143$, $d = .222$, 95% CI [-0.05, 0.31]), respectively. Test results were illustrated and interpreted in detail to investigate the significant change in GS at great length and to understand one item in OI and one in SA that increased significantly. OI1 detected a substantial change for students after taking the course ($t(44)= 2.485$, $p = .017$, $d = .370$, 95% CI [0.05, 0.48]). In addition, GS5 showed a significant increase ($t(44)= 2.145$, $p = .037$, $d = .320$, 95% CI [0.02, 0.60]), while GS2 showed a marginally significant difference ($t(44) = 1.884$, $p = .066$, $d = .281$, 95% CI [-0.02, 0.69]), with its p-value close to the set threshold of $p <.05$. Simultaneously, SA2 also presented a significant increase between pre- and post-test scores ($t(44)=$

2.362, $p = .023$, $d = .352$, 95% CI [0.06, 0.74]).

Figures 6-4 to 6-8 illustrated the pre-test and post-test score changes for each subscale in the CDSE. While students seemed to make some progress in clarifying self-awareness (SA2) and developing a determined mindset to align their future careers with personal interests (OI1 and GS5), confidence in advanced planning or problem-solving was not significantly stimulated. Specifically, students demonstrated a modest improvement in OI1, "Use the internet to find information about occupations that interest you" (with a 6.7 percentage point increase in "Complete Confidence"). Although this indicated an increase in their confidence in exploring career information, student interviewees stated that they were already well-equipped with the skills to routinely search for useful information online before taking the course.

Notwithstanding, students reflected a substantial improvement in self-awareness and assuredness to align career options with their personal interest. For example, GS5, "Choose a major or career that will fit your interests", showed an 11.1 percentage point increase in "Complete Confidence", and SA2, "Determine what your ideal job would be", demonstrated a 17.8 percentage point increase in "Much Confidence". Additionally, the nonsignificant but noticeable increase in GS2 (a 22.2 percentage point increase in "Much Confidence") further supported these findings, suggesting that students gained confidence in narrowing down their preferred occupations after taking the course.

These findings suggested that students did not demonstrate a significant overall increase in belief or confidence in career decision-making. However, regarding self-initiated occupational information searching and introspecting on their interest-career alignments (self-awareness), students showed increased confidence and assuredness. Still, there was no evidence to corroborate improved confidence in generating practical or actionable strategies for actual planning or
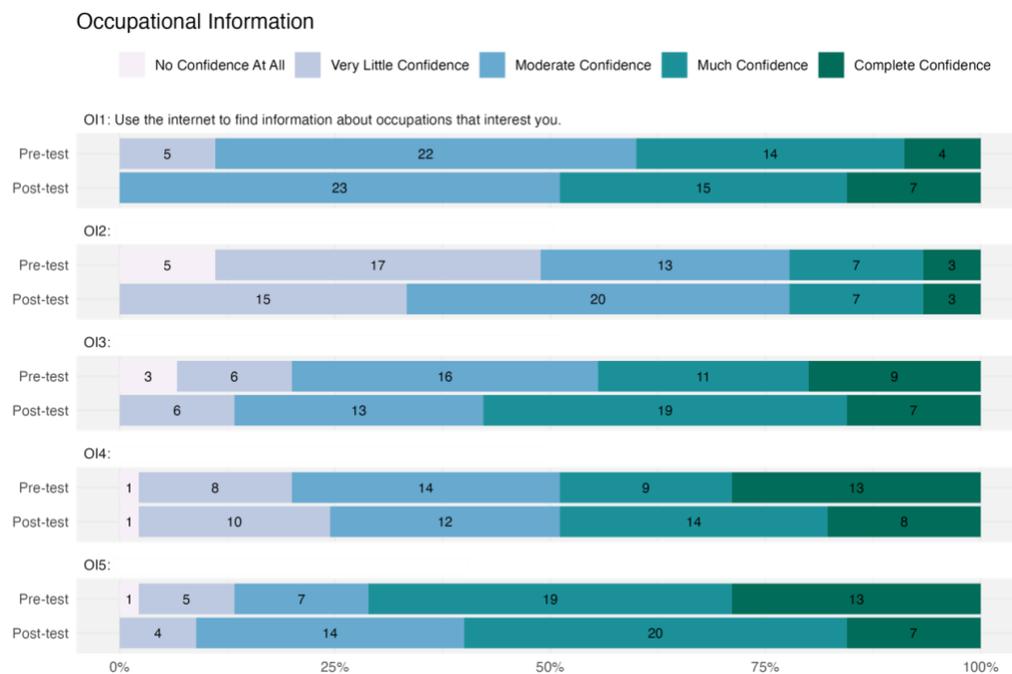
problem-solving. Therefore, this indicated that, despite students' enhanced cognitive awareness of career preferences, they did not develop the essential capacities needed to perform career tasks or make firm career decisions. Overall, no significant gains were observed in practical or actionable career decision-making self-efficacy among students.

Table 6-3 Paired t-test Results: Career Decision Self-Efficacy Analysis

	CDSE	Pre-test		Post-test		$t(44)$	p	Cohen's d
		M	*SD*	*M*	*SD*			
	OI1	3.38	0.81	3.64	0.74	**2.485**	**.017**	.370
	OI2	2.69	1.08	2.96	0.88	1.633	.110	.243
	OI3	3.38	1.15	3.60	0.92	1.494	.142	.223
OI	OI4	3.56	1.16	3.40	1.10	-0.943	.351	-.141
	OI5	3.84	1.04	3.67	0.85	-1.159	.253	-.173
	OI total	3.37	0.71	3.45	0.66	1.105	.275	.165
	GS1	3.40	0.89	3.62	0.91	1.431	.160	.213
	GS2	3.13	1.08	3.47	0.92	1.884	.066	.281
	GS3	3.44	0.87	3.62	0.83	1.386	.173	.207
GS	GS4	3.02	1.18	3.16	0.98	0.746	.459	.111
	GS5	3.47	0.99	3.76	1.00	**2.145**	**.037**	.320
	GS total	3.29	0.73	3.52	0.70	**2.701**	**.010**	.403
	P1	3.24	0.96	3.20	0.94	-0.305	.761	-.046
	P2	3.62	0.89	3.58	0.89	-0.321	.750	-.048
	P3	3.20	1.12	3.16	1.07	-0.321	.750	-.048
P	P4	3.09	0.93	3.22	0.10	0.924	.360	.138
	P5	2.93	0.99	3.09	1.04	1.022	.313	.152
	P total	3.22	0.77	3.25	0.74	0.342	.734	.051
	PS1	3.33	0.93	3.31	0.82	-0.147	.883	-.022
	PS2	3.58	0.89	3.67	0.85	0.752	.456	.112
	PS3	3.20	1.29	3.13	1.14	-0.416	.679	-.062
PS	PS4	3.36	1.03	3.29	1.04	-0.387	.701	-.058
	PS5	3.33	0.88	3.38	0.96	0.286	.776	.043
	PS total	3.36	0.65	3.36	0.69	-0.055	.957	-.008
	SA1	3.20	0.76	3.36	0.88	1.069	.291	.159
	SA2	2.93	1.25	3.33	0.98	**2.362**	**.023**	.352
	SA3	3.49	0.97	3.71	0.97	1.431	.160	.213
SA	SA4	3.78	0.10	3.71	0.87	-0.353	.726	-.053
	SA5	3.80	0.94	3.76	0.93	-0.292	.772	-.044
	SA total	3.44	0.62	3.57	0.68	1.491	.143	.222
	CDSE total	3.34	0.59	3.43	0.60	1.498	.141	.223

Note. N = 45. CDSE = career decision self-efficacy; OI = occupational information; GS = goal selection; P = planning; PS = problem solving; SA = self-appraisal.
p-values were calculated with two-sided tests.

Figure 6-4 Item Plots of Pre-Post-Test for OI

Occupational Information

Legend: No Confidence At All | Very Little Confidence | Moderate Confidence | Much Confidence | Complete Confidence

OI1: Use the internet to find information about occupations that interest you.

Pre-test	5	22	14	4
Post-test	23	15	7	

OI2:

Pre-test	5	17	13	7	3
Post-test	15	20	7	3	

OI3:

Pre-test	3	6	16	11	9
Post-test	6	13	19	7	

OI4:

Pre-test	1	8	14	9	13
Post-test	1	10	12	14	8

OI5:

Pre-test	1	5	7	19	13
Post-test	4	14	20	7	

0%   25%   50%   75%   100%

Note. In compliance with copyright requirements, only three items from the scale are presented.

Figure 6-5 Item Plots of Pre-Post-Test for GS

Goal Selection

Legend: No Confidence At All · Very Little Confidence · Moderate Confidence · Much Confidence · Complete Confidence

GS1:
- Pre-test: 1 | 4 | 21 | 14 | 5
- Post-test: 5 | 15 | 17 | 8

GS2:
- Pre-test: 2 | 11 | 17 | 9 | 6
- Post-test: 8 | 13 | 19 | 5

GS3:
- Pre-test: 5 | 21 | 13 | 6
- Post-test: 4 | 15 | 20 | 6

GS4:
- Pre-test: 5 | 10 | 14 | 11 | 5
- Post-test: 1 | 10 | 20 | 9 | 5

GS5: Choose a major or career that will fill your interests.
- Pre-test: 1 | 6 | 17 | 14 | 7
- Post-test: 6 | 11 | 16 | 12

Axis: 0% · 25% · 50% · 75% · 100%

Figure 6-6 Item Plots of Pre-Post-Test for P

Planning

Legend: No Confidence At All · Very Little Confidence · Moderate Confidence · Much Confidence · Complete Confidence

P1:
- Pre-test: 1 | 9 | 17 | 14 | 4
- Post-test: 12 | 16 | 13 | 4

P2:
- Pre-test: 1 | 2 | 17 | 18 | 7
- Post-test: 5 | 16 | 17 | 7

P3:
- Pre-test: 2 | 11 | 15 | 10 | 7
- Post-test: 3 | 9 | 15 | 14 | 4

P4:
- Pre-test: 1 | 11 | 19 | 11 | 3
- Post-test: 12 | 17 | 10 | 6

P5:
- Pre-test: 2 | 14 | 17 | 9 | 3
- Post-test: 2 | 11 | 18 | 9 | 5

Axis: 0% · 25% · 50% · 75% · 100%

Note. In compliance with copyright requirements, only three items from the scale are presented.
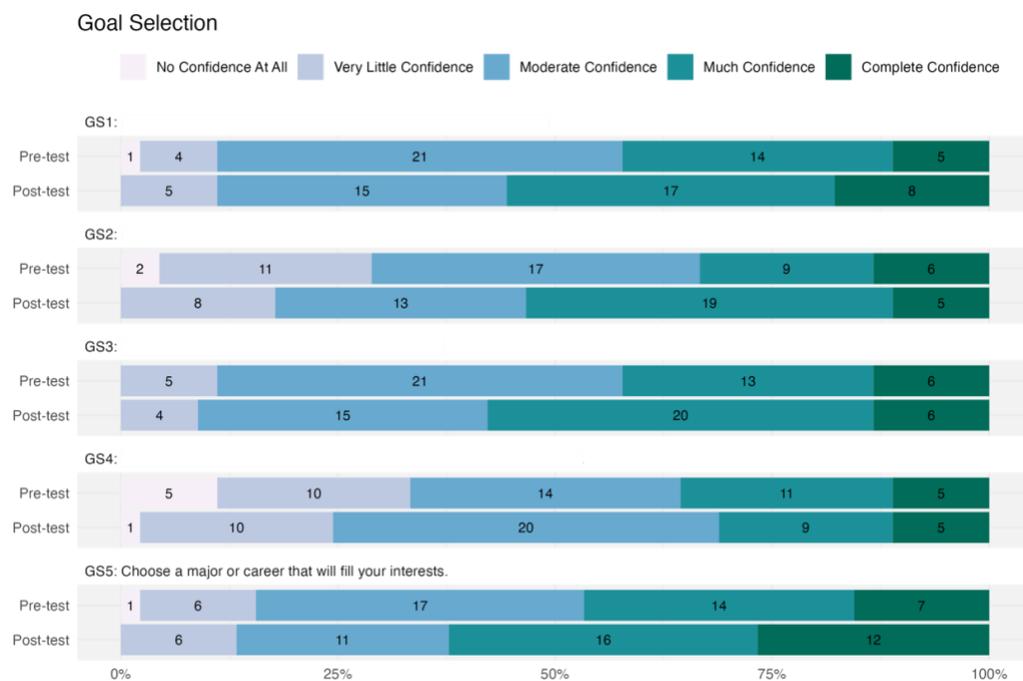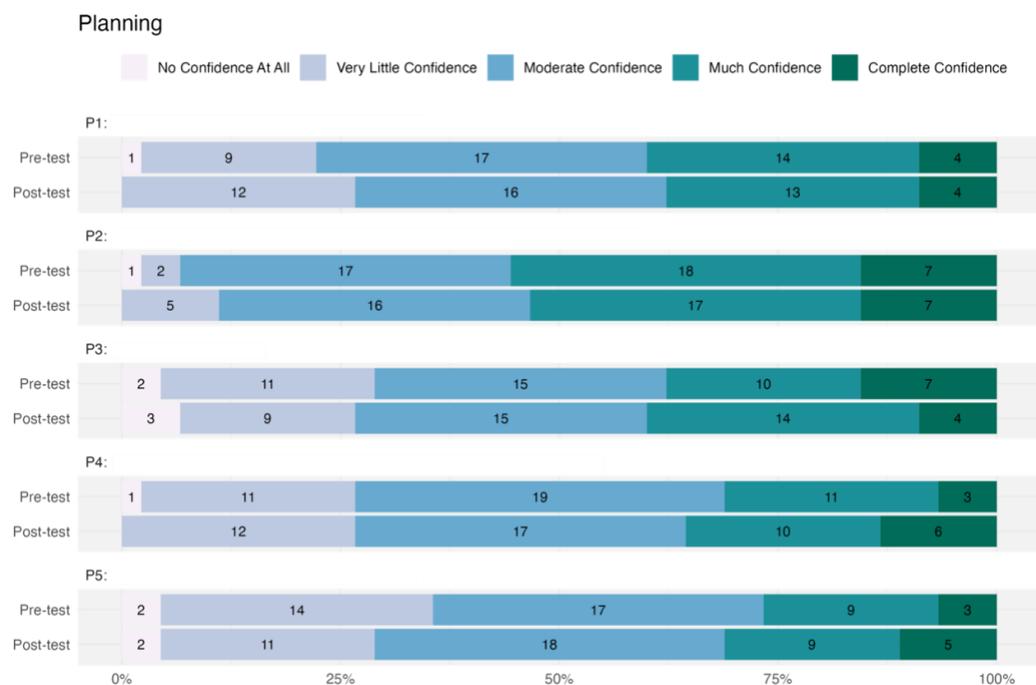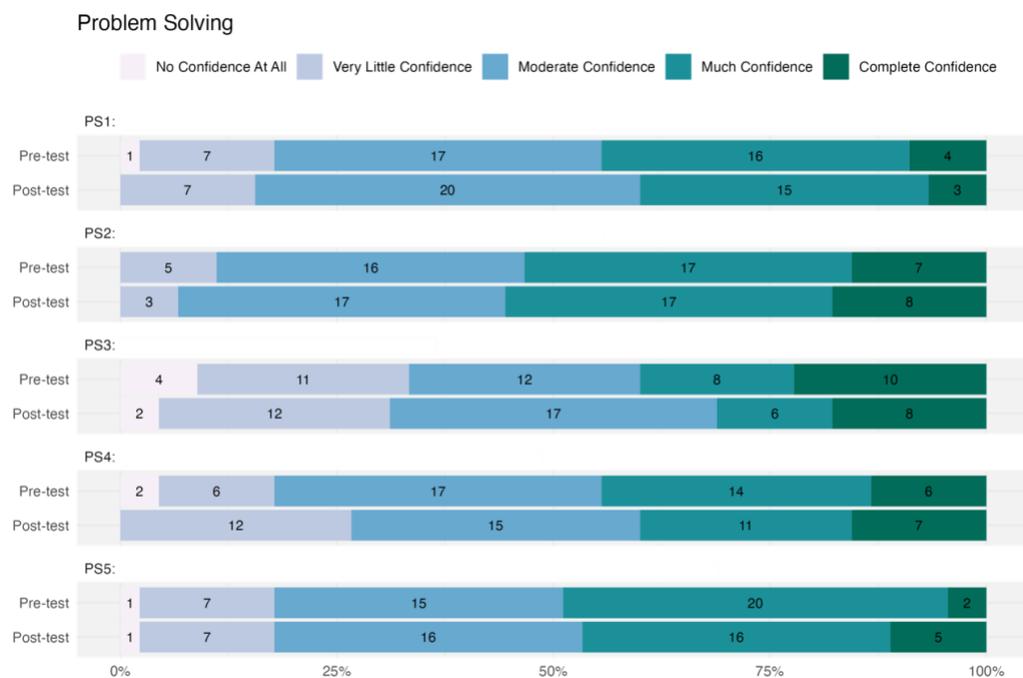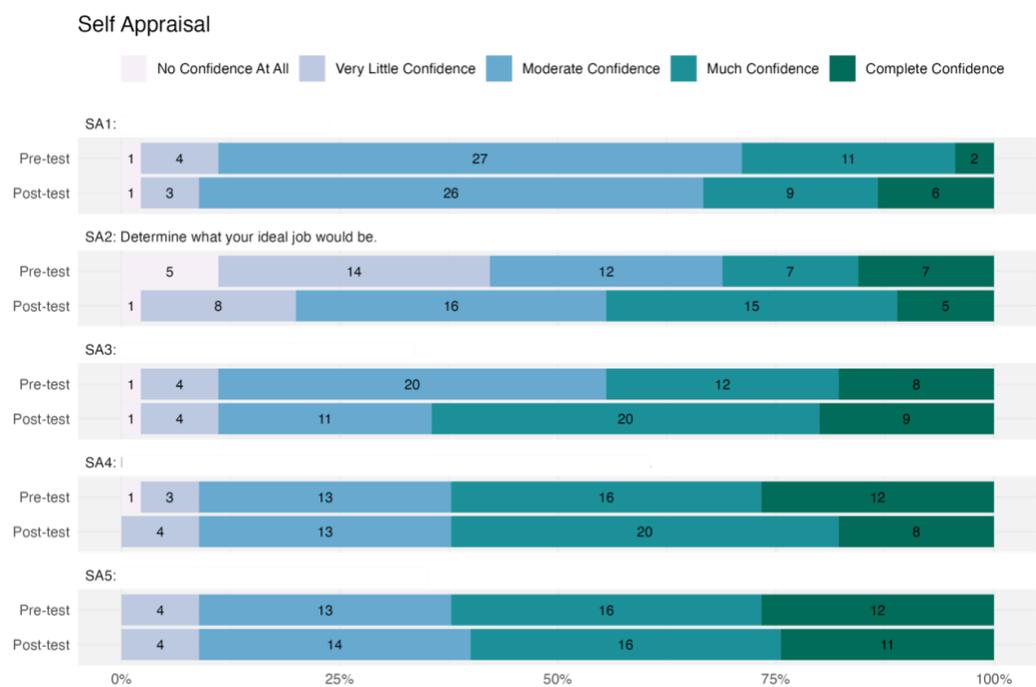
Figure 6-7 Item Plots of Pre-Post-Test for PS

Problem Solving

Figure 6-8 Item Plots of Pre-Post-Test for SA

Self Appraisal

Note. In compliance with copyright requirements, only three items from the scale are presented.

6.4   Career Adaptability

Career adaptability (CA hereafter) measures individuals' self-regulated resources and transactional competencies that one "draws upon to solve the unfamiliar, complex, and ill-defined problems" encountered during developmental vocational tasks, occupational transitions, and work traumas (Savickas & Porfeli, 2012, p. 663). Meanwhile, as denoted in CCT, the four dimensions measure specific competencies that facilitate individuals in forming strategies and directing their adaptive behaviours (Savickas, 2020). The four dimensions indicate competencies in planning, decision making, exploring, and problem-solving. Although this CDE course did not set career adaptability enhancement as its specific objective, these four competencies were included as essential outcomes of the course. Thus, the study hypothesises that students' career adaptability should be affected by taking this course.

Table 6-4 illustrated that there was a significant difference between participants' pre-test ($M = 3.44$, $SD = 0.66$) and post-test ($M = 3.62$, $SD = 0.71$) in CA total score ($t(44) = 2.618$, $p = .012$, $d = .390$, 95% CI [0.04, 0.32]). For the four dimensions, there were significant increases in scores for concern and curiosity subscales: concern ($t(44) = 3.008$, $p = .004$, $d = .448$, 95% CI [0.10, 0.49]) and curiosity ($t(44) = 3.178$, $p = .003$, $d = .474$, 95% CI [0.11, 0.48]), respectively. For the remaining dimensions, there was no significant difference in scores between pre- and post-test: control ($t(44) = 0.487$, $p = .629$, $d = .073$, 95% CI [-0.16, 0.27]) and confidence ($t(44) = 0.925$, $p = .360$, $d = .138$, 95% CI [-0.10, 0.26]), respectively.

Figures 6-9 to 6-12 demonstrated the score changes of pre- and post-test for each item in the CA scale. Notably, the results of the CA-Concern and CA-Curiosity subscales illustrated a significant increase among students after participating in the course. Six items with significant results were highlighted to further understand the specific changes made by students.

For the CA-Concern subscale, the results provided evidence that the course enhanced students' cognitive awareness regarding career planning. Referring to the strength of thinking more about what their future be like (CA1), students showed a 15.6 percentage point increase in "Very Strong" and a 6.7 percentage point increase in "Strongest". Meanwhile, for the strength of planning how to achieve their goals (CA5), students demonstrated a 6.7 percentage point increase in "Very Strong" and an 8.9 percentage point increase in "Strongest". However, this increased reflective or future-oriented thinking may have been stimulated merely by the immersive environment and the structure of the course. Instructors consistently remained students of the importance of planning their careers and emphasised this message throughout the course delivery process.

For the CA-Curiosity subscale, significant improvements were observed in CA13 (e.g., a 26.7 percentage point increase in "Very Strong"), CA16 (e.g., an 11.1 percentage point increase in "Very Strong"), and CA17 (e.g., an 8.9 percentage point increase in "Strongest"). These results indicated that students expanded their willingness to explore their surroundings and boosted analytical behaviours, actively engaging in observing and reflecting on matters related to their personal growth and career development. Despite these improvements, which are critical precursors for adaptability (e.g., openness to learning and exploring opportunities), students still needed to develop competencies in decision-making (Control) and problem-solving (Confidence). These competencies are essential for translating awareness into meaningful actions to overcome obstacles in real-life career tasks. However, no significant gains were detected in these areas after participating in the course.

For the CA-Control subscale, only CA7 showed an 11.1 percentage point increase in "Very Strong" and a 6.7 percentage point increase in "Strongest". This result indicated that students strengthened their ability to maintain an optimistic attitude toward career challenges.

These findings suggested that, statistically, students demonstrated a significant gain in career adaptability after taking the course, as indicated by a roughly medium effect size. However, the changes predominantly occurred in the concern and curiosity dimensions. According to the theoretical underpinning of the scale, these results reflected the development of strengths in cognitive awareness for career planning and exploration (Savickas & Porfeli, 2012). This resonated with findings from other measured scales. Additionally, students' positivity and resilience toward preparing for their future careers were positively influenced to some extent by taking the course.

In contrast, students' decisiveness and confidence to act upon real-life career challenges, such as acquiring skills or strategies for utilising proper strengths and resources to make decisions or cope with obstacles, did not show significant improvement.

Table 6-4 Paired t-test Results: Career Adapt-Abilities Scale Analysis

CA		Pre-test		Post-test		$t(44)$	p	Cohen's d
		M	SD	M	SD			
Concern	1	3.18	1.17	3.58	1.12	**2.211**	**.032**	.330
	2	3.64	1.13	3.84	0.95	1.500	.141	.224
	3	3.27	1.10	3.60	0.99	1.915	.062	.285
	4	3.49	1.18	3.64	1.00	0.980	.333	.146
	5	3.07	0.96	3.42	1.01	**2.556**	**.014**	.381
	6	3.04	1.17	3.36	1.07	1.709	.095	.255
	Total	3.28	0.81	3.57	0.89	**3.008**	**.004**	.448
Control	7	3.16	1.31	3.67	1.07	**3.727**	**<.001**	.556
	8	3.40	1.14	3.51	0.84	0.670	.506	.100
	9	4.07	0.89	3.93	0.81	-0.903	.372	-.135
	10	3.47	1.08	3.49	1.01	0.113	.895	.020
	11	3.56	0.94	3.49	1.12	-0.363	.718	-.054
	12	3.96	0.90	3.82	1.01	-0.846	.402	-.126
	Total	3.60	0.73	3.65	0.69	0.487	.629	.073
Curiosity	13	3.20	1.22	3.62	0.91	**2.581**	**.013**	.385
	14	3.51	1.10	3.67	1.09	1.155	.254	.172
	15	3.13	1.25	3.44	1.18	1.735	.090	.259
	16	3.38	1.21	3.78	0.90	**2.115**	**.040**	.315
	17	3.29	1.20	3.58	1.10	**2.165**	**.036**	.323
	18	3.51	1.10	3.71	0.89	1.421	.162	.212

	Total	3.34	0.92	3.63	0.84	**3.178**	**.003**	-.474
	19	3.47	0.99	3.64	0.91	1.386	.173	.207
	20	3.91	1.00	3.82	0.89	-0.781	.439	-.116
	21	3.44	1.06	3.56	0.94	0.710	.481	.106
Confidence	22	3.60	0.94	3.64	0.91	0.305	.761	.046
	23	3.29	0.94	3.47	0.94	1.274	.209	.190
	24	3.60	0.86	3.67	1.00	0.489	.627	.073
	Total	3.55	0.78	3.63	0.76	0.925	.360	.138
CA total		3.44	0.66	3.62	0.71	**2.618**	**.012**	.390

Note. N = 45. CA = career adaptability.

p-values were calculated with two-sided tests.
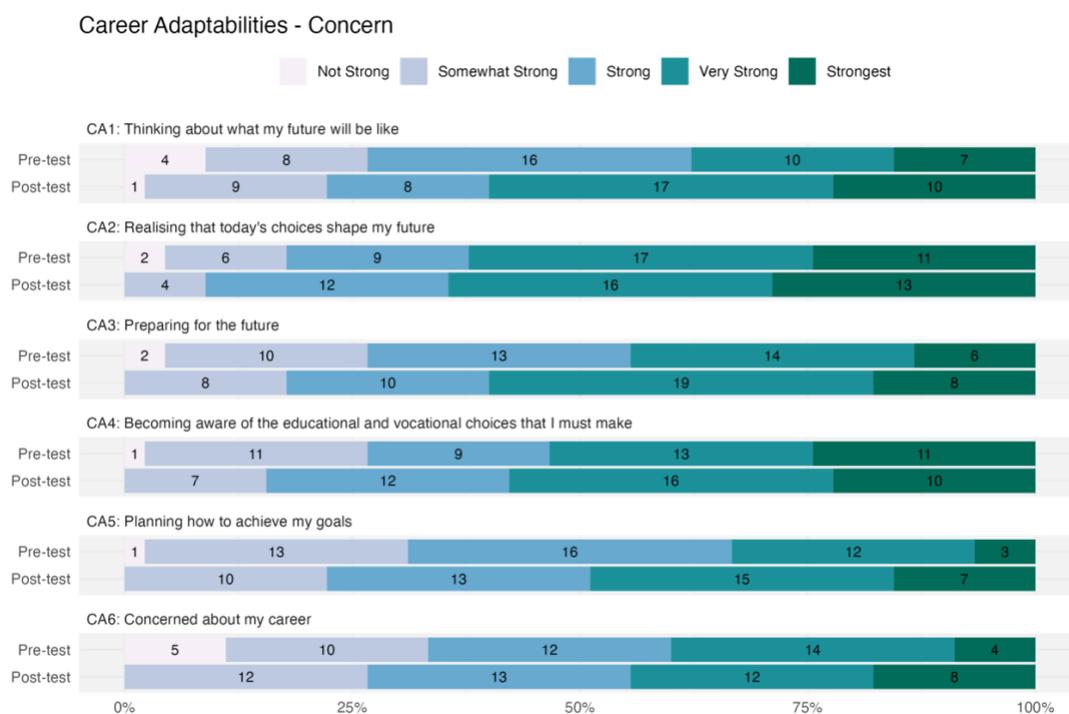
Figure 6-9 Item Plots of Pre-Post-Test for CA Concern

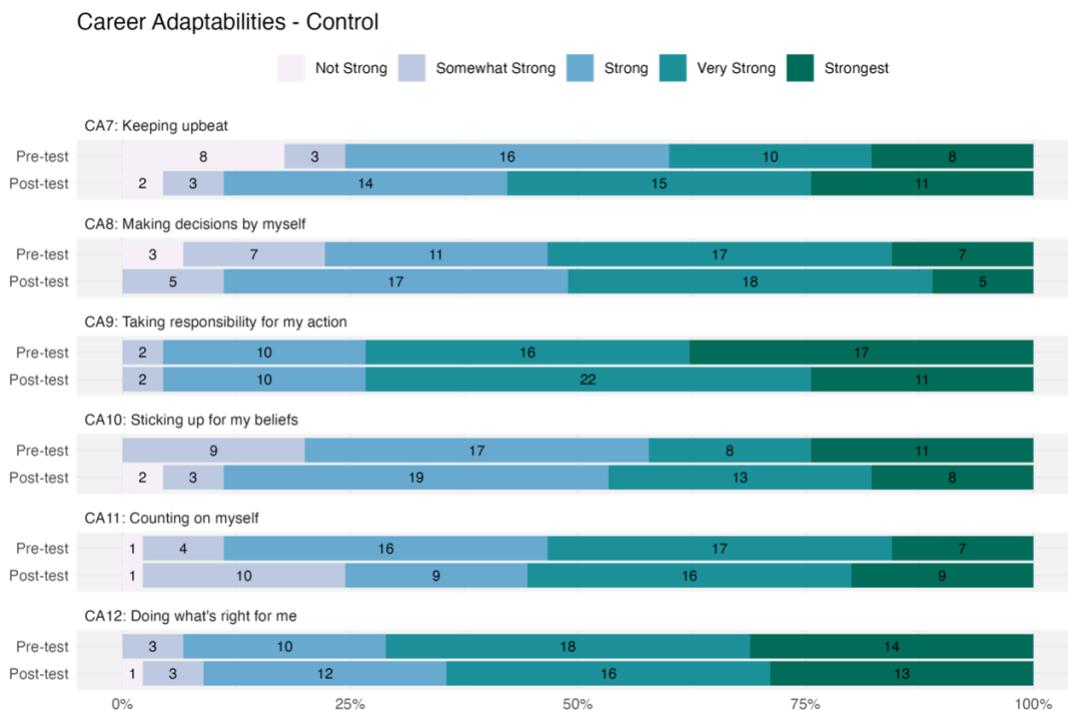*Figure 6-10 Item Plots of Pre-Post-Test for CA Control*

Career Adaptabilities - Control

Figure 6-11 Item Plots of Pre-Post-Test for CA Curiosity

Career Adaptabilities - Curiosity
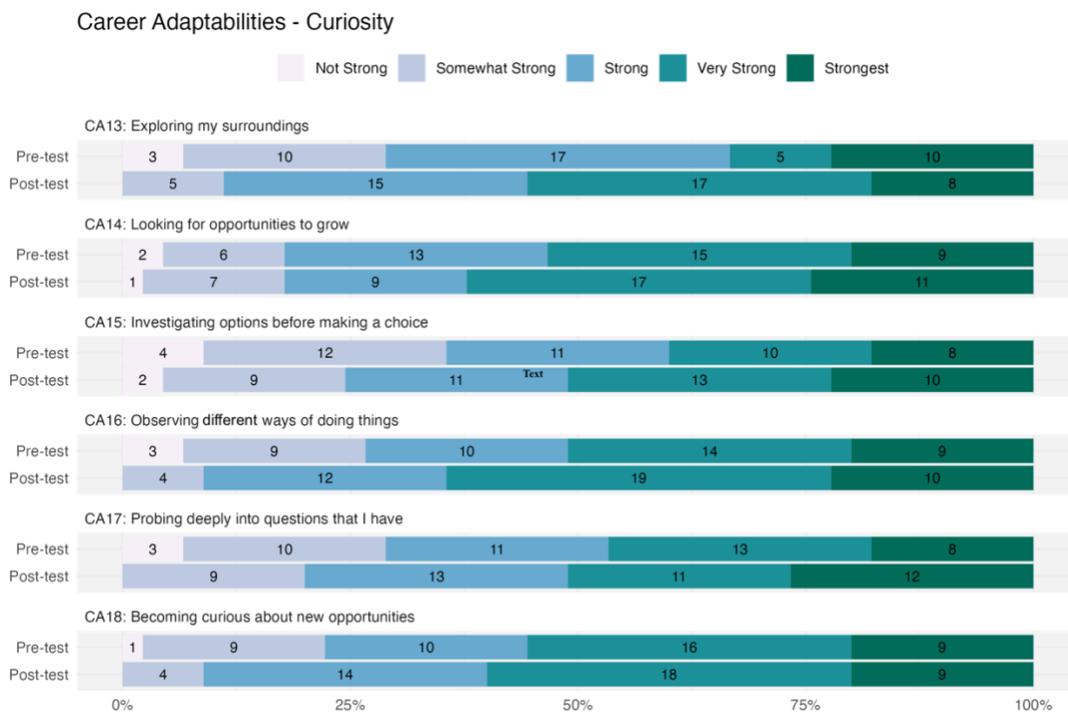
Figure 6-12 Item Plots of Pre-Post-Test for CA Confidence

Career Adaptabilities - Confidence
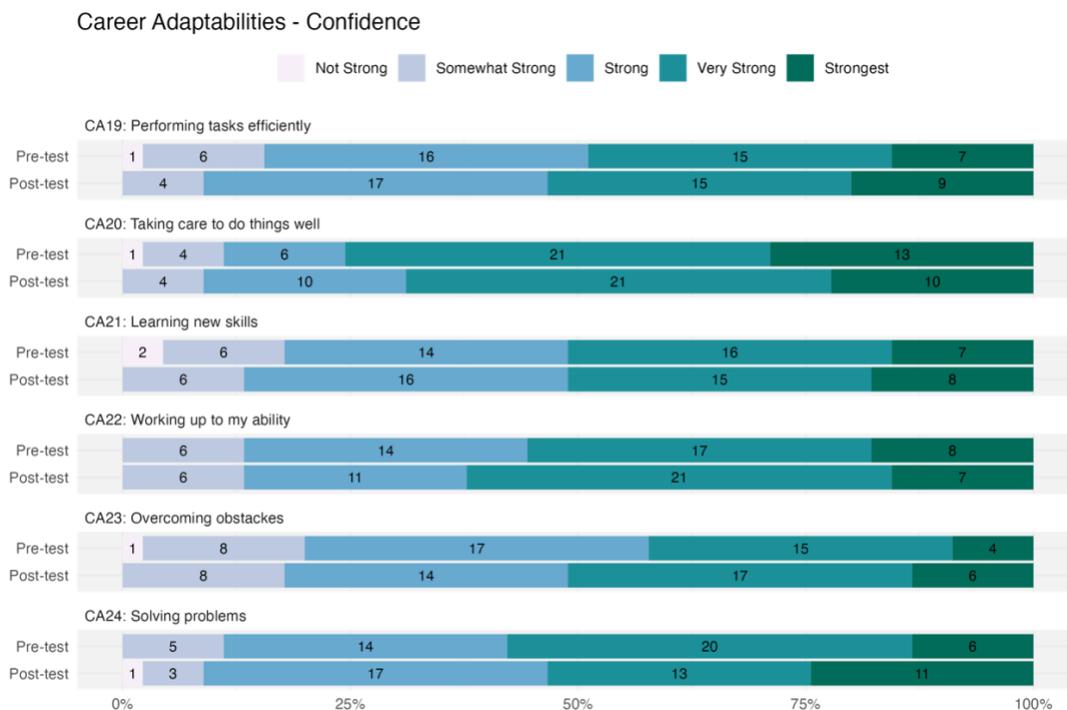
6.5 Triangulation with Focus One and Focus Two

This section describes evaluative results that synthesised findings of the three focuses of analysis. It serves as the triangulated interpretation of the case study and addresses the overarching objectives by and large. It will facilitate grasping a comprehensive and in-depth understanding of its effectiveness and quality from different perspectives and integrated with its background context. In Focus Three, aside from the CDSE, the other three measured variables (CP, CES, and CA) showed significant changes in students' pre-post scores after taking the CDE course. To further understand and interpret the meanings behind these quantitative results, findings from Focus One and Two will be merged and interpreted, generating a triangulated perspective.

6.5.1 Slightly More Engaged in Career Planning Considerations and Activities

Focus Three demonstrated significantly enhanced students' inclination and actions towards career

planning preparation. Similarly, almost all 14 student interviewees expressed their recognition of the importance of planning their careers ahead. They realised that it would be beneficial to consider this issue as early as possible. Evidently, after taking this course, it stimulated students to initiate and engage more in activities related to career planning purpose. In other words, students' concern and curiosity about their future careers increased, alongside with the frequency of self-exploratory behaviours.

According to findings in Focus Three, students reported strengths in future career consideration (CA1), an inclination to understand different approaches for goal attainment (CA16), and a likelihood to probe deeply into the problems they face (CA17) have been facilitated after taking the course. Additionally, their cognition of exploring self and surrounding environmental behaviours was also enhanced by participating in the course (CA13, SE4&11).

Therefore, coinciding with students' interpretations, while they were intrinsically aware of the importance of making efforts for their career planning (cognitive awareness), the course indeed catalysed their impetus to consider more seriously about this issue. In turn, it prompted them to take actions to gather information and form strategies for career planning.

6.5.2   Facilitated Occupational Information Obtainment

The CDE course was effective in facilitating students' preferences for gathering and obtaining relevant occupational information. According to the results in Focus Three, students reported increased behaviours regarding obtaining information on specific jobs or companies (EE3), and on the labour market in general and job opportunities in their areas of interest (EE5) after taking the course. Moreover, they also claimed that the frequency of attaining career orientation programs (EE8), talking to knowledgeable individuals from their preferred career area (EE10), and using the internet to find relevant information about their interested careers (OI1) increased due to

participating in the course. Besides, their reported behaviour in exploring more career possibilities (EE1) was also nearly significantly increased at the end of the course. As a result, their attitudes toward preparing and equipping skills for career planning and the changes they would encounter (CA7) seemed positively upbeat after participating in these career exploration activities, which were both initiated by themselves and obtained during the class.

Indeed, during the class observations, the delivered curriculum involved substantial information regarding the labour market in general (details in Section 4.2). Also, the instructors constantly encouraged students to explore occupational information independently. Meanwhile, it required students to visit job fairs and interview professionals in their areas of interest as part of the course assignments. Moreover, most instructors shared personal experiences regarding choosing their own career pathways. Additionally, there was one guest speaker invited in the last session who shared her perspectives on her own career stories and provided some advice for the audience. This content and information reasonably contributed to students' reported enhancement in gaining occupational information.

However, regarding obtaining specific occupational information, students expressed that they did not obtain desired career information from the course. Some students claimed that they habitually seek relevant information from popular social media platforms and look for case sharing or experiences from others with similar backgrounds and situations, as approaches to gain useful information. Thus, despite the non-desirable and irrelevant occupational information conveyed during the delivery, it seemed to have intrigued students to engage more frequently in self-regulated initiatives and activities for occupational information gathering outside the classroom.

6.5.3 Strategizing for Attaining Preferred Career Goals

The CDE course seemed effectively strengthening students' awareness of formulating strategies

to pursue their preferred career goals at the current stage. According to Focus Three, there was a significant increase in students' reported strengths in making plans to achieve their goals (CA5) and possessing strategies to attain their goals (CP3). Meanwhile, there was also a considerable increase in students' beliefs towards deciding their majors or careers in accordance with their interests (GS5).

However, regarding the decidedness towards their career goals, the results indicated only a statistical significance in the improvement of their reported confidence in having a clear career objective (CP1 & CP5). Considering the semantic implications of these changes, students seemed to share a lingering hesitation regarding what their decisive career objectives should be. Notwithstanding, they did reveal an assuredness in having a strategy for achieving their career goals after participation in the course (CP3).

Evidently, these findings were consistent with the interpretations that students expressed during interviews. Most emphasised that they had a plan to pursue their next-stage goals before taking the CDE course, such as applying for postgraduate studies or jobs in the government servant system. They stated that it was prevalent among their generation to plan everything ahead and have a procedure to attain their goals. Notwithstanding, the more imperative problem they considered regarding future career planning was centralised on self-understanding and pre-professional identity formation. This referred to their expectation of practising self-awareness with distinct personal characteristics formed. Furthermore, they anticipated assistance in establishing clearer and more visualised personal and work values to guide them in seeking more possibilities in career options. In turn, this would facilitate them making appropriate career decisions that align with their personal growth and long-term life satisfaction.

Therefore, it was evident that the course predominantly contributed to boosting students' intention

and action towards pursuing their goals with strategic plans. However, concerning the decidedness in career goals and clearer self-understanding, it seemed the CDE course did not effectively facilitate students in obtaining these strengths.

6.5.4   No Increasement in Tangible Career Planning Skills

The CDE course did not increase students' specific competencies necessary for career planning. Focus Three showed no significant findings in students' reported increase in career decision self-efficacy (CDSE) overall. Specifically, their assessed level of belief regarding planning (P), problem-solving (PS), and self-appraisal (SA) remain unchanged. Additionally, their reported level of confidence in gathering occupational information did not significantly increase either.

This finding resonated with the themes that emerged from Focus Two. According to students' expressions during interviews, they highlighted several specific strategies and competencies they wanted to learn from the CDE course but were not included. Firstly, they emphasised the need for assistance and practice in clarifying their personal values and making connections to possible career choices (self-appraisal and values clarification). Secondly, they highlighted the importance of providing real-life examples with relevant and similar educational and family backgrounds. They also underlined the needs for specific processes and strategies sharing regarding career decision-making and goal attainment (decision-making and psychoeducation intervention). Thirdly, they mentioned the necessity of equipping them with strengths to cope with the challenges and difficulties they might encounter in the rapidly changing world (career adaptability and problem-solving). Lastly, they addressed the need for specific occupational information that was data-driven, including statistical analysis of previous graduates' employment outcomes. Meanwhile, they highlighted the necessity to discuss the meaning and linkage of this information they could absorb and integrate, with peers or within class to contribute to their career planning

and decision-making.

Thus, it was evident that the competencies and strategies students desired were not adequately addressed, corresponding with the non-significant findings in the pre-post-test scores. As a result, the course did not effectively assist student in obtaining the necessary competencies for their unique career planning.

6.5.5   Contradictory Results in Career Adaptability

In Focus Three, career adaptability (CA) as a global indicator significantly increased its total score among students, statistically speaking, though with a weak practical effect size. In detail, while the sub-scales of CA-Concern (i.e., students' competence in career planning) and CA-Curiosity (i.e., students' competence in career exploration) were significantly increased, the assessed strengths in career decision-making (CA-Control) and efficacy in career problem-solving (CA-Confidence) were not changed.

Contradictory findings were observed in Focus One. Its planned and delivered curricula neither comprised CA as an objective nor did it include components or theoretical underpinnings to engage students with activities or facilitate them in gaining CA during the delivery process. Yet, students reported that overall CA significantly increased. One possible explanation for this contradiction was associated with CA's theoretical dimension (details in Section 2.3.3). As elucidated by Savickas (2020), its four dimensions were associated with four distinctive career competencies that are generated from each (see Table 2-1). Therefore, to some extent, the findings supported the relationships between each dimension and its associated competence, as established in theory. That is to say, the components involved in the delivered curriculum, relevant to career planning (CA-Concern) and career exploration (CA-Curiosity) indeed aided students in gaining strengths in the two dimensions of CA. They referred to students' augmented competencies and awareness in

initiating planning and exploring behaviours. In contrast, the non-involved aspects, such as career decision-making skills (CA-Control), and problem-solving skills (CA-Confidence) did not show any improvement. This also resonated with the results obtained from the CDSE scale (details in Section 6.3).

In sum, with combination of interpretations encapsulated from the three focuses of analysis, it revealed the reasons behind the statistical results generated, explaining why particular scales or subscales significantly increased among students after taking the course, whereas some specific others were not affected by participating in the CDE course.

6.6 Summary

In this chapter, the focus of analysis investigated the effectiveness of the course by measuring four specific variables, as its outcome benchmarks for course completion. To examine the pertinent changes made by students before and after taking the course, a series of paired t-tests were conducted individually for each variable. Consequently, the generated statistical results for each variable were demonstrated and discussed separately, employing detailed interpretation to understand changes in each single item. Additionally, the results were further integrated and interpreted with findings derived from Focus One and Focus Two, providing a triangulated explanation of the data analysis.

For the self-initiated career planning activities (CP), there was a significant increase reported by participants after taking the course. Meanwhile, their reported behaviours towards career exploration (CES), from both self and environment aspects, were augmented by participating in the course. Moreover, students' career adaptability (CA), considered as a global indicator, was significantly increased by the end of the course. Notwithstanding, regarding students' reported career decision self-efficacy (CDSE), the total score did not significantly increase. The goal

selection subscale detected a significant increase among participants after taking the course. Yet, considering the semantic meanings of some changed items, it appeared that there were merely demonstrations of statistical significance without practical meaning in increasing students' career decidedness.

Nonetheless, it was evident that the course provided students with general information and directions to consider their future careers. In turn, it successfully stimulated participants' inclination and behaviours to explore and seek more targeted information and opportunities towards their preferred career choices or next-stage options by themselves. Specifically, it stimulated students to undertake exploratory activities to search for useful information online and from surrounding resources. To some extent, it prompted students' intentions to reflect and consider this issue more often in their spare time.

Yet, referring to the essential competencies gained for career planning, and as the objectives in its planned curriculum, it seemed there was no significant enhancement detected among students. The results indicated that their gains in career decision-making strategies or self-efficacy, problem-solving competencies, planning skills, and self-efficacy towards accurate self-appraisal were not strengthened. Meanwhile, students' assuredness and confidence in generating adaptability and strengths for changes they might encounter in themselves, and the environment, were also not enhanced after taking the course.

Moreover, the triangulated interpretations combined with findings from the other two focuses of analysis indicated that the course effectively promoted students' cognitive awareness of the importance of career planning. To some extent, it also motivated their performance in initiating information explorations and self-reflections regarding their future careers. Nevertheless, the course was ineffective in facilitating students' critical competencies, which refer to strengths

needed for structuring and performing their personalised career planning in practice. Lastly, although the component of career adaptability was not included in both the planned and delivered curriculum, students still revealed a significant gain in CA as a global indicator. However, the concrete strengths for career decision-making and problem-solving associated with the two sub-scales in CA were not changed. This resonated with the other findings and provided further evidence that supported the theoretical establishment of CA.

Chapter 7   Discussion and Conclusion

Career development education (CDE) courses have been the predominant approach that HE institutions adopt to facilitate students in acquiring career awareness and gaining sufficient career development competencies as outcomes, both in international and local contexts (Bridgstock et al., 2019; Cheung & Jin, 2016; Jin et al., 2021; Reardon et al., 2020). In turn, CDE courses also served as the main strategy, specifically in China's higher education settings, to facilitate students in attaining employability as the ultimate goal of higher education and preparing them for successful school-to-work transitions (Jin, 2018; Su & Zhang, 2015; Zhou et al., 2016). Notably, current literature asserts that employability should not be encapsulated into a list of skills acquirements (Clarke, 2018; Healy, Hammer, et al., 2022). To achieve the overarching goal of enhancing graduates' employability, the predominant emphasis should be on equipping students with self-actualisation through self-awareness, critical reflection, and pre-professional identity formation (Dean et al., 2022; Jackson & Tomlinson, 2020). More crucially, as Healy (2023) argued, the conceptualisations of employability and CDE should be broadened and integrated into a simultaneous learning process. This integration would allow CDE theories and empirical findings to serve as a means to strengthen the overall enhancement of graduates' employability concerning the aforementioned goals. Therefore, it is essential to evaluate the current CDE course from this asserted perspective and based on the empirically supported criteria for the general effectiveness. To make sound evaluations of CDE courses in the Chinese context, most studies adopt criteria that measure variables to judge students' skills gains as outcome evaluation (Zhao & Wu, 2022). There is seldom research that consider CDE courses as case studies and evaluate them from a process learning perspective. This approach would integrate the context as the basis and rationale for systematic evaluation, making sound judgments and suggestions for meaningful improvement.

This thesis evaluated an ongoing CDE course using a designed evaluation framework that considers the evaluation procedure in three categories: content evaluation, process evaluation, and outcome evaluation. Four research objectives were proposed:

Content Evaluation

- Objective 1) To evaluate whether the design and delivery of the curriculum are fit for purpose with respect to what are stipulated in career development education courses' criteria.

Process Evaluation

- Objective 2) To evaluate the delivery of the career development education course against the planned curriculum.

Outcome Evaluation

- Objective 3) To evaluate the students' and instructors' perceptions of the career development education course.

- Objective 4) To evaluate the effectiveness of the career development education course regarding career development competencies.

Specifically, this thesis evaluated the case study from three aspects: the design and delivery of its curriculum (in Focus One), students' and instructors' perceptions regarding the delivered curriculum (in Focus Two), and effectiveness in terms of students obtaining career development competencies (in Focus Three). Jointly, the three focuses of analysis established and presented a systematic evaluation discussion and addressed the four proposed research objectives. Different research methods were adopted in each of the three focuses of analysis.

This chapter first summarises the findings from each focus of analysis. It follows with a discussion of implications for more effective CDE courses. Lastly, it outlines the practical contributions of

structuring CDE courses, the limitations of the study, and directions for future research.

7.1 Summary of Main Findings

In Focus One, using the evaluation framework described in Section 2.8 and considering the seven criteria identified for CDE course effectiveness (details in Section 2.4.2), five critical factors were identified in the planned curriculum through content analysis: written exercises, occupational information, modelling, values clarification, and psychoeducation intervention. The curriculum described that its structure was formed based on one of the most influential career theories, the CIP (Cognitive Information Processing) theory (Sampson et al., 2004). The curriculum presented and adopted its theoretical strategies to cultivate students' mindsets and ability for career decision-making and career problem-solving. It also contained sub-objectives and involved content for students to practise their career-relevant developmental competencies (i.e., interview skills, CV design, occupational information exploration, etc.). Thus, in alignment with the empirical evidence, the planned curriculum was structured with sufficient critical factors engaged and formulated with a sound theoretical underpinning as guidelines (Brown & Ryan Krane, 2000; Reese & Miller, 2010). However, these factors fulfilled the criteria for effectiveness at the theoretical level but were not effectively applied at the practical level.

During the observed curriculum delivery process, the instructors did not implement the planned curriculum. Instead, a simplified curriculum was delivered. Three critical factors were observed and evaluated based on the delivered curriculum through class observations: written exercises, occupational information, and modelling. However, none of these factors were sufficiently demonstrated as critical components during the sessions.

Written exercises were performed with unspecific guidance and inadequate methods, hindering the possibility for students to gain a deepened and fresh understanding of the topic. Regarding the

presented occupational information, the aspects and types of information did not resonate with the students. The general labour market information addressed, and nonspecific career information elaborated as anecdotal stories, did not effectively engage students' attention or interest. Lastly, the modelling components demonstrated by the instructors and the invited guest speaker did not successfully establish rapport and generate empathy between these role models and the students. Evidently, the delivered curriculum was not aligned with the planned one. Evaluated reasons were interpreted as follows. The course instructors did not acknowledge the theoretical framework adopted or any career theories involved in the planned curriculum. Consequently, the sessions did not deliver relevant strategies and exercises for self-awareness, career decision-making, and problem-solving as theoretically structured based on these career theories. The core instructor explained that they did not receive any training or support from other stakeholders to instruct the planned curriculum, nor did they have knowledge of how to utilise the toolset for effective participation. Thus, based on the core instructor's reflection, the delivered curriculum was structured based on their understanding of the essential aspects of CDE that should be engaged and demonstrated to students. In other words, the four missing critical factors in curriculum delivery were deemed unimportant by instructors based on their knowledge and competencies in the actual situation and context.

In Focus Two, students' and instructors' perceptions regarding the delivered curriculum were explored and evaluated through semi-structured interviews. Their interpretation and experiences were also understood and discussed, integrating participation interactions and responses observed during the class sessions. Four major themes regarding the misalignment between students' and instructors' perceived standpoints towards the delivered curriculum were discerned. Specifically, the difference between students' perceived and expected CDE curriculum structure for this specific

case study and context were addressed and interpreted.

From students' perspectives, they perceive this CDE course as not as helpful and practical as they expected. Student interviewees stated that the course's aims were not explicitly elaborated. The expected career planning skills, methods, and tactics of decision-making were not obtained. Regarding the curriculum content delivered: first, merely general and vague information and issues of the current labour market were demonstrated; second, the concepts and strategies of career planning or career decision-making were non-specifically mentioned; third, a trustworthy relationship was not built with the instructors; lastly, they were still confused about how to ascertain their personal interests, work values, and strengths to make informed decisions about their next-step options or for their future careers, aiming for personal growth and satisfaction.

From instructors' perspectives, they perceived this CDE course as primarily aiming at enhancing students' realisation and mindset for preparing and planning their careers ahead. According to their knowledge and current competencies, they did not intend to cultivate students with concrete skills or strategies for career planning or career development. Thus, regarding the large proportion of the content of occupational information provided, they believed the general information and landscape of the current labour market status offered students an overall understanding of future conditions they might encounter. Meanwhile, they thought the curriculum delivered would stimulate them to be more concern about their future and take actions to work towards their goals. Nonetheless, instructors also know that if the curriculum aims to cultivate students to gain sufficient practical skills and strategies for career decision-making and problem-solving, they need extra training and more resources and support to achieve the goals. Besides, they think students' self-awareness and work values clarification were essential but out of the scope of this CDE course.

In comparison, it was evident that, with respect to the course aim, students considered self-

awareness and pre-professional identity formation to be essential and fundamental. However, instructors considered raising awareness among students to plan their careers as early as possible to be adequate and should be prioritised at this stage. Regarding the curriculum content, students wanted strategies and exercises to discern personal strengths and work values and make connections between their characteristics and career choices for appropriate decision-making. They wanted to learn statistically analysed employment data from previous graduates. They desired to build a reliable and trusting relationship with instructors to share their personal concerns and acquire personal guidance. In turn, they also desired to learn strategies and approaches to adapt to a rapidly evolving world and adjust to constantly switching life and work roles. Nevertheless, instructors did not seem to make much effort to consider the needs of students regarding this topic. They merely fulfil their duties as requested by the authority and the documents. Due to their competencies and the status quo context, they prepared and delivered the content they deemed necessary and easy to access. Thus, as asserted by the instructors, they did their best, providing the curriculum under the unique conditions.

On the contrary, students held high expectations towards the CDE course and the relevant issues of CDE by and large. They believed it could offer them valuable opportunities and an environment to focus on their personal problems and career concerns. More importantly, they wanted to learn sufficient skills to make appropriate decisions. They aimed to master adaptabilities and a proactive mindset to plan in advance and take control of their life paths for personal growth and life satisfaction. Moreover, students highlighted that the key to meaningful engagement and effective outcomes of the CDE course heavily relied on the collaborative teaching and learning environment established during sessions. Additionally, they emphasised the importance of sufficient instructor feedback for both exercises and work completed during class, as well as for personal

communications outside of class.

In Focus Three, a questionnaire was completed among students before and after taking the CDE course to evaluate the changes that appeared. The questionnaire was structured with four existing career competency scales considered as benchmarks for effective CDE course outcomes. It contained the Career Planning Scale (CPS, Gould, 1979), the Career Exploration Survey (CES, Stumpf et al., 1983), the Career Decision Self-Efficacy- Short Form (CDSE-SF, Betz et al., 1996), and the Career Adapt-Ability Scale- China Form (CAAS-CF, Hou et al., 2012; Savickas & Porfeli, 2012).

As the research study was designed and targeted on one single case study, the data sample consisted of students who registered for the CDE course during the researched semester. Paired *t*-test results indicated that students' tangible career development competencies (i.e., career decision-making strategies or self-efficacy, skills for problem-solving and planning, self-appraisal, etc.) did not increase after taking the CDE course. However, the CDE course did facilitate students in gaining career consideration and boosting relevant career behaviours. In other words, students' career exploration activities regarding themselves and the environment and career planning activities significantly increased after taking the course.

Furthermore, after integration with the findings obtained in Focus One and Focus Two, the results of Focus Three were further supported. Students perceived and expressed profound realisation and curiosity regarding this subject. They also reported that the course motivated them to engage in more exploratory activities for self-understanding and information gathering.

In contrast, students' career adaptability (CA) significantly increased at the end of the CDE course, as a global indicator. However, students did not perceive any specific content relevant to practising their adaptability, nor were they aware of gaining CA strengths through reflections. Meanwhile, in

both the planned and delivered curricula content, CA was not involved in course objectives or engaged in class activities. This result suggested that in the four dimensions constituting CA, students' attitudes and beliefs of career concern and career curiosity were affected by content related to in-advance planning and self-and-environment exploring, as theoretically structured (details in Section 2.3.2.2). Nonetheless, students' competencies of career control (referring to career decision-making) and career confidence (referring to problem-solving) were not improved, which resonated with the findings throughout the three focuses of analysis.

Together, the three focuses of analysis evaluated this case study based on the aspects of content, process, and outcomes. It suggested that the CDE course was ineffective in cultivating and promoting students' gains in tangible career development competencies. In contrast, it merely stimulated students to consider the issue more often and engage in more self-initiated exploring activities after taking the course.

7.2 Implications for a More Effective CDE Course

This thesis established a comprehensive and systematic evaluation process. According to the aforementioned findings, this section provides three implications for interpreting these evaluation results to structure a more effective CDE course curriculum.

7.2.1 Clearer Curriculum Objectives

Theoretically and practically, curriculum plays a pivotal role in guiding and structuring an effective course. In this regard, the CDE courses should be structured with clearer objectives demonstrated in the curriculum and explicitly interpreted throughout the delivery process. This will serve as the guiding outlines and indicators for instructors to follow and prepare targeted content and activities to approach and achieve these set objectives.

As suggested by Reardon et al. (2021) and Brown et al. (2003), and supported with empirical

evidence (Cheung & Jin, 2016; Lam & Santos, 2018; Reese & Miller, 2010), CDE courses without theoretical underpinning and clearly structured objectives can devolve into a series of visiting speakers, students experiences sharing, and disorganised activities. These types of courses are difficult to replicate and standardise, making outcome effectiveness and quality evaluation challenging.

This thesis suggested that, apart from theoretical underpinning and structured objectives, instructors should make more efforts to engage students in understanding the goals and purpose of the course. Studies investigating the characteristics of Gen Zers indicated that the current Gen Z students require more elaboration to grasp the relevance and purpose of what they are learning to achieve meaningful outcomes (Barreiro & Bozutti, 2017; Cameron & Pagnattaro, 2017; Ernst & Young Report, 2016).

More crucially, the explicitly elaborated objectives during sessions would aid in establishing an authentic and trustworthy relationship between the instructor and students (Appleby et al., 2019). It will enable instructors to convey their genuine care for students to attain knowledge and skills that will be learned as the course outcomes. It will further motivate students to actively engage in class activities and assignments by clearly stating the procedures and purposes of content involved (Richmond et al., 2019). Additionally, students will gain a better understanding of how to connect and apply the knowledge and skills to solve problems and conquer obstacles in attaining their future career goals.

Specifically, as theoretical implication, two objectives should be structured and underscored in the CDE courses, that is, pre-professional identity formation and values clarification.

7.2.1.1   Pre-Professional Identity Formation

Pre-professional (graduate) identity (PPI) formation was one of the most essential curriculum

objectives emphasised by student interviewees. From students' perspective, they believed the CDE course should not merely provide occupational information available elsewhere (i.e., internet, other lecturers, or family sources, etc.). Nor should it offer experiences shared by role models from decades ago. More effort needs to be focused on helping students understand their personal characteristics (i.e., interest, strengths, weaknesses, values, and ideology) and connect them with their intended or appropriate future professions. Numerous scholars in the employability domain asserted that PPI formation is a critical element in integrating students' knowledge and possessed capitals to build up their employability during their higher education journey (Holmes, 2013; Jackson, 2017; Tomlinson & Jackson, 2019). This integration will further benefit their personal growth in the long run. CDE in higher education settings is seen as a proper approach to facilitate students' PPI formation through activities focused on self-awareness and career exploration (Daniels & Brooker, 2014; Tomlinson & Jackson, 2019).

Current CDE course practices primarily aim to cultivate students with skills and strategies for career decision-making (Jin et al., 2021; Zhao & Wu, 2022). Some courses focus solely on either career exploration (Cheung & Jin, 2016) or self-awareness activities separately. This thesis suggests that PPI formation should be explicitly indicated as a course objective. Such an explicit focus will motivate students to engage more with the content. Consequently, it will benefit students by increasing their certainty in career decision-making and forming strong employability when combined with other factors.

7.2.1.2 Values Clarification (including self-awareness)

Values clarification was another objective and content highlighted by the students interviewed, which should be involved in the CDE course. Students perceived that making proper and meaningful decision requires crystalised personal and work values and finding congruence

between them. Thus, values clarification exercises provide students opportunities and methods to ascertain their values. These clarified values would be utilised by students to further interact and configure with their other dispositions and resources to assist in their unique career decision-making (Rounds & Leuty, 2020). Additionally, values clarification supports these emerging adults (i.e., undergraduates) in grasping and interpreting their personal needs, strengths, and potentials as emerging PPI to future employers or any authorities from whom they need to earn trust and opportunities for personal development (Barbarà-i-Molinero et al., 2017; Hinchliffe & Jolly, 2011; Rounds & Jin, 2013).

Furthermore, in findings demonstrated in Focus Two, self-awareness was another aspect consistently highlighted and emphasised by the students. Student recognised that, to form, understand, and crystallise their personal and work values, they needed to first gain accurate and comprehensive knowledge about themselves. In contrast, instructors perceived elevating students' self-awareness merely as raising awareness to make career plans in advance. In literature, self-awareness is defined as an essential factor that directs self-focused behaviours and is based on understanding and evaluating one's emotions, strengths, limitations, values, and motives (Özek & Ferraris, 2018; Wicklund, 1975). In career development theories specifically, self-awareness is integrated as self-concept or self-knowledge, which emphasises the need to facilitate individuals' reflection and evaluation of their values, interests, skills, and career preferences as the fundamental basis for generating plans, actions, or decisions toward career tasks (Sampson et al., 2020; Savickas, 2013). Additionally, empirical studies have validated the positively association between self-awareness and individuals' ability for career decision-making (Özek & Ferraris, 2018; Weng & McElroy, 2010). Thus, as the foundation for students to recognise and articulate their values, self-awareness needs to be integrated and emphasised alongside values clarification.

However, in current CDE practices, practitioners generally encapsulate the concept of work values as one element needed for career development, often including only a single class activity for values clarification in one session. For establishing student's career awareness, instructors often perceive the concept narrowly and lack toolsets or strategies to stimulate self-awareness. Noticeably, CDE courses seldom set values clarification as an objective or outcome to be emphasised or elaborated upon in detail. Specifically, instructors without adequate training in career guidance and counselling may omit content or structure curriculum without incorporating any activities regarding values clarification or self-awareness, as observed in this particular case study.

Hence, with evidence obtained in Focus Two and supported by a previous meta-analysis study (Whiston et al., 2017), this thesis recommends that values clarification, including cultivating students' awareness, should be one of the main objectives emphasised throughout the delivery process. Intensive and diversified activities should be offered to students to practice.

Thus, these theoretical implications resonated with Tomlinson (2017a)'s model of graduate capital formation for employability enhancement. As pre-professional identity and values clarification serve as fundamental bases for students to develop crystalised self-knowledge and broadened career sights, they foster a clearer understanding of one's personal values and enable alignment with the norms and shared values of chosen professional domains. Based on Tomlinson (2017a)'s assertion, a deepened awareness of self and environment strengthens students' ability to recognise and articulate their human capital when communicating with future employers. In turn, emerging pre-identity formation and crystallised values clarification further bolster students' cultural and identity capital. By developing a thorough understanding of their strengths, weaknesses, and desired personal and work values, students are better prepared to navigate matched values of

targeted professional domains, bridging their competencies and resources with industry requirements, and invest the time and effort necessary for effective preparation and satisfactory career outcomes (Tomlinson & Jackson, 2019). Therefore, pre-professional identity and values clarification are vital for cultivating proactive career-management competencies, broadening career insights, and integrating with other forms of capital sustain employability enhancement over the long term.

7.2.2 Consistent Curriculum Delivery (Implementation Fidelity)

The effectiveness or quality of a curriculum is not only judged by the scores or outcome assessment data from student performances but also by the fidelity of implementation delivered by instructors (Smith et al., 2018). Implementation fidelity refers to how well the designed educational curriculum matches the delivered curriculum (O'Donnell, 2008; Smith & Finney, 2020). Scholars assert that to improve and facilitate students' learning effectively, the implemented curriculum content, adopted pedagogies, and involved activities all contribute to students' learning experience. These elements affect students' responsiveness or engagement during the learning process (Smith & Finney, 2020).

Regarding CDE courses specifically, to the best of the researcher's knowledge, no empirical study has investigated the alignment between the designed curriculum and the delivered one. However, scholars in the CDE domain have raised concerns about the quality and fidelity of CDE courses implemented in practice (Reardon et al., 2021; Spokane & Nguyen, 2016). They warn educators and stakeholders to be cautious about whether the implemented content and approaches are consistent with the intended curriculum, which is structured based on theoretical and empirical findings. Accordingly, they argue that policymakers and authorities should pay extra attention to providing adequate training and support to practitioners. This support will help practitioners

present appropriate instruction and ultimately aid students in achieving meaningful learning outcomes.

The evaluation results and facts revealed in Focus One indicated that the current case study did not deliver the curriculum as planned and intended. Due to the status quo of China's current CDE context in higher education settings, most institutions lack funding to hire or train professionals in career services or to instruct CDE courses (Jin, 2018; Wei et al., 2016). Instructors are prevalently unable and insufficiently competent to implement the planned curriculum. This inconsistency between the planned and delivered curriculum, along with diminished implementation fidelity, jeopardises students' learning opportunities to achieve meaningful outcomes. It also impacts their motivation to engage in more relevant career development activities.

Therefore, this thesis suggests that educators and instructors need to dedicate themselves to improving the quality and fidelity of CDE courses implementation. Providing training and support to in-service practitioners with sufficient knowledge and competencies is a fundamental approach (Hao et al., 2015; Jin, 2018). More essentially, to ensure instructors' continuous participation in professional improvement their willingness to allocate additional time and effort for building working-reliance with students and offering personalised feedback, despite already heavy workloads, university regulations and broader educational policy should develop tangible, specific guidelines and standardised requirements to regulate CDE curriculum implementation (Xie et al., 2019). These guidelines and directive must also mandate systematic professional training and require regular evaluation of its outcomes and effectiveness.

Thus, consistent delivery of the intended and planned curriculum will safeguard implementation fidelity, ensure the overall effectiveness of the CDE course. It will further align with students' expectation of the course and enhance the quality of their learning experiences and outcomes.

7.2.3 Teaching Practice: Establishing a Learner-Driven and Collaborative Teaching and Learning Environment

Teaching practice needs to engage students in the structure and delivery processes regarding how the content will be implemented. The CDE courses should be structured with a learner-driven approach and a collaborative teaching and learning style. In the learner-driven approach, instructors act as facilitators of the teaching and learning process, while learning actions are driven by the active learner. This approach engages students in co-constructing the expectations of what they will learn and achieve from the course (Herranen et al., 2018). It is also congruent with the learning inclinations that characterise Gen Z (Adobe Report, 2017; Cameron & Pagnattaro, 2017). As a result, it further stimulates students to think critically, act meaningfully, and work collaboratively with peers and instructors to attain goals and develop higher-order thinking skills (Davidson et al., 2014).

On the other hand, collaborative teaching and learning environments provide students with opportunities to work together to define, discuss, and solve complex problems that do not have simply right or wrong solutions (Sawyer & Obeid, 2017). This learning practice enables students to engage in more self-directed learning. It allows them to identify the information, strategies, resources, and skills needed to solve problems collaboratively and apply the skills constructed to real-life situations.

The learner-driven approach and collaborative learning are rooted in the social constructivist epistemology and the cognitive developmental theories of Vygotsky (1978) and Piaget (1951). These theories propose that learners, as active agents, need to learn by constructing and co-constructing knowledge through interaction with their surrounding social and cultural contexts, as well as based on their prior knowledge and experiences (Sawyer & Obeid, 2017; Zhou et al., 2019).

Meanwhile, scholars also advocated and underscored this proposition in the present career and employability learning pedagogy approach (Forrier et al., 2018; Healy, 2023; Monteiro & Almeida, 2021). Healy (2023) suggested that CDE and employability enhancement should provide students with more opportunities to reflect on and practice with peers or practitioners about narrations for co-constructing and reconstructing their related experiences into career identities and later career stories, as proposed by Career Construction Theory (see more ref. in Savickas, 2020). This suggestion requires CDE courses to establish a more learner-driven, collaborative teaching and learning environment.

As explicitly stated by the student interviewees and interpreted in Focus Two, they expected the CDE course to provide a learner-driven and collaborative learning environment. This environment would allow them to discuss and exchange their thoughts, insights, and dilemmas regarding career choices and next-stage decisions. With this teaching and learning approach adopted, students might engage more actively and intentionally in content and activities designed to teach them competencies and strategies for career decision-making and problem-solving. This approach might be conducive to helping students generate more tangible competencies and essential mindsets to solve everyday problems, thereby benefiting their personal growth and career development as a whole.

This case study did not provide students with such a teaching and learning approach. At present, most CDE courses might employ collaborative learning methods that engage students in more interactive class activities (Jin et al., 2021; Lam & Santos, 2018; Peng & Lin, 2019). However, they seldom adopt a learner-driven approach that actively engages students in structuring the content delivery process collaboratively, "as owners of their knowledge and their learning" (Herranen et al., 2018, p. 2198). Such an approach invites students to co-construct the expectations

and achievements of the course. Therefore, this thesis recommends that practitioners and instructors consider adopting this teaching practice approach. Proactively engaging students' learning expectations can improve the overall effectiveness of the course.

7.2.4 External Stakeholders Engagement

The role of external stakeholders should be further emphasised and integrated into the current CDE curriculum structure and implementation. This study suggests that external stakeholders should be involved and engaged in a systematically structured, consistently interactive approach to utilise external resources more profoundly and meaningfully, enhancing the effectiveness of CDE courses meaningfully for all parties involved. Such external stakeholder's engagement should be cautiously chosen from potential partners who have cooperated with, and previously established reciprocal relationships at university-level, or at least faculty-level, ensuring robust, mutual benefits. Many scholars emphasised the pivotal roles that external stakeholders (e.g., employers and industries representatives) should play in cooperating with HE curricula to help students gain realistic working experiences and develop career self-management competencies (Bridgstock & Jackson, 2019; Jackson & Tomlinson, 2020). However, empirical studies suggested that, during implementation and cooperation with external stakeholders and in engaging students in work-integrated learning activities, issues arise in continuously maintaining both stakeholders' and students' energetic, meaningfully engagement to secure beneficial outcomes, especially in ensuring that students can effectively transfer these acquired experiences into substantive resources and articulate them to prospective employers (Jackson & Edgar, 2019; Jorre de St Jorre & and Oliver, 2017).

Therefore, to ensure the energetic interaction and participation of these external stakeholders, and to secure practical, positive engagement, the university or faculty should offer support through

reliable resources, such as contacts with potential employers, industry representatives, or professionals and alumni. Most essential, first, these external stakeholders should be involved in pre-structuring of curriculum materials and activity development, such as real-life case studies creation, or on-site scenario role-play materials, to serve as class activities or assessment that immerse students, encourage active participation, and enable later reflection. Second, guest speakers or collaborative instructors from external partners should be selected and engaged early in the implementation-preparation process. Only through this sustained, long-term interaction can students access meaningful, up-to-date industry insights, forge tangible labour market connections, and build a pre-professional identity. Lastly, these external stakeholders should provide ongoing, individualised feedback on students' class participation, assessments contributed, or via mentorship, ensuring that advice is grounded in established rapport and is practical for student reflection. Meanwhile, they can also offer instructional feedback, drawn from their participation experiences and student interactions, to refine curriculum structure and teaching approaches, thereby enhancing the overall effectiveness of the CDE course. As scholars asserted, only through these iterative, authentic interactions, reflections, and feedback loop can students learn to apply theoretical concepts in practice, develop networking skills (enhancing utility of social capital), strengthen their psychological capital (e.g., adaptability and resilience), and solidify their emerging professional identities.

7.3 Limitation and Future Studies

This study evaluated a CDE course by describing its background contexts and interpreting its content, process, and outcome as evaluation results to demonstrate the overall effectiveness and quality of the course. There are several limitations due to the time constraints and accessible resources available to the researcher at the present stage. First, in the research design, the study

did not involve a control group for comparison with the changes obtained from the intervention group. This might restrict the generalisability of the results acquired in Focus Three. Without a control group as a baseline, it may be challenging to ascertain whether the changes made in students were predominantly due to the impact of the course or affected by other variables or factors that were not measured, such as students' general maturity of thoughts regarding career planning over time.

Second, this thesis only evaluated one CDE course with a non-randomised population sample. The students involved were from limited disciplines, specifically from economic and management-related majors under one faculty. This single case study might not be representative of the general effectiveness of the CDE courses in China at large. As asserted by Whiston et al. (2017), research on career interventions should be designed rigorously and follow the experimental standards to improve credibility and replicability of the results.

Third, because this thesis was deliberately scoped to evaluate the effectiveness of a single case study, it was limited in integrating or addressing external factors (macro-level), such as economic status, societal influences, national policy, and labour-market demands, that, although important and worthy of investigation, lie beyond its defined objectives yet may extrinsically affecting CDE courses effectiveness and its development and implementation in HE settings. From this macro level, scholars have consistently debated and emphasised the shared responsibilities of external stakeholders surrounding HE institutions to comprehensively and sustainably support individuals in developing and strengthening their career-management competencies and broader employability in this dynamic, lifelong-learning labour-market context.

Therefore, future research needs to design and involve a control group and expand its comparison samples from multiple school sites. It should also include samples from diversified disciplines and

institutions with different academic ranks and varied funding available for CDE. This will help evaluate the general effectiveness of CDE courses. Such an approach would increase the representativeness of the findings.

Moreover, future studies should adopt the systematic evaluation framework proposed by this thesis. This framework should be applied to evaluate different CDE courses with distinct theoretical underpinnings that utilise various strategies and approaches for enhancing career competencies. Since no uniform or indigenous career theories have been established to guide the curriculum structure or standardise the principles for implementation in the Chinese context, different CDE courses were designed and instructed based on the preferred or familiar theories or pedagogy strategies chosen by the instructors (Wei et al., 2016; Xie et al., 2019; Zhang, 2016). Investigating and evaluating different approaches would allow the determination of potential critical factors that might affect students' learning outcomes in the Chinese context. This would further contribute to establishing a plausible and applicable curriculum framework and instruction guidelines to improve the development of the CDE courses curriculum in China.

Additionally, future research should investigate CDE course effectiveness by explicitly involving macro-level factors that underpin and support CDE curriculum design and implementation. Although numerous national policies mandate equipping students with robust career competencies, enhancing graduates' employability, and reforming HE curricula to align with labour-market demands, practical challenges persist. The allocation of university funding, the professional development of in-service career instructors and qualified practitioners, and societal influences, such as parental expectations, students' socioeconomic backgrounds, fluctuating labour-market conditions, and graduates' long-term career satisfaction, require further examination. Comprehensive and longitudinal research designs should be adopted to clarify how these external

factors shape CDE course outcomes in a broader context and, ultimately, their impact on graduate employability.

Lastly, with the themes identified and perceptions interpreted from both instructors and students regarding their different standpoints and expectations of the course, these findings may shed light on what should be included and emphasised in the curriculum content. Indeed, they may inform what teaching approaches should be adopted to motivate and engage students to attain effective learning outcomes. Thus, future research could utilise the results, as indicated in Focus Two, to redesign the CDE course's curriculum and evaluate its effectiveness and fidelity of implementation for verification.

7.4   Contribution

This thesis substantiates previous research and modifies an evaluation framework to evaluate an ongoing CDE course in the Chinese context. It particularly advances the knowledge and understanding of the current practice of CDE courses in this specific context. The substantive and original contribution of this thesis can be addressed in the following three aspects:

First, this thesis presents a comprehensive and systematic evaluation framework, which predominantly adopts the conceptualisation and data-gathering matrix based on both Stake's and Stufflebeam's program evaluation models and methodological approaches (Stake, 1967, 1995; Stufflebeam & Coryn, 2014). This framework is used to address and investigate the four specific objectives proposed by this thesis. This framework expands the knowledge of the methods and techniques for CDE course evaluation in practice. Specifically in the Chinese context, although policymakers and stakeholders have pervasively promoted CDE courses and instructed them in higher education settings for almost two decades, not much attention has been paid to the evaluation process of these courses. Furthermore, no applicable model or paradigm has been

proposed for conducting appropriate and comprehensive evaluations. Many studies have investigated and verified the effectiveness of specific CDE courses regarding outcome variables, such as career decision-making difficulties, career exploration behaviours, career awareness, or job search self-efficacy, etc. (Jin et al., 2021; Zhang et al., 2019; Zhao & Wu, 2022). However, they all measured and reported their findings based on close-ended questions and Likert scale questionnaires. Moreover, none of them studied the potential impact of the curriculum delivery process, or the fidelity of implementation, on the overall effectiveness. This thesis shows that the delivery process, the teaching practice adopted by the instructors, and the subsequently established learning environment affect students' motivation to engage and interfere with their learning experience and outcomes altogether. The legitimate application and demonstration of the findings by adopting this evaluation framework provide valuable evidence to fill this research gap.

Second, this thesis demonstrates contradictory perspectives regarding the effectiveness of CDE course between instructors and students, as well as between students' perceptions and outcome measurements. With the synthesis of the results generated from three focuses of analysis, the CDE course studied was evaluated as ineffective. Although Focus Three indicated that some competencies or career-related behaviours were significantly increased among students, such as career planning skills, career exploration activities, and career adaptability (details in Chapter 6), students reported that no tangible capabilities regarding career planning or decision-making were obtained, except for increased awareness of this topic. Previous research has intensively verified the effectiveness of CDE courses in promoting students' career skills enhancement by conducting quantitative analysis of students' performance before and after taking the course (Cheung & Jin, 2016; Green et al., 2019; Lam & Santos, 2018; Zhao & Wu, 2022). However, this thesis suggests an alternative approach and aspect to evaluate the actual effectiveness. It suggests considering

students' experiences and perceptions and taking into account the background context as antecedent factors. Notwithstanding, this thesis describes firm results that even though the statistical analysis may indicate significant outcomes, the actual beneficiaries may have noteworthy and opposite opinions.

Lastly, this thesis identifies potential factors of the CDE course that could improve its effectiveness in future directions. Recent literature in the employability and CDE domains argues that to effectively and meaningfully enhance graduates' employability or cultivate their competencies in career management, educators and stakeholders should not simply focus on a list of competencies gained from an outcome orientation (Clarke, 2018; Römgens et al., 2019). Scholars assert the necessity for a paradigm shift to promote students' careers and employability learning as a process (Holmes, 2013; Monteiro & Almeida, 2021). This requires the objectives of CDE courses to change from a competency focus to an unfolding learning process that emphasises the factors of "identity formation, self-actualisation, and social connection" (Healy, 2023, p. 1304). This thesis provides empirical findings to support this assertion.

Crucially, the results provide fruitful evidence indicating potential factors based on students' expectation. The thesis demonstrates, in accordance with up-to-date literature and characteristics categorised as Gen Z, that students need extra guidance and practice to develop a firm self-awareness and form a potential and tangible pre-professional identity for possible career decision-makings. In addition, practicing values clarification is essential to aid their identity formation and help them make sense of and connect with various career options to discern possible career directions. More importantly, the thesis extends the understanding of teaching practice in CDE. Creating a learner-driven, collaborative teaching and learning environment, along with a working alliance established between instructors and students, is a critical factor that affects students'

engagement with the content and, eventually, their learning outcomes. This makes an essential contribution to the practical implementation of what should be involved in curriculum and teaching practice.

This doctoral thesis provides empirical evidence that evaluating the effectiveness of CDE courses should consider the content, delivery process, and outcomes achieved to reach a valid and comprehensive judgement. The fidelity of implementation is as important as the critical factors that should be involved in the curriculum as criteria for course effectiveness. Thus, the original and substantive contribution of this thesis is the comprehensive and systematic framework established to conduct evaluation in CDE courses and the practical suggestions generated from the evaluation results.

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Appendix A Focus Three's Questionnaire (Chinese)

香港教育大学
The Education University of Hong Kong

香港教育大学

国际教育系

参与研究同意书

关于某大学生职业发展规划课程的评估及发展研究

我同意参加由香港教育大学国际教育系博士生导师林志明副教授和PAVLOVA Margarita副教授负责指导的，由其学生盛盟负责执行的研究项目。

本人理解此项研究中所获得的资料可用于未来的研究和学术发表。本人有权保护自己的隐私，且其个人资料不会被泄露。

研究员已向本人充分解释了研究需提供的资料和相关步骤。本人理解可能会出现的风险，且本人自愿参与这项研究。

本人理解且有权在研究过程中提出问题，并可在任何时候决定退出研究，更不会因此而对研究工作产生的影响付有关责任。

如有兴趣参与此研究后续的访问环节（大约一小时的深度访谈），请与研究员盛盟（email: ____@s.eduhk.hk; 电话：____ 微信同号）联系。

本人签名：

日　　期：

关于大学生职业发展能力的研究调查问卷

个人信息

姓名		学号	
性别		年龄	
专业		年级	
家庭月收入区间（元）	☐ 3000及以下 ☐ 3001 ~ 10000 ☐ 10001 ~ 20000 ☐ 20001及以上 ☐ 其他（_____）	父母所受教育的最高水平	☐ 初中及以下 ☐ 高中 ☐ 大学 ☐ 研究生及以上 ☐ 其他（_____）

导语

每个人在建立自己的生涯时，都有不同的优势。没有人擅长做所有的事情，我们每个人都有比其他人更善用的某些能力。请在下面的量表中评定你在每项能力上的发展程度有多强，并在适当的选项下划勾（✓）。

	优势	不强	有点儿强	强（中等）	比较强	非常强
1	思考我的未来会是什么样的	☐	☐	☐	☐	☐
2	意识到现在的选择会塑造我的未来	☐	☐	☐	☐	☐
3	为未来做准备	☐	☐	☐	☐	☐
4	觉察到我必须要做出教育和职业选择	☐	☐	☐	☐	☐
5	计划如何实现我的目标	☐	☐	☐	☐	☐
6	关注我的职业生涯	☐	☐	☐	☐	☐
7	保持乐观	☐	☐	☐	☐	☐
8	靠自己做决定	☐	☐	☐	☐	☐
9	为我的行为负责	☐	☐	☐	☐	☐
10	执着于我的信念	☐	☐	☐	☐	☐
11	依靠我自己	☐	☐	☐	☐	☐
12	做自己认为正确的事情	☐	☐	☐	☐	☐
13	探索我周围的环境	☐	☐	☐	☐	☐
14	寻找机会得到成长	☐	☐	☐	☐	☐
15	在做选择前调查各种可能的选择	☐	☐	☐	☐	☐
16	观察别人做事的不同方式	☐	☐	☐	☐	☐
17	深入探索我的问题	☐	☐	☐	☐	☐
18	对新的机会感到好奇	☐	☐	☐	☐	☐
19	有效地完成任务	☐	☐	☐	☐	☐
20	有责任心把事情做好	☐	☐	☐	☐	☐
21	学习新的技能	☐	☐	☐	☐	☐
22	逐步发展我的能力	☐	☐	☐	☐	☐
23	克服阻碍	☐	☐	☐	☐	☐
24	解决问题	☐	☐	☐	☐	☐

感谢您的认真作答与参与！

1

香港教育大學
The Education University
of Hong Kong

导语

每个人在做出职业相关的决定前，都会有不同的考量。任何决定都不存在绝对的对与错。同时，个体不同的成长经历，过往经验，外界可获取的支持与帮助，及自身情绪的变化都可能成为我们做出决定的考量指标。请仔细阅读以下每个选项，根据你对<u>自己能够完成下列任务的自信程度作评估，并在适当的选项下<u>划勾</u>（✓）。

	你有多大的信心完成以下任务	完全没信心	很少的信心	中度的信心	很大的信心	完全有信心
1	使用互联网找到你所感兴趣的职业的相关信息	☐	☐	☐	☐	☐
2		☐	☐	☐	☐	☐
3		☐	☐	☐	☐	☐
4		☐	☐	☐	☐	☐
5		☐	☐	☐	☐	☐
6		☐	☐	☐	☐	☐
7		☐	☐	☐	☐	☐
8		☐	☐	☐	☐	☐
9	确定你的理想职业是什么	☐	☐	☐	☐	☐
10		☐	☐	☐	☐	☐
11		☐	☐	☐	☐	☐
12		☐	☐	☐	☐	☐
13		☐	☐	☐	☐	☐
14		☐	☐	☐	☐	☐
15		☐	☐	☐	☐	☐
16		☐	☐	☐	☐	☐
17		☐	☐	☐	☐	☐
18		☐	☐	☐	☐	☐
19		☐	☐	☐	☐	☐
20	选择与你兴趣相符的专业或职业	☐	☐	☐	☐	☐
21		☐	☐	☐	☐	☐
22		☐	☐	☐	☐	☐
23		☐	☐	☐	☐	☐
24		☐	☐	☐	☐	☐
25		☐	☐	☐	☐	☐

导语

每个人在选择自己的职业前，都会依照自己的习惯展开特定的职业探索之路。在此过程中，对身处环境的探索和自身认知的探索是我们获取相关信息的重要渠道。请仔细阅读以下每个选项，根据你对<u>自己在</u>过去三个月中所涉及行为的频繁程度作评估，并在适当的选项下<u>划勾</u>（✓）。

	在过去的三个月中，你在多大程度上有过以下行为	很少	有时	适量的	大量的	经常性的
1	调查了（自己未来）职业的可能性	☐	☐	☐	☐	☐
2	专注于全面地了解自己	☐	☐	☐	☐	☐
3	针对部分具体的工作或公司，获取了相关信息	☐	☐	☐	☐	☐
4	在思考我的职业（发展）时，我会回顾并反思（我的过往经历）	☐	☐	☐	☐	☐
5	针对我（感兴趣）的职业领域，获取了人才市场和工作机会的相关信息	☐	☐	☐	☐	☐
6	反思我过去的经历如何与我的未来职业相结合	☐	☐	☐	☐	☐
7	在我（感兴趣）的职业领域中，针对一些具体职位查询了相关信息	☐	☐	☐	☐	☐
8	参加了各种职业指导相关的课程或活动	☐	☐	☐	☐	☐
9	反复回顾我的过往（经历）	☐	☐	☐	☐	☐
10	主动与我（感兴趣）的职业领域中的有识之士进行交流	☐	☐	☐	☐	☐
11	对自己过往经历与未来职业的相关性有了新的认知	☐	☐	☐	☐	☐

导语

职业规划是每个人生涯发展中的重要一环。在不同的人生阶段，筹划与之匹配的职业计划可以更好地辅助我们的职业发展。请仔细阅读以下每个选项，根据<u>自己</u>对以下陈述的同意程度作评估，并在适当的选项下<u>划勾</u>（✓）。

		非常不同意	不同意	有点不同意	有点同意	同意	非常同意
1	我还*没有*真正决定我的职业目标应该是什么	☐	☐	☐	☐	☐	☐
2	我对自己的职业生涯有一个计划	☐	☐	☐	☐	☐	☐
3	我有一个能够实现自己职业目标的策略和方法	☐	☐	☐	☐	☐	☐
4	我知道我需要做什么来实现我的职业目标	☐	☐	☐	☐	☐	☐
5	我的职业目标*并不*明确	☐	☐	☐	☐	☐	☐
6	我经常改变我的职业目标	☐	☐	☐	☐	☐	☐

Note. The full Career Decision Self-Efficacy Scale (CDSE) is copyrighted and cannot be reproduced in this document. In compliance with copyright requirements, only three sample items are presented.

Appendix B Focus Three's Measuring Instruments

Appendix B-1 Career Adaptability

<table>
<tr><td colspan="8" align="center">Career Adapt-Abilities Scale</td></tr>
<tr><td colspan="8" align="center">Savickas and Porfeli (2012)</td></tr>
<tr><td colspan="8" align="center">Directions</td></tr>
<tr><td colspan="8">Different people use different strengths to build their careers. No one is good at everything, each of us emphasizes some strengths more than others. Please rate how strongly you have developed each of the following abilities using the scale below.</td></tr>
<tr><td colspan="3" align="center">Strengths</td><td align="center">Strongest</td><td align="center">Very Strong</td><td align="center">Strong</td><td align="center">Somewhat Strong</td><td align="center">Not Strong</td></tr>
<tr><td colspan="3"></td><td align="center">5</td><td align="center">4</td><td align="center">3</td><td align="center">2</td><td align="center">1</td></tr>
<tr><td rowspan="6">Concern</td><td>CA1</td><td>Thinking about what my future will be like</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA2</td><td>Realising that today's choices shape my future</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA3</td><td>Preparing for the future</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA4</td><td>Becoming aware of the educational and vocational choices that I must make</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA5</td><td>Planning how to achieve my goals</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA6</td><td>Concerned about my career</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="6">Control</td><td>CA7</td><td>Keeping upbeat</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA8</td><td>Making decisions by myself</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA9</td><td>Taking responsibility for my action</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA10</td><td>Sticking up for my beliefs</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA11</td><td>Counting on myself</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>CA12</td><td>Doing what's right for me</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Curiosity</td><td>CA13</td><td>Exploring my surroundings</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

	CA14	Looking for opportunities to grow					
	CA15	Investigating options before making a choice					
	CA16	Observing different ways of doing things					
	CA17	Probing deeply into questions that I have					
	CA18	Becoming curious about new opportunities					
Confidence	CA19	Performing tasks efficiently					
	CA20	Taking care to do things well					
	CA21	Learning new skills					
	CA22	Working up to my ability					
	CA23	Overcoming obstacles					
	CA24	Solving problems					

Appendix B-2 Career Decision Self-Efficacy- Short Form

Career Decision Self-Efficacy Scale -- Short Form							
Betz, Klein, and Taylor (1996)							
Instructions							
For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the following 5-point continuum.							
How Much Confidence Do You Have That You Could:			No Confidence at All	Very Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
			1	2	3	4	5
Occupational Information	OI1	Use the internet to find information about occupations that interest you.					
	OI2	…					
	OI3	…					
	OI4	…					
	OI5	…					
Goal Selection	GS1	…					
	GS2	…					
	GS3	…					
	GS4	…					
	GS5	Choose a major or career that will fill your interests.					
Planning	P1	…					
	P2	…					
	P3	…					
	P4	…					
	P5	…					
Problem Solving	PS1	…					
	PS2	…					
	PS3	…					
	PS4	…					
	PS5	…					

	SA1	…					
Self-Appraisal	SA2	Determine what your ideal job would be.					
	SA3	…					
	SA4	…					
	SA5	…					

Note. The full Career Decision Self-Efficacy Scale (CDSE) is copyrighted and cannot be reproduced in this document. In compliance with copyright requirements, only three sample items are presented.

Appendix B-3 Career Exploration Survey

<table>
<tr><td colspan="7">Career Exploration Survey</td></tr>
<tr><td colspan="7">Stumpf, Colarelli, and Hartman (1983)</td></tr>
<tr>
<td colspan="2">Environment Exploration</td>
<td>Little</td>
<td>Somewhat</td>
<td>A Moderate Amount</td>
<td>A Substantial Amount</td>
<td>A Great Deal</td>
</tr>
<tr>
<td colspan="2">To what extent have you behaved in the following ways over the last three months?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr><td>EE1</td><td>Investigated career possibilities.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>EE2</td><td>Obtained information on specific jobs or companies.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>EE3</td><td>Obtained information on the labour market and general job opportunities in my career area.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>EE4</td><td>Sought information on specific areas of career interest.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>EE5</td><td>Went to various career orientation programs.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>EE6</td><td>Initiated conversations with knowledgeable individuals in my career area.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr>
<td colspan="2">Self- Exploration</td>
<td>Little</td>
<td>Somewhat</td>
<td>A Moderate Amount</td>
<td>A Substantial Amount</td>
<td>A Great Deal</td>
</tr>
<tr>
<td colspan="2">To what extent have you done the following in the past three months?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr><td>SE1</td><td>Focused my thoughts on me as a person.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>SE2</td><td>Been retrospective in thinking about my career.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>SE3</td><td>Reflected on how my past integrates with my future career.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>SE4</td><td>Contemplated my past.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>SE5</td><td>Understood a new relevance of past behaviour for my future career.</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Appendix B-4 Career Planning Scale

		Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Career Planning Scale							
Gould (1979)							
		6	5	4	3	2	1
CP1	I have not really decided what my career objectives should be yet. (reverse)						
CP2	I have a plan for my career.						
CP3	I have a strategy for achieving my career goals.						
CP4	I know what I need to do to reach my career goals.						
CP5	My career objectives are not clear. (reverse)						
CP6	I change my career objectives frequently. (reverse)						

Appendix C Ethical Review Approval for Focus Two and Focus Three

香港教育大學
The Education University
of Hong Kong

12 April 2023

Ms SHENG Meng
Doctor of Education Programme
Graduate School

Dear Ms Sheng,

Application for Ethical Review <Ref. no. 2022-2023-0274>

I am pleased to inform you that approval has been given by the Human Research Ethics Committee (HREC) for your research project:

Project title: The Evaluation of a Career Planning Course in a Chinese University

Ethical approval is granted for the project period from 12 April 2023 to 30 June 2023. If a project extension is applied for lasting more than 3 months, HREC should be contacted with information regarding the nature of and the reason for the extension. If any substantial changes have been made to the project, a new HREC application will be required.

Please note that you are responsible for informing the HREC in advance of any proposed substantive changes to the research proposal or procedures which may affect the validity of this ethical approval. You will receive separate notification should a fresh approval be required.

Thank you for your kind attention and we wish you well with your research.

Yours sincerely,

Jacqueline Hui (Ms)
Secretary
Human Research Ethics Committee

c.c. Prof HO Wing Kei, Acting Chairperson, Human Research Ethics Committee

香港新界大埔露屏路十號
10 Lo Ping Road, Tai Po, New Territories, Hong Kong
T (852) 2948 8888 F (852) 2948 6000 www.eduhk.hk

Appendix D Permission Letter to Use the Career Decision Self-Efficacy Scale (CDSE)

mind garden

www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her research:

Instrument: *Career Decision Self-Efficacy Scale*

Authors: *Nancy E. Betz and Karen M. Taylor*

Copyright: *© 2012 Nancy E. Betz and Karen M. Taylor. All rights reserved in all media.*

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix E Participant Information Sheet for Focus Two (English and Chinese)

Participant Information Sheet

The Evaluation of a Career Planning Course at a Chinese University

You are invited to participate in a project supervised by Dr LAM Chi Ming and Dr PAVLOVA Margarita and conducted by Ms SHENG Meng, who are staff and student of the department of International Education in The Education University of Hong Kong.

Research Project

The main purpose of the research is to investigate the effectiveness of this ongoing Career Planning Course on facilitating students' relative career development competencies, such as career adaptability, career decision self-efficacy, and career planning and exploration behaviours. This study aims to measure the above-mentioned variables to examine the outcome effectiveness of this course. Further, it will adopt class observation and interviews (involving a few participants) to understand what changes you have experienced after taking the course.

Project procedures once your consent is provided

This research adopts a mixed-method design for data collection and analysis. For the quantitative data, you will be invited to take a survey two times, one at the beginning session and another at the ending session of the course. It contains 66 items that measure their career development competencies (same as the above-mentioned variables). Your participation of finishing this paper-and-pencil survey might take approximately 10-12 minutes for each. Meanwhile, each session of the course will be video recorded. However, these recordings will only be used for further data analysis and accessed by the researcher alone. None of the recording contents will be presented or exhibited under any circumstances for any occasion.

For qualitative data, this research attempts to recruit at least five student interviewees and several instructor interviewees (depending on how many instructors deliver the course content) to conduct semi-structured in-depth interviews. Each interview will last at least one-hour long. The interview questions will be anchored on how you are appraising the process and outcome of the course according to specific criteria illustrated in the question list (for both instructors and students) and what changes they have experienced after taking the course (for students only).

For each interview, the interviewee will be informed before starting, that the process will be audiotaped and the purpose of it is for further data analysis only. Also, except the researcher, no one will have the access or giving authorised permission to review or use the data for any other

purpose.

Right to Withdraw from Participation

Please understand that your participations are voluntary. You have every right to withdraw from the study at any time without negative consequences. All information related to your personal information will remain confidential and will be identifiable by codes known only to the researcher.

Compensation

You will receive a 25 RMB equivalent voucher for T-mall online shop for completing the survey each time. Therefore, you should receive 50 RMB vouchers as a thank-you for your time and effort in participating in the research. However, as this research will recruit roughly five student interviewees (depending on when the data collected will be saturated) and four instructor interviewees (depending on how many instructors are involved in actual content delivery), they will be receiving an additional 100 RMB equivalent voucher to compensate for their extra effort and time contributed.

Contact Details

If you would like to obtain more information about this study, please contact me by email at _____@s.eduhk.hk or telephone number _____ or my supervisor Dr LAM Chi Ming by email at chimingl@eduhk.hk.

If you have any concerns about the conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at hrec@eduhk.hk or by mail to the Research and Development Office, The Education University of Hong Kong.

Thank you for your interest in participating in this study.

Sheng Meng

Approved by the Education University of Hong Kong Human Research Ethics Committee on April 12, 2023. Reference number 2022-2023-2074

研究对象告知书

关于某大学生职业发展规划课程的评估及发展研究

诚邀您参加由博士生导师林志明副教授和 PAVLOVA Margarita 副教授负责指导的，由其学生盛盟负责执行的研究计划。她/他们是香港教育大学国际教育系的教员和学生。

研究计划简介

该研究的主要目的是分析研究一个正在进行的大学生职业发展规划课程，对促进学生的相关职业发展能力的有效性，如职业适应性、职业决策自我效能感、职业规划和探索行为。本研究旨在测量上述变量，以考察该课程的有效性。此外，它将采用课堂观察和访谈（涉及一些参与者）来了解学生在学习该课程后有哪些变化。

研究方法

本研究采用了混合方法设计来收集和分析数据。在定量数据方面，参与者将被邀请进行两次问卷调查，一次在课程的开始阶段，另一次在课程的结束阶段。问卷包含 66 个项目，衡量学生的职业发展能力和行为习惯（与上述变量相同）。完成这个纸笔问卷，需要大约 10-12 分钟。同时，课程将会全程录像。然而，这些录像只会用于进一步的数据分析，并只能够由研究人员本人浏览。录制内容在任何情况下都不会在任何场合呈现或展示。

对于定性数据，本研究计划招募至少五名学生受访者和数名教师受访者（取决于有多少名教师讲授课程），进行半结构化的深度访谈。每次访谈将持续至少一小时。访谈问题将围绕他们如何根据问题清单中说明的具体标准评价该课程的讲授过程和效果（针对教员和学生），以及他们在学习该课程后经历了哪些变化（仅针对学生）。

在每次访谈时，受访者在开始前都会被告知访谈过程将被录音，其目的只是为了进一步分析数据。此外，除了研究者，没有人可以访问或授权许可审查或使用数据并用于任何其他目的。

放弃参与问卷及采访

您在本研究的参与完全自愿且匿名。您在完成问卷和参与采访的过程中，您可以随时无理由退出。一旦您完成并提交问卷，或完成采访内容，如您有意退出，请联系研究人本人删除您的数据。

奖励

来自该课程的学生每次完成问卷后都会收到一张相当于 25 元人民币的天猫网店代金券。因此，完成课前与课后的问卷，他们将得到 50 元人民币的代金券作为对他们参与研究的感谢。然而，由于本研究将招募大约 5 名学生受访者（取决于收集的数据何时饱和）和 4

名教师受访者（取决于有多少名教师参与实际的授课），他们将收到额外的 100 元人民币等值代金券，以补偿他们的额外努力和时间贡献。

如您想获得更多有尖这项研究的资料，请通过电子邮件（＿＿＿＿＿@s.eduhk.hk）或电话（＿＿＿＿＿＿）与我本人联系，或通过电子邮件（chimingl@eduhk.hk）联系我的导师林志明副教授。

如您对这项研究的操守有任何意见，可随时与香港教育大学人类实验对象操守委员会联络（电子邮件 hrec@eduhk.hk；地址：香港教育大学研究与发展事务处)。

感谢您有兴趣参与这项研究。

盛盟

本研究已获得香港教育大学学术道德委员会批准。批准日期：2023 年 4 月 12 日。编号：2022-2023-2074

Appendix F Participants' Interview Questions for Focus Two

Appendix F-1 Interview Questions (English)

For Student Participants

What are the students' perceptions of the delivered curriculum?

1. What were your expectations before taking the course? Please describe them with examples.

2. What were your expectations regarding the course instructor(s)? Please describe them with examples.

3. How do you perceive of the teaching practices they (instructors) adopted? Please elaborate in detail.

4. Did the course instructor(s) meet your expectations? Why or why not? Please elaborate in detail.

5. Did the delivered course curriculum meet your expectations? Why or why not?

6. What is your perception of the course curriculum or content that was delivered? Please elaborate in detail.

7. What changes have you experienced after taking the course? Please elaborate with specific examples.

8. Which session(s) or part of the curriculum inspired you the most? In what ways and why?

What are students' perceptions regarding the seven factors identified as effective criteria in both delivered and expected CDE course curricula?

Note: These seven factors include written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support (counsellor support), values classification, and psychoeducation intervention.

1. How many of these factors did you experience during the course instruction? Please elaborate on your insights regarding each of them.

2. Which factors did you find most beneficial? Why?

3. Which factors did you expect to be included in the delivered curriculum but were not? Please elaborate in detail with reasons.

For Course Instructors

What are the instructors' perceptions of the delivered curriculum?

1. What were your expectations of the course outcomes before instructing it? Please describe them with examples.

2. What resources or materials did you prepare before instruction? Please describe them in detail.

3. What strategies or teaching approaches did you adopt to attract students' interest and attention regarding the delivered curriculum content? If any, how did they work out from your perspective?

4. How did you appraise the objectives of the course curriculum? Please elaborate on them with examples.

5. What were your perceptions of the teaching practice of the curriculum delivery? Please elaborate in detail.

6. What are your opinions and suggestions regarding the structure of curriculum and the teaching practice of the course? Please describe them in detail with examples.

7. Have you taken any professional training or received support from other stakeholders for the course instruction? If yes, please demonstrate the training or support received in detail. If no, please describe the reasons.

What are instructors' perceptions regarding the seven factors identified as effective criteria in both delivered and expected CDE course curricula?

Note: These seven factors include written exercises, individualised interpretation and feedback, occupational information, modelling, attention to building support (counsellor support), values classification, and psychoeducation intervention.

1. How many of these factors did you intend to involve during the course instruction? Please interpret the purpose for each factor.

2. Which factors did you believe are most effective in facilitating students' career development competencies? Why?

3. Which factors did you think that should be included in the delivered curriculum but were not? Please elaborate in detail with reasons.

Appendix F-2 Interview Questions (Chinese)

针对学生受访者的问题

学生对于实际授课内容的看法如何？

1. 您在课程未开始前，对这门课程的期望是什么？请用具体例子描述说明。

2. 您针对该门课程的授课老师有什么期待或期望吗？请用具体例子描述说明。

3. 您对于授课老师采用的授课形式有什么具体的感受或看法？请详细说明。

4. 您觉得授课老师（们）是否符合您的预期？为什么或为什么不？请详细说明。

5. 您觉得该课程的授课内容符合您的期望吗？为什么或为什么不？请用具体例子说明。

6. 您对于授课内容的具体感受或体验如何？请详细说明。

7. 您觉得学习该课程后，您有什么具体的变化或提升吗？请用具体例子说明。

8. 您觉得课程的哪个环节或内容对您的启发或触动最大？在哪些方面，为什么？

对于文献研究中提及的七个元素，作为针对课程大纲及效果的评估指标，学生的理解是怎样的？

注：这些元素包括书面练习及作业、个性化的解释和反馈、职业相关资讯、榜样建立及经验学习、建立及获取外界支持（包含辅导员支持）、职业价值分类、和决策策略及方法。

1. 在授课过程中，您觉得课程内容包含了哪几个元素？请详细说明您对提到每个元素的具体感受。

2. 针对提升职业发展相关技能，您觉得哪个元素对您的帮助最大？为什么？

3. 在您看来，哪个或哪一些元素应该被纳入课程内容，目前却没有？请用具体例子说明。

针对授课老师的问题

老师对于实际授课内容的看法如何？

1. 您在课程未开始前，对这门课程的预期目标是什么？请用具体例子描述说明。

2. 在未授课前，您针对课程做了哪些教学材料及信息的准备来协助您授课？请用具体例子描述说明。

3. 针对课程内容，您采用了什么授课模式及方式来吸引学生的注意力或提升学生对内容的兴趣？如有，您觉得是否有效？请详细说明。

4. 您如何评价该课程大纲中设立的课程目标？请详细说明。

5. 您觉得目前该课程采用的授课模式或方法如何？请具体说明。

6. 您对于课程内容的构成或授课方式有什么具体的意见或建议？请用具体例子说明。

7. 针对该课程，您是否参加过任何相关的专业培训，或从学院或学校层面获取相关支持？如有，请具体说明您参加过的专业培训，或收到过哪些层面的帮助与支持。如没有，请具体说明原因。

对于文献研究中提及的七个元素，作为针对课程大纲及效果的评估指标，老师的理解是怎样的？

注：这些元素包括书面练习及作业、个性化的解释和反馈、职业相关资讯、榜样建立及经验学习、建立及获取外界支持（包含辅导员支持）、职业价值分类、和决策策略及方法。

1. 在授课过程中，您本来计划包含哪几个元素？请详细说明您希望通过每个包含元素达到的目的及效果。

2. 针对提升学生的职业发展相关技能，您觉得哪个元素对学生的帮助最大？为什么？

3. 在您看来，哪个或哪一些元素应该被纳入课程内容，目前却没有？请用具体例子说明。