


7-2022

## **A Multiple Case Study Exploring CTE Faculty Members' Account of Working with ID Professionals in the Course Design Process**

Nicole Lewis

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**A Multiple Case Study Exploring CTE Faculty Members' Account of Working with ID  
Professionals in the Course Design Process**

By

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Presented to the Faculty of the

Doctor of Educational Leadership Department

George Fox University

in fulfillment for the degree of

Doctorate of Education



GEORGE FOX  
UNIVERSITY

COLLEGE OF EDUCATION | EdD

A MULTIPLE CASE STUDY EXPLORING CTE FACULTY MEMBERS' ACCOUNT OF WORKING WITH ID PROFESSIONALS IN THE COURSE DESIGN PROCESS, a Doctoral research project prepared by NICOLE LEWIS in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership.

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### **Abstract**

This multiple case study examined the working relationship between CTE faculty and ID professionals in the course design process from the perspective of faculty. The study explored the methods and choices around equity that CTE faculty make when working on course design and delivery. The narratives of the CTE faculty are shared. A cross-case analysis was conducted to reveal three main themes. The themes include 1) impact of communication, 2) defined project is key, and 3) creating a shared culture. While there was no cohesive theme for methods and choices around equity, the study found the results to be reflective of equity practices in the literature. Implications for CTE faculty include a missed opportunity to improve the collaboration process and professional practice when they do not practice active communication. In addition, creating a shared culture can help alleviate frustration and confusion in the course design process. This study revealed equity is in the beginning stages for these participants. Additional training and research need to be conducted to better support 21<sup>st</sup>-century learners.

### **Acknowledgements**

There are several individuals I must acknowledge who have supported me over the last three years. I am grateful for the love, support, and mentorship you have graciously provided.

I dedicate my dissertation to my daughter Gianna. She has been my rock, my reason for all I do, and I could have never finished my dissertation without her. Throughout my doctoral journey, she has listened and watched me grow as an educator and as a person. She has given me many hugs and encouraging words. I hope I have inspired you to never give up and push forward no matter what life throws at you. I believe in you, spread your wings and fly!

I am grateful for my dissertation committee and professors. I have learned so much about grace and patience from you. Karen, I appreciate the guidance and feedback you continued to provide despite the obstacles life threw at you. Dane, thank you for believing in my brilliant idea.

I am thankful for all of my colleagues that have completed the doctoral journey before me. You demonstrated that you can be a mother, a wife, a leader, and still accomplish great things in your education and career. It is because of these brave women I went on this journey. Alyssa, you believed in me before I believed in myself. I appreciate your support as a mentor and a friend. I am truly indebted for all the friendship and support you have offered me over the last seven years.

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## **Chapter 1 Introduction**

### **Background**

Career and Technical Education (CTE) has made great strides over the last hundred years, but more work needs to be done to keep up with the demands of 21<sup>st</sup>-century employer needs. CTE, sometimes called vocational, occupational education, or workforce training, prepares students for a particular career through a specialized path of program coursework (Cohen, et al., 2014). According to the American Association of Community Colleges (AACC) (2017), there are “about 30 million good jobs in the United States that do not require a bachelor’s degree but do require some postsecondary education.” (p. 1). A good job is defined as paying at least \$35,000-\$45,000 a year. In addition, AACC states that between 1991 and 2015 the number of good jobs increased for associate-degree holders by 3 million. The need for CTE is in increasing demand.

### **History**

CTE started as vocational education or trade education that arose as part of the development of community colleges in the early 1900s (Grubb, 2020). These community colleges were formed by community advocates pushing for local education. While the purpose of community colleges shifted throughout the 20th century between liberal arts courses, terminal degrees, transfer paths, and vocational preparation, CTE became a permanent element with the passage of the Smith-Hughes Act of 1917 aligning federal aid to states for vocational education (Imperatore & Hyslop, 2017).

CTE legislation expanded in the 1950’s and 1960’s as part of the Truman Commission (Jacobs & Worth, 2019). The legislation started with the Higher Education Act of 1965, providing funding for the expansion of community colleges, along with the Vocational

Education Act of 1963, which provided funding for economically disadvantaged and disabled students (Grubb, 2020; Vocational Education Act of 1963 as cited in Imperatore & Hyslop, 2017). At the same time as policy expansion, there was a push to integrate racially segregated community colleges (Beach, 2011; Grubbs, 2020). CTE in higher education advanced during this time period.

The 1970's and 1980's yielded additional changes for CTE. Community colleges started to face competition from private junior colleges causing changes in the course offerings to niche offerings for the community (Beach, 2011). This was in part due to demand for CTE programs. In addition, community colleges started increasing the number of adjunct faculty to keep up with the changes. Several pieces of legislature were passed during this time including the 1984 Perkins Act and the Career Educational Incentive Act of 1977 (Imperatore & Hyslop, 2017). Both acts provided more funding for CTE although the allocation became more restrictive.

As the twenty-first century emerged, the need for CTE is in high demand. In 2018-19, 878,900 associate degrees, 619,711 certificates, and 20,700 bachelor's degrees were awarded at community colleges (Carnevale, et al. 2020 as cited in CCRC, 2021). Of these awarded degrees, 57% of the associate degrees, 94% of the certificates, and all of the bachelor's degrees were in CTE fields. In addition, the Community College Research Center found that employers are looking for employees with more than labor skills. They want employees with foundational skills, and interpersonal skills such as communication, critical thinking, and customer service, as well as data literacy skills, causing a need to evaluate what is being taught in the classroom (Brock, 2021). CTE continues to be in demand with pressure to evolve the curriculum to fit with employers' needs.

## **Achievement Rates**

While more students than ever before have access to CTE, the achievement gaps continue to persist despite current strategies. Many institutions that offer CTE programs have open admission policies that allow students to take classes quickly with very few admission requirements (Grubbs, 2020). Without academic support, financial assistance, and resources, some students may not have the tools to persist (Beach, 2011). According to California Community Colleges (CCC) (n.d.), completion rates are lower for African American students (38%) and Hispanic students (41%) compared to White students (54%). Research from the National Center for Educational Statistics (2017) found African American and Hispanic students have a lower mean GPA than White students. Additionally, African American students are more likely to take remediation courses than White students (CCC, n.d.; NCES, 2017).

Along with inequities in achievement rates, inequities exist within CTE programs. Programs such as nursing or dental hygiene that require academic preparation and have selective applications tend to favor White applicants, whereas programs without prerequisites that serve lower-paying jobs like medical assisting have more Black and Latinx students (CCRC, 2021). In addition, women are overly represented in education and allied health care programs, where men are predominately in technical programs.

## **Educational Problem of Practice**

With the increased demand for CTE careers, 70% of all faculty being part-time, and achievement gaps persisting, institutions are faced with the need to redesign how courses are delivered to accommodate more students, support faculty, and strengthen achievement rates. Faculty are developing and teaching online and hybrid courses at an increasing rate (Beirne & Romanoski, 2018). At the same time, there are more part-time faculty (around 70%) than full-

time (Cohen et al., 2014). To support the changing pedagogical demands of the course development process, some institutions have integrated instructional design (ID) professionals into the resources offered to faculty. As of 2016, 13,000 instructional design professionals worked on college campuses in the United States (Intentional Futures, 2016 as cited in Beirne & Romanoski, 2018). Despite the increased presence of instructional designers at higher education institutions, little is known about the impact instructional designers have on CTE teaching and learning.

In higher education ID professionals use research in teaching and learning to support their practice. According to Intentional Futures as cited in Beirne and Romanoski (2018), ID professionals are responsible for “designing, managing, training, and providing support” (p. 3). Additionally, in a survey conducted by Intentional Futures, 57% have at least three years teaching in higher education, 53% have at least three years in technology development, and 53% have at least three years in academic research roles. In another survey conducted by Oregon State University’s Ecampus Research Unit, 71.4% of the instructional designers surveyed participated in research activities with 49.2% focusing specifically on teaching and learning (as cited in Beirne & Romanoski, 2018). As part of their practice, ID professionals use research to help inform them of best practices in teaching and learning.

### **Purpose of the Study**

The purpose of this study is to gain insight into the practice of CTE course design. This study examined the working relationship between CTE faculty and ID professionals from the perspective of faculty. It also explored the methods and choices around equity in the course development and delivery process. For this study, equity is defined as providing each student what they uniquely need for the course and creating equal opportunity for success in the course.

In addition, the research explored if there were barriers to ID professional support. Finally, this study attempted to understand why some faculty choose or do not choose to work with an ID professional.

The limited research available exploring faculty and ID professionals in the course design process does not include CTE faculty. Additionally, in the research there is limited access to ID professionals for faculty due to lack of time, resources, trust factors, or the lack of knowledge of the value ID professionals bring to course design (Campbell, et al., 2009; Richardson et al., 2019). Furthermore, the limited research available on equitable practices in ID is focused on four-year colleges and universities, signifying a gap in the literature between equitable practices in ID at two-year CTE institutions. This study has added to the limited knowledge available on CTE course development, specifically from the viewpoint of faculty.

### **Research Questions**

The following research question were explored in this study:

- How do CTE college faculty describe the process of working with ID professionals in the course design process at their institution?
- What considerations do CTE faculty make in their course design when thinking about equity?

### **Significance**

With the increased need for CTE, the substantial presence of part-time faculty, and an increasingly diverse student population, there is a need to find ways to support faculty in implementing best practices in course design. Partnering CTE faculty with ID professionals can give CTE faculty with little to no teaching experience a wealth of tools and course design support. Understanding how faculty perceive ID professionals and their role in this study can

help other ID professionals understand the best approach to take when working with faculty. In addition, equity has been implemented in a variety of ways, but little focus has been on CTE course design. This study explored the ways that CTE faculty are thinking about equity and course design.

### **Definition of Terms**

**Access** is when students have the ability to attend community college due to the open admission process. Locations are geographically located near students. The institution provides a wide variety of courses in different formats, students can attend part-time, and there is a low cost of enrollment along with financial aid benefits. Community colleges can serve more part-time, first-generation, low-income, minority, and non-traditional age students due to the aforementioned stated factors (Bragg & Durham, 2012).

**Achievement Gap** is when there is a disparity between students within a student group such as race, gender, age, or work status.

**Academic Outcomes** include a variety of metrics such as course completion, graduation, and transfer attainment. Since community colleges have a much wider purpose than four-year institutions, it can be difficult to pinpoint exactly what academic outcomes are most important for community college students (Bragg & Durham, 2012).

**Career and Technical Education (CTE)**, sometimes called vocational education, workforce development, or occupational education, provides the academic and hands-on skills needed for a specific career (Imperatore & Hyslop, 2017). The Perkins Act of 2006 defines CTE as:

Organized educational activities that offer a sequence of courses that provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and

careers in current or emerging professions; provides technical skills proficiency, an industry-recognized credential, a certificate, or an associate degree; and may include prerequisite courses that meet the requirements of this subparagraph; and include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual. (“Carl D. Perkins,” 2006, p. 1 as cited by Threeton, 2007).

Building on the Perkins IV definition, for this study, CTE is defined as college courses that lead to a specific career field that does not require a bachelor’s degree. This includes public community colleges, public and private junior colleges, as well as private for-profit and non-profit career and vocational colleges. Students who enroll in CTE courses earn a certificate or associate degree without having to transfer to a four-year college.

**Course Success** is defined as completing and passing a course with the minimum required grade. Course success is an important measurement of student success as a student must complete a required number of courses to transfer to a four-year university, obtain a certificate, or associate degree.

**Equity**, for the purposes of this study, is defined as providing each student what they need to complete their course with the hope of providing equal opportunity for success. Equity is also defined more broadly as “fair based on what can be provided and what is needed,” looking at the needs of each student and taking into account their background and history (Lowell & Morris, 2019 p. 81). Additionally, equity is not just about providing equal access to resources but providing access in a manner that makes sure the needs of the students are met (Gordon, 1999, as



cited in Ching, 2018). Equity looks at the individual student, not a broad gaze on all students as a whole.

**Equity Mindedness** is an alternative way to view why there are equity achievement gaps (Malcom-Piqueux & Bensimon, 2017). Equity mindedness has five main aspects “1) race-conscious, 2) institutionally focused, 3) evidence-based, 4) systemically aware, and 5) action-oriented” (Bensimon & Malcom, 2012; Center for Urban Education, n.d.; Dowd & Bensimon, 2015 as cited in Malcom-Piqueux & Bensimon, 2017, p. 6). The focus is on how the institution is failing based on its attributes not on student attributes. Equity-conscious educators use this framework to problem solve when trying to reduce equity gaps.

**Equity Plan** Sometimes labeled as a student equity plan (SEP), these plans focus more on a bottom-up implementation in which the focus is on the particular institutional goals for an underrepresented student population and aligning multiple strategies between multiple stakeholders to accomplish these goals (Ching et al., 2020).

**Institutional Attributes** are the attributes of the institution. They may include how advising and counseling services are provided, course offerings, the type of student services available, and how students access them. Institutional attributes may impact whether a student has access to the resources they need to be successful. For example, students who attend part-time at night or take online courses only, may not have access to resources that are only offered on campus during daytime hours.

**Instructional Design (ID) Professional** ID Professionals are defined for this study as individuals who are responsible for “designing, managing, training, and providing support” for course design (Intentional Futures, 2016, as cited in Beirne & Romanoski, 2018). ID professionals may work with faculty to help implement technology into their course, provide

general professional development, or build part or all of a course. ID professionals are trained in educational practices of instruction, curriculum, and assessment.

**SME** A SME or subject matter expert is another name or title a faculty member is given when they support curriculum or course design for a particular subject. They are considered the expert in the content for this course.

**Student Attributes** are the attributes that are part of the students' background. They include attributes such as educational history, race, ethnicity, socioeconomic status, sexual orientation, age, work status, parental college attainment, and learning abilities.

### **Limitations and Delimitations**

There are several limitations to this study. First, as a case study, the sample size is small. The opinions and experiences shared by the participants do not represent the CTE faculty population at large. In addition, it is my expectation that all participants act in good faith and are truthful in their statements. Second, the faculty participants teach at colleges located on the West Coast of the United States. Each college has their own demographics, processes, and policies, which may not exemplify the same processes or policies as other colleges. The stories that emerge may not be the same as those from rural areas or colleges in other parts of the country. Finally, given the diverse nature of CTE colleges, not all colleges employ or have the funding for ID professionals. This study does not look at funding or organizational structure and may not apply to some colleges.

Delimitations are the boundaries of a study. For this study, I chose to focus on CTE colleges as well as settings that employed ID professionals. Additionally, student viewpoints or student achievement are not considered in this study. While it may be beneficial to see if the choices made help increase student achievement, that is beyond the scope of this study. Although

equity was defined in this study, how individuals interpret equity and what constitutes equity widely varies. This study was bounded by time. This study was conducted during the spring of 2022. Over time, practices and experiences may shift. This study only focuses on a specific time frame and cannot be assumed to be the normal practice for other time periods.

### **Organization of Study**

This study is organized into five chapters. This chapter is the introduction. It presents the background of the issue at hand, the research question, the general purpose as well as the significance of the study. The second chapter is the literature review. The focus is on exploring what has already been studied regarding community colleges, equity, instructional design and delivery application. The third chapter is the methodology chapter. There the design of the study is presented as well as the data gathering and data analysis procedures. The fourth chapter is a presentation of the findings from the study. Any of the emergent themes will be presented as well as a summary of the findings. The final chapter includes a discussion of the findings, implementation for practice, as well as recommendations for further research.

## **Chapter 2 Review of the Literature**

### **Overview**

Examining the relationship between CTE faculty and ID professionals in course design is valuable in understanding how to best collaborate and provide an equitable course design for the diverse CTE student in the 21<sup>st</sup> century. This review of literature explores the research associated with the following: the purpose of CTE and whom it serves, the roles of CTE faculty and ID professionals, instructional design approaches, the relationship between faculty and ID professionals in course design, equity, equity at two-year colleges, and equity in course design. It became apparent during the literature search that there is a lack of research on CTE course design, especially at for-profit institutions. Most of the research presented in this literature review is from community colleges or four-year higher educational institutions. Some of the keyword attributes used to find available research include Career and Technical Education, CTE, vocational education, workforce education, instructional designer, instructional design professional, faculty and instructional design collaboration, CTE faculty, equity, equity in curriculum, equity in course design, equity in CTE, and equity in community colleges. Some of the exclusions from the literature review include CTE at the K-12 level as well as baccalaureate CTE programs.

### **Purpose of CTE**

CTE generally serves the specific employment needs of the community. Unlike other educational endeavors, CTE arose from community activists fighting for the needs of the local industries (Jacobs & Worth, 2019). Originally serving the agriculture, secretarial, and education sectors in the 20<sup>th</sup> century, CTE in the 21<sup>st</sup> century serves programs in 16 career cluster areas (US Department of Education, 2018). The cluster areas with the most postsecondary students for

the 2014-15 school year include health science 27.31%; business management and administration 15.82%; law, public safety, and security 8.94%; information technology 7.25%, and manufacturing 6.74% (US Department of Education, 2018, Table 4). While previously CTE focused only on the hands-on skills needed for a profession, many CTE programs today focus on soft-skills, professional skills, and critical thinking skills in addition to hands-on skills (Cohen et al., 2014). If CTE programs want to stay current, they will need to provide the skills required by the industries they serve.

### ***Types of Institutions***

There are three types of higher education institutions that generally offer CTE at the certificate and associate degree levels. These include public community colleges, private non-profit colleges, and private for-profit colleges. According to National Center for Educational Statistics, (2020) for 2016-17, 27.1% of sub-baccalaureate occupational education programs (CTE) are offered at public four-year institutions, 24.1% are offered at public community colleges, 4.3% are offered at private non-profit institutions, and 44.5% are offered at private for-profit institutions. When comparing the college types in 2016-17 to those that were offered in 2005-06, public community colleges decreased the offerings by 3.6%, while private for-profit colleges increased offerings by 1.2% (NCES, 2020).

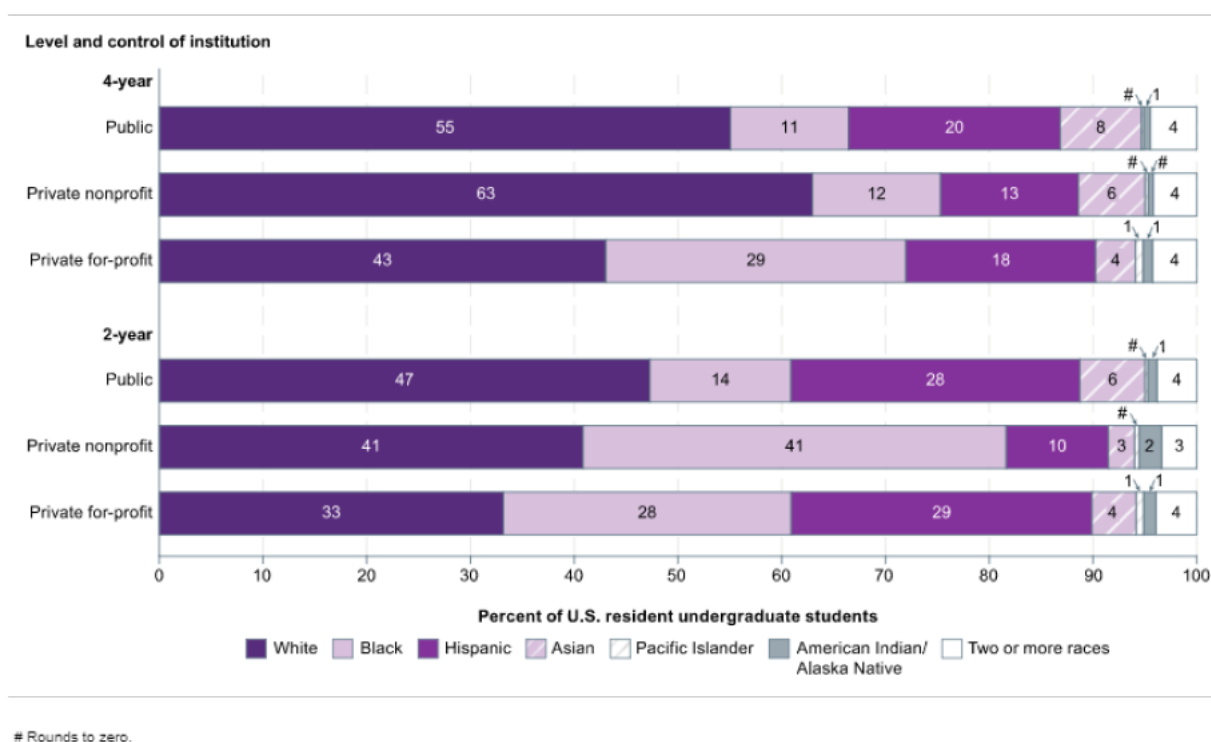
### ***Student Demographics***

The demographics for CTE students are similar characteristics of other non-traditional college students. According to Hirshy et al. (2011), as of 2004, students in CTE are predominately female, white, have an independent financial status, as well as first-generation college students. In addition, approximately 41% are over the age of 25, and 38% work full-time. Many students at community colleges receive some type of financial aid. During the 2015-16

school year, 59% of students received financial aid (AACC, 2021). Figure 1 shows ethnicity by institution type. While there are more white students attending public two-year institutions than private institutions, black students attend private non-profit institutions three times as often and two times as often as public institutions. The demographics of CTE students have many diverse attributes. The diversity represented causes educators to consider the potential differing educational needs that might exist.

**Figure 1**

*Ethnicity by Institution Type*



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2020, Fall Enrollment component, see Digest of Education Statistics 2020, table 306.50

## **CTE Faculty and ID Professionals**

### ***Role of faculty***

The demographics of faculty who teach CTE is different than at a traditional four-year institution. One of the major differences is based on the institution type. At four-year universities, one of the primary duties of faculty is research. At community colleges and other private two-year institutions, the primary focus is on teaching (Cohen et al., 2014). Due to increased needs and decreased budgets, approximately 70% of faculty are part-time or adjunct (Cohen et al., 2014). Adjunct faculty often must hold multiple jobs to make ends meet, leaving less time for student engagement, lesson planning, and professional development (Grubb, 2020). Most faculty are subject matter experts in their career field, not in pedagogy. There is generally little teaching experience or expertise required for CTE faculty (Cohen et al., 2014). However, because many part-time faculty are still working in their career field, they are often very knowledgeable about the latest industry changes (Cohen et al., 2014). The focus of CTE faculty is on subject knowledge, not pedagogy.

**21st Century Learning Environment.** Even without pedagogical training, faculty are expected to provide a learning environment that facilitates 21<sup>st</sup>-century skills. In a quantitative study surveying 387 CTE faculty, the researchers found that CTE faculty use direct learning strategies including, interactive lecture, questioning, and whole-group discussion most frequently as their instructional strategy (Fletcher et al., 2012). These results are similar to traditional forms of teaching and learning and do not foster the development of 21<sup>st</sup>-century skills such as critical thinking, problem-solving, and teamwork (Partnership for 21<sup>st</sup> Century Skills, 2010, as cited in Fletcher et al., 2012). CTE faculty, generally, are not using learner-centered teaching strategies

when developing their own courses, which are needed for students in today's learning environment.

**Course Development.** Another part of the teaching and learning responsibilities of CTE faculty is the assistance of course development. In conjunction with being subject matter experts, faculty are expected to help choose course materials, have experience teaching the subject, know what should or should not be included, and help create learning outcomes and assessments as well as course learning activities (Halupa, 2019). Beyond subject knowledge and pedagogy, CTE faculty need to have good communication and collaboration skills (Bawa & Watson, 2017; Richardson et al., 2019).

**Instructor Competencies.** According to the International Board of Standards for Training, Performance, and Instruction (IBSTPI) (2021) there are 19 instructor competencies. These standards range from good communication, professionalism, professional development, and following legal standards to managing resources, planning instruction, engaging learners, and applying classroom management. In addition, faculty are expected to adapt instruction to learners, prepare assessments, provide feedback, and evaluate instructional effectiveness (IBSTPI, 2021). Faculty have a wide range of duties they must be competent in.

**Engagement and Career Guidance.** Additionally, CTE faculty provide student engagement, industry interactions, and career guidance to students. While many colleges have career guidance counselors, the Perkins Act of 2006 indicates that teachers, administrators, and counselors are all "CTE professionals" and responsible for "accomplishing the mission of CTE" (Carl D. Perkins, 2006 as cited in Fletcher et al., 2012 pp. 70-71). This may include providing career information, bringing guest speakers to speak of their industry, or sharing practical experiences for which career guidance counselors are unfamiliar. In addition, faculty are



expected to engage with industry leaders in and out of advisory committees (Brock & Cormier, 2021). CTE faculty bring the industry to the classroom, helping students be engaged with their future careers.

### ***Role of ID Professionals***

The role of an ID professional varies depending on the work setting. The process of instructional design started around World War II to help create training and assessments for military personnel (O'Malley, 2017 as cited in Beirne & Romanoski, 2018). Over time, the process of instructional design shifted to support online course development or technology integration. Today, instructional design can be used in a variety of settings and in variety of modalities lending to a diverse role for ID professionals. In academics, ID professionals may work on multiple projects across several departments at the same time (Beirne & Romanoski, 2018). This may include course development, professional development, and training. ID professionals need to excel at project and time management to juggle the many responsibilities they have (Cowie & Nichols, 2010).

**Teaching and Learning Support.** The fundamental role of ID professionals at academic institutions is to support the teaching and learning environment. Student success is at the forefront of their work in creating and revising courses (Beirne & Romanoski, 2018). ID professionals often have a large knowledge base on ID models and strategies, pedagogy, student engagement strategies, appropriate technology integration, as well as best practices in assessments (Beirne & Romanoski, 2018; Halupa, 2018). While the educational training of IDs is diverse, according to one study, approximately 87% of IDs have master's degrees, and 32% have doctoral degrees (Beirne & Romanoski, 2018). In addition, approximately 53% of the 853

individuals surveyed have three or more years of experience with technology development and 42% have three or more years of experience in graphic design.

**ID Competencies.** The IBSTPI (2012) outlines five main domains that IDs are responsible for: professional foundations, planning and analysis, design and development, evaluation and implementation, and management. Within these five domains, there are 22 competencies ranging from communication, ID research, identifying target population characteristics, determining and designing instruction, and assessment to project management (IBSTPI, 2012). While CTE faculty are subject experts, ID professionals are the experts in teaching and learning and project management.

**Collaborators.** Beyond pedagogical and ID knowledge, ID professionals are expected to be expert collaborators. Since they are not the subject experts, ID professionals partner with faculty in course design. For many faculty, course design collaboration is a new experience, thus, it is up to the ID professional to set clear expectations for the work and deadlines (Richardson et al., 2019). In addition, ID professionals need to build rapport and a culture of trust in the collaboration process (Cowie & Nichols, 2010; Richardson et al., 2019). Good collaboration takes excellent communication skills, especially listening skills (Richardson et al., 2019).

### ***ID Approaches***

Instructional Design is used to plan, develop, design, implement, and assess how curriculum is used to support learning (Seel et al., 2017). Several researchers have indicated ID at community colleges is limited to episodic instances of teaching and learning strategies or professional development; not necessarily design practices in curriculum (Booth et al., 2014; Ching, 2018; Jaggars and Xu, 2014). ID may be conducted by instructional designers or course faculty (Campbell, et al., 2009; Gaston, 2018; Richardson et al., 2019). According to Gaston

(2018) and, Lenert, and Janes (2017) some ID professionals and faculty develop courses using a rubric—either a Quality Matters Rubric or an institutionally designed rubric—although the effectiveness of using a rubric to increase course outcomes was not evaluated in either study. Yanchar et al. (2010) found that not all ID professionals stick to one model or ID process but use ID theories as a source of ideas for practice and to make sense of complex design.

When expanding the literature search beyond community colleges and looking at other higher educational institutions, Gaston (2018), Jaiswal (2019), and Young and Murphy (2003) found ID approaches that focused on engagement and learner-centered choices to be favorable. Additionally, Rao et al. (2015) and Staats et al. (2020) found the framework Universal Design for Learning (UDL), provides needed support for diverse students. In a narrative review, Waitoller and King Thorius (2016) supported the use of UDL in combination with culturally sustaining pedagogy to support diverse students, although neither model was evaluated for effectiveness in academic outcomes during the study.

In another study, faculty partnered with an ID professional to create a standardized course. Especially in e-learning, having a “canned” or standardized course is a popular option. In this case study, the ID provided the deadlines and expectations for the faculty while the faculty provided the content (Cowie & Nichols, 2010). One of the issues raised in this type of course development was academic freedom. Although the faculty member understood the need to move towards this type of course, there was tension and resistance to work with the ID and let the ID professional take some of the responsibility for the course design from the faculty member (Cowie & Nichols, 2010).

### ***Faculty and ID relationships***

While faculty and ID professionals are expected to work together on course design, it is apparent from the literature review that the working relationship is not always a positive experience. One of the major hindrances toward effective collaboration stems from faculty not understanding role delineation and the value of the pedagogical support an ID professional can bring (Bawa & Watson; 2017; Campbell et al., 2009; Richardson et al., 2019; Xu & Morris, 2007). While ID professionals are trying to support faculty in the “how” to teach, faculty feel that ID professionals are telling them “what” to teach. Some faculty see working with ID professionals as giving up control (Bawa & Watson, 2017). In addition, some faculty are only working on course development with an ID professional because they were told to by the administration and not because they want to (Richardson et al., 2019). While sometimes faculty are given a stipend or release time from teaching, if the course design process is too complicated or has too much conflict, the faculty may not participate in the process again (Halupa, 2019).

**Faculty Buy-In.** One of the major themes presented in the literature regarding faculty and ID professionals’ collaboration, was the ability for ID professionals to gain trust and buy-in from the faculty. In a phenomenology study with five faculty and 10 ID professionals, the biggest hurdle cited by the ID professionals was not having trust or buy-in from the faculty (Richardson et al., 2019). Faculty did not always know of the ID professional’s credentials like they do of their peers and were cautious about their autonomy being taken away. Additionally, another ID professional shared the importance of making the faculty feel safe and comfortable in the working relationship (Richardson et al., 2019). While there was no one way presented on gaining buy-in, it was an important element in the collaboration process.

**Shared Culture.** In addition to gaining trust, creating a new shared culture is helpful for faculty and ID professionals' collaboration. In a case study examining the experience of a faculty member and an ID professional on course design, the ID professional found it helpful to understand the culture the faculty is coming from, both personally and professionally (Cowie & Nichols, 2010). Some individuals have different communication styles and work styles that need to be considered. In addition, every department in the college has its own culture that an ID professional must consider (Campbell et al., 2009; Cowie & Nichols, 2010). At the conclusion of one study, a faculty member stated, "course development process was 90% relationship building... once the relationship was sorted everything else followed naturally" (Cowie & Nichols, 2010, pp. 83-84). Cowie & Nichols' (2010) research recommends that in future ID projects, a new culture is created that outlines roles, and allows each team member to bring meaning and value to the project.

**Effective Communication.** Effective communication is another major theme addressed in the research literature examining the work of faculty and ID professionals. In a phenomenology study by Bawa and Watson (2017) communication was one of the key characteristics of effective collaboration. This includes all members of the teams having good listening skills as well as ID professionals being proficient at asking strategic questions (Campbell et al., 2009). Faculty will often bring a variety of issues to a meeting, such as classroom management, that have little to do with the course design process. It is up to the ID professional to actively listen to figure out their needs and be supportive in a way that will not take away from the faculty expertise (Richardson et al., 2019).

**Flexibility and Adaptability.** Flexibility and adaptability are other essential elements in effective collaboration between faculty and ID professionals. One faculty member suggested that

faculty should come with an open mind and not assume that they already know how to teach their course (Richardson et al., 2019). For ID professionals, adaptability may mean missed deadlines and having to change the schedule or being patient and flexible with faculty as they are learning new technology or course tools (Bawa & Watson, 2017). Course design does not always happen in a straight line. Both faculty and ID professionals need to be flexible in the process.

**Potential Solutions.** Written policies and course writing guides are some of the potential solutions presented to have a better collaboration process (Halupa, 2019). The written policies need to have specific information regarding the delineation of roles between the faculty member and the ID professional. It may even include a contract for the faculty member so there is no confusion (Halupa, 2019). Additionally, a course guide that helps teach faculty about the course design process is helpful. Some of the recommended topics to include are curriculum mapping, writing course objectives, Bloom's taxonomy, technology usage, and best pedagogical practices (Halupa, 2019).

While there are only a handful of studies examining the relationship between faculty and ID professionals, none specifically studied CTE faculty. Given the nature of CTE faculty as practitioners in industry and not pedagogical experts, it is not known if their experiences will be the same as the experiences of faculty and ID professionals at other higher education institutions. Even so, in one study's conclusion, it is recommended that more work be done to help improve the understanding of faculty and administrators in the valuable role ID professionals bring to course design (Richardson et al., 2019).

## **Equity in Higher Education**

CTE students represent a range of diverse backgrounds and educational experiences. Therefore, it is important for this literature review to examine how equity is conceptualized in the course design process.

### ***Definition of Equity***

Lowell and Morris (2019) define equity in education as the fairness of treatment, and additionally, “fair based on what can be provided and what is needed” (p. 81). Equity does not mean equal; it looks at the unequal needs of students and the unequal background of students. Rooted in a legal movement called critical legal studies, the concept of Critical Race Theory examines the relationship between race, racism, and power (Delgado & Stefancic, 2017; Ladson-Billings, 1998). When applied to education, Ladson-Billings (1998) argued that a push for “equality” has divided African American students further by promoting the “dominate white male voice” as the standard for curriculum, removing the voice of those outside of the dominant discourse, and using assessment practices that place blame on the student without taking in consideration the student’s circumstances. Bragg and Durham (2012) additionally expressed that equity is not just more access, it must include success when examining equity in education.

### ***Student Attributes***

The focus on equity in higher education continues to be inconsistent with some institutions focusing on student attributes, not the institutional attributes (Bensimon, et al., 2012; Ching et al., 2020; Malcom-Piqueux & Bensimon, 2017). Bensimon (2007) argues there is too much emphasis on quantitative methods and correlation based on students’ attributes and not enough emphasis on practitioner (faculty) influence. Perna and Thomas (2006) as cited in Bensimon (2007) found 175 articles out of 192 focused on quantitative methods and analysis.

One study by Johnson et al. (2020) found that students in learning communities persisted 7.6-10.8% higher than students not in learning communities at a four-year institution, indicating that learning communities may have a positive impact on reducing inequities at four-year institutions. Additionally, institutions use the “diversity distractor” and ineffectively focus on increasing diversity to solve equity issues on campus (Bensimon, et al., 2012; Ching, et al., 2020). Institutions focus on student attributes to make the campus look more diverse, without addressing the real student needs.

### ***Equity Policies***

Equity policies continue to be the focus when addressing inequities at 2-year colleges. The California Community College (CCC) system, the largest community college system in the United States has several goals in its *Vision for Success Executive Summary* related to equity. One goal seeks to “reduce equity gaps across all of the above measures by 40 percent in 5 years” with the measures to include degree attainment, transfer rate to a four-year college, less accumulated units, and increase CTE students in their employment field (CCC, n.d., p. 2). In a study by Ching et al. (2020) examining CCC student equity plans, the researchers found that the language of those plans shifted over time from being about race or racial equity to supporting all students without identifying how to target specific inequities in student populations. Bragg et al. (2012) found in examining three equity policy initiatives, “The Achieve the Dream Initiative,” “Equity Scorecard,” and the “Pathways to Results Initiative” that both access and success need to be accounted for although not one clear method was identified. Although equity-mindedness and practitioner development are included, remediation of student deficits continues to be a major theme throughout equity policies (Bensimon et al., 2012; Bragg et al., 2012; Ching et al., 2020).



## **Equity in Course Design**

### ***General Strategies***

The limited research available on equity implemented in the instructional design process focuses on learning or teaching strategies such as professional development (Ching, 2018), remediation and tutoring (Booth et al., 2014). In a narrative review of literature, Lowell and Morris (2019) found inconsistencies in how technology should be utilized in a multigenerational classroom. Daddow (2016) examined the use of “funds of knowledge” by connecting students’ lived experiences to the curriculum as an asset, although learning outcomes were not measured in this study. Booth et al. (2014) discovered in a quantitative study, a need to revise the curriculum or use innovative strategies such as self-paced or hybrid course to increase success in developing education courses. How equity is used in instructional design ranges from learner-specific strategies to general strategies with no clear focus on what works best to reduce inequities in the classroom.

### ***Universal Design for Learning***

One course design framework that seems to support equity in course design is UDL. This curriculum design was created for students with disabilities in mind, however, it has been shown to support all diverse students (Bradshaw, 2020; Kieran & Anderson, 2019; Rao et al., 2015; Staats & Lee, 2020). UDL is a framework that offers checkpoints to ensure that the learning design provides “multiple means of engagement, multiple means of representation, and multiple means of action & expression” (CAST, 2018). The framework has a goal for students to be expert learners who are, “purposeful & motivated, resourceful & knowledgeable, and strategic & goal oriented” (Cast, 2018). See Figure 2. Several of the researchers suggested combining UDL with Culturally Responsible Teaching (Kieran & Anderson, 2019) or Interactive Phase Theory

(Bernacchio et al., 2007) so cultural influences and backgrounds can be integrated into the planning phase. Bradshaw (2020) found that UDL helps students with self-determination of their learning. While the research had positive elements, none looked at if using UDL made a difference in course completion or grades.

**Figure 2**

*The Universal Design for Learning Guidelines Graphic Organizer*



**Source:** CAST (2018). Universal Design for learning guidelines version 2.2 [graphic organizer].

[www.udlguidelines.cast.org/more/downloads](http://www.udlguidelines.cast.org/more/downloads)

One of the limitations of UDL is the amount of time and effort needed to fully implement the guidelines (Coffman & Draper, 2021). While UDL supports a more varied learning environment, faculty may struggle with balancing specific learning goals and having enough flexibility to meet the needs of the students (Bernacchio et. al., 2007). This can be a challenge as faculty are seen as experts and some students may be drawn away from being part of the learning goal discussion. Additionally, for one study, the group found their discussions around flexibility, inclusiveness, and access were useful, however, there was a continued tension between providing what the students were interested in, and maintaining high academic standards (Bernacchio et al., 2007). While implementing UDL has benefits, it may be a challenge given the time constraints faculty are often faced with.

### **Equity in Course Design at Two-Year Colleges**

Despite Community Colleges' advancement in providing more access to non-traditional college students, inequities still exist (Bailey, 2006; Booth et al., 2014; Bragg et al., 2012; CCC, n.d.). Community Colleges have attempted to solve equity issues by creating policies (Bragg et al., 2012; Ching et al., 2020) or inconsistently implementing tools such as remediation or tutoring that focuses on student deficits (Bensimon & Malcom, 2012; Booth et al., 2014). Campbell et al. (2009) and Richardson et al. (2019) demonstrated barriers to ID professionals exist with a lack of time, role acceptance, and trust between faculty and ID professionals, but advocate for the use of ID professionals to support the needs of learners. The limited research conducted on equity in instructional design focuses on four-year universities (Daddow, 2016) or on models that provide support for all students such as Universal Design for Learning (Rao et al., 2015; Staats & Lee, 2020). Despite this limited research, equity research suggests using an

equity-minded framework when evaluating and making decisions around equity (Bensimon & Malcom, 2012; Ching, 2018).

Although there are arguments to support removing inequities at two-year colleges, based on the literature reviewed, there is a lack of instructional design equity knowledge at two-year colleges. Bensimon (2007) and Ching (2018) advocate for practitioner inquiry-based research on the influence of practitioner knowledge, beliefs, and experiences with student success. In Campbell et al. (2009) final thoughts section, the researchers suggest ID professionals are not just technicians but are “principled actors” who can be useful as change agents in the design process. They advocate for reflexive dialogue with others to develop a community of change. Instructional design equity knowledge can be expanded by looking at the intersection of equity-mindedness and instructional design practices at the two-year college level.

### **Conclusion of Literature Review**

The review of the literature provides insights into what we know about the purpose of CTE, the roles CTE faculty and ID professionals play in course design, and various ways equity is being implemented at two-year institutions. The literature revealed that little is known about the course design process between CTE faculty and ID professionals. However, the research available at four-year institutions indicated a need for more research in the course design process. Equity, while a priority in higher education, has rarely been examined in course design beyond a few episodic examples. Building on this literature review, the next chapter will explain the research methods for this study.

## **Chapter 3 Methodology**

### **Introduction**

This chapter examines the methodology employed in this research, which aimed to conduct an in-depth exploration of how CTE college faculty explain the working relationship with ID professionals at their institution in the course development process. To allow the stories to emerge, this research centers on the following research questions:

- How do CTE college faculty describe the process of working with ID professionals in the course design process at their institution?
- What considerations do faculty make when thinking about equity?

### **Setting**

Through judgment sampling, two college locations were chosen for this study. Judgment sampling is useful when looking for participants with specific characteristics (Vogt et al., 2012). I reached out to several colleges that teach CTE and employ ID professionals. This process was extensive and took several months to find an institution that met my criteria and faculty who had time due to the current educational environment impacted by the Covid-19 Pandemic. Once I found potential institutions, I started my planning process.

The setting for this study includes two colleges in the Western United States that have multiple locations throughout the region. College A will be identified as All Town College and College B will be identified as Beach Town College. Each college is a private for-profit institution located in over 15 locations and offering over 15 different programs. Both colleges award certificates and associate degrees in CTE programs. All Town College started offering bachelor's degrees (online only) in the last two years. These two colleges were chosen as they have similar locations, program types, and student demographics. Both offer options in technical

and medical careers. Like other CTE colleges, some programs offered have little to no entrance requirements such as HVAC or Medical Assisting as well as programs that have prerequisite entrance requirements such as Nursing or Respiratory Therapy.

The student demographic data is similar for both colleges. As shown in Table 1, the majority of the students are female. In addition, the majority of students are Hispanic, reflective of the communities the college serves. The demographics for college B shown in Table 2 reveal a similar pattern with females and Hispanic students making up the majority. Graduation rates for All Town College indicate the majority population, Hispanic students, have an overall rate of 62% while White students' graduation rate is 51%. For Beach Town College, Asian and White students have the strongest graduation rate with 74% and 64% respectively. In both colleges, Black or African American students have the lowest graduation rate by race.

**Table 1**

*All Town College Gender and Race with Graduation Rates 2014-15*

	Percentage of First-Time, Full-Time Students Enrolled	Graduate Rate (First-Time, Full-Time Students)
Male	31%	58%
Female	69%	53%
American Indian or Alaska Native	1.2%	44%
Asian	3.4%	57%
Black or African American	12.8%	31%
Hispanic/Latino	53.9%	62%
Two or More Races	4.4%	50%
White	21.9%	51%
Race and Ethnicity Unknown or Other Race	2.4%	40%
College Grand Total		54%

Source: All Town College Website Student Right to Know Disclosures 1/16/2022

**Table 2***Beach Town College Gender and Race with Graduation Rates 2017-18*

	Percentage of First-Time, Full-Time Students Enrolled	Graduate Rate (First-Time, Full-Time Students)
Male*	12%	48%
Female*	71%	61%
American Indian or Alaska Native	7.1%	61%
Asian	3.7%	74%
Black or African American	8.4%	47%
Hispanic/Latino	47.9%	58%
Two or More Races	2.6%	51%
White	26.3%	64%
Race and Ethnicity Unknown or Other Race	4%	44%
College Grand Total		59%

\*Some data was not reported

Source: Beach Town College Website Student Right to Know Disclosures 1/16/2022

**Participants and Sampling Methods**

At the chosen colleges, I used informal gatekeepers to introduce me to prospective participants. Since I work at one of the colleges and work with the administration at the other college occasionally, I already have a working relationship with the gatekeepers. Then using judgment sampling, I selected the participants based on my criteria. The criteria used to recruit participants included faculty who teach CTE courses with three years or more experience teaching. In addition, I wanted to find faculty that teach in different programs and different modalities. Once I had my pool of qualified participants, I selected at least one that teaches fully online and one that teaches in a face-to-face setting. I also looked for faculty that teach different subjects including general education and program courses, to provide a wider range of viewpoints.

## Research Design

This qualitative study was designed to examine CTE college faculty experiences working with ID professionals in course design. I used a multiple case study methodology to explore my research question. In a multiple case study, the cases are studied individually and then examined across cases to look for single case conclusions (Yin, 2018). A case study is useful in research that requires rich description, analysis, and is bounded in location or context (Merriam & Tisdell, 2016). For this study, all participants are faculty who teach CTE education, bounded in context.

The goal of case studies is to add to and generalize theories (Yin, 2018). That is not to say that something new may be learned, but a case study is not to be treated as a population “sample” (Yin, 2018). Each case study explored the CTE faculty’s experiences, perceptions, and values in course design. This study used interviews as the data collection method since the research questions are exploratory in nature. Yin (2018) explains that exploratory questions using “how” and “why” fit with the style and purpose of a case study. The goal of this case study is to add to what we know about CTE faculty and ID professionals’ relationships, theory of equity, instructional design theory, and the intersection of all three in practice.

In a case study, four tests must be conducted to determine the quality of the case study design. This is important as a case study is rarely replicable, however, the work needs to show reputable and quality research methods to ensure the case is valid (Yin, 2018). The first test is construct validity, having multiple sources of data and member checking. The second test is internal validity, which occurs in the data analysis by pattern matching or logic models. The third test is external validity, where theory is used in a single-case study. The fourth test is reliability, which comes from the researcher using a case study protocol (Yin, 2018). Further expansion on



each of these tests will be provided in the following sections to demonstrate high-quality research.

## **Data Collection**

Once participants had been chosen and Institutional Review Board (IRB) approval had been received, the data collection process began. I followed Seidman's (2019) interview protocol. The heart of Seidman's in-depth interviewing process is to understand the "lived experience" of others and how they make meaning of that experience. This entails building a relationship over a series of three interviews. Each interview should last approximately 60 minutes and be scheduled approximately one week apart from each other. Given the exploratory nature of this study, the research questions are less structured and have more space for open-ended answers and stories (Seidman, 2019; Vogt et al., 2012).

The gatekeepers at both colleges collected a list of potential participants. After reviewing to make sure they met the participant criteria for the study, I sent out an introduction email to the potential participant. Once the potential participant accepted, I sent a follow-up email with the informed consent. Each of the participants emailed the informed consent back. During this email exchange, I asked each participant for dates and times that would fit their schedule that were approximately one week apart. I then set up the meetings via Microsoft *TEAMS* or *Zoom* based on each participant's preference. Before the start of the first interview, I went over the informed consent with each participant. In addition, I asked at the start of each interview if the participant had any questions or concerns.

Each of the three interviews had a specific purpose in the data collection process. Four of the interview series took place on *TEAMS* and the fifth interview series took place on *Zoom*. During the first interview, the context of the faculty's experiences was explored (Seidman,

2019). This included learning about what they teach, how long they have taught, and initial experiences working with an ID professional. The second interview allowed some of the experiences shared to be expanded on upon. The third interview allowed the participants to reflect on the meaning of the experiences they shared, as well as share ideas on what they feel works best for the course design process in the future (Seidman, 2019). All three interview sessions were video recorded for further analysis. In addition to video recording, field notes were kept following the interview to capture non-verbal communication or additional thoughts from the researcher.

While this case study only used one data source interviewing, member checking was used to ensure construct validity. After all interviews were conducted, member checking occurred. This is when participants had the opportunity to review the interview transcripts as well as the summary of the observations to ensure I captured what was said during the interviews as well as the observations. Any changes that were requested by the participants were made.

### **Data Analysis**

Throughout the data collection process, I followed Yin's (2018) case study protocols. This included having an electronic database that consists of any evidence such as video recordings and notes from the data collection process (Yin, 2018). All video recordings and notes have been filed in an electronic case file with the participants' names and the date they were formed. These files were the foundation of the data analysis process. Maintaining a case study database is important to ensure the reliability of this research.

After all data were collected, a multistage coding process occurred. As a multiple case study, each case study was analyzed separately before converging into one case study conclusion (Seidman, 2019). Using a template adopted from Saldana (2009) I began the coding process (see

Appendix D). First, I pre-coded and highlighted passages related to the main themes from the literature review. Next, I used In Vivo coding or literal coding in the second column (Saldana, 2009). This type of coding helps “honor the voice of the participants” (Saldana, 2009). Finally, I used pattern matching for my final coding type. Pattern matching happens when the resulting themes match what your predicted findings would be (Yin, 2018). During the final stage of coding, themes were revealed and exhausted from the patterns and connections that were found in each case study (Vogt et al, 2014). Finally, in a cross-case analysis, these themes were then compared to initial predictions about the research along with the literature review, to form the singular case.

## **Research Ethics**

### ***Confidentiality and Consent***

Since this research explores the participants’ behaviors, feelings, attitudes, and personal understanding of course design and equity, research protocols were followed to maintain research ethics. These protocols include IRB approval and informed consent. IRB approval was obtained, and all participants signed and agreed to the informed consent. Participants were informed of the purpose of the research and explained that they have the choice to withdraw from the study at any time. Additionally, all participants were given a letter of consent to sign that identifies the benefits, any possible risks, a statement about participation as being voluntary, confidentiality steps, contact information, and how the data collected will be used (see Appendix A). These signed letters were collected and stored in an electronic file that requires a password. They will be destroyed with the rest of the research material after three years. Additionally, at the start of each interview, participants were asked if they had any questions or concerns.

To provide confidentiality, the name of the colleges and the individual participants were changed to pseudonyms. Minimal identifying demographics were used in the study. All physical case study data and materials have been locked in the researcher's home office with only the researcher having access. All electronic material has been stored in a file that requires password access. All case study material will be destroyed after three years.

### ***The Researcher's Background***

As the researcher, I must acknowledge and limit my personal bias and assumptions about the study. As a curriculum specialist, I work closely with faculty on course design. I am always looking for better ways to make the course design process more efficient while incorporating equitable practices to help students succeed. While I am interested in finding ways to improve the working relationship between faculty and ID professionals, I must be diligent in not interpreting participants' words or reactions to favor my beliefs. Using reflexivity, I will take a critical assessment of myself in the research role as I produce and interpret findings (Merriam & Tisdell, 2016). This includes using an iterative process to review collected data to ensure my own biases have not influenced my records. I will review videos, field notes, and coding analysis to check my findings for accuracy. This includes member checking to make sure my records have not been misinterpreted. By continuing to acknowledge, check, and recheck my methods and analysis, I will uphold researcher validity and consistency.

### **Conclusion**

Given the nature of this study, using a multiple case study methodology will help the stories and experiences emerge. By using Seidman's (2019) three interview protocol, I was able to build enough trust with the participants that they felt comfortable sharing the details of

working with an ID professional. The next chapter will share the experiences and analysis of the stories shared by the participants of this study.

## **Chapter 4 Findings**

### **Introduction**

This study examined the working relationship between CTE faculty and ID professionals in course design from the perspective of faculty. In addition, the methods and choices around equity in the course development process were explored. Other considerations were made for barriers to ID professional support as well as why some faculty choose or do not choose to work with an ID professional.

The following research questions framed the research:

- How do CTE college faculty describe the process of working with ID professionals in the course design process at their institution?
- What considerations do CTE faculty make in their course design when thinking about equity?

This chapter reports on the experiences and stories of the CTE faculty participants. A narrative account of each participant's case is shared including individual case analysis. The individual case analysis was conducted and used as the foundation of the cross-case results. The chapter ends with a cross-case analysis which presents the major themes found once all cases were merged into the final case.

### **Participants**

All participants of this study were teaching at a CTE college. Each has at least a master's degree or higher as well as ten plus years of teaching experience (see Table 3). Given the small pool of potential participants, the subjects the participants taught and designed courses for, as well as the modality (online or face-to-face), have been left out of the study to provide

confidentiality. However, for this study, I found participants that taught in both modalities and in a variety of subjects that fit the criteria my participant pool was designed around.

**Table 3**

*Participant Demographics*

Participant	Gender	College	Highest Degree	Years Teaching
Ava	F	All Town	Master's	10
Barbara	F	All Town	Master's	13
Chloe	F	All Town	Master's	20
Indra	F	All Town	Doctorate	25 +
Leticia	F	Beach Town	Master's	15

**Participant Experiences**

The following section is a narrative account of each of the participants' experiences. While all participants were asked the same questions, each participant expanded on different aspects of the interview questions. For each participant, I share their teaching experience, how they became involved in course design, the course design process, as well as equity in course design.

*Participant 1 Ava*

Ava did not always want to be a teacher in the classroom. She started her career working in community health and later moved into a clinical position in the medical field. About 10 years ago, she found herself in a place of transition, and a friend recommended an adjunct faculty position. The position worked out perfectly as it was a part-time hybrid position teaching on campus two days a week. She has now been teaching at a CTE college for the last 10 years.

Approximately two and half years ago, Ava was asked to be part of a course design project. She was excited to see a new side of higher education. In preparation for the project, Ava was given a smaller course load, one instead of two courses. She did not have any specific

training for this project but was willing to learn, given the flexibility in the meeting dates and times. At the time of the interviews, Ava was finishing her last week of her master's program. Her experiences at All Town College over the last several years led her to go back to school and earn a master's degree in education.

**Course Design Process.** The first course Ava had the opportunity to help develop was already in progress with some of the content selected. Her initial thought was, "wow, that's a lot of work. Our students are going to close down to that." However, Ava explained that she just met the ID professional and did not have the relationship yet to feel comfortable saying there was too much work commensurate with the learning level of the students. She did follow up stating the course was redesigned at a later date. "And we did go back and fix that after the first rollout because it was very intense, I think we had to fix it twice. So yeah, I think coming in and feeling like I still have ownership of that, or my name is still attached to that, and it's not really something that I started with." While Ava shared that this first experience was not ideal, it did not stop her from working on other projects.

Ava describes her time helping design courses as feeling rushed. She stated that sometimes they would only have two or three weeks with a short extension to design an entire course. Ava and the ID professional would meet virtually regularly and spend the time either dividing up tasks for each of them to work on or reviewing tasks they have just completed. Sometimes Ava would use email to communicate when she had a question outside of meeting times.

The majority of the work Ava did outside of the meetings was related to the content choices for the course. She would review assets from the publisher and decide which ones fit, and which ones did not. She also spent time working on lab assignments and interactive



activities. The ID professional worked on putting content into standard templates, creating the LMS course, and working with the publisher to integrate the assets in the course.

One of the major hurdles Ava expressed during the project was the lack of structure and organization in the process. She wished the ID professional would have delegated responsibilities at the beginning so they each knew what they were supposed to do. “So that just makes it more organized because what you’re going to be doing as part of this, as opposed to, I’ll do this now, or I’m working on this, [or] maybe someone else is working on it at the same time.” Ava also expressed the desire to have a clear explanation of what the course design process is:

My idea of coming into this is that there's actually an outline, and a discussion first, research, actually whatever to figure out what are the best ways to utilize SME's [subject matter expert], what's not the appropriate way to utilize them, and what should the [ID professional] be focusing on, and then having a structured outline that you just check off. You do the same thing for every course, every program, this is step one, this is step two, instead of kind of doing this and that, [like] what we did most of the time here and they're trying to just get it done.

As an individual who plans and prepares her course lesson plans regularly, the lack of structure and organization was something she saw lacking in the course design process she was part of.

Some of the external forces Ava felt impacted the course design process was the COVID-19 pandemic and the pressure from leadership to get this project done. The majority of this course design project was completed during the two years of the COVID-19 pandemic. She indicates this time was stressful as she was trying to balance working at home, teaching her other course, and building curriculum. Ava indicated it was, “manageable, not great.” She also felt pressure to get all of the courses complete as there were strict dates and rollouts. One or two

courses would roll out every five weeks, which led to not having time to give some content as much attention as she desired.

**Equity in Course Design.** When Ava was asked what equity means to her, she replied, “equal access, all across, everyone is able to have something that they need, they have access to get there.” She further added, “whether it is you know, the information that they see in the book that they can relate to...having access to physical and psychological access”. During the time she was working on course design she did not always consider access. Ava felt it was important to remember a student’s at-home access or lack thereof to computers and the internet students when making content choices. Some things such as videos require more bandwidth and were more accessible at school instead of at home. In addition, Ava felt she supported equity in course design by making sure the images were reflective of a diverse group. Ave shares:

Again, [do] our students feel like it [the image] reflects them, even when you're critically thinking about a question, and you can relate to it...like sometimes you can have a picture in your head that could trigger a memory to get the answer correct. So I think that's valuable even in the questions themselves.

Finally, Ava indicated, “training, making sure that your faculty understand those things so that they can then be the link for the students. Make sure that they're up to speed on equity because there might be faculty that have difficulty accessing things as well.” Ava believes equity considers the student needs as well as the faculty needs.

### ***Participant 2 Barbara***

Teaching was not Barbara’s first career. She started in the military and after retiring, worked as a recruiter. Even though she was a mom, wife, and recruiter, she still wanted more. A friend introduced her to online teaching thus leading to her career as a CTE faculty at All town

College approximately 13 years ago. Barbara has both her bachelor's and master's degrees in a similar field and teaches part-time in subjects related to her degrees and experience.

Barbara has helped design courses throughout the time she has taught CTE. It is in Barbara's "nature" to help out where it is needed. She had three distinct experiences based on the ID professionals she worked with, as well as the expected course design process during that time. While she enjoyed the first process, she said her enthusiasm for building a class changed when she became aware of "the very detailed, specific and time-consuming process" it had become for the second process. In the third experience, the process was different, resulting in what Barbara called "fun".

**Course Design Process.** Barbara started by describing the second course design project during the first interview. While she does recall having the first meeting, Barbara was not sure if it was a phone call or through an online meeting platform. All communication after that was done through email, mostly in the template. In an early communication with the ID professional, Barbara learned about a SME course that she was supposed to have been enrolled in that helps with the course design process as well as the template. Barbara expressed frustration and less enthusiasm when she learned about this:

Because it's not only the content that you're building. It's putting it in the template. I love content. I love building classes. Let me just put it in a Word document. Give me an empty shell. And then look in and we can discuss. Yeah, the enthusiasm kind of went away some due to the frustration of not knowing about this course that I was supposed to go to, and I just didn't know about it.

Barbara continued to explain that most of the time she spent trying to figure out how to get all of the right information into the excel template. Barbara was responsible for creating assessments, discussions, assignments, and choosing textbook reading.

Barbara expressed unclear communication when talking about deadlines and expectations. She does not recall being told when she had to finish her part of the course design. Barbara expressed, “I did it at my pace with the assumption that the instructional designer would do more checking in to see at what point I was.” In addition, Barbara started late because it was unclear when she would receive a copy of the textbook. She eventually bought a hard copy since there was a delay with the eBook copy. About three weeks into the project, Barbara received communication that the whole course was needed in two weeks. Barbara summarized her communication with the ID professional:

Well, I am up to this point. I'll show you what I have, I'll tell you how much more I need to do. And then it was actually handed over to somebody else who could finish it in two weeks, because I described as a part-time faculty, and addressing the way that I did my methodology for doing it, plus meeting the needs of that template, I knew that I would not be able to put the thought processes in place and have it completed in two weeks.

Barbara was unable to finish this course design project and does not know what the final product looked like.

Barbara moved on to describe some of the first course design projects she worked on. In these first course design experiences, Barbara was given a blank Learning Management System (LMS) shell to enter content into. She would regularly meet with the ID professional approximately every week or every other week to go over what she had entered into the shell, discuss, and gather feedback. Barbara expressed “it worked really well to have the one-on-one

contact with him. I asked him my questions. If there were things technology-wise that I didn't know how to do, he would assist." When describing what this ID professional did, Barbara used words like, "guiding me," "provided feedback," "showing me," and "team effort." She also mentioned that he would jump in and help when she fell short on time.

The third experience Barbara described as fun and a true partnership. After receiving an email requesting volunteers to help build a course, Barbara replied she would be interested except for the standardized template. Barbara received an email back asking, "if I [Barbara] would accept the assignment if I did not have to follow the standard template used for course development and reiterated the flexibility with content that I would be given." Barbara shared that she accepted the project knowing this would be a different process. One of the major differences between this project compared to the second was the communication process. While email was the method of communication, Barbara felt there was "an active exchange of communication" and they checked in and provided feedback every few days. Barbara expressed this project felt like a true partnership. Unlike other projects, the communication process was with a director not an ID professional until the end of the project. Barbara shared:

I started to build the course and show the director my progress, the director facilitated the link between me and the instructional designer. As portions of the course were developed, and reviewed by the director, the instructional designer was included within our email communication.

Barbara further explained how they all worked together and how she found this to be fun.

When asked in the interview about any external forces that impacted any of the course design projects she participated in, she shared how COVID-19 impacted the second experience. When she agreed to assist in the course design project, Barbara was teaching two classes.

Normally she had 10 to 12 students per class. Because of COVID-19, students who normally too in person classes were moved online, and her class sizes went up to 20 or 22 students. Barbara indicated that when you have to give APA guidance as she did in her courses, that requires a larger amount of time. She indicated that her workload increased given the large class size, causing her to have less time to dedicate to the course design process.

**Equity in Course Design.** When I asked Barbara what equity means, she replied, “When individuals are given the same resources to meet the same goal, that's equality, when individuals or groups of individuals are given different resources based on their individuality and needs to meet the same goal, that's equity.” Barbara expressed that equity required the “human interface intervention” and did not see how equity could be incorporated into the course design. Given the standardization of courses, Barbara felt that equity comes from the faculty, not the course. She gave the example of APA formatting, in-text citation, and paraphrasing. Barbara explained, “So even though the same resources are provided to all students, they differ when I share, depending on the individual needs of the student. Feedback is tailored based on what I see the individual student needs.”

### ***Participant 3 Chloe***

Chloe’s journey as a college faculty started about 20 years ago after she had a child and finished her master’s degree. She started as an adjunct faculty at a local community college. She quickly realized that teaching was a great fit for her. In previous careers, she would often finish her work in about 50-60% of the time and was expected to help others do their job too. Being paid to teach a course allowed her to spend the amount of time she needed on the course and be paid for her work, not just her time. Chloe currently works full-time at All Town College.

Chloe has taught and helped develop courses at several different colleges offering both associate and bachelor's degrees. She did attempt to work at a K-12 school and quickly realized she did not "have the emotional bandwidth to teach anything lower than college". Chloe has helped with course design in a variety of ways including reviewing completed work, helping with minor edition updates, to building out brand new courses. Chloe shared that she initially was drawn into curriculum projects when she was using a textbook that had a lot of wrong answers. Her students were complaining about the pictures not lining up with the answers, so Chloe went through the whole textbook as if she was a student and kept track of all of the discrepancies. She submitted these to the publisher, who then asked her to be part of the next edition review team. Chloe feels like her attention to detail is in part what drew her to course design projects.

**Course Design Process.** Chloe explained that often a course design project starts with an email request. Once she accepted a project, she started by looking at the textbook, the publisher resources, course description, and learning outcomes if they are available. In her experience, the communication between her and the ID professional was almost exclusively through email although at times she felt short check-in meetings would be helpful. In general, Chloe worked on the assignments and content for a unit, submitted it, got feedback, made any necessary changes, then moved on to the next unit. While it may vary, in general at All Town College, she spends about five weeks on one course design project.

During the interview process, Chloe shared that while the process is similar from course to course, some of the interactions and feedback changed based on the ID professional she worked with. To Chloe, having experience made a difference. She explained:

If I asked a question, it seemed like she was experienced enough to answer that question, as well as anticipate what the follow-up question would be and [say], oh, I've seen this before, so yeah, do this, but then you're going to find out you're going to need to do this on the back end too.

In addition, Chloe shared there was timely communication. “I could count on her, if she said she'd have something to you by a certain day or time it was done, and the rare circumstance where it couldn't be she would say, communication was wide open”. In addition, this ID professional helped Chloe prioritize tasks and fix small things when Chloe felt she needed help:

Sometimes when stuff happens like life happens to me, she's very good about helping prioritize, also finding other resources like typing in all the exam questions for instance, if I'm underwater and I need some help. She would be one that could get me some additional resources, not that it happens all the time. If it did, they'd stop asking me to develop. But, you know, she was always helpful in that way. Even if it was well, I'll type up exam five for you, that way you'll only have the four to do and so helpful, she pitched in. Also, here's a biggie, she would fix things as she went. If I made a grammatical error, she would just fix it rather than, highlight it and send it back to me [to fix].

The interactions Chloe had with another ID professional were different. At times, Chloe felt the ID professional was trying to teach her when she could have just made the updates herself. Chloe explained:

If I'm in her position, and I know what I want and it's to change this word from one tense to another tense and it doesn't change the meaning, I just fix it. I'm not going to go back and try to teach the SME how to do it this better way. Because it seems to me, it takes her longer to try to teach me the ways you want it and I've not had that with other



instructional designers. So I don't know whether they're just fixing things, or their expectations are different.

Additionally, Chloe commented that perhaps she should use her continuing education hours to learn APA format beyond the basics since this ID professional had a focus on APA format. Chloe also shared this ID professional did not help out and enter things as the first ID professional did.

Throughout the interviews, Chloe mentioned in a few different areas she wishes she knew why certain things happened in the course design process. Chloe mentioned having to give the ID professional five images for each unit's presentation, yet she was never told the purpose since the presentations end up having at least 20 images. Sometimes the pictures Chloe chose were just professional images such as people shaking hands. Chloe stated that knowing the intention behind the SME choosing images would help her make more informed choices. Another area Chloe wished she understood was the reason for listing the specific reference pages on study guides. Chloe expressed that standardization is good but was not sure the reason why such specificity. She stated, "we are being told to narrow this down so specifically, well are we teaching definitions, or are we teaching concepts and applying those concepts?" The topic of knowing why she was to do certain things, came up again in the third interview and Chloe further added, "I'm not going to just get stubborn and say well then, I'm not going to do it. But it would be nice to know why. I'm a rule follower. It is helpful to know some of the why sometimes and I don't know why I haven't asked before." Chloe concluded this point by saying she will ask "why" next time she helps develop a course.

When asked about external forces that impacted the course design process, Chloe shared that not having textbooks on time was an issue. Since most courses are expected to be built in

five weeks, a delay in having the textbook can make it difficult to get courses completed on time. In addition, Chloe mentioned getting pulled off a current course design project temporarily to revise an existing course due to a textbook edition change. Not having the current textbook edition can cause delays in Chloe's experience.

**Equity in Course Design.** Chloe expressed that to be equitable means, "may or may not be equal, but fair." Chloe shared that some courses used to be designed with assignments that had three choices. This design allows students to choose if they want to create something, write something, or have another option of presenting the information. While Chloe liked students having a choice, one of the issues that came up was fairness in grading. One course had a poster option and she said, it was difficult to grade and did not compare academically to writing a paper or making a power point. Chloe said that having choices might work for some programs or some courses, but it would not work in every single class. Chloe further explained that she does not enter the alternative text, but she does know that the ID professionals or the media team do add in alternative text for images that are used.

#### ***Participant 4 Indra***

Indra started working on course design due to the "frustration and lack of coherency in the courses." Indra has taught and supported course development for over 25 years. She has taught from the associate degree level through graduate-level courses. Indra has taught at All Town College for the last 10 years and continues to teach and develop courses at other colleges as well.

**Course Design Process.** Indra shared that the course design process is the same for CTE education as it is for a graduate-level course. The main difference is to tailor the course material to the level of the education and any accreditation expectations for that program. While the

communication process with ID professionals varies from college to college, at All Town College communication is done through email. Her process is to complete the content selection for a unit, email the ID professional, get feedback, make any necessary changes, and then move on to the next unit. In her experience, she spends approximately 100 hours on a certificate or associate level course and 150 hours on bachelor's or master's level courses. The one exception are courses related to statistics or research as those take a lot more proofing and editing.

Unlike other participants in this study, Indra did not see a big difference between the role of the faculty and the ID professional. When asked how she defines the roles and responsibilities of the faculty member in course design and the roles and responsibilities of the ID professional, Indra responded, "I'm not sure there's a real huge difference in those two roles. Unless I'm misunderstanding the question because the faculty that's doing the development is the curriculum designer." Indra explained that she chose the content and put everything in the master course. When Indra was asked to explain what others who worked on the project did if she was the course designer she said:

You've got a big picture manager that's over the top of this. She's the ultimate person that reviews the entire course. And either says yay or nay. Often it comes back for some type of edit. Under her, you've got the people that do the media piece, the making the course pretty, clarity, language, that's their job over here. Then you've got the person over here that's actually looking to make sure we're in compliance with our accreditation standards.... making sure content, CLOs all map, they are in alignment. Then you have the editorial team to make sure that all of this is making sense and going together. But down here at the very bottom is the faculty person doing the actual design piece. So content, flow, all that.

Indra went on to explain that the others who work on the project make it “look pretty”. While Indra sees herself as the designer, she does state that if the others give suggestions and feedback, she will make changes as necessary.

Like Chloe’s experience, Indra shared that her interactions with ID professionals were different from person to person. Indra shared that for some ID professionals, power and control is what they seem to care about:

I have found that some people that get into curriculum design or middle management are extremely passive-aggressive, and they will delay answering. They don't do their jobs. It's more about their power and control over their little fiefdom versus the good of what we're doing, which is our mission to educate our students. And it becomes almost a personal issue. I run into that twice. And it's very uncomfortable.

Indra found these types of interactions to be uncomfortable. Indra proceeded to describe an opposite type of interaction with ID professionals:

Well, they maintain the 24-hour turnaround [time] in emails, which is what everyone's asked to do. Their communication is clear and concise, which is wonderful. There are some people that excel at it [course design]. They're just really good at it. But those are also the people that have done this for quite some time. They're not newbies. They've done their own curriculum development or SME work. So they have a better handle on what they're doing. Bringing experience to the table really helps.

Indra prefers to work with someone with experience and good communication. Indra summed up the interview by sharing that at All Town College there is a flow chart for course design that has a specific timeline of what happens when in course design and who is responsible for each step.

It was not always that way but is currently in practice. She concluded that, “I think it [the flow chart] also instills accountability at various levels of who does what.”

**Equity in Course Design.** From the viewpoint of Indra, equity does not exist in education even though it should. Indra explained, “what it should be is everybody has an even chance to get in the same program, get the same education, be qualified in the same ways to pursue a job or career”. She sees “huge discrimination” in education. When asked how equity relates to course design, Indra believes it is removing all the “non” stuff. She went on to say, “it should be non-sexist, non-gender, non-prejudicious, no bias, open to everyone.” When it comes to her choices in the course design process, Indra always makes sure to present both sides of a controversial topic, so the students have access to both extremes, not just the middle. Indra further explained:

I want them to be able to use their cognitive skills, their reasoning, coupled with their own emotions and background because it's all coming forward, all the stuff they've learned through their lives, and then apply it to this. That kind of critical thinking is what you need to do out in the real world when you get out of college. That's some of the stuff I try to bring to curriculum, is to make them think.

Indra further shared that she tries to make sure the verbiage and images she uses are equitable, but if she misses something, the ID professional and media team will usually catch that and make changes. While Indra tries to make equitable choices in the content for the courses she builds, she knows the others on the team will support equity when they review and implement the content.

### ***Participant 5 Leticia***

Leticia became a teacher after her career in the military. After realizing retail was not for her, she went back to school and obtained a master's in education. She taught in K-12 for about seven years before moving on to become a CTE faculty for Beach Town College. She has taught at Beach Town College for about seven years now. In addition to teaching classes, she is also an academic coach that supports students that need extra help.

**Course Design Process.** Approximately four years ago, Leticia was approached to help with a course design project. She is regarded as an expert in her subject and often helps other faculty in the same subject when the need arises. Her Curriculum Dean reach out to her as she thought she would be the right person for this project.

Leticia described the course design process as collaborative and thought it went well. The entire project consisted of building three courses in a six-month period. Although she was learning the publisher assets and a new LMS, she still felt there was plenty of time for the project. In addition to her and the ID professional, several technical specialists from the college as well as the publisher were included in the process. They met regularly and Leticia shared she liked meeting instead of just using email to communicate.

The main role Leticia had in this project was picking out content for the course. Since the course was using an integrated product, all of the instruction, videos, and assignments were prebuilt by the publisher. Leticia did have to help design discussion topics and some of the course introductions. The ID professional was responsible for entering the content into the course as well as working with the technical team on integrating the links into the course. The ID professional also supported the project as a reviewer for quality control.

When Leticia was asked during the interview why she felt the collaboration went so well, she talked about the team having a common goal:

We had a common goal and that's always important when you're working or collaborating with somebody you haven't met. The girl that I worked with most often was just a happy person. She was, you know, really excited about what she did, and she wanted to make sure she was putting things in the right places in the right manner, that I wanted to see it as an SME. And I like to think I work well with just about everybody, and she had the same kind of disposition. So, we had fun, we enjoyed it. We knew that this was going to be new and exciting...Everybody else that was on the team, we had somebody who was higher up in Newton that was working with us and then the LMS folks, but everybody, they had no problems asking questions, reaching out to somebody if we didn't understand something. It's like, oh, how could we do this? Maybe, you know, that would be a question on my LMS. And she'd say, oh, oh, we can go like this. And so yeah, it was just a super open group.

Leticia further explained that if someone does not have the same common goal, the course design process will be more difficult.

**Equity in Course Design.** During Leticia's interview, she indicated that equity means "being able to meet their needs as learners, being able to present things in different ways." For Leticia this is not as much in the design or the course, but what you do as the instructor to personalize the student's experience. She stated, "I think it has to be more in a one-on-one environment as opposed to overarching the entire class." Some of the ways she provides equity in her classes are to have tutoring sessions to show different techniques to learn the course material. Leticia further explained that she felt the publisher for the product they were using

incorporated equity in assignments and word problems by using different “heritage names” to make the material more diverse. Leticia clarified, “I’m just thinking they’re trying to make it more diverse in the actual set course. And then, it’s up to us to address ability and different things like that to meet that equity or that fulfillment of making the students learn.” Leticia saw course design elements as being able to support diverse students where the one-on-one actions of faculty support equity.

### **Cross-Case Analysis**

The cross-case analysis was conducted after each individual case was coded and no further codes could be found. The cases were coded with In Vivo coding for the preliminary codes and then pattern matching was used for the secondary coding. Yin (2018) suggests “playing” with the data to look for patterns and insights. After the coding process, I did this in a few ways as suggested by Miles & Huberman (1994) by tabulating the frequency of particular words and phrases as well as creating word maps and concept maps for key ideas and phrases (as cited by Yin, 2018 p. 167). Three main themes emerged in my cross-case analysis. The themes include:

- Impact of communication
- Defined project is key
- Creating a shared culture

While there was no one theory applied to this study, the themes found are consistent with themes found in the literature review examining CTE faculty and ID professionals collaborating on course design (Bawa & Watson, 2017; Campbell et al., 2009; Cowie & Nichols, 2010; Richardson et al., 2019). This next section looks at each of the themes around course design.



### ***Theme One: Impact of Communication***

Research question 1: How do CTE college faculty describe the process of working with ID professionals in the course design process at their institution?

The impact of both positive and negative communication is prevalent throughout the participants' accounts. Because many of the participants want to be "helpful" and it was not in "their nature to say no" they often did not ask why something was the way it was, nor did they give feedback when they disagreed. However, during the interview process, Barbara and Chloe reflected on the impact of not asking or speaking up.

Barbara indicated that she never asked for clarification on several of the issues she had with one of the course design projects. Barbara struggled using the mandatory "template" and when questioned if she asked for an explanation, she stated, "well I didn't ask. It definitely wasn't an empty course shell to develop something and let's enter it together and discuss it, it was not... That was the old way." In addition, Barbara said the communication about deadlines was not clear.

Well, that's where the communication was not clear. So, I did it at my pace, with the assumption that the instructional designer would do more checking in to see at what point I was in the process. Because I was part-time, I was compensated for the development of the course. And the compensation was based on I think one course, but it didn't necessarily mean that the development had to be done within five weeks. So I took my time.

In her last interview, Barbara reflected on some of the course design projects and discussed the need to be more assertive in her communication in the future.

To be more assertive for certain, like saying this is probably not going to be done, but it's just not my nature not to do it. My nature is to try to really get this done. When I noticed that it was not going to be completed by week five, I [needed to] let the curriculum side know that the course was not going to be completed in five weeks.

While Barbara does not like to say no, she saw that her lack of communication caused issues for the course design projects in which she was involved.

Chloe shared the importance of feedback both to her and from her. With email as the primary form of communication, the lag time in feedback sometimes caused delays or issues.

Maybe an occasional check-in, I don't know if it would need to be once a week but like a phone call, even where there's real-time feedback, and an opportunity to ask questions...I love email because of the asynchronous nature, it is a good thing in so many ways, you don't have to worry about somebody else's schedule. You know they're going to get back to you within a day. But if you do have a follow-up question, almost everybody's good about replying within a day or the next business day, so that's not an issue. But what if, what if I have a question to a follow-up question, are we now into five days?

Given the five-week expectation for completing a course, expedient feedback is sometimes needed. Chloe also reflected and wished at times she had spoken up and given feedback. She explained she usually does not bring up an issue if she does not have a solution. "I think it's just my nature, if I can't think of a solution, I don't mention the problem...there is no solution anyway, so why am I going to bring it up?" Chloe does not like to bring up issues without a solution, however as she further elaborated, she said, "there are solutions out there that probably never crossed my mind...just because I haven't thought of one, there isn't one, so I just need to be more open and speak up." By not giving feedback, Chloe missed the opportunity to have a

conversation to make things better. Giving and receiving feedback is an important part of the communication process for Chloe.

Leticia too does not always speak up and ask questions when she is unsure of why things happen in the course design process.

Just for me personally a little bit more explanation for things that were done and the way they were done. We did a lot of piggybacking off existing classes that we already had.

[Leticia thought] why aren't we or why are we doing this and this and this and this sequence, as opposed to maybe this and this, but I don't ask a lot of questions either. I just figure stuff out. So, it's like, well, okay, I guess this is the way it's done.

While Leticia was not always good at asking questions, she did say that communication was important. Feedback from members of the team was important to ensure the course design had all of the right elements and function correctly.

For Indra, communication is number one. “Communication is number one, and in a timely manner. For instance, at All Town College, you've got 24 to 36 hours to turn your communication around... So communication and guidelines for communication... I've had both positive and negative [course design experiences] and communication is the key to both of those.” At another college, Indra talked about the importance of fast email responses regarding feedback. “I would send an email this is what I'm having an issue with, and I get an email within hours. The next day it's resolved or in the process of being resolved.” Throughout Indra's descriptions of course design experiences, most issues or good experiences come back to a clear understanding of the communication expectations.

Ava had mixed feelings about the communication process she had with the ID professional. While on the one hand, Ava could send emails and *Teams Messages* anytime and

request a virtual meeting when she needed to because her ID professional was friendly and open to communication. However, Ava felt like the communication process lacked organization and meetings were not consistent. Ava never knew what they were going to discuss in their meetings. In addition, Ava wished she were part of the meetings with the publisher who provided assets for the course. Ava shares:

Not having access or being included in some of those conversations, especially if the ideas will be helpful...How is that getting across?... Did they [ID professional] interpret it the same way? Or do they give the message the same way that I meant to send the message, and was it received in the correct way? So, when you have that middle person doing it, obviously that can be a barrier to clear communication.

Ava was not sure if the questions and ideas she brought up to the ID professional were always communicated correctly to the publisher. Sometimes she had different ideas on the content and wished her voice could be heard directly by the publishers or at least she would hear “why not” and have closure. Having a middle person can be a barrier to effective communication.

***Theme Two: Defined Project is key***

In addition to communication, the course design projects that either went well or had issues stemmed from whether or not there was a clearly defined project. A clearly defined project includes deadlines, a concise explanation of the entire scope of the project, as well as defined roles and responsibilities for all members of the team.

While Ava liked the idea of collaboration, she felt like more defined roles and having the ID professional lead the project, would have benefited her as a first time SME. In the interview Ava stated what she would like to see:

[That] There is better organization and consistency in each class because I did different things in each class. So, [the ID professional] taking the lead. I think earlier I had talked about how it felt like it was a mutual collaboration, but maybe it shouldn't be especially for someone brand new...maybe next time I do this with someone, I could be more collaborative for sure. But definitely the first time, maybe they should take the lead, and maybe they still should always take the lead.

In addition to the ID professional taking the lead, Ava mentioned several times how she wished there was more organization. She wanted a structure of what she was supposed to do and what the ID professional was supposed to do. Ava wanted, “a structured outline that you just check off. You do the same thing for every course, every program, this is step one, this is step two, instead of kind of doing this and that”. Ava liked collaboration but wanted structure and definition of what should be happening throughout the course design process. Having a structured process would contribute to a more effective process.

While Barbara knew the second course design project was going to be different, she wished she knew more about the full scope of the project. Barbara shared she was supposed to be enrolled in this “how-to” course design course, however during the email exchange with the ID professional, she found out she was not. Barbara shared some of her thoughts on this course as well as not knowing the full scope of what she was expected to do:

If I was enrolled in that course, prior to designing, would I have accepted the project differently? Perhaps, I may have reluctantly said this is a lot of work. However, it's not my nature not to accept an Assignment; I may have addressed it differently. I don't usually turn down assignments, but I think I would have looked at it differently if I had to

go through that training and complete that training, prior to the start of the course development process.

Having a full understanding of all a course design project entailed would not stop Barbara from assisting, but she may have approached it differently.

For Indra, having an understanding of what a course design project consisted of, means not only knowing the roles and responsibilities of every member of the team, but it also means the members work within their scope. Indra assisted in a course design project at another college that was at a master's degree level resulting in licensing. She was the SME and the team consisted of the ID professional, an administrative assistant, a technology person, a chairperson, and a credentialing division resource person. Indra shares how difficult the project became because the administrative assistant continued to change content, even though she had no background or education in the subject:

This is what we're doing [Administrative Assistant stated]. No, no, we're not doing that [Indra stated]. Well yes, we are. That's what I decided [Administrative Assistant stated]. Who are you to decide this? You are not the SME. You're an assistant admin person that's putting in media, not content [Indra stated]. And it got so ugly, that we actually had to get the department chair for the program to review the content to see who was right. This person absolutely was adamant she knew better than I did. She did not have a degree. She had been hired as an administrative assistant, but she knew best.

Indra continued to describe how the rest of the team was silent, not even the chair spoke up. Eventually, the provost and dean were involved, and they had to side with Indra since she was the only SME on the team. Although this example shows the impact of communication on a

project, it also shows how important it is for the roles and responsibilities to be defined and followed to make the project run smoothly.

Chloe's experiences in course design often had a positive outcome due to the defined processes for the projects. She knew the expected deadlines and what her responsibilities were. Chloe also knew that the ID professional, as well as the media team, needed her content by a certain date as they had specific tasks to do in order to complete the whole course. When talking about the differences in roles, Chloe shared:

I think that designers are best at that [entering content into the course]. And I think that's where the task needs to be from an efficiency and expertise perspective... It takes extra time, but they're definitely better at it. And I mean, those are the kinds of things they could see easily. If a font changes slightly from one unit to the next I probably am not going to notice.

In addition to Chloe seeing certain tasks more fitting for the SME or the ID professional, Chloe referenced a checklist that states what needs to be done, what order, and by whom (see Table 4). The entire checklist has 136 steps, providing well-defined expectations for the course design project. Having clearly defined steps with who is expected to complete each task makes it easy to know where you are at in the process and who has an upcoming task.

**Table 4**

*Excerpt from Step-by-Step Course Development Excel Document*

Step	Description	Who
1	Obtain CLOs, text, and media guidelines	SME obtains from Curriculum manager
2	Obtain map template from training course	SME
3	Develop map	SME
4	Email map to ID	SME
5	First review	ID
6	Email map to Reviewer	ID
7	Second review	Reviewer
8	Email map to Curriculum Manager	Reviewer
9	Final review	Curriculum Manager

In Leticia's experience, there were no checklists, however, the project ran well because everyone knew what the end goal was and how their role contributed to this goal. Although Leticia did not decide on the format of the course, she knew there was a standard format the college followed for these courses. In addition, Leticia felt she was working with a team that was the best at what they did. She commented:

I knew they were selected because the team was put together the way it was [for the needed roles] ... I went in there believing that these people were the best at what they do. I believed when I joined the team that we were going to be the best." Leticia further explains that the team was picked because they could get the job done and knew their role. "We knew what everybody's part was [in course design].

In the end, Leticia felt the project was a success because they had all of the necessary roles, and everyone knew what their responsibility was to the team.



### ***Theme Three: Creating a Shared Culture***

The final theme of the case study is the importance of creating a shared culture between the CTE faculty and the ID professional. A shared culture includes a common goal, having trust and respect for each other, taking time to understand each other's preferences, and building on the strengths of each other (Campbell et al., 2009; Cowie & Nichols, 2010). While creating a shared culture takes a bit of time at the start of a project, from the participants' perspectives, it makes the project flow smoother and can add an element of fun to the project. The participants used words such as "collaboration," teamwork," "respect" and "strengths" when talking about a shared culture.

Barbara recognized that she has strengths and weaknesses when it comes to course design but felt that if the ID professional took a small amount of time on relationship building, the course design process would be better. When asked about her ideal course design situation Barbara shared:

I'm smiling because I think, Nicole, if you're ever assigned a project and you come into my world, I'd love to work with you because now you know how I learn, my strengths, and my weaknesses. What it took, well a good hour from last week and now an hour here, I think you have a good idea as far as my strengths and weaknesses, what makes me happy and excited about course development and what doesn't. So it goes back to that relationship building.

Barbara stated several times that maybe the ID professional must do things a certain way due to standardization, but any opportunities to fit the strengths and preferences of both the CTE faculty and the ID professional would be an improvement.

Leticia also felt that it is important to build on each other's strengths as well as have mutual respect for the course design process to flow well. She shared, "I just think people work well together if they respect what each other does and what their strengths are." Leticia further expanded that using these differences will ultimately help the students. She continued:

We can draw on each other and we can work together to make this complete thing [course]. I just think finding people who have different strengths, different abilities, and then just kind of seeing how we can put these together to make it easier for the students to understand or find different techniques to do these things.

Creating a shared culture for Leticia meant finding the best each member of the team had and using that to create the best course for the students. By creating a shared culture, Leticia learned from the others and had fun while accomplishing the common goal.

Indra also shared an experience that resulted in fun because of the mutual respect and common goal the group was working toward. At another CTE college, Indra worked with an ID professional and an assistant. She shared her interactions with this team,

It's also the individual personalities who you're working with, and what their investment is in what you're doing... They were a joy to work with. Back then, we didn't have Zoom and all the face-to-face stuff. It was all by email or actual phone. The two people I worked with, it's like they knew what their job was, they knew what the mission of the school was, and good communication... So that was a big difference, the motivation behind what got us motivated to get this done.

This team Indra was part of, wanted to get these courses complete and worked together to accomplish this goal. Indra compares this experience to that of the experience with the administrative assistant at the other college:

I think with the administrative assistant, she was disgruntled because she didn't have the education, yet wanted to be in the role, and part of it was jealousy. And I can't say for sure this is true. But I got the feeling. She was trying to make herself look good to her specific supervisor and that it was about her being promoted or to get more responsibilities.

In this course design experience, there was a lack of a shared culture. While the others on the team were silent, Indra had a feeling this administrative assistant was looking out for herself, not the good of the project.

Ava saw the importance of working collaboratively together to build a shared culture. Ava explained, “We were working collaboratively together. Definitely the personality, or at least for the working style, it's important to make sure that it works for the team.” Ava saw the need for the team to have complimentary personalities or styles for the process. While the first few courses did not go so smoothly, Ava explained by the time they reached the last two courses, they did understand how both roles fit together and how to best use the “expertise” of each other. Taking the time to get to know each other’s working style is part of creating a shared culture, which can impact a course design project.

The three themes found in the cross-case analysis include 1) impact of communication, 2) defined project is key, and 3) creating a shared culture. This next section will examine the second research question exploring equity in the course design process.

### ***Equity in Course Design***

Research question 2: What considerations do CTE faculty make in their course design when thinking about equity?

Similar to the research presented in the literature review, there was no cohesion in the understanding and application of equity in course design between the five participants. For Barbara and Leticia, equity did not happen in the course design process, it was provided to individual students one on one, based on the students' needs in tutoring and feedback. Chloe suggested allowing students to present their assignments in multiple ways but cautioned against trying to standardize this across all courses or all programs as it does not always work. For Indra, equity in course design is to provide both sides of an argument, not just the middle. She wanted students to think critically.

Although all participants had slightly differing views on equity, most mixed in diversity and inclusion in their understanding of equity. Similar to the literature, the “diversity distractor” was present in the responses of the participants (Bensimon et al., 2012; Ching et al., 2020). Leticia mentioned more diverse names being used such as “heritage names”, Ava talked about the importance of students seeing images that reflected them and Indra talked about removing biased language from the course design. While presenting names, images, and language that is non-bias and reflective of the students lends to making a course more diverse or inclusive, it is not necessarily equitable.

## **Conclusion**

The research conducted examined five CTE faculty's experience in working with an ID professional on course design. Each participant shared their own experiences and had an opportunity to reflect on changes and best practices for future course design projects. In addition, the participants shared their understanding of equity and any considerations they make as both a CTE college faculty and as a SME working on course design.

A cross-case analysis revealed three themes related to course design including 1) impact of communication, 2) defined project is key, and 3) creating a shared culture. In addition, a discussion on the lack of cohesion around equity in course design was presented. Based on these findings, the next chapter discusses the implications, recommendations for practice, and suggestions for future research.

## **Chapter 5 Implications, Recommendations, and Conclusions**

This study explored the working relationship between CTE faculty and ID professionals in course design from the faculty's perspective. Also examined was the understanding of equity in the course development process. This study looked at the collaboration process and the essential elements in course design. Three main themes emerged in the cross-case analysis related to the course design process: 1) impact of communication, 2) defined project is key, and 3) creating a shared culture. While there was no cohesive theme regarding equity in the course development process, the findings were quite varied including individual tutoring and remediation as being equitable, as well as making sure the images and names are diverse.

This final chapter will start by discussing the findings of both research questions. Next, the implications of the study will be explored. Finally, this chapter will conclude with recommendations for practice as well as suggestions for future research.

### **Discussion of Findings**

This discussion of findings will examine how the three main themes of the cross-case analysis 1) impact of communication, 2) defined project is key, and 3) creating a shared culture connect to the findings of the literature. In addition, this discussion will address the lack of equity knowledge and application in the course design process. Finally, potential influences on the findings will be addressed in this section.

#### ***Impact of Communication***

The impact of both positive and negative communication was woven throughout this study. The lack of speaking up or asking questions by the participants when they were not sure of why something happened hindered the collaborative process in course design. Barbara not asking for a timeline resulted in her being unable to finish a course. Chloe did not like to bring up issues

she did not have the solution for, however, when she took the time to reflect on this lack of communication, she acknowledged that others may have a solution that she did not think of. Similarly, Bawa and Watson (2017), found it important to not only be a good listener in the course design collaboration process but be good at asking questions. Asking questions brings up new ideas which may improve the course design.

Another aspect of communication that impacted the participants was the method of communication for feedback and the timeliness of the feedback. Indra liked email feedback but wanted it to be a one-to-two-day turnaround. Chloe also liked email feedback, but at times, she wished she had the opportunity to meet for real-time feedback. Sometimes the feedback was delayed, which was not ideal when you only have five weeks to complete a course. In the study by Bawa and Watson (2017), the researchers found that rigorous (back and forth) communication between the stakeholders is an important aspect of the collaboration process. The method of communication was also an issue for Barbara. She liked meeting and collaborating on ideas; she did not like receiving or giving feedback in the template. She spent more time learning the template than on the ideas she entered. Her experience is similar to a faculty member in a study by Chao et al. (2010) that shared how the faculty member was so overwhelmed by the amount of detail in the feedback comments left by the ID professional in the template that the faculty felt they needed to meet to discuss. Both the method of feedback and timeliness can impact the collaboration process.

One of the influences on the communication stemmed from the participants' desire to be a helper. Outside of being a faculty member, several of the participants hold roles or duties that support student success. Leticia, Barbara, and Chloe are all academic coaches, a role that supports new or struggling students academically. Many of the participants used language such

as “it’s my nature” when describing why they say yes to a project, or why they do not ask too many questions, even if they do not understand the reasoning behind something. These participants want to be helpful and may have not raised issues or asked questions that delayed the project or made them seem not as helpful.

### ***Defined Project is Key***

The participants in this study who did not have a defined project struggled with the process. Ava had a lot of difficulty working with her ID professional due to the lack of organization and direction on tasks and timelines. She went into meetings not knowing what they were going to discuss. Every class Ava helped design was built differently. She wished there was structure, a pattern, and a set timeline of everything that needed to be done. Similarly, Barbara struggled in her second-course design project because the structure was so different from the first experience where she worked hand and hand with an ID professional. She did not know when her content was due, she did not understand the required template that was to be used, and she was offered little to no flexibility in how she shared the content with the ID professional.

Participants who helped contribute to what the defined project encompassed often were more successful and enjoyed the process more often. Both Indra and Chloe appreciated having a checklist of tasks that needed to be completed, who was to complete them, as well as when they happened in the timeline. While Chloe liked this structure, she also appreciated it when the ID professional supported her in the tasks she was not strong in, like wordsmithing and APA format. In Barbara’s third experience, she knew what her role and responsibilities were, but appreciated when she was able to get the required content over the ID professional in a manner that suited her, not using the template. This experience was “fun” for Barbara. Having the ability to contribute to what the defined project entailed made a difference for the participants.



Like the participants' experiences, the literature showed faculty want structure and timelines but want options in how the work will be completed. In one study, the faculty wanted to have a discussion with the ID professional to mutually determine the division of tasks (Bawa and Watson, 2017). While having templates and guidelines can be a positive asset to the course design process, another study found there needs to be a discussion first on how they are used and how they can support the project (Chao et al., 2010). This did not happen in Barbara's experience and for Ava, this was a missing piece to her course design projects. Similarly, in Richardson et al. (2019) and Xu and Morris' (2007) research, when the participants were asked what the role of the ID professional is, there was a mix of responses and it was clear that even within the same college, the role of ID professional is not clearly defined or understood. While being part of the conversation to define the project is important for faculty, having structure and a timeline is also important to the course design process.

One of the potential influences on a defined project was the lack of time for the course design process. Except for Leticia, all the participants described the amount of time given to complete a course as between three to five weeks. This includes subject content selection, course build, incorporating assets or media, as well as the review or quality control period. For Ava, the time constraints impacted her ability to be as detailed on the content as needed. Ava shared:

Moving forward when they want to make the curriculum changes like this instead of being reactive, be thoughtful about the process... It's reasonable that nobody's rushed and that they can pay attention to details because there was a lot... We would be in the middle of another one [course] and I would get an email about a specific question or a lab activity that maybe I forgot to add something, or it didn't work, or there was an error. And again, it was because of the speed that we were asked to do this and didn't have time

to really look over it and pay attention to detail. Like as a nurse, I feel we [should] pay attention to detail.

Ava had to skip some of the details especially when it came to reviewing the content due to a lack of time. Another participant, Chloe, understood the step-by-step process for the course design projects, but sometimes she had to move forward without timely feedback. At times she would submit a unit of content midweek and would not get feedback until the next week. By that time, she had already moved on to the next section since she had to complete five units in five weeks. Since feedback is an important part of the project, these delays caused issues with other units as she had to stop and go back and make changes. Time constraints caused parts of the project to get overlooked or bypassed at times.

### ***Creating a Shared Culture***

While the cross-case analysis revealed three themes for this study, creating a shared culture lies at the heart of course design. Leticia and Indra explained how it was important for the team to come together and understand what the common goal of the project was. Several of the issues with methods of communication, timelines, and role expectations could have been solved if the CTE faculty and the ID professional came together at the start of the project to create a shared understanding of each person's strengths and weaknesses as well as any preferences they have in course design. Chloe and Barbara both recognized some processes were standardized in course design but understanding the "why" behind those processes would help them internalize and have greater buy-in to the process.

Like the participants, having a shared culture was a theme in many of the studies in the literature. Cowie and Nichols (2010) explained the importance of both understanding each other's professional culture as well as coming together to create a shared culture. Creating a

shared culture does include respect, trust, and understanding, but it also means being willing to speak up and challenge the content or challenge the standard process to possibly create a better way (Campbell et al., 2007; Richardson, et al., 2019). In another study, understanding each other's preferences and dislikes was also found as a critical component of creating a shared culture between the faculty and ID professional (Chao et al., 2010). Creating a shared culture is foundational to the collaboration process in course design.

CTE faculty who have a supervisor who model these same traits and behaviors may be one possible impact on the findings of creating a shared culture. Several of the participants shared the importance of respect and support from their supervisor in the course design process. In one example, Barbara shared that the relationship she had with her supervisor impacted her willingness to volunteer. "I go to her if I perceive a large problem and we communicate about it, if she needs assistance with a project, I usually volunteer. So, the relationship was there." According to Richardson et al. (2019), an important factor in instructional designer and faculty collaborative relationships includes buy-in and support from administration. For Chloe, she sometimes accepts things are the way they are in course design or other areas of teaching and learning, because of her respect and belief in her supervisor. She explained:

I think she looks out for all of us. And if Sam and I ever disagreed about something, I would be like, let's go with Sam because of her track record and how she's cared about us, that I would always defer to her judgment even over mine. Now, that said, that doesn't mean I wouldn't bring up something. But with Sam, I will always feel heard. And for me personally, that's enough, if I feel like I've been heard, even if it turns out that mine isn't the popular opinion, you know, being heard was important.

Chloe felt comfortable enough to share her thoughts with her supervisor as she knew she would be heard. For faculty who are used to having a shared culture of respect, trust, and collaboration with their supervisor, it may be more natural to be part of creating a shared culture with an ID professional than for those faculty who do not have a shared culture currently.

### ***Equity Knowledge and Application***

Throughout the findings, from the most experienced to the least experienced CTE faculty, equity knowledge and application in the course design process were lacking. The research literature concurs with how Barbara and Leticia described equity in their practice; tutoring and remediation as an equity method (Booth et al., 2014). Similar to Ching (2018), Ava saw professional development as a way to implement equity. Only Chloe mentioned any type of design that would allow students to have choices or options. Even the most experienced CTE faculty, Indra, did not reference specific ways to implement equity into the course design beyond making sure the verbiage was not biased and presented extremes of a controversial topic. No consideration was discussed related to student preferences or learning abilities.

While I anticipated the participants not knowing particular frameworks or design methods, I expected more consideration of students learning styles. However, in many of the courses the participants helped build, the courses were standardized across the college. Since each unit had to have similar activities, adding in a particular design framework such as UDL may be difficult since faculty are unable to modify the courses they teach.

### **Implications**

While the results from this case study cannot be explicitly generalized to other institutions, the experiences and stories shared can help provide some general guidance for both

CTE faculty and ID professionals in the course design process. In addition, implications for equity in course design are shared.

### ***Implications for CTE Faculty***

This study found barriers to communication and a lack of defined roles and responsibilities had an impact on the course design process. In one study, Xu and Morris (2007) found it helpful to the communication process to clearly define the roles and responsibilities of each member of the team. Similarly, for the participants in this study, not knowing who was responsible for each task or not knowing deadlines was a hurdle for courses being completed on time. While defining the project and managing the project needs to lie with the ID professional, faculty need to speak up and ask questions if they are unsure of what is being communicated. In addition, faculty need to be willing to give feedback and share ideas that might improve the course design process. When faculty do not engage in an active communication process, they miss the opportunity to improve the course design process as well as improve professionally as a faculty member. Effective communication is necessary for the course design process.

### ***Implications for ID professionals***

Although this study only looked at the viewpoint of CTE faculty working on course design, there are several implications for ID professionals who work with CTE faculty. The participants in this study were at times looking for a coach, mentor, and someone to give examples and feedback. Richardson et al. (2019) suggest that ID professionals do not just give the answer but give suggestions and choices to help guide the faculty in the decision-making process. In addition, a faculty member in the study found it helpful when the ID professional gave several examples of how others handled a similar issue. Chloe too, expressed how she wanted examples of what other faculty would do in a similar situation. While ID professionals

need to keep course design project deadlines and standards in place, they need to help cultivate an environment in which faculty feel supported but allowed to be creative and have autonomy over their work. They can do this by taking on a more active role as a coach and mentor.

ID professionals need to take an active role in creating a shared culture. Building trust, respect, and buy-in have been found as critical elements in the collaboration process (Richardson, et al., 2019). The results from this study found a similar conclusion. ID professionals who do not take the time to build a professional relationship and create a shared culture with the faculty may find faculty frustrated with the processes or confused about expectations. This study found different ID professionals have different levels of expectations for the work faculty complete. This caused faculty to have to spend time learning the preferences of the ID professional in an environment that already had very tight deadlines. ID professionals can help alleviate some of this extra work by working with the faculty on shared expectations and preferences.

### ***Implications for Equity in Course Design***

As the educational landscape continues to change and grow for CTE, colleges must find ways to serve the needs of the student population. While this study is not representative of all CTE colleges, it was clear that equity in course design is not a major consideration beyond making sure students see images they recognize and see familiar names. Although including diversity in the course is important, colleges will continue to leave learners behind if they refuse to grow equity practices in course design. If the goal of CTE is to provide for the needs of the local community and help develop 21<sup>st</sup> century skills of critical thinking and problem solving, course design needs to be more reflective of the types of learning activities that best support the growth of students in these areas (Fletcher et al., 2012). Faculty can support the growth of

students by looking through the lens of “equity mindedness” when participating in course design (Ching, 2018).

### **Recommendations for Practice**

Based on the findings of this study, there are several recommendations for practice. At the start of any course design project, there needs to be an initial meeting with the CTE faculty and the ID professional to begin to build a working relationship around the project. This includes:

- Spending 10-15 minutes getting to know each other
- Identify the common goal of the project
- Discussing preferences on communication methods and establish the primary communication method
- Discussing timelines for the project and the impact if deadlines are not met
- Discussing and agreeing on roles and responsibilities
- Learning about CTE faculty’s likes and dislikes in the design process
- Discussing the areas in which the CTE faculty feels they need extra support in

Throughout the course design process, the ID professional needs to support the CTE faculty, offer guidance, and support to keep the project moving toward the goal. In addition, ID professionals need to realize that asynchronous (email) communication may not fit the needs of faculty and be willing to adjust to in-person or virtual meetings when possible. The CTE faculty need to speak up with questions or issues as they arise. Building a shared culture and having a clear understanding of the scope of the project is critical. Both the CTE faculty and the ID professional need to be open and honest in the collaboration process. Relationship building and

having a clear understanding of what each role in the design process does is critical to the process (Cowie & Nichols, 2010; Richardson et al., 2019).

In addition, time was a factor in this study. Timely feedback is necessary. Timelines need to be communicated as well as the impact of what will happen if a deadline is not met.

Administration of course design projects need to take into consideration the scope of the project as well as the CTE faculty and ID professionals' workload before giving deadlines. Allowing additional time for course design projects will allow for more meaningful development of learning activities to support the needs of the learners.

At both All Town College and Beach Town College, equity in course design was in the infancy stages. Institutions need to recognize the power of language and implement a common language around equity. A common language will help ensure understanding of equity across the college. Additionally, training CTE faculty and ID professionals on equitable practices and equitable course design frameworks is essential. Once training has occurred, equity best practices must be developed in each course beyond tutoring efforts. I recommend using a framework such as UDL to incorporate equity and student learning choices into the course design. Finally, during the review or quality control period, a reviewer needs to review the course with an equity lens to ensure the course is designed to provide ways to reach the needs of diverse learners.

### **Suggestions for Future Research**

This study examined how five CTE faculty explained the process of working with ID professionals in the course design process at two for-profit CTE colleges. Given the parameters for the study, I recommend the following for future research in this space.

- Conduct a study with CTE faculty at other types of CTE colleges that are not-for-profit or a public community college to see if the same challenges are found.



- Implement a study that interviews ID professionals to gain insight into the course design process from their perspective.
- Conduct an action research project that interviews both CTE faculty and ID professionals. In addition, through reflective practice, work with both CTE faculty and ID professionals on modifying their current process to make a shared process that benefits both parties.
- Finally, more work needs to be done in the area of equity. I suggest training and implementing an equity-based course design process such as UDL at a CTE college. Then, collect data and feedback to evaluate the effectiveness for learners.

## **Conclusion**

This study examined how CTE faculty explained the course design process when working with ID professionals including any equity considerations. While the results cannot be applied as the standard process for all CTE faculty, the experiences and insights are valuable for both CTE faculty and ID professionals in the course design process. While both positive and negative experiences in the collaboration process were shared, I learned best practices from both. Some of the best practices include understanding the impact of communication, having a defined project is key, and the need for creating a shared culture.

Equity in course design at both colleges is still in the early stages. While the faculty want to support students, many of their ideas around equity are similar to how equity is addressed in the literature review of this study with tutoring and remediation. While equity was limited in course design for the CTE faculty in this study, using creativity and collaboration with ID professionals in designing future courses can help support the needs of all learners.

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## Appendix A

### Participant Informed Consent Form

**Prospective Research Participant:** Please read this form thoroughly and feel free to ask as many questions as you need before you decide to participate in this study. You may ask questions at any time before, during, or after the study.

#### Purpose of This Research Study

This study is being conducted by Nicole Lewis, a doctoral student at George Fox University in Newburg, Oregon. The purpose of this research study is to explore how Career and Technical Education College (CTE) faculty explain working with Instructional Design (ID) Professionals at their institution during the course development process. In addition, the research will look at how equity is considered in course design.

#### Description of Study

If you consent to participating in this study, you will be participating in an unfunded study. As part of your consent, you agree to the following.

- To participate in three video recorded interviews through a remote platform such as Microsoft Teams or Zoom
- To review transcripts of your own interviews to check for accuracy

#### Risks and Benefits

There are no known risks in participating in this study, however unknown risks may occur during any research study. The researcher is taking all possible actions to provide confidentiality, however if you feel you have reported information that may cause you harm in any way, you have the right to strike the information from the transcript of your interviews.

There are several possible benefits to this research. Since this research is looking at the working relationship between CTE faculty and ID professionals, through professional reflection, you may discover practices that are beneficial for your future work with an ID professional. In addition, best practices for CTE faculty and ID professionals' collaboration effort may be found that can help inform future work between CTE faculty and ID professionals.

#### Confidentiality

Given the small number of participants, the researcher cannot guarantee all data will be completely confidential. Other individuals may know you participated in this study. However, the researcher will not use your name, and will identify you and the institution you work for with a pseudonym. The program you teach for will not be identified and only minimal demographic data will be used to protect your identity.

Only the researcher and her chair, Karen Buchanan will have access to the data collected from this study. All electronic data such as recorded interviews will be stored in a password protected

file on a cloud server. Any physical data such as the researcher's notes will be stored in a locked draw in the researcher's home office. All data will be destroyed 3 years after the conclusion of the study.

This study will be used in part to fulfill the requirements of the researcher's dissertation. The data collected may be used in reports, presentations, or publications. You may receive a copy of the dissertation once published if you so choose.

### **Withdrawal**

Participation in this study is completely voluntary. You may choose to withdraw at any time without penalty or bias.

### **Voluntary Consent**

This form explains possible risks, benefits, demands of the study and how your information will be used. Any questions about this study should be address to the researcher, Nicole Lewis (209-541-1501).

Your signature below indicates that you volunteer to participate in this research study. You have read the form and understand the requirements. You understand you may withdraw at any time, without any penalties. In signing this form, you are not waiving any legal claims or rights in case any legal fault was made by anyone who is involved in the study. You will receive a copy of this form.

Participant Name (Printed): \_\_\_\_\_

Participants Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### **Contact Information**

Researcher: Nicole Lewis	Dissertation Chair: Karen Buchanan
Email: <a href="mailto:nlewis19@georgefox.edu">nlewis19@georgefox.edu</a>	Email: <a href="mailto:kbuchana@georgefox.edu">kbuchana@georgefox.edu</a>
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## Appendix B

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### GEORGE FOX UNIVERSITY HSRC INITIAL REVIEW QUESTIONNAIRE

Title: A Multiple Case Study Exploring CTB Faculty Members' Account of Working with ID Professionals in the Course Design Process \_\_\_\_\_

Principal Researcher(s): Nicole Lewis

Date application completed: 3/7/22

**(The researcher needs to complete the information above on this page.)**

### COMMITTEE FINDING:

✓ (1) The proposed research makes adequate provision for safeguarding the health and dignity of the subjects and is therefore approved.

\_\_\_\_\_ (2) Due to the assessment of risk being questionable or being subject to change, the research must be periodically reviewed by the HSRC on a \_\_\_\_\_ basis throughout the course of the research or until otherwise notified. This requires resubmission of this form, with updated information, for each periodic review.

\_\_\_\_\_ (3) The proposed research evidences some unnecessary risk to participants and therefore must be revised to remedy the following specific area(s) on non-compliance:

\_\_\_\_\_ (4) The proposed research contains serious and potentially damaging risks to subjects and is therefore not approved.

mlw  
Chair or designated member

3/11/22  
Date

## Appendix C

### Interview Protocol

#### Interview 1:

- Thank the participant for their participation.
- Review the informed consent and ask if the participant has any questions.
- Share my professional background and introduce the purpose of the research.
  - The purpose of this research study is to explore how Career and Technical Education College (CTE) faculty explain working with Instructional Design (ID) Professionals at their institution during the course development process. In addition, the research will look at how equity is considered in course design.

Interview 1	Guided Questions
Basic Introduction to the participant and introduction to the research.	<ul style="list-style-type: none"> <li>• Tell me a little about your professional career before becoming a faculty member.</li> <li>• Tell me about your professional career as a faculty member.</li> <li>• What made you decide to be a subject matter expert for course design projects? When did you start assisting in these projects?</li> <li>• Did you receive any SME training? If so, describe the process.</li> <li>• Describe the process of working on a course design project.</li> <li>• What is the most and the least amount of time spent on one course?</li> <li>• In a course design project, what is the role and duties of the faculty member?</li> <li>• In a course design project what is the role and duties of the ID professional?</li> </ul>

- At the conclusion of interview 1, thank the participant for their time and confirm the next interview date and time.

## Interview 2:

- Ask the participant if they have any questions before we get started.
- Ask participant if they have any clarifying or additional information about the last interview they want to provide.

Interview 2	Guided Questions
<p>Participant accounts of course design and equity.</p> <p>Big Questions:</p> <p>How do CTE college faculty describe the process of working with ID professionals in the course design process at their institution?</p> <p>What considerations do faculty make when thinking about equity?</p>	<ul style="list-style-type: none"> <li>• Describe what it is like working with an ID professional on a course design project. <ul style="list-style-type: none"> <li>○ What went well?</li> <li>○ What issues arose?</li> <li>○ What internal forces impacted your experiences?</li> <li>○ What external forces impacted your experiences? (examples if needed- accrediting body recertification, supervisor expectations, etc.)</li> <li>○ Will you expand on...</li> <li>○ How did that impact the project?</li> </ul> </li> <li>• Describe another project you worked on with and ID professional. <ul style="list-style-type: none"> <li>○ (Use the same prompting questions as above)</li> <li>○ How was this similar?</li> <li>○ How was this different?</li> </ul> </li> <li>• What does equity mean to you?</li> <li>• How does equity relate to course design?</li> <li>• When you are assisting with a course design, do you think about equity? If so, what considerations do you make?</li> </ul>

- At the conclusion of interview 2, thank the participant for their time and confirm the next interview date and time.



## Interview 3:

- Ask the participant if they have any questions before we gets started.
- Ask participant if they have any clarifying or additional information about the last interview they want to provide.

Interview 3	Guided Questions
<p>Adding addition accounts related to the big questions and having the participant reflect on the process.</p>	<ul style="list-style-type: none"> <li>• Are there any other experiences you want to share on the course design process, if so, what are they?</li> <li>• Recalling the experiences working with an ID professional that went well and those that had issues, describe why you had the outcome that you did for each.</li> <li>• What could have been done differently to make the process of working with an ID professional better?</li> <li>• Reflecting on your own experiences, what do you wish you knew about being a subject matter expert working with an ID professional?</li> <li>• Knowing what you know now, is there a better way to have dealt with the external forces that impacted any projects you worked on? <ul style="list-style-type: none"> <li>○ Please explain.</li> </ul> </li> <li>• In what ways could the role of faculty and ID professions be improved in the collaborative process?</li> <li>• What elements/processes do you desire to see in future course design projects?</li> <li>• Thinking back to you understanding of equity in course design from the last interview, do you have anything else to add?</li> </ul>

- At the conclusion of interview 3, thank the participant for their time and participation.  
Ask if they have any questions.
- Let the participant know they will be contacted in a few weeks to review transcripts for member checking.

## Appendix D

### Coding Template

Adopted from Saldana (2009)

<b>Column 1 Raw Data</b>	<b>Column 2 Preliminary Codes</b>	<b>Column 3 Final Codes</b>
<i>This column will contain text from the interviews.</i>	<i>Listening (example)</i>	<i>Communication (example)</i>