

UCLA

UCLA Electronic Theses and Dissertations

Title

Constructing Coherence in the Community College Career Decision-Making Space

Permalink

<https://escholarship.org/uc/item/8gz691hn>

Author

Neri, Rebecca Colina

Publication Date

2019

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Constructing Coherence in the Community College Career Decision-Making Space

A dissertation submitted in the partial satisfaction of the
requirement for the degree of Doctor of Philosophy
in Education

by

Rebecca Colina Neri

2019

© Copyright by

Rebecca Colina Neri

2019

ABSTRACT OF THE DISSERTATION

Constructing Coherence in the Community College Career Decision-Making Space

by

Rebecca Colina Neri

Doctor of Philosophy in Education

University of California, Los Angeles, 2019

Professor Louis M. Gomez, Co-Chair

Professor Cecilia Rios-Aguilar, Co-Chair

Today, community college students are tasked with making high-stakes decisions about their major and career paths in a very complex and confusing decision-making environment, often without adequate labor market knowledge and career guidance which can have a direct impact on their future earnings, employment, and mental health (Baker, Bettinger, & Marinescu, 2018; Scott-Clayton, 2015; Rosenbaum, Deil-Amen & Person, 2006; Wolniak et al, 2008). This study utilized a mediated-action approach (Penuel & Wertsch, 1995) to examine the career development and decision-making processes of community college students. Researching the action of choosing a major and career path, rather than the individual making the decision, enabled the researcher to foreground structural and contextual affordances and barriers and provided a window into how students construct coherence (Erickson, 1968) in a complex decision-making environment (Baker et al., 2018). For the participants in this study, making a

decision about their major and career path required navigating a dynamic and shifting labor market (Fouad & Bynner, 2009), a complex ecosystem of postsecondary credentials (Carnevale, Garcia, & Gulish, 2017), and various contextual and structural affordances, barriers, and constraints (Duffy, Blustein, Diemer, & Autin, 2016). For many participants, this complexity was confounded by a lack of labor market knowledge and knowhow (Baker et al., 2018); sociopolitical barriers and previous schooling experiences (Diemer, 2009; Duffy et al., 2016); efforts to balance peers, family obligations, and work (Saenz et al., 2018); and experiences in classes, especially math and science, that impacted their self-efficacy and outcome expectations (Baker et al., 2018; Lent & Brown, 2013; Lent, Hackett, & Brown, 2000). The findings of this study suggest that community college students need: (a) access to labor market knowledge and knowhow; (b) differentiated career guidance and career exploration opportunities; (c) career guidance that extends into the classroom and is contextualized in disciplinary learning; (d) opportunities to explore and cultivate their sociopolitical development *across career fields*; (e) career guidance focused on developing their career adaptability; and (f) emotional and psychological support to navigate the stress, anxiety, and uncertainty they report feeling throughout their career development and decision-making processes.

The dissertation of Rebecca Colina Neri is approved.

Tyrone C. Howard

Teresa L. McCarty

Pedro Antonio Noguera

Louis M. Gomez, Committee Co-Chair

Cecilia Rios-Aguilar, Committee Co-Chair

University of California, Los Angeles

2019

Dedication

For my family, students, mentors, friends, and guides who have taught me,

To survive the Borderlands
you must live *sin fronteras*
be a crossroads.
– Gloria Anzaldua

Caminante,
no hay puentes,
se hace puentes al andar.
– Gloria Anzaldúa

Do work that matters. Vale la pena.
– Gloria E. Anzaldúa

Stumbling is not falling.
– Malcolm X

When we drop fear,
we can draw nearer to people,
we can draw nearer to the earth,
we can draw nearer to all the
heavenly creatures that surround us.”
– bell hooks

I just don't believe that
when people are being unjustly oppressed
that they should let someone else set rules
for them by which they can come out
from under that oppression.
– Malcolm X

The real power,
as you and I well know,
is collective.
I can't afford to be afraid of you,
nor you of me.
If it takes head-on collisions, let's do it:
this polite timidity is killing us.
– Cherríe L. Moraga

I am an act of kneading,
of uniting and joining
that not only has produced both a creature
of darkness and a creature of light,
but also a creature that
questions the definitions of light and dark
and gives them new meanings.
– Gloria Anzaldúa

Table of Contents

Chapter 1: Introduction.....	1
Problem Statement.....	1
FCC-UCLA Research Practice Partnership.....	7
Purpose of the Study.....	9
Summary of Methods and Research Questions.....	9
Chapter 2: Literature Review and Conceptual Framework.....	11
History of Community Colleges in the U.S.: Contested Goals and Origins.....	12
Completion Agenda.....	15
Designing Guided Pathways to Redesign America’s Community Colleges.....	18
The Potential to (Re)produce Equity Gaps in Completion.....	23
Conceptual Framework.....	25
Various Perspectives on Career Identity Development.....	26
Erickson: fidelity, ideology, and work.....	26
Career exploration, commitment, and reconsideration and the 4 Identity Statuses.....	28
Life-span approach.....	30
Person-Fit approach.....	30
Self-efficacy and learning experiences.....	31
Career construction approach.....	32
The Significance of Context.....	33
Contextual factors: The labor market and complex ecosystem of postsecondary credentials.....	35
Sociopolitical barriers: Stressors and critical consciousness.....	37
Putting it All Together through the “Mediated-Action Approach”.....	39
Work Transitions as Mediated-Action in the Context of Community College.....	40
Chapter 3: Methods.....	44
Study Design and Rationale.....	44
Research questions.....	44
Context and Setting.....	45
Positionality.....	48
Recruitment and Sampling.....	49
Participants.....	50
Data Collection.....	51
Brief Labor Market Questionnaire.....	52
Interview Protocol.....	52
Contextual Factors Guiding Data Analysis.....	53
Data Reduction and the (Re)construction of Student’s Career Development Stories.....	55
Data Analysis.....	56
Career Development Stories.....	59
Special Population Interviews.....	60
Study Limitations.....	62

Chapter 4: Findings.....	63
Section 1: Career Development and Decision-Making.....	64
Factors Influencing Students’ Career Development and Decision-Making.....	64
Career Development Stories.....	87
Why Did Students Change Their Major and Career Paths?.....	92
Networks of Support and Information.....	93
Section 2: Labor Market Knowledge and Knowhow.....	102
Labor Market Knowledge.....	104
Students’ Questions About the Labor Market.....	110
Section 3: Special Populations.....	127
Transitional Age and Former Foster Youth.....	128
Undocumented Students.....	148
Students with Disabilities.....	165
Chapter 5: Discussion and Implications.....	179
Labor Market Knowledge and Knowhow.....	180
Differentiating for Students’ Career Development Trajectories.....	183
Learning Experiences: Courses and Self-efficacy.....	186
Nurturing Sociopolitical Development.....	187
The Career Adaptability of Special Populations.....	188
Intersectionality and Career Development.....	191
Limitations and Future Directions.....	193
Chapter 6: Conclusion, Implications, and Recommendations.....	195
Appendix A: Consent Form.....	197
Appendix B: Demographic Form and Labor Market Questionnaire.....	199
Appendix C: Interview Protocol.....	201
References.....	203

List of Figures

Figure 1. Students' career decision-making process organized by level of uncertainty and change.....	82
Figure 2. Reasons students change major and career paths.....	91
Figure 3. Students' networks of support and information.....	93
Figure 4. Networks of support and information by gender.....	94
Figure 5. Networks of support and information by race/ethnicity.....	94
Figure 6. Networks of support and information by gender and race/ethnicity.....	95
Figure 7. Networks of support and information by first generation status.....	96
Figure 8. Networks of support and information by first generation and race/ethnicity.....	97
Figure 9. Networks of support and information by first generation and gender.....	98
Figure 10. Networks of support and information by first generation, race/ethnicity, and gender.....	99
Figure 11. Networks of support and information, diversity with in the Asian population.....	99
Figure 12. Variation in the type of career guidance participants received from family.....	100
Figure 13. Variation in types of family support by gender, by first gen, and by race/ethnicity..	101
Figure 14. Variation in family support by first gen and race/ethnicity.....	101
Figure 15. Bureau of Labor Statistics list of top 10 highest-paying careers and student-identified top 3 highest-paying careers	104
Figure 16. Bureau of Labor Statistics list of top 10 careers with highest level of job stability and student-identified top 3 careers with the highest level of stability.....	105
Figure 17. Bureau of Labor list of top 10 careers with the highest employment rate and student-identified top 3 careers with the highest employment rate.....	106
Figure 18. Student-identified top 3 careers that are the most rewarding and top 3 things that make a job rewarding.....	107
Figure 19. Student-identified top 3 reasons they would turn down a job.....	108
Figure 20. What participants desire to know about the labor market.....	110
Figure 21. Variation in participants' questions about the labor market by race/ethnicity.....	125
Figure 22. Community college career decision-making space.....	179

List of Tables

<i>Table 1.</i> Students' career development stories organized by level of uncertainty and change....	90
<i>Table 2.</i> Participants' questions about the labor market.....	111

Acknowledgements

Completing this process would not have been possible without the love, time, and guidance of my family, friends, students, mentors, guides, and community. To my committee, thank you for teaching me, both through words and by example, how to be a responsible, critical, and powerful scholar who fights to make an impact on the educational and life trajectories of all students, and especially nondominant student. To my advisor, Louis, thank you for always pushing me to be better; for reminding me, constantly, why we do this work; and for providing me with a home away from home. Your two famous words, “so what,” will forever guide my work. To my fairy madrina, Cecilia, I honestly don’t know what this process would have looked like without you. You provided me with opportunities that have shaped my career and life trajectory. When I felt lost and questioned whether this was the right path for me, you helped me relocate, hold onto, and incorporate my passion and personal reasons for being here into my work. Both you and Louis have not only opened doors to my future, you have also equipped me with the tools and confidence to step through them. Tyrone, you have been my north star for as long as I can remember. I can only hope to have as meaningful of a career and impact on students and families as you have had. Thank you also for teaching me to advocate for myself, say no 😊, and never apologize for my work. Pedro, long before UCLA you were one of my biggest inspirations for pursuing a PhD. I have learned so much from your dedication to praxis and efforts to transform schools in pursuit of educational equity. Teresa, you provided us with a home at UCLA; a place we all felt comfortable to be creative with, and critical of, our methods and approaches to research. Thank you for the love and dedication you put into each and every one of your students. To all my UCLA professors, thank you for molding me into the scholar I am today. Lew, thank you for our long conversations about theory and life. I have grown

immensely as a scholar through our collaboration and friendship. I feel blessed to have had a chance to learn from you and watch you in action. ☺ To the schools, practitioners, families, and students I have had the honor to work with, thank you for your time, trust, passion, and dedication to improving teaching and learning and the pursuit of equity.

To my UCLA familia...Shante, you have been there since the beginning and have been my rock throughout this whole process. We share a dream for a different world and we are dedicated to holding each other accountable to achieving it. Let's do this. Maritza, you taught me how to dance, pray, and love my way through this process. We have a long life of work to do together academically *and* spiritually. Our mission will be to combine the two and to believe in our power, ability, and right to do so. Krissia, my confidant, familia, writing and walking partner, and the person I share both my hopes for and worries about my future in academia...thank you for being my friend, for reminding me of who I am and how far I have traveled to be here, for breaking the restraints I place on myself, and dreaming about the future with me. We got a lot of work to do and I can't wait. Veriene, you have been my hero since day 1. Thank you for always believing in me, constantly reminding me of who I am, grounding me, and seeing the strength in me when I struggle to find it. To the rest of my UCLA familia, Jahneille, Benny, Melo, Menissah, Tunette, Lilia, Christina, Natacha, Emily, Kaelyn, Ung Sang, and everyone else who has supported me along the way, thank you for your love, wisdom, guidance, motivation, and friendship. Kristen, aka my soulmate ☺, our friendship, perspective on life, love, and spirituality, and our commitment to helping each other health through the struggles we have each endured bring clarity, purpose, magic, and hope into my life. Meklitiye, you were the first person to make me believe I could accomplish any of this. When we were at Stanford, you did not allow me to give up on myself and believed in my potential long before I did. Thank you for always being

happy for me and inspiring me to reach a little further. Raf, you are pure love and light, the best hugger I have ever met ☺, and one of the most inspirational women and writers I know. You remind me to follow and accomplish my wildest dreams and never ask permission to do so. You have already changed my world and the world of so many. Angelita Marilyn thank you for your love, for cherishing mine, and for helping me be confident in my own power. Hannah, Melissa, and Monica thank you for being my sisters; for laughing with me, listening to my irrational thoughts, and helping me through the toughest times. To the Chavez family, thank you for being my Los Angeles family. You welcomed me at a time when I needed family the most. I will forever be grateful. To Erika, thank you for guiding me through the process of releasing and letting in, for sacred space, and for the beautiful healing community you have built for all of us.

To my family, none of this would have been possible without the hard work and sacrifices you have made for me to be where I am today. Thank you for loving me, believing in me, and being proud of me. Momma, you have been one of my greatest inspirations. Your tireless hard work and dedication to your students, children, grandchildren, nieces, and nephews has been the strength I need to keep pushing when things feel impossible. The struggles we have endured together have made me a strong, powerful, empathetic, and resilient woman, sister, auntie, friend, and educator. Pops, I wouldn't be here without the sacrifices you made to ensure we were healthy, safe, and had opportunities to thrive in this world. You always bring me back to my roots and since I can remember, you have always believed in my ability to make an impact on this world. I am proud to be your daughter. To nana and papá, no matter how lost I feel, you have provided me with a place to always come home to. Thank you for your love, support, and the tremendous sacrifices you have made for me to be here. To my grams and gramps, thank you for getting me through the most trying month of this entire process. Thank you for taking care of

me, the sense of security you have always provided for me, and your unconditional love, pride, and belief in me. To my tia Sylvia, thank you for being my second mom, for teaching me how to see the beauty in life, and for being a constant reminder of the power of love and taking care of others. To all my brothers, you have made me strong and the experiences we have shared have defined who I am as a person, woman, and educator and my purpose for doing this work. To my nieces and nephews, you are pure joy and love and my reason for pushing through the hardest times. Finally, gracias a Dios for this journey and the ability to Your work yet another day.

VITA

REBECCA COLINA NERI

CURRENT POSITION

Tenure-Track Assistant Professor at Indiana University, Bloomington in the Learning and Developmental Sciences division of the School of Education's Department of Counseling and Educational Psychology. (Signed Contract, 02/08/19; Start date: 08-01-19)

EDUCATIONAL BACKGROUND

- 2005-2006 Stanford University, School of Education
M.A. in Education
- 2001-2005 Stanford University, School of Humanities & Sciences
B.A. in Sociology; Minor in Psychology; Honors in Education

Credentials: CA Multiple Subject; CA Single Subject in Foundational Mathematics

RESEARCH EXPERIENCE

- 2018-2019 *Research Assistant, Equity & Diversity Initiative, UCLA*
- 2017-2019 *Research Assistant, Pasadena City College-UCLA Research-Practice Partnership, UCLA*
- 2016-2019 *Hub Director/Research Assistant, Los Angeles School Improvement Network (LASIN), UCLA*
- 2016-2019 *Research Assistant, The UCLA Pritzker Center for Strengthening Children and Families, UCLA*
- 2016-2017 *Research Assistant, UCLA Community School College-Going RPP, UCLA*
- 2015-2017 *Research Assistant, National Center for Research on Evaluation, Standards, and Student Testing (CRESST), UCLA*
- 2013-2016 *Research Assistant/Improvement Specialist, Developmental Evaluation of the Police Orientation and Preparation Program (POPP), West LA College/UCLA*

PUBLICATIONS

- Neri, R.C., Lozano, M., & Gomez, L. (2019). (Re)framing Resistance to Culturally Relevant Education as a Multilevel Learning Problem. *Review of Research in Education*, 43(1), 197-226.
- Quartz, K.H., Murillo, M., Trincherro, B., & Neri, R.C. (2019). Framing, Supporting, and Tracking College-For-All Reform: A Local Case of Public Scholarship. *The High School Journal*, 102(2), 159-182.
- Neri, R.C., Lozano, M., Chang, S., & Herman, J. (2016). High-Leverage Principles of Effective Instruction for English Learners. From College and Career Ready Standards to Teaching and Learning in the Classroom: A Series of Resources for Teachers. *Center on Standards and Assessments Implementation*.
- Neri, R.C. & Rios-Aguilar, C. (2016) [Review of the book *Cracks in the Schoolyard: Confronting Latino Educational Inequality*, Ed. by Gil Conchas]. *Teachers College Record*, June 6, 2016, no. 21019

BOOK CHAPTERS

Neri, R. C. (2018). Learning From Students' Career Ideologies and Aspirations. In J.M. Kiyama and C. Rios-Aguilar (Eds.) *Funds of Knowledge in Higher Education: Honoring Students' Cultural Experiences and Resources as Strengths*. New York, NY: Routledge.

WORKS IN PROGRESS:

Neri, R.C., Rios-Aguilar, C., Zipin, L., & Huerta, A. (revise and resubmit). Surfacing Deep Challenges for Social-Educational Justice: Putting Three Key Frameworks into Dialogue. *Harvard Educational Review*.

Rios-Aguilar, C., Neri, R.C., Zipin, L., & Huerta, A. (revise and resubmit). *Funds of Knowledge, Community Cultural Wealth, and the Forms of Capital: Strengths, Tensions, and Ethical and Practical Considerations*. *Harvard Educational Review*.

Rios-Aguilar, C., Neri, R.C., Zipin, L., Esteban-Guitart, M., & Huerta, A. (revise and resubmit). (Re)contextualizing Funds of Knowledge Across Sectors and Regions. *Harvard Educational Review*.

Neri, R.C., (in progress). *Using Improvement Science Tools in the Developmental Evaluation of a Career and Technical Education Program*.

Neri, R.C. & Gomez, L., (in progress) *Developmental Mathematics Obstacles in Dual Enrollment Career and Technical Education (CTE) Programs: One Case of Overcoming Them*.

SELECTED PRESENTATIONS

Neri, R.C., *Funds of Knowledge, Community Cultural Wealth, and Forms of Capital: Strengths, Tensions, and Ethical Considerations*. Symposium accepted at the American Educational Research Association (AERA) 2017 meeting.

Neri, R.C., *College and Career Aspiration: A Funds of Knowledge Approach to Reimagining Career and Technical Education*. Paper accepted at the American Educational Research Association (AERA) 2017 meeting.

Neri, R.C., *Community Policing, Educational Institutions, and Third Order Change: The Promise of Inter-Institutional Partnerships*. Symposium accepted at the American Educational Research Association (AERA) 2016 meeting.

Neri, R.C., Gomez, L., Gomez, K. *Developmental Mathematics Obstacles in Dual Enrollment Career and Technical Education (CTE) Programs: One Case of Overcoming Them*. Paper accepted at the American Educational Research Association (AERA) 2016.

Neri, R.C. & Berryman, A., *Third Order Changes in Policing through Critical Pedagogy: Implications from a Participatory Action Research Study*. Paper accepted at the American Educational Research Association (AERA) 2016 meeting.

Yap, M. & Neri, R.C., *Visualizing Community Building and Social Capital in YPAR Using Social Network Analysis*. Paper accepted at the American Educational Research Association (AERA) 2016 meeting.

Neri, R.C., *Using Improvement Science Tools in the Developmental Evaluation of a Career and Technical Education Program*. Paper accepted at the American Educational Research Association (AERA) 2015 Annual Meeting.

Chapter 1: Introduction

In the last decade, local, state, and national initiatives have turned to community colleges to educate and train significant numbers of student populations to address educational, social, economic, and political shortcomings and workforce needs in the United States (Anderson, Barone, Sun, & Bowlby, 2015; Dowd 2003; Kiyama & Rios-Aguilar, 2017; Rosenbaum, Deil-Amen, & Person, 2006; Stevens, Kurlaender, & Grosz, 2015; Teranishi & Bezbatchesko, 2015). Such a high-stakes spotlight for community colleges comes given that 42% of all undergraduates in the United States are enrolled in community colleges (Ma & Baum, 2016). Community colleges are also the major point of entry to postsecondary education for Students of Color and low-income students. More than half of the Latinx, Black, and low-income student populations start at community college compared with 38% of White students, 36% of Asian students, and 15% of high-income students (Shapiro & Gomez, 2017). While community colleges have increased college access, greater opportunity has not increased college-degree attainment, specifically for students of color from historically marginalized communities (Dowd 2003; Teranishi & Bezbatchesko, 2015; Stevens et al., 2015; Sponsler, Pingel, & Anderson, 2015; Kiyama & Rios-Aguilar, 2017). Approximately 80% of community college students aspire to achieve, at minimum, a Bachelor's degree, but only 14% will obtain a BA degree within 6 years of community college entry (Horn & SkomSvold, 2012; LaViolet, Fresquez, Maxson & Wyner, 2018). This is in large part due to the challenges students face in transferring from a community college to a four-year university. In California, only 2% of students transfer after 2 years, 25% after 4 years, and 38% after 6 years (Bustillos, 2017). In sum, today's community college sector is plagued with "increased enrollment, increased stratification, and stagnation completion" (Baker, Bettinger, Jacob, & Marinescu, 2018, p.199).

In 2012, the American Association of Community Colleges (AACC) released their annual report, *Reclaiming the American dream: Community colleges and the nation's future*, which highlighted the completion problem in community colleges and set the stage for an era of policy and reform efforts aimed at improving community college student graduation and completion rates. According to the report, the main premise of the Completion Agenda is that a highly educated population is essential to economic growth and vibrant democracy and community colleges, if dramatically redesigned, play an essential role in reclaiming this American Dream. The Completion Agenda therefore tasked community colleges with,

increas(ing) completion rates of students earning community college credentials (certificates and associate degrees) by 50% by 2020, while preserving access, enhancing quality, and eradicating attainment gaps associated with income, race, ethnicity, and gender (AACC, 2012, p. x).

Most of the recommendations in the Completion Agenda's framework for change addressed community college operations (e.g. streamlined pathways, the elimination of boutique programs, and improved learning analytics) and organizational culture (e.g. collaboration, limiting faculty prerogative, emphasizing student access and success, data-driven action) (Harbour & Smith, 2016).

Very few would argue against seeing improved completion and graduation rates in community colleges. However, practitioners and scholars alike worry the all-out focus on completion comes at the expense of learning (Rhoades, 2012); prioritizes economic competitiveness over other individual and social benefits of higher education (Bensimon, Dowd, Longanecker, & Witham, 2011); is unrealistic and unsupported (Dowd & Tong, 2007); lacks the voice and experience of on-the-ground community college practitioners and students and therefore powerful or clear values for practice (Bensimon et al., 2011); and falls in the mix of

reform efforts focused on diversity and equity that fail to actually meet the needs of Students of Color (Bensimon, 2018; Bensimon & Malcom, 2012; Harper, Patton, and Wooden, 2009).

The Completion Agenda also coincides with an increasingly changeable and dynamic labor market in which work-related transitions and employer demands are much less predictable due to globalization, downsizing, the shrinkage of unskilled work and the expansion of service jobs, and technological advancements (Fouad & Bynner, 2008). Today, the median employee tenure is 4.3 years for men and 4.0 years for women and an individual will change jobs an average of 12 times across the course of her or his career (BLS: 2016, 2018). The employee tenure rate is even lower, 2.8 years, for the younger generation, ages 25-24 (i.e. community college student population), as well as the Latinx population, only 23% of whom had been with their employer for 10 or more years compared to 30% of Whites and 25% of both Black and Asian workers (BLS, 2018). Frequent job dislocation and career destabilization produced by the aforementioned factors have produced “gaps between what higher education can deliver and what labor needs” (O’Banion, 2019) resulting in uncertainty about the relationship between education and work and provoking questions about the purpose of education, its alignment to career, and labor market returns.

There have been a multitude of reform efforts in response to the Completion Agenda and the rapidly expanding and changing economy in the U.S. that include, amongst many others, the community college baccalaureate, apprenticeship models, STEM pathways, and alternative credentialing. One approach that has gained national attention and is currently being brought to scale to substantially increase graduation rates and narrow gaps in completion between student groups is the Guided Pathways model (Bailey, Jaggars, & Jenkins, 2015). The Guided Pathways model calls for a fundamental redesign of community colleges that, in serving their purpose of

providing open access to students, have become “cafeteria colleges” in which students are left to their own devices to wade through often confusing and incoherent course lists and programs to pick a major and piece together a coursepath. Bailey et al. (2015) argue that the cafeteria model historically employed by most community colleges has produced a system in which: 10-40% of students who apply, don’t show up to their first day of classes; more than 20% are still enrolled with no credential after 6 years; and students who do earn a BA degree end up with a multitude of excess credits. Drawing on behavioral economics, organizational behavior, and cognitive science, the Guided Pathways model attempts to remedy these challenges through creating “clearer, more educationally coherent pathways to credentials that in turn prepare students for success in the workforce and further education in fields of economic importance to their regions” (Jenkins, Lahr, Fink, & Ganga, 2018, p.1).

As an integrated, institution-wide and student-centered approach, Guided Pathways is made up of four dimensions to decrease students’ time to completion: (1) creating and clarifying curricular pathways to employment and further education; (2) helping students choose and enter a pathway; (3) advising and supporting students to stay on their path; and (4) ensuring students are learning throughout the process. Central to Guided Pathways are clear, educationally coherent program maps, or educational plans, that include specific course sequences, progress milestones, and program learning outcomes. Educational plans are aligned to what will be expected of students upon program completion both in the workforce and in further education for their specific pathway. Counselors support students throughout the process of exploring their academic and career options, choosing a program of study, and developing a plan based on the program maps. These plans are meant to simplify student decision-making and also enable colleges to provide predictable schedules, frequent feedback, and targeted support to motivate

students to stay on track and complete their programs more efficiently. Within the Guided Pathways model, faculty is encouraged to ensure that students are building the skills they will need to succeed in their educational and occupational pathway.

While Guided Pathways has rapidly gained support from practitioners, the academy, funders, and the AACC, scholars and practitioners alike have also critiqued its underlying assumptions as well as expressed skepticism about the feasibility and potential pitfalls of its implementation (Hussak, 2018). For many skeptics, Guided Pathways raises many questions about the purpose of education and more specifically community college. Some are concerned about the fate of ethnic studies and liberal arts courses. Others argue that exploration, especially for young adults, is an important aspect of developing a healthy vocational identity and leading a fulfilling life. And for some students, especially those with family and work obligations, community college is a fluid space they can attend for temporary periods of time. There is also the question, is Guided Pathways better and where is the evidence?

While the cafeteria model of community college has been linked to low completion rates, several question the assumption that fewer options will lead to better outcomes, especially for a predominantly underserved student population. As Rose (2016) argues, Guided Pathways “runs the risk of reducing nuanced and layered human dilemmas to a technical problem, and thus being unresponsive to or missing entirely the particular life circumstance of students” (p. 1). Career decisions are complex, high-stakes decisions that require career exploration and guidance; an emerging awareness of personal talents, values, and interests; navigating contextual, structural, and perceived barriers and constraints; and having access to information about the labor market, majors, and work environments (Duffy, Blustein, Diemer, & Autin, 2016; Fouad & Bynner, 2009; Porfeli, Lee, & Vondracek, 2013; Savickas, 2012). Most students enroll in community

college without clear goals for college and career and the opportunities available to them (Gardenhire-Crooks, Collado, & Ray, 2006). Furthermore, Students of Color and low-income students continue to experience less access to qualified teachers; high quality curriculum, instruction, and resources; laboratories, computers, STEM programs, internships; and even the math, science and AP courses needed for college (Battey, 2013; Darling-Hammond, 2010; Dondero & Muller, 2012; Noguera, 2004; Oakes, 2005; Riegle-Crumb & Grodsky, 2010). Disparities like these not only limit the amount of information students have access to; they also limit students' perceptions of their capabilities (e.g. the relationships between prior math experience and STEM) (Diemer, 2009). For many students, the transition to community college can also be challenging financially, emotionally, and mentally and far from the optimal time to make a major life decision like choosing one's career path.

Perhaps the most widespread critique of Pathways is the feasibility and potential pitfalls of its implementation. As of 2017, 270 community colleges across the country were implementing the Guided Pathways model with varied levels of success and buy-in. For the majority of these colleges, quality and consistent guidance, resources, and financial support has been sparse. A small subset of these colleges were selected as participants in the AACC's Pathways project or serving as innovation incubators and are therefore receiving guidance, resources, and support. Guided Pathways, as an integrated, institution-wide reform effort, requires comprehensive, long-term guidance, resources, and support. Without it, challenging issues of ideology and power, organizational coherence, trust and collaboration, and knowledge and know-how can work to not only reproduce status quo outcomes, but also potentially cause more harm than good.

Take, as example, the recent phasing out of 2 dozen programs at University of Wisconsin-Superior where first generation students make up 46% of the student population. After a series of workshops over the summer based on the GP model, the university's task force streamlined its courses and majors, without consulting faculty, resulting in the suspension of 9 majors, including Political Science, Sociology, and Journalism, and 15 minors (e.g. Computer Science, Global Studies, and Earth Science). Under a suspension status, the programs could not accept any new or additional students and were given a 5-year period to make changes that would make them more viable in the marketplace. A major part of the task force's reasoning for their decisions was that poor, working-class students couldn't make decisions because there are too many choices. While the proposed changes and assumptions underlying them may not be the Guided Pathways reforms its creators would advocate for, they raise very important questions of equity for the implementation of GP: completion to what? For whom? And, under what conditions? They also beg the question, what types of knowledge and knowhow, resources, and guidance do community colleges need to implement Guided Pathways *in pursuit of equity*? These are some of the questions that guide the work of the Research-Practice Partnership that is the context of this study.

FCC-UCLA Research Practice Partnership

This study is part of a larger Research-Practice Partnership (RPP) that developed at a time when Guided Pathways was being brought to the foreground of community college reform efforts across the nation. Fuerte Community College (FCC) had long identified itself as a transfer institution and therefore paid much less attention to career pathways. After Guided Pathways thrust career into the foreground, FCC became increasingly aware of its gaps in knowledge and knowhow related to guiding students' career decision-making. Also at this time, FCC hired a

new economic workforce development director and started developing a new career center. Therefore, there was an increasing interest at FCC regarding questions like, “What is the process students go through to declare a major and career path? What are the developmental stages of students’ career development? How should students be supported to make meaningful decisions about their future, especially when many of them are just coming out of high school?” (FCC Practitioner, Interview, April 2019). There was also a concern about the tensions inherent within the Guided Pathways approach. For example, practitioners recognized that prolonged time to completion was indeed a problem, however they also understood that career exploration is an important part of an emerging adult’s identity development. They also questioned the “assembly line-like approach of Guided Pathways,

It's like thinking students are going to come in, they're going to take 15 units and they're going to pass all their classes. And, on top of that, they're going to come in with a declared major and they're going to be out in two years and then they're going to transfer with certificates and degrees. It's like, "Really?" Lives are way more complex. And, yeah, there are certainly students who have a really super clear idea about what they want and then do it, but I think they're in the minority (FCC Practitioner, Interview, April 2019).

The implementation of Guided Pathways also requires restructuring and transforming FCC structures, systems, and processes. FCC practitioners explain some of these challenges in relation to priority registration and ensuring students can enroll in the classes they need,

There are a lot of people teaching classes that students don’t need, but that they're never going to give up. There are programs that are never going to go away until they retire and we're paying more attention to enrollment management and yeah, we're getting better at it, but the fact remains that after a certain date, if somebody wants to get into Pathways, it's very difficult to ensure them English and Math. Other high demand classes also close up very quickly in a matter of days in some cases. (FCC Practitioner, Interview, 2019)

And, while FCC has recently received a federal grant to expand Pathways, FCC needs to discern where to best focus its efforts to, at the very least, improve their process for advising students' major and career decisions,

if we're going to assign students to a career community, I hope there's a process in place which includes the opportunity for a student to have a conversation with somebody who's informed to some degree ... You know what I mean? At the very least. (FCC Practitioner, Interview, 2019)

Purpose of the Study

The purpose of this qualitative study was to explore the career development of community college students and specifically, (a) how community college students make decisions about their major and career paths; (b) the factors that influence these decisions; (c) the networks of support and information that influence students' career development and decision-making processes; and (d) their labor market knowledge and knowhow. This study used a qualitative phenomenological research design and thematic and descriptive analysis to explore the following questions related to community college students' career development and decision-making,

1. How do community college students experience and navigate the process of choosing a major and career path?
 - a. What factors influence community college students' career development and decision-making processes?
 - i. How do these factors vary by race/ethnicity, gender, first generation status, and/or the intersection of these identities?
 - b. What networks of support and information do community college students draw upon to make decisions about their major and career paths?

- i. How do participants' networks of career support and information vary by race/ethnicity, gender, first generation status, and/or the intersection of these identities?
- c. What is the relationship between community college students' labor market knowledge and knowhow and their career development and decision-making processes?

Summary of Findings

The findings of this study suggest that community college students would benefit from:

1. access to timely, relevant, and contextualized labor market knowledge and knowhow;
2. career guidance and career exploration opportunities that differentiates for students' levels of uncertainty/decidedness and labor market knowledge and knowhow; previous career exploration opportunities and schooling experiences; and networks of support and information;
3. career guidance and support that is contextualized in disciplinary learning and extends into the classroom—especially math and science courses;
4. opportunities to cultivate their sociopolitical development *across career fields*;
5. career guidance focused on developing the career adaptability skills students need to navigate and adapt to change in an increasingly complex and unstable labor market;
6. emotional and psychological support to navigate the stress, anxiety, and uncertainty students report feeling throughout their career development and decision-making processes.

Chapter 2: Literature Review and Conceptual Framework

Today, community colleges are tasked with *doing the most for the most students and most underserved populations*: increasing access to higher education, serving as a transfer pathway, preparing students for entry into the workforce, partnering with high schools and local employers for CTE, and conferring credentials, certificates, and, as of recently, BA degrees. Furthermore, community colleges serve large, predominantly underserved student populations and are rarely provided sufficient guidance, financial backing, and material resources necessary for supporting the learning, persistence, and success of its student population. While community colleges have played an essential role in widening postsecondary educational *access* and participation to the masses, it has been less successful in facilitating student completion and graduation. This review of the literature begins by exploring the relationship between community colleges' completion challenge and their historical origins. Next, the community college completion agenda and its complexity is described in more detail followed by an exploration of the Guided Pathways model as one intervention that has contributed to, and attempts to meet the challenge of, the completion agenda. After describing the origins and purpose of the Guided Pathways model, critiques of its foundational assumptions and challenges related to its implementation will be explored in the context of equity.

The conceptual framework follows this section and explores the various perspectives that have been developed to research and describe career development and decision-making. After describing seminal theories and their limitations, the author makes the argument that foregrounding internal and individual-level factors and backgrounding the contextual and structural factors that influence career development is very problematic as it not only devalues the impact that a radically transforming labor market has on individuals' career decisions, but it

also fails to adequately explain the experience of underserved populations. Structural and contextual factors that impact the career development and decision-making of community college students are then explored. The author ties this large body of research together through Penuel and Wertsch's (1995) mediated-action approach for researching identity formation and argues that researching the career development of emerging adults utilizing a mediated-action approach provides a window into the complexity of engaging in work transitions like making a decisions about one's major and career path, especially in the context of Guided Pathways and community college. The literature review ends by utilizing the mediated-action approach to examine work transitions in the context of community colleges.

History of Community Colleges in the U.S.: Contested Goals and Origins

It is possible that the completion problem facing community colleges stems from historical origins that greatly challenge its attempts at developing organizational coherence. Community colleges as we know them today grew out of and in response to workforce and economic demands—both local and rooted in global competition—of the late 19th and early 20th century; increased enrollment demands resulting from various civil rights movements, the baby boom, and World War II and the GI Bill; and the attempts of elite and top-tier public universities to maintain academic prestige by diverting “lower-division” students away from their institutions (Brint & Karabel, 1989). Take, as example, the *California Master Plan of Higher Education: 1960-1975* that led the way in statewide coordination to accommodate mass access to education.

A Master Plan for Higher Education in California: 1960-1975

In their report, *A Master Plan for Higher Education in California: 1960-1975*, the Master Plan Liaison Committee (1960) identifies several motivating factors for the inception of the Master Plan. To start, the 1950's saw large increases in student enrollment and even larger

increases were expected in the decades to come (Kerr, 1963). As Clark Kerr, the engineer of the original Master Plan, explains, “back in 1960, we were concerned with just one issue ... and that was how to handle the tidal wave of students that was coming our way” (1999). The decade prior to 1960, the California Higher Education system had been experiencing unsteady growth. According to the Liaison Committee, this growth was due in part to the “flood of veterans, men and women” aided by the G.I. Bill (Coons et al., 1960, p. 45). Furthermore, projected enrollment numbers continued to predict a growing “tidal wave” of students, which was attributed to the doubling of pre-war birth rate, an increase in immigration, and the civil rights movement. With this projected increase in student enrollment, the liaison committee hired George Strayer, Professor Emeritus at Teachers College, and his team to conduct a full-scale study of California’s needs for higher education. The report called for an expansion of the system of higher education and argued that the role of the University should be to emphasize work at the upper division and graduate levels, while state, and especially junior colleges, should act as diversion tactics to ensure that Universities would not be overcrowded and could do the work they were best suited for (Stadtman, 1970).

As a result of this report, the 1959 Legislature saw the introduction of 23 bills, 3 resolutions, and 2 constitutional amendments designed to establish or study the need for new institutions, change the functions of existing institutions, and change the structure for the organization, control, and administration of publicly supported higher education in the state of California (Stadtman, 1970). State assemblywomen Dorothy Donahue introduced Assembly Concurrent Resolution No. 88 (ACR 88), which halted all expansion and restructuring of the California higher education system and called upon Liaison Committee of the State Board of Education and The Regents of the University of California “... to prepare a master plan for the

development, expansion, and integration of the facilities, curriculum, and standards of higher education, in junior colleges, state colleges, the University of California, and other institutions of higher education of the State, to meet the needs of the State during the next ten years and thereafter..." (Coons et al., 1960, p. 19). On February 1, 1960, the Master Plan report was presented to a special session of the 1960 Legislature and a few months later, on April 26, 1960, Governor Edmund G. Brown signed the Donahue Act into law.

The Master Plan asked the state to "despite the size of this enormous tidal wave, create a place in higher education for every single young person who had a high school degree or was otherwise qualified" (Kerr, 1999). It was through this commitment that the Master Plan was able to incorporate a mission seeking universal access to education. To address this mission, Junior Colleges were designated the open access level of education. Every individual would qualify to enroll in and attend a Junior College. Additionally, the Master Plan sought to increase the number of Junior College campuses by strategically placing them in populated areas. This increased accessibility would benefit a large sector of the population, mostly minority, immigrant, and working-class populations.

However, in the attempt to provide universal access to education, there was a clear and significant disconnect between equity and access. Brint & Karabel (1989) explain that prior to the Donahue Higher Education Act under which the Master Plan was passed, the California higher education system had specific "differentiated functions: lower-division and technical education for the junior college, and upper-division, graduate and professional education, and research for the state colleges and universities" (p.86). The passage of the Master Plan recommendations via the Donahue Act strengthened and institutionalized the three-tier system and the diversionary role of junior colleges. Therefore, while it is true that the Master Plan policy

has monumentally provided open access to higher education, especially for underserved populations, it also used Junior Colleges to insulate the University of California from those demanding access that did not fall within the privileged few. The “junior colleges [made] it possible for the public four-year institutions to reject a student without denying him an opportunity for higher education” (Brint et. al., 1989, p. 90, citing McConnel, 1962, p. 11). Thus, predicting the “tidal wave” student enrollment, the advancement of universal access to education in the Master Plan through the Junior Colleges served to divert (not ensure the completion or transfer of) mostly minority, immigrant, and working-class populations from state colleges and the prestigious UC system. The effects of these origins are demonstrated through the strides community colleges have made to increase access and enrollment in postsecondary education, without much promise for completion and transfer.

Completion Agenda

Amongst others, reports by the Lumina Foundation (Matthews, 2009) and the Georgetown University Center on Education and the Workforce (Carnevale, Smith, & Strohl, 2010) have refocused higher education to completion and away from access. These reports called into question the status of the American Dream, claiming that unless we dramatically redesign our system of higher education to increase student graduation and completion rates, we will lack the educated population we need to meet the demands of the local and global economy. The significance and urgency of the completion agenda was brought to national attention through President Obama’s 2009 speech, which introduced the American Graduation Initiative (Obama, 2009). In this speech, President Obama proposed a deadline for drastically increasing postsecondary degree attainment, proclaiming “by 2020, America will once again have the highest proportion of college graduates in the world.” Over the past decade, a great amount of

effort has been applied to measuring, analyzing, and addressing the completion problem in higher education institutions in the United States.

What we know is that completion is a significant problem in the U.S. Approximately 80% of community college students aspire to achieve, at minimum, a Bachelor's degree, but only 14% will obtain a BA degree within 6 years of community college entry (Horn & SkomSvold, 2012; LaViolet, Fesquez, Maxson & Wyner, 2018). And in 2016, more than 40% of students who started in a 4-year college had not earned a BA degree in 6 years or less (Hess & Hatalsky, 2018). The completion challenge impacts Students of Color and low-income students at even higher rates. In 2016, Black people comprised 15% of the population ages 18-24, but earned 11% of BA degrees (73 percent of parity) and Latinx people comprised 22% of the population ages 18-24, but earned 13% of BA degrees (59 percent of parity). In comparison, White people comprised 54% of the population ages 18-24, but earned 65% of BA degrees (120 percent of parity) and those of Asian/Pacific Islander origin comprised 6% of the population ages 18-24, but earned 8% of BA degrees (133 percent of parity) (The Pell Institute, 2018). And, in relation to socioeconomic status, only 15% of students in the lowest SES quartile earn BA degrees in 8 to 10 years of their expected high school graduation compared to 60% in the highest SES quartile (Cahalan et al., 2018).

What has been questioned is the shift to an all-out-focus on completion and its implications for measuring institutional effectiveness, especially for community colleges. While the completion agenda is meant to address higher education writ large, community colleges—both gateways and gatekeepers (Dowd, 2007) to higher education—are disproportionately impacted by its demands. As approximately 95% of community colleges have an open-admissions policy (Provasnik & Planty, 2008), community colleges, more than any other type of

public institution, are the primary gateway for “first-generation, part-time, non-traditional-age, low-income, minority, and female students” (Bragg & Durham, 2012). They therefore play an essential role in widening access to postsecondary education, especially for Students of Color and low-income students who disproportionately lack access to qualified and experienced teachers; quality instruction, curriculum, and materials; laboratories, STEM programs, and work-based learning opportunities; and college preparatory courses, including AP courses and high-level math and science courses (Battey, 2013; Darling-Hammond, 2010; Dondero & Muller, 2012; Noguera, 2004; Oakes, 2005; Riegle-Crumb & Grodsky, 2010). Resultantly, for community colleges, the relationship between access, completion, and equity is very complex. To pursue equity in access, but not completion not only shortchanges students’ educational experiences, it often results in students spending years in school without much return both educationally and occupationally. However, to pursue equity in both access *and* completion requires a dramatic restructuring (and the resources and funding to back it) of not only community colleges, but also, the K-12 system—to ensure students are academically prepared and have obtained a level of career readiness—and the 4-year college and university system that students aspire to transfer into.

Furthermore, community colleges, even more so than their 4-year counterparts, are directly shaped by their external environments and tasked with serving “multiple missions” that range from meeting labor market demands to serving as transfer pathways. Baber et al. (2019) explain that in its efforts to

balance the demands from both democratic principles and elite economic interests... the twenty-first century community college mission has multiplied and swelled with demands for increased performance and accountability while simultaneously being questioned of its role: as an access portal to postsecondary education, or as a vehicle for academic transfer to the baccalaureate, or as a provider of workforce education and occupational training (p.212).

In the context of serving “multiple missions”, completion can have myriad meanings. For some students completion could mean a credential, certificate, or entry into the workforce; for others, it could be an AA degree and/or transfer; and now completion in community college could also come in the form of a BA degree. For many students, completion might even be a combination of these outcomes. Bragg and Durham (2012) argue that measuring success in community colleges in the same way as 4-year colleges and universities (e.g. completion of a BA degree) can lead to confusing, if not inaccurate, reports of student success that also affect assessments of institutional effectiveness. However, they also argue that if the college-completion agenda is to succeed, “students’ diverse goals need to be understood and honored so that low rates of completion are not blamed on students’ uncertainty, ignorance, or underpreparation” nor further perpetuated by “deficit thinking in policy makers’ agendas, practitioners’ work, and researchers’ studies” (p.113).

Designing Guided Pathways to Redesign America’s Community Colleges

At the turn of the century, researchers from the Community College Research Center (CCRC) amongst others were recognizing significant equity gaps in community college completion. While the low completion rates were not surprising as the historical mission of the community colleges was largely to provide open access and increase college enrollment, there was a growing body of educators, researchers, funding agencies, and policy makers who made it their mission to better understand and address low rates of, and gaps within, community college completion. These efforts built a foundation for future community college policy, practice and research based on three broad areas. These three lines of inquiry constitute the various aspects of the Guided Pathways model: (1) the community college environment was too complex and confusing; based on theories from behavioral economics, students would benefit from simpler,

more coherent pathways into and through college-level programs (Scott-Clayton, 2011); (2) students who gained early momentum¹ were much more likely to graduate (Attewell, Heil, & Reisel, 2011; Jenkins & Cho, 2012); and (3) developmental assessments and coursework did not accurately identify students' needs, nor help underprepared students succeed at higher rates; accelerated and contextualized coursework held more promise (e. g., Bailey, 2009; Edgecombe, 2011; Perin, 2011; Zeidenberg, Cho, & Jenkins, 2010).

Growing out of these efforts, the Guided Pathways model was developed in response to research that suggested the current “cafeteria” model approach of community college was not working for today’s students, nor was it aligned to the current missions of community colleges across the country. The “cafeteria” model approach of community colleges is predictable considering in the 1960s and 1970s, at the time of the California Master Plan, the purpose of the community college was to increase enrollment and access without much promise for completion or transfer. Furthermore, during that era, transitions into the labor market were more viable and clear (Blustein, 2017) and a college degree was not yet a requirement for the majority of jobs in our country. However, in our current context, students have to navigate not only an increasingly dynamic labor market, but also an ecosystem of postsecondary credentials (Carnevale, Garcia, & Gulish, 2017) that is also extremely complex, uncertain, and confusing.

Carnevale et al. (2017) explain that the ecosystem of postsecondary credentials is more complex, fragmented, and multilayered than ever. Between 1950-2010, the number of occupations in our country grew from 270 to 840 and the number of postsecondary programs grew from 410 to 2,260. Students also have to navigate an exhaustive number of factors that impact the value of a postsecondary credential, such as type of credential (e.g. degrees,

¹ Students were considered to have gained momentum by passing the gateway courses in a program of study in their first year of college.

certificates, certifications, licenses, badges, etc.); delivery mode and models (e.g. distance learning, e-learning, competency-based, hybrid models, etc.); and their alignment to workforce demands and requirements (Cappelli, 2015; ConnectingCredentials, 2015). The confusion students experience in developing and actualizing their educational and career plans is confounded by the fact that most students enroll in community college without clear goals for college and career and the opportunities available to them (Gardenhire-Crooks, Collado, & Ray, 2006).

Students often have to navigate this complexity without access to the information they need and struggle to find effective counseling and reputable sources of information (Baker et al., 2018). And, while career centers, services, and counselors are available, students must seek them out and it has been found that students who need them the most are least likely to use them (Karp, O’Gara, & Hughes, 2008). When students do manage to receive guidance, those who are undecided are assigned to general education to provide them with time to explore the courses and majors that are available to them (Grubb, 2006). While educational and career exploration are important processes in one’s identity development and can lead to better career decisions (Porfeli et al., 2013), without the proper guidance students can end up taking courses that do not provide them with the credits they need to complete a degree and/or transfer. As a result, students often spend prolonged time in school without guarantee for transfer and payoff in the labor market (Bailey et al., 2015). Evidence has also demonstrated that students who enter a program in the first year of study are more likely to successfully earn a credential or transfer (Jenkins & Cho, 2012).

As an integrated, institution-wide and student-centered approach, Guided Pathways attempts to address these challenges through four dimensions: (1) creating and clarifying

curricular pathways to employment and further education; (2) helping students choose and enter a pathway; (3) advising and supporting students to stay on their path; and (4) ensuring students are learning throughout the process. Central to Guided Pathways are clear, educationally coherent program maps, or educational plans, that include specific course sequences, progress milestones, and program learning outcomes. Educational plans are aligned to what will be expected of students upon program completion both in the workforce and in further education for their specific pathway. Counselors support students throughout the process of exploring their academic and career options, choosing a program of study, and developing a plan based on the program maps. These plans are meant to simplify student decision-making and also enable colleges to provide predictable schedules, frequent feedback, and targeted support to motivate students to stay on track and complete their programs more efficiently. Within the Guided Pathways model, faculty is encouraged to ensure that students are building the skills they need to succeed in their educational and occupational pathway. Two essential components of Guided Pathways reform are meta-majors and an improved architecture for advising.

Meta-Majors and Advising

Meta-majors are an essential component of the Guided Pathways approach. When students enroll in community college, they face an overwhelming amount of options for their major and career path. Not only do they have to choose a major, they also have to design their course pathway through this major. Meta-majors are meant to (re)organize the overwhelming array of options and courses available to students by offering clear, timely, and secure pathways to and through completion and/or transfer into the labor market. Meta-majors are specifically meant to support undecided or uncertain students through the process of choosing a major and career path. Upon enrolling in community college, students choose a meta-major, take courses

and eventually declare a major within that meta-major. Students who enroll in community college having already chosen a major are able to enroll and take classes without choosing a meta-major.

Meta-majors are not only meant to support students, they are also meant to provide clarity for counselors. Advising is an integral part of Guided Pathways and counselors are involved in every stage of the Guided Pathways process, from on-ramping students all the way through degree completion and/or transfer. In the clarifying pathways stage of the advising process, counselors support students with questions that include, “What is my path? What will I need to take? Am I on track to graduate? What will I need to take next term?” Next, to help students get on a path, they address questions such as, “What are my career options? What if I want to change programs? What if I run into trouble?” An essential component of the Guided Pathways advising architecture includes ensuring students stay on their path. During this stage of the advising process, counselors support students with questions like “Am I on schedule? How can I get help?” Finally, to better facilitate cross-institutional collaboration and accountability, counselors also ensure students are learning and prepared by encouraging students to reflect upon the following question, “Am I learning what I need to be learning?”

Guided Pathways demands an overhaul of the traditional architecture of counseling. Structurally, this demands that students each have an assigned counselor, and counselors understand the procedure for taking and sharing case notes across silos, have access to knowledge about the labor market, and understand the various courses, major paths, and careers available within each meta-major. Process-wise, counselors must learn to treat advising like teaching by drawing upon students’ aspirations and funds of knowledge, supporting the emotional and psychological growth of their advisees, and engaging students in processes of

problem-solving and metacognition. Furthermore, counselors must engage in their own processes of metacognition and reflect upon the ways their attitudes and values (mis)align with the goals of Guided Pathways and their students' cultural ways of knowing.

The Potential to (Re)produce Equity Gaps in Completion

While Guided Pathways is currently being implemented in community colleges across the country, many researchers and practitioners are weary of both its theoretical foundations and implementation challenges that could (re)produce inequity. Some question the soundness and rationale of the assumption that limiting the options available to undecided or uncertain students, who are predominantly Students of Color and low-income students, is the best way to support their educational and career trajectories (Hussak, 2018). Others question the feasibility of the Guided Pathways reform, especially considering only a small subsection of community colleges in our country are receiving the guidance and funding to transform and overhaul their institution (Hussak, 2018). For example, streamlining courses into meta-majors to ensure students are taking credit-bearing courses and experience timely transfer requires: (a) actually having the courses students require available to them; (b) convincing and preparing faculty to revise their course content, pedagogy, embed more basic skills and labor market competencies in their instruction, and potentially teach entirely new courses; and (c) reorganizing and mapping a very complex ecosystem of credentials, courses, and delivery methods into structured, high quality programs of study. Lacking the necessary funding, resources, personnel, and guidance can not only lead to watered-down or incomplete pathways, but it can also lead to (mis)interpretations of Guided Pathways (re)produce inequity.

The advising process of Guided Pathways is capable of not only (re)producing equity gaps, but also making the system, processes, and structures that produce these gaps more

efficient. Counselors are tasked with providing students with educational and career information that they themselves may not have access to or may not understand well enough to guide students in making the best decision possible about their major and career path. Furthermore, the majority of the undecided and uncertain students population in community colleges are low-income students and Students of Color, populations that continue to experience less access to qualified teachers; high quality curriculum, instruction, and resources; laboratories, computers, STEM programs, internships; and even the math, science and AP courses needed for college (Battey, 2013; Darling-Hammond, 2010; Dondero & Muller, 2012; Noguera, 2004; Oakes, 2005; Riegle-Crumb & Grodsky, 2010). Disparities like these not only limit the amount of information students have access to; they also limit students' perceptions of their capabilities (e.g. the relationships between prior math experience and STEM). While recently increased effort has been made to embed exploration opportunities into meta-majors and students' structured pathways, less guidance has been provided to help community colleges better understand and support students' career decision-making processes, including how and why they make certain decisions about their major and career.

As an equity-based approach to reform, it is essential that Guided Pathways grapple with important questions of equity to guide and assess its future implementation: completion to what? For whom? And, under what conditions? Included here: what types of knowledge and knowhow, resources, and guidance do community colleges need to implement Guided Pathways *in pursuit of equity?*

Conceptual Framework

Career decisions are among the few decisions with lifelong consequences. They can determine people's salary, where they are able to live, how much time they spend with their family and friends, their ability to provide for their family, and so forth in ways that impact their mental, emotional, and physical health. Career decision-making cannot be understood outside of the context of career development and identity formation. Career development begins in early childhood and extends throughout one's life (Erickson, 1959). Porfeli, Lee, and Vondracek (2013) explain that as children, we engage in tasks that "include (a) learning about the world of work and establishing a basic sense of self; (b) imagining the self doing various work tasks, having different jobs, and being a part of different work settings; and (c) projecting the self into the world of work (e.g., a future worker self) to establish a budding worker identity" (p.135). Dependent upon the context within which we have lived, interactions we have had with others (e.g. people who were nice to us, seemed happy, helped us, etc.), our family work histories, the various struggles we or our families have experienced, and so forth, we begin constructing our vocational identities at a young age. Take as example, the occupational dreams and aspirations of my family members when they were young (i.e. younger than 8 years old). One of my cousins wanted to be an ice cream truck driver, not only due to the ice cream she would have unlimited access to, but because the palatero man (ice cream man) was always nice to her and her friends. Another cousin of mine wanted to be a doctor so she could both learn how to take care of her sick family members and be super rich so her parents wouldn't have to worry so much about life. My brother wanted to be a landscaper like my father because he liked plants and being outdoors. My mother wanted to run an orphanage so that no child would ever be without a home. I wanted to be a famous singer or dancer. As we enter adolescence and emerging adulthood, our

“vocational identity becomes shaped by an emerging awareness of personal talents, values, and interests and bounded by perceived opportunities and constraints” (Porfeli et al., 2013, p.135).

Various Perspectives on Career Identity Development

While vocational identity development varies across cultural and socioeconomic contexts and is defined and studied in a multitude of ways, scholars generally agree upon (a) it being a priority in adolescence and emerging adulthood (Porfeli et al., 2013) and (b) its relationship to one’s well-being and health (Erickson, 1959). Erickson (1959) may have been one of the first to draw attention to the importance of vocational identity development, especially for young adults, when he declared “in general it is primarily the inability to settle on an occupational identity that disturbs young people” (p.92).

Erickson: fidelity, ideology, and work

For Erikson (1968), identity is “a subjective sense of invigorating sameness and continuity” (p. 19). According to Erickson, there is no guarantee of permanent stability for this sameness; neither society (e.g., through imposing a rigid social structure on individual functioning) nor inner certainty (e.g., maintaining an ideology) can guarantee the sense of identity (Penuel and Wertsch, 1995). Erickson (1968) explains that identity should be understood as an integration or union between personal and cultural identity. He argues that if individuals cultural identity is not nurtured by others within their own culture and validated by their community, neurosis and pathology can develop in the individual (Erickson, 1964, 198; Penuel & Wertsch, 1995). For Erickson (1968), the process of identity formation is one of simultaneous reflection and observation that takes place on all levels of mental functioning through which,

The individual judges himself in light of what he perceives to be the way in which others judge him in comparison to themselves and to a typology significant to them; while he judges their way of judging him in the light of how he perceives himself in comparison to them and to types that have become relevant to him (p. 22-23).

Therefore, an individual must construct coherence through coordinating such perspectives, a complex process that requires emerging adults to also simultaneously develop their capacity for self-reflection (Penuel & Wertsch, 1995).

Erickson explains this process through three domains: fidelity, ideology, and work. Fidelity to people and ideas is considered the “cornerstone of identity,” and involves “becoming committed to a group of people and to a set of ideas one can trust, a process of active selecting and searching...for to whom and what they will be faithful” (Penuel & Wertsch, 1995, p. 88). During this time, individuals conserve what feels right to them and correct or destruct what has lost its regenerative significance (Erickson, 1968). Ideological commitments are essential to this stage of identity formation,

the ideological structure of the environment becomes essential for the ego, because without an ideological simplification of the universe, the adolescent ego cannot organize experience according to its specific capacities and its expanding involvement (Erickson, 1968, p.27).

Ideological commitments are vital to the construction of coherence as they “provide a convincing world image” and hope for an “anticipated future” (Erickson, 1968, p. 30-31; Penuel & Wertsch, 1995). Erickson (1963) explains that this hope is actualized through making a decision about one’s occupation,

The inner sense of ego identity, then, is the accrued confidence that inner sameness and continuity prepared in the past are matched by the sameness and continuity of one’s meaning for others, as evidenced in the tangible promise of a ‘career’ (p.262).

In sum, the relationship between Erikson's domains of fidelity, ideology, and work include “commitments to others that one can trust, to an ideology that promises a place in and the world with a hopeful future, and to a career that can actualize those promises” (Penuel and Wertsch, 1995, p.88).

Since Erickson, vocational identity development has been taken up in research in myriad ways to understand and describe the process, content, and structure of vocational identity development. Marcia's (1966, 1980), Super's (1957, 1963), and Holland's (1985) theories remain amongst the most influential. However, these theories and the impact they have had on research and practice have also received criticism for largely ignoring contextual and structural barriers that shape individual's career development.

Career exploration, commitment, and reconsideration and the 4 Identity Statuses

The career development process has been frequently examined across three domains: career exploration, commitment, and reconsideration (Crocetti, Rubini, Luyckx, & Meeus, 2008; Luyckx, Goossens, Soenens, & Beyers, 2006; Meeus, 1996). Career exploration involves exploring one's self in relation to the world of work, which can be done through both in-breadth and in-depth exploration. While in-breadth exploration tends to precede in-depth exploration, both can occur at various times across one's life span. Career commitment extends beyond making a choice about one's career to being attached or committed to that choice. Therefore, career commitment involves both career decidedness and career attachment. Porfeli et al. (2013) found that emerging adults with a higher level of career commitment demonstrated more favorable self-evaluations and decreased levels of depression and anxiety. Career reconsideration involves examining alternative occupations that may be a better fit. Depending on its interaction with career exploration and commitment, the process of (re)considering other occupational alternatives can support the crystallization of one's vocational preferences and is therefore considered an essential process in an individual's identity development. Various configurations of these three processes—exploration, commitment, and reconsideration—have also been used to

situate emerging adults along Marcia's 4 identity statuses (Crocetti et al., 2008; Marcia, 1966, 1980).

Building upon Erikson's concepts of crisis and commitment, Marcia (1966, 1980) operationalized the process of forming an identity into four identity statuses, or stages (i.e. achieved, moratorium, foreclosed, diffused). In diffusion status, an emerging adult demonstrates low commitment and low exploration. In the context of having to choose a major or career path, a student in diffusion status would demonstrate a great deal of uncertainty and, possibly, increased levels of stress and anxiety. In foreclosure status, the emerging adult would demonstrate a high level of commitment and a low level of exploration. Here, students might have a passion for art or gaming, but their parents have decided, and they have agreed, that they will choose business. Moratorium identity status involves a high level of exploration and a low level of commitment. This is an essential stage in the vocational identity development of emerging adults in which they are learning a lot about themselves and the world of work. It has been found that if emerging adults receive effective guidance and support during this stage, they are more likely to make career decisions they are confident in and satisfied with later in life (Porfeli et al., 2013). Lacking effective guidance and support during this time can result in prolonged time to completion and decreased persistence. Identity achievement indicates that the student has experienced a high level of exploration and is demonstrating a high level of commitment.

Marcia's (1966) approach to studying identity development has been criticized for its desire to classify individuals into static identity statuses or stages as well as its inattention to sociocultural processes. While Marcia drew upon Erickson's theories to construct the 4 identity

statuses, he drew primarily from the notion of individual choice and action and was less concerned with the cultural-historical opportunities and barriers in an individual's life context.

Life-span approach

Super (1963) believed that people make decisions about their career by comparing, or "matching," their preferences and competencies to individuals who work in a specific field. He believed that an individual's preferences and competencies changed across their life span and in relation to the experience of their life-space. Super (1957) argued that vocational maturity was essential to making an appropriate career choice and is demonstrated through planful exploration and appropriate occupational knowledge, self-knowledge, and decision-making knowledge. For Super (1957), choosing one's occupation is a means to implement one's self-concept,

The choice of an occupation is one of the points in life at which a young person is called upon to state rather explicitly his concept of himself, to say definitely "I am this or that kind of person" (pp. 195).

Super's (1963) greatest contribution to the field has been his life-span approach to studying identity development. However, Super's theories have been critiqued for not being applicable to practice, for overly fragmenting the concept of development, and for not integrating economic and social factors that influence career development (Brown, 1990; Osipow & Fitzgerald, 1996).

Person-Fit approach

Holland (1985) conceptualized vocational identity as the degree of clarity an individual has of her/his goals, interests, and talents. Individuals with crystallized vocational identities have an easier time making career choices and are more likely to "do competent work, be satisfied and personally effective, and engage in appropriate social and educational behavior" (Holland, 1997c, p. 40), while "the inability to make discriminations among occupations is indicative of conflict and disorganized self-understanding" (Holland, 1958, p. 337). Holland, Gottfredson, and

Power's (1980) My Vocational Situation (MVS) has been the most widely used instrument by researchers and career counselors, in part due to its simplicity (i.e. matching personality type, goals, talents, and interests to job type). The goal of person-fit models is to optimize the fit of the career choice and therefore increase career choice self-efficacy or confidence in one's career choice. Holland's career choice theory has been critiqued for over simplifying the career decision-making process by not attending to development, limiting agency, and ignoring sociopolitical barriers that affect an individual's perception of perceived barriers in ways that limit access to information and opportunities.

Self-efficacy and learning experiences

In their development of the Social Cognitive Career Theory (SCCT), Lent, Brown, and Hackett (1994, 2000, 2002) explain that self-efficacy, outcome expectations, development of career-related interests, and the formation of provisional career goals are essential components of an individual's career development, especially in adolescence and emerging adulthood. SCCT explains career development during adolescence and emerging adulthood as the acquisition and refinement of 6 interrelated processes: (1) acquisition of positive, yet realistic self-efficacy and outcome expectations; (2) development of academic and career interests; (3) formation of linkages between interests and career-related goals; (4) translation of goals into action; (5) skill development and remediation of performance problems; and (6) negotiation of social supports and barriers that affect the pursuit of career options (Lent, Hackett, & Brown, 1999, p.300). The main premise of SCCT is that, even more than one's skills and accomplishments, an individual's beliefs about their capabilities will influence their behavior and the decisions they make about their career. SCCT is intentional about distinguishing proximal-processes from distal-outcomes as

people do not simply pursue a career because of its ultimately foreseen payoffs. Rather, they also consider the conditions they are likely to face in its pursuit (e.g., "medical school will be impossibly hard on my relationships and my bank account"), among other important factors, like self-efficacy regarding the occupation's requisite skills. Thus, two individuals with similar distal-outcome expectations regarding a career in medicine may hold quite different process expectations about the proximal barriers and supports they would encounter in pursuing this goal (Lent et al., 2000, p. 15).

According to Lent and Brown (2013), learning experiences inform self-efficacy and outcome expectations and therefore play an essential role in the career exploration and decision-making process. In this way, learning experiences are sources of self-efficacy that an individual processes and integrates into their belief system to form a judgment of their capabilities. For example, doing poorly in one's math courses can lead to the belief that "I am not a math person," and therefore will not pursue a STEM major. Drawing from Bandura (1997), learning experiences have been found to include master experiences, vicarious learning, verbal persuasion, and physiological and affective states.

Career construction approach

Savickas (2012) argues that counseling students through the complex of making a career decision necessitates letting go of the familiarity of *self-actualization* (i.e. take this inventory, select words that describes your personality and *preexisting self* to choose a career that fits you). Instead, students should be supported through a process of *self-construction* through which they constantly (re)construct and (re)constitute their vocational identity. He explains that

the loss of stable structures and predictable trajectories decouples people from modernity's grand narrative about the life course and expectations about its patterns...shifting the responsibility for career from institutions to individuals [meaning that] people must 'get a life' and bridge transitions in that life using identity work (p.14).

Career construction theory understands self and identity as separate; identity is formed through understandings of one's self in relation to social roles (e.g. in relation to other people,

communities, institutions, discrimination, etc.). Identity development is a lifelong process; individuals enact and revise their identity as they join communities, navigate institutions, experience discrimination, and so forth. The constructivist perspective of identity calls for several shifts: identity from personality, adaptability from maturity, intentionality from decidedness, and stories rather than scores (Savickas, 2012).

The Significance of Context

Over the past 60 years, these and several other overarching theories have been developed to explain the internal and individual-level factors and contextual factors that influence an individual's career development and decision-making processes. The majority of these theories foreground individual-level factors, such as self-efficacy, interest, and motivation and push to the background, and sometimes ignore, contextual and structural factors, such as economic constraints, discrimination, and marginalization (Duffy, Blustein, Diemer, & Autin, 2016).

Blustein (2017) explains that the foundation of many of these theoretical advancements occurred during the post-World War II era within the U.S., which “was characterized by a growing middle class, upward mobility, increasing access to higher education, and the growth of professions, many of which were developing hierarchical career paths” (p.182). The field of vocational psychology began focusing on the career decisions and choices people made in this new era of prosperity and advancement. However, not everyone benefited from the economic boom of the 1950s and 1960s. People of Color, immigrant populations, and women faced Jim Crow laws, xenophobic policies, and discriminatory and racist hiring policies and work environments that not only limited their options in the workforce, but also detrimentally impacted their schooling experiences and preparation for work. People living in poverty and working class populations also often lacked the preparation, skills, and social capital to benefit

from the era of prosperity (Gordon, 1974; Smith, 1983). Additionally, at this time, much of this research was being conducted in institutions of higher education that, for many of the reasons listed above, enrolled majority White middle- and upper-class men who did not experience these types of barriers in their career decision-making processes. Furthermore, while the economic trends, and subsequently the world of work, has changed immensely since the era of prosperity, “reifying choice, dreams, purpose, self-concept implementation, and well-being at work have remained the steady guiding posts of practice, and to a lesser extent, theories and research” (Blustein, 2017, p.182).

Foregrounding internal and individual-level factors and backgrounding the contextual and structural factors that influence career development is very problematic as it not only devalues the impact that a radically transforming labor market has on individuals’ career decisions, but it also fails to adequately explain the experience of underserved populations. As Duffy et al. (2016) explain,

these theories, while capturing essential psychological elements of career development and work, do not adequately explain the work-based experiences of people on the ‘lower rungs of the social position ladder’—people without sufficient access to financial and social capital, marginalized people (i.e., who are marginalized on the basis of factors such as race, ethnicity, social class, and/or gender), and people who are forced to make involuntary work-based transitions—for whom elements of context are often primary in driving the experience of work. In addition, the contextual factors that have shaped the lives of people on the margins are increasingly constraining the lives of the middle class, who face a radically transforming labor market that is being reshaped by globalization, unemployment and underemployment, precarious work, and rapid technological change (p.127).

Contextual factors: The labor market and complex ecosystem of credentials

The world of work has changed drastically over the past 50 years, yet the policies and practices that impact people’s transitions to the workforce continue to reflect a labor market that was much more predictable and stable. The idea that an individual chooses a career they will stay

in for the rest of their lives is becoming less and less of a reality due to globalization, downsizing, the shrinkage of unskilled work, the expansion of service jobs, and technological advancements (Fouad & Bynner, 2009). Today, the median employee tenure is 4.3 years for men and 4.0 years for women and an individual will change jobs an average of 12 times across the course of her or his career (BLS: 2016, 2018). The employee tenure rate is even lower, 2.8 years, for the younger generation, ages 25-24 (i.e. community college student population), as well as the Latinx population, only 23% of whom had been with their employer for 10 or more years compared to 30% of Whites and 25% of both Black and Asian workers (BLS, 2018).

Frequent job dislocation and career destabilization have also produced “gaps between what higher education can deliver and what labor needs” (O’Banion, 2019). Today more than ever, students are questioning (and rightly so) the return for their investment in higher education. Since 1980, tuition rates for 4-year colleges have grown at a rate 19 times faster than the average median family income (Carnevale et al., 2017). Furthermore, while educational attainment is positively correlated with employment rates and more pay, there are significant differentials in pay between the major and career paths students choose to pursue (Carnevale, Cheah, & Hanson, 2015). In some cases, less education is actually worth more (e.g. IT certificate holders earn \$10k more than the average BA degree holder and 30% of those with AA degrees earn more than the average BA degree holder) (Carnevale, Rose, & Hanson, 2012; Carnevale et al., 2015; Carnevale et al., 2017). The value of a specific program or major also varies depending on the alignment between curricula and regional labor market demands producing a situation in which a program is only the same in name (Carnevale et al., 2015).

Furthermore, Carnevale et al. (2017) explain that the ecosystem of postsecondary credentials is more complex, fragmented, and multilayered than ever as a result of dramatic

increases in (1) occupations (from 270 to 840 between 1950-2010); (2) postsecondary programs of study (410 to 2,260 between 1985-2010); (3) colleges and universities (from 1,850 to 4,720 between 1950-2014); and (4) the college student population (2.4 million to 20.2 million between 1950-2014). There are an exhaustive number of factors that impact the value of a postsecondary credential, such as type of credential (e.g. degrees, certificates, certifications, licenses, badges, etc.); delivery mode and models (e.g. distance learning, e-learning, competency-based, hybrid models, etc.); and alignment to workforce demands and requirements (Cappelli, 2015; ConnectingCredentials, 2015). And, while career has increasingly become a focal point of postsecondary education, alignment efforts between college and career rarely, if ever, address the knowledge and knowhow employers need to navigate, and accurately assign value to, postsecondary credentials, further contributing to the uncertainty of their payoff in the labor market. Practitioners and policy-makers currently lack the knowledge and knowhow about this complex ecosystem of postsecondary credentials to effectively support and guide students' major and career decision-making processes.

Higher education has typically responded to shifts in labor market demands through reinvestment in Career and Technical Education (CTE), strengthening K-12 and higher education partnerships, and revamping curriculum and certification programs. There has also been a recent turn in CTE towards lifelong learning (e.g. 21st century skills, informational and communications technology, interpersonal communication, basic skills) to prepare students to navigate new demands of, and changes they might face in, the labor market. Interventions like Guided Pathways have also been implemented to strengthen and clarify pathways for transfer and entry into the labor market. However, the majority of students leave high school unprepared to make a decision about their future career path. And, while students go through various on-

ramping activities to help them choose a career path, issues of equity arise when students are asked to make such high-stakes decisions early in their education. These include, amongst others: (a) previous exposure to careers and vocational exploration opportunities; (b) labor market information; (c) internalized experiences of marginalization and discrimination; (d) practitioner knowledge and knowhow to support students through these high-stakes decisions; (e) prior educational experiences and preparedness; and so forth. At the same time, Bailey et al. (2015) are not wrong in arguing that the cafeteria model is not working and that prolonged time to completion is an equity issue in and of itself. However, a guided pathway approach to education that does not take seriously issues of equity like those listed above and how they influence students' career decisions is likely to reproduce educational and occupational disparities. Understanding the how and why behind students' career decisions is essential for more effectively supporting their navigation of higher education and an increasingly complex labor market.

Sociopolitical barriers: Stressors and critical consciousness

Sociopolitical barriers—underresourced schools, access to quality instruction, racism, limited structures of opportunity, poverty—play a large role in the perpetuation of disparities between the vocational aspirations and outcomes of Students of Color and their White counterparts (Blustein, McWhirter, & Perry, 2005; Brown, 2002; Hill & Torres, 2010; Hotchkiss & Borow, 1996; Strayhorn, 2008). The sociopolitical barriers Students of Color experience are exacerbated by the acculturative stress they experience in a culturally misaligned college environment (Gloria, Castellanos, Scull, & Villegas, 2009; Hurtado & Ponjuan, 2005). For women, these barriers have been found to include sexual harassment, educational and workplace discrimination, and a lack of female career role models (Ferri & Connor, 2010; Noonan et al.,

2004; Smith, 2007). Scholars have found that awareness, and in some cases internalization, of these barriers can: (a) make it difficult for emerging adults to realize their aspirations in their future world of work (Wilson, 1996); (b) cause them to anticipate, and avoid, perceived barriers and discrimination in the workplace (Brown, Minor, & Jepson, 1991; Fouad & Byars-Winston, 2005; Leal-Muniz & Constantine, 2005; Lease, 2006; McWhirter, 1997); (c) lead them to aspire for lower-paying, lower-status jobs, or “safer” jobs (Bigler, Averhart, & Liben, 2003; Diemer, 2009; Gloria & Hird, 1999; Gushue, 2006; Littig, 1968; Mejia, Navarro, and Gushu, 2008); (d) experience increased anxiety, depression, and mental health issues (Borgen & Maglio, 2007; Hinkelman & Luzzo, 2007); and (d) in some cases, disengage entirely from educational and occupational systems (Bell, 2018; Conchas, 2001; Fine & Weis, 1999).

Diemer (2009) argues that while the negative effects of students’ experiences with sociopolitical barriers are significant, students’ desire, agency, and capacity to negotiate and alter these conditions of oppression remain underexamined. In his work, Diemer (2009) found that underrepresented students often have a sociopolitical development, or a critical consciousness and motivation to change one’s social reality and help others by addressing sociopolitical inequalities through community action (Ginwright & Cammarota, 2002; Watts & Flanagan, 2007). He found that the sociopolitical development of underrepresented youth could serve as a powerful asset or “antidote to oppression” (Watts, Griffith, and Abdul-Adil, 1999, p. 255 as cited in Diemer, 2009). Using this lens to examine students’ vocational aspirations revealed that a students’ sociopolitical development can be a successful means for students to: a) implement their occupational self-concept in the world of work; b) increase the clarity of their vocational identities; c) realize their vocational expectations; d) expect to attain higher-paying, higher-status occupations; and e) enhance their ability to critically assess and act upon the sociopolitical

barriers of their lived realities (Diemer, 2009; Diemer & Blustein, 2006). Similarly, it has also been found that even if misaligned with their college environment, a student's ethnicity and ethnic identity can serve as a protective factor and increase their career decidedness (Bullington & Arbona, 2001; Duffy & Klingaman, 2009).

Putting it All Together through the “Mediated-Action Approach”

Penuel and Wertsch's (1995) mediated-action approach (re)incorporates Erickson's attention to culture, context and action and utilizes the work of Vygotsky to articulate the concrete ways that identity development is socioculturally situated. The mediated-action approach differs from most identity development theories in that it takes human action as the starting point for identity and identity research. In doing so, it calls for research that:

1. Studies identity *in action* and specifically in contexts and activities within which the formation of an individual's identity is at stake (e.g., making a choice about major and career upon enrolling in community college);
2. Centers *cultural and historical resources* as both empowering and constraining tools for identity formation (e.g., sociopolitical barriers can lead students' to aspire to lower-paying or less satisfying jobs, but can also support their development of a critical consciousness and motivation to enter a specific career);
3. Understands *mediated action*, rather than inner sense of identity, as the basic unit of analysis (e.g., investigating the action of choosing a major—specifically language and signs individuals use to describe themselves and their decisions—turns the attention towards the diversity of tools individuals have access to and why, or why not, particular tools are used); and

4. Views variation in the use of cultural resources for identity formation in terms of commitments as Erickson describes through his domains of identity–*fidelity*, *ideology*, and *work* (e.g., moving away from understanding career decisions as the actualization of a *pre-existing* self towards Erickson’s notion that commitment requires *action* and constructing coherence) (p.89-90).

Researching the action of choosing a major or career path, rather than the individual making the decision, foregrounds structural and contextual affordances and barriers. It also provides a way forward for understanding, describing, and supporting students in the complex process of constructing coherence and making commitments, which, as Erickson argued repeatedly, is essential for the well-being and healthy development of young people. Researching the career development of emerging adults utilizing a mediated-action approach provides a window into the complexity of engaging in work transitions like making a decisions about one’s major and career path, especially in the context of Guided Pathways and community college.

Work Transitions as Mediated-Action in the Context of Community College

Fouad and Bynner (2009) argue that the assumptions underlying our theoretical perspectives about work transitions fail to capture the turmoil individuals experience during a work transition. These assumptions are that individuals: (1) are making transitions in optimal circumstances; (2) are making the transitions voluntarily; and (3) have the resources to make the transitions. Work transitions cannot be separated from transitions in other areas of life (e.g. starting or ending a relationship, becoming a parent, moving out, etc.) as “transformations in the labor market and work transitions will also influence transitions in other life domains” (Fouad and Bynner, 2009, p.244) For emerging adults in community college, transitioning to college, much less deciding upon a major and career path, is a time of change, adjustment, and

uncertainty. Students are not only trying to construct and actualize a viable educational and career path, they are also learning to be adults, possibly living on their own for the first time, making new friends, navigating romantic relationships, working, and so forth. In the context of community college and Guided Pathways, students face challenges and barriers that contribute to the turmoil and complexity of their transitions and subsequently, the construction of their vocational identity and their educational and career decision-making.

In addition to navigating a complex and fragmented ecosystem of postsecondary credentials, community college students are more likely to come from low socioeconomic backgrounds, which often requires them to work while they pursue school (Crisp & Nora, 2010). Confounded by the pressure to choose a career pathway as soon as possible, students have minimal time to engage in career exploration, which is an essential stage of the career development process. It has also been found that Students of Color and low-income students have a greater level of responsibility and expectation to provide for their families and live near home (Luna & Martinez, 2012; Rodriguez, 2014; Saenz, Garcia-Louis, Peterson-Drake, & Guida, 2018). While family has consistently been found to be an important source of support for nondominant students (Liou, Antrop-González, & Cooper, 2009; Luna & Martinez, 2012; Perez Huber, 2009), family can also contribute to the pressure students experience and the turmoil they feel when their dreams and aspirations do not align with their family's needs and expectations (Saenz et al., 2018). It has also been found that the older student population in community college experiences an even greater amount of family and work responsibilities (Pascarella & Terenzini, 2005).

Many community college students also enter college unprepared due to factors such as their prior schooling experiences or gaps between high school and college and are required to

take remedial courses (Bailey, Jenkins, & Leinbach, 2005). While developmental, or remedial, courses are slowly being phased out under the Guided Pathways model, many students are still affected by lack of preparedness, which can have an impact not only on the level of turmoil they feel, but also the majors and career paths they avoid. For example, this study found that participants who were underprepared in math or science in high school actively avoided, and would not even consider exploring, STEM majors and careers. Community college students also lack information about the labor market and report that they do not receive effective career guidance and enough labor market information from counselors (Olson & Matkin, 1992; Simon & Tovar, 2004). Furthermore, college students in general, but especially first generation and transfer students, lack awareness of the services and allies on campus that can provide them with this information (Gallup Purdue Index, 2016).

Fouad and Bynner (2009) argue that one predictor of healthy career development and decision-making is a voluntary transition in which an individual: (a) has enough time to consider multiple options; (b) has gathered the information they need and has had time to prepare; (c) is psychologically and physically ready; (d) can determine the appropriateness of the transition for them as individuals and for their families; and (e) determine whether the conditions in the economy and labor market are favorable for change. When students are forced to make high-stakes career decisions during an involuntary transition due to factors like those outlined above and others (e.g. sociopolitical barriers, discrimination, a slow economy, institutional barriers), they may: (a) feel forced to make any decision, instead of take the time to make a decision they are confident about; (b) struggle to incorporate their interests and values into their decision, relying solely on labor market information; or (c) make a decision that does not take into consideration important labor market information (e.g. salary, benefits, job stability).

Perhaps most unsettling for students when making a high-stakes decision during an involuntary transition is the uncertainty, stress, and anxiety they experience. Savickas (2012) explains that when “the content of the current identity is unable to support the individual in confronting a new set of demands imposed by society...individuals feel anxious because they encounter challenging situations without the protection of an identity that holds and comforts them” (p.14). Helping students navigate this uncertainty to choose the best path possible into the labor market that itself is dynamic and unpredictable requires supporting the development of students’ career adaptability (Fouad & Bynner, 2009; Savickas, 1997). Doing so requires: (a) supporting students’ emotional, cognitive, and social preparedness, including students’ ability to anticipate and cope with obstacles; (b) helping students marshal the resources they need; and (c) ensuring students understand the employment opportunities available to them and the competencies they need to have or acquire to be employed (Fouad & Bynner, 2009).

Chapter 3: Methods

The purpose of this qualitative study was to explore the career development of community college students and specifically, (a) how they make decisions about their major and career paths, (b) the factors that influence these decisions; (c) the networks of support and information that students draw upon when making decisions about their career; and (d) their labor market knowledge and knowhow. Utilizing a qualitative phenomenological research design and a combination of thematic and descriptive analysis, this study examined the career development and decision-making processes of community college students. A phenomenological research design was chosen because it enabled the researcher to study how participants experience and navigate the task of choosing a major and career path as well as examine participants' shared or common experiences (Creswell, 2007). It also enabled the researcher to investigate this phenomenon as mediated-action (Penuel & Wertsch, 1995) as the two main questions asked of participants in a phenomenological study are, "What have you experienced in terms of the phenomenon? What contexts or situations have typically influenced or affected your experiences of the phenomenon?" (Moustakas, 1994). Finally, a phenomenological research design was best suited to meet the needs of the RPP team and FCC practitioners who wanted to better understand how students experience and navigate the phenomenon of choosing a major and career path in the context of community college and Guided Pathways. The research questions guiding this study include:

1. How do community college students experience and navigate the process of choosing a major and career path?
 - a. What factors influence community college students' career development and decision-making processes?

- i. How do these factors vary by race/ethnicity, gender, first generation status, and/or the intersection of these identities?
- b. What networks of support and information do community college students draw upon to make decisions about their major and career paths?
 - i. How do participants' networks of career support and information vary by race/ethnicity, gender, first generation status, and/or the intersection of these identities?
- c. What is the relationship between community college students' labor market knowledge and knowhow and their career development and decision-making processes?

Context and Setting

This study is part of a larger Research-Practice Partnership between UCLA researchers and practitioners from a local community college, Ferte Community College (FCC). FCC serves approximately 30,250 students, including international students from 71 different countries. It offers 124 AA degree programs, 88 Certificate of Achievement programs, 41 noncredit certificate programs, and is recognized as an exemplar transfer school, serving as one of California's top schools for transfer to local universities. Approximately 71% of its student population is under the age of 24, 61% receive a waived or reduced tuition, and 54% of its students attend school part-time. In regards to the racial/ethnic makeup of the population, 51% of students identify as Latinx, 24% as Asian, 15% as White, 4% as Black, 3% as two or more races, and 3% are unknown. FCC is also well known in the community for its smaller, localized version of a Pathways program.

In addition to the RPP that is the context of this study, there are also other concurrent projects and RPPs operating between FCC and UCLA researchers. There is a well-established partnership, dating back to the early 2000s, between UCLA and FCC. Since the emergence of this partnership, several different projects have been undertaken (e.g., the formation of PLCs, projects related to scale, data-inquiry dives, and developmental education projects) and various dissertations have been conducted by UCLA graduate students at FCC. The specific RPP in which this study is embedded has been underway for approximately 1.5 years and includes UCLA researchers, and, from FCC, the Executive Director of Institutional Research, institutional research analysts, the Faculty Lead of the Pathways program, Pathways coaches, the Lead Pathways coach, career counselors, job developers, the Executive Director of Economic Workforce Development who is also developing the new career center, the Equity Director, the Professional Development Director, and the Vice President of Student Services.

This RPP began at a time when Guided Pathways was being brought to the foreground of community college reform efforts across the nation. FCC practitioners explain that they had long identified themselves as a transfer institution and therefore paid much less attention to career pathways. After Guided Pathways thrust career into the foreground, FCC became increasingly aware of its gaps in knowledge and knowhow related to guiding students' major and career decision-making. Also at this time, FCC hired a new Economic Workforce Development Director and started developing a new career center. Therefore, there was an increasing interest in the college regarding questions like,

What is the process students go through to declare a major and career path? What are the developmental stages of students' career development? How should students be supported to make meaningful decisions about their future, especially when many of them are just coming out of high school? (FCC Practitioner, Interview, April 2019)

There was also a growing concern about the tensions inherent within the Guided Pathways approach. For example, practitioners recognized that prolonged time to completion was indeed a problem, however they also understood that career exploration is an important part of an emerging adult's identity development. They also questioned the "assembly line-like approach of Guided Pathways,

It's like thinking students are going to come in, they're going to take 15 units and they're going to pass all their classes. And, on top of that, they're going to come in with a declared major and they're going to be out in two years and then they're going to transfer with certificates and degrees. It's like, "Really?" Lives are way complex. And, yeah, there are certainly students who have a really super clear idea about what they want and then do it, but I think they're in the minority (FCC Practitioner, Interview, 2019).

Furthermore, the implementation of Guided Pathways requires a massive restructuring and transformation of FCC structures, systems, and processes. FCC practitioners explain some of these challenges in relation to priority registration and ensuring students can enroll in the classes they need,

There are a lot of people teaching classes that students don't need, but that they're never going to give up. There are programs that are never going to go away until they retire and we're paying more attention to enrollment management and yeah, we're getting better at it, but the fact remains that after a certain date, if somebody wants to get into Pathways, it's very difficult to ensure them English and Math. Other high demand classes also close up very quickly in a matter of days in some cases. (FCC Practitioner, Interview, 2019)

And, while FCC has recently received a federal grant to expand Pathways, FCC needs to discern where to best focus its efforts to, at the very least, improve their process for advising students' major and career decisions,

if we're going to assign students to a career community, I hope there's a process in place which includes the opportunity for a student to have a conversation with somebody who's informed and to some degree ... You know what I mean? At the very least (FCC Practitioner, Interview, 2019).

Positionality

As the lead graduate student researcher, I led, alongside the faculty lead, the facilitation of the FCC-UCLA RPP. In our monthly meetings, I designed and delivered workshops driven by preliminary findings; facilitated the collective revision of interview, focus group, and survey protocols; worked with practitioners to identify and secure institutional data; facilitated various improvement science activities (e.g., causal systems analysis, mapping); trained other graduate students; and conducted interviews on campus. My interest in community college stems from personal and professional experiences. The majority of my family, if they attended college, began their journey in community college. Many of my family members did not transfer or earn a degree due to their need to work; trouble obtaining classes and passing remedial courses; insecurity about groupwork, math, or reading out loud in class; personal challenges that required them to stop out; and so forth. Still, community college remains the primary point of entry for my family members and with the right supports, can be a powerful avenue to the labor market as it is for my cousin who is currently transferring to a 4-year university to become a doctor.

My interest in the labor market also stems from the experiences of my family members who, despite having a great amount of experience in their career field, are often paid less, displaced, or lack job security because they do not have a college degree or certificate. Furthermore, my family members who have earned a BA degree, have struggled to find employment in their field and are working jobs not related to their degrees. Considering the time and financial investment higher education requires, the inability to secure employment in one's field brings into question the value of the BA degree for certain career fields.

Furthermore, through my experience as a K-12 educator and a community college and Cal State developmental mathematics professor, I have recognized that, like my family members,

the majority of nondominant students enter higher education in community college and face challenges in their attempts to transfer and/or earn a certificate/degree on time. Finally, my experience facilitating a RPP in a Career and Technical Education (CTE) program contributed to the significance of questions related to the relationship between education and work; how students make decisions about their career; and intersectionality and career development.

Recruitment and Sampling

Participants were recruited in two rounds. In the first round, a voluntary sample of participants were recruited through an email blast sent out from FCC'S Lead Student Success Coach. The email explained that researchers from UCLA, in conjunction with FCC practitioners, were conducting an investigation to better understand how students make decisions about their education and career. Students would receive \$20 for their participation in a 45-minute interview. In response, 124 students signed up. Of the 124 students who signed up, 93 showed up for their interview and 31 were no shows. After our initial data collection effort, we recognized that Latinx males and Black students were underrepresented in our sample. We also began to realize in preliminary data analysis, that the experiences of special populations (e.g., former foster youth, undocumented students, LGBTQ, students with disabilities) were not only unique, but also underrepresented. Therefore, a second round of recruitment was conducted. Purposive sampling was used to identify participants who fell into these categories. Counselors and Pathways coaches at FCC spoke with students they knew who belonged to these identity categories and offered them the opportunity to self-select into the study. Purposeful sampling was used to protect the identity and ensure the safety of the participants. For this round of interviews, 18 students volunteered to interview. Of the 18 students, 9 students showed up and 10 students did not.

Participants

In total, there were 102 participants; 93 participants from the first sample and 9 participants from the second sample. Approximately 59% of participants identified as Asian, 30% Latinx, 8% White, and 3% Black. 60% of participants identified as female and 40% male. Over half of the participants were from low SES backgrounds. The majority of participants, 61%, were between 17-19 years of age, 27% were between 20-25 years of age, 8% were between 26-30 years of age, and 4% were over 30. Participants were also mostly, 87%, first-time students, with only 13% identifying as returning students. Approximately 31% of the population were first generation (FG) students, 14% were international students, 61% identified a language other than English as their first language, and slightly less than half, 43%, of participants were not born in the United States. 78% of participants identified as heterosexual, 11% bisexual, 6% gay or lesbian, and 5% other. Exactly half of the participants were employed and working while attending school. The majority of participants, 79%, had goals to transfer to a 4-year university after community college, 16% wanted stated they wanted to work after completing community college, and 5% did not report.

Of the 30 Latinx participants, 2 identified as non-FG males, 11 as FG males, 3 as non-FG females, and 9 as FG females. Approximately 67% of the Latinx population were first generation students and 60% of Latinx participants identified as male. Of the Asian participants, 6 identified as FG males, 7 as FG females, and 5 as FG international females; 13 identified as non-FG males, 22 as non-FG females, 3 as non-FG international males, and 4 as non-FG international females. 30% of Asian participants were first generations students, 20% were international students, and 63% identified as female. Of the 3 Black participants, one participant identified as a non-FG male, one participant identified as a non-FG female, and one participant identified as a FG

female. Of the 8 White participants, 2 identified as non-FG males and 3 as non-FG females, 2 identified as FG males, and one participant identified as a non-FG international female. It is important to note that 38% of White participants identified as students with disabilities. It is therefore possible that the White participants in this study were a unique sample and not representative of the average White community college student population. Finally, 2 participants identified as former foster youth, 8 participants identified as undocumented students, and 5 participants as students with disabilities.

Data Collection

Due to the number of interviews originally scheduled (n=124), there were a team of 4 graduate student researchers and one undergraduate student researcher who supported the data collection process. Although the majority of researchers on the team had experience conducting interviews, they attending a training meeting to learn the protocol, consent process, process for conducting and recording interviews, and procedures specific to the community college context of this study. They also had the opportunity to ask questions and provide feedback. The majority of interviews (n=70) were conducted by the author (n=39) and one other graduate student (n=31) closely related to the project.

Each participant was orally consented, see Appendix A, and given a copy of the consent form for their records. Due to the mixed methods nature of the larger RPP umbrella this study falls under, students were asked to provide either their name or a student ID#, but also ensured this information would not be shared with anyone outside of the IRB-approved research team. Students were also assured identifying factors, such as names, institutions, and specific programs or locations, would be eliminated from the reporting of data. Students were then asked to initial upon receiving a \$25 Amazon gift card. The participant was also provided with a copy of the

interview protocol to follow along with as we conducted the interview. Prior to beginning their interview, students were asked to fill out a demographic form and a brief questionnaire related to the labor market, see Appendix B. The interviews lasted anywhere from 30-45 minutes. While there was a structured protocol, see Appendix C, interviewers were trained to make note of questions that had already been answered in previous questions. The interviews were audio-recorded for transcription. There was only one interview in which the author had to pause the recording due to the confidential and emotional nature of the conversation. The audio recordings will be destroyed upon the completion of the study; the audio recordings, transcripts, demographic forms, questionnaires and researcher notes are kept securely in an IRB-approved box folder.

Brief Labor Market Questionnaire

Prior to beginning their interview, students were asked to complete a brief questionnaire, see Appendix B, that asked them several questions about the job market. The survey asked them to name the top 3 careers that: (1) have the highest salary; (2) have the most job stability; (3) have the highest employment rates; and (4) are most rewarding. Students were also asked to name the top 3 things that would make a job rewarding and the top 3 reasons they would turn down a job. If needed, students were also given the option to leave the answers blank or write “I don’t know.”

Interview protocol

This study utilized a structured interview protocol, see Appendix C. The interview protocol was developed earlier in the RPP work when we were more broadly focused on students’ educational and career trajectories, and how their college campus and specific programs, like Pathways, supported these trajectories. Therefore, there was data from questions in the protocol that were

not included in this analysis. The protocol was organized into 3 sections based on the conceptual framework developed by Rios-Aguilar and Deil-Amen (2012) to examine the transition and trajectories of Latinx students into and through postsecondary education: Getting In, Fitting In, and Moving On. The Getting In section was focused on questions related to students' transitions into community college, such as: (a) when and why students enrolled in college; (b) the major decisions students were facing during the enrollment process; (c) how students decided upon their major and career path; (d) from who or where they obtained the information and support they needed to make these decisions; and (e) students' understanding of the experiences and skill sets they need for their chosen major and career path. The Fitting In section included questions related to students' experience in college thus far, such as: (a) the challenges and successes they have experienced since being in college; (b) their biggest worries about their education, future career, and life and who they turn to for each of these; (c) how their college has supported their educational and career goals and what FCC could do to better support them; (d) whether students have changed career paths or coursework since enrolling in college; and (e) how students practice self-care. Finally, the Moving On section focused on questions related to students life after college, such as: (a) if students believe, and how, their chosen educational career path will help them secure their desired future lifestyle; (b) how their career aspirations have developed from the time they enrolled in college until now; (c) how their knowledge of the labor market has changed over the course of their education; and (d) what they would still like to know about the labor market.

Contextual Factors Guiding Data Analysis

Preliminary analysis of the interview transcripts was conducted in efforts to focus the work of the RPP. Preliminary data analysis of a smaller subset of randomly selected interviews

(n=28) from each racial/ethnic and gender group, utilizing InVivo coding, produced an initial understanding of major themes that were occurring in the data. At this nascent stage of data analysis, the themes that emerged included: (a) fear and uncertainty about major and career decisions; (b) changes in major and career paths, students' experiences in courses; (c) lack of labor market knowledge; and (d) the networks of information students draw upon to make decisions about their major and career paths. Simultaneously, another researcher on our RPP team was conducting longitudinal quantitative analyses of curricular course cluster patterns to determine the degree to which emergent structures serve to differentiate students on status characteristics, academic achievement, and degree attainment. Preliminary quantitative analysis revealed differences between the course-taking patterns and outcomes of various subgroup populations of students. Similar to preliminary findings from the qualitative data collection effort, there were significant differences between the course selection and course-taking patterns and trajectories of racial/ethnic groups. Upon presenting preliminary findings from these two data collection efforts to the larger RPP team in our monthly workgroup meetings, practitioners expressed their desire to learn more about how students make decisions about their major and career path, including how frequently they change paths and why they change paths. They also wanted to know more about how these phenomena varied by racial/ethnic group, gender, and specific subgroup statuses (e.g., first generation, LGBTQ).

It is also important to note that these were problems the FCC practitioners on our RPP team were already working on to varying degrees. Many practitioners had heard of or recognized these issues within their context through conversations with colleagues, interactions with students, and institutional data reports. However, before our specific branch of the RPP was developed, they lacked the time and personnel to explore these issues in more depth. It is also

important to note that these issues were becoming increasingly important in the context of Guided Pathways. As explained earlier, FCC had implemented their own, localized version of Pathways and was in the process of learning how to expand this program to wider population of students. Furthermore, in the context of Guided Pathways and meta-majors (i.e. named Career Academies for this college), career advising takes on a heightened level of importance.

Therefore, questions regarding major, and especially career selection and decision-making, were becoming increasingly important. Questions surrounding equity had also become more important for myriad reasons including the concurrent research efforts conducted over the past decade by other UCLA researchers (e.g. a study of disparities in completion outcomes for a College 1 course). Finally, in our RPP work meetings, we had also utilized Improvement Science methods to identify shared, high-leverage problems of practice. Across all of these efforts, learning more about how students make decisions about their major and career paths, and the relationship between the two, and specifically in the context of Guided Pathways, was identified as a high priority.

Data Reduction and the (Re)construction of Student's Career Development Stories

After identifying the emerging focus of this stage of the RPP work, data reduction techniques were utilized to extract data specifically related to students' career development and decision-making processes. This was an intensive process, and all done by hand. The researchers' rationale for not utilizing computer software programs will become more clear throughout this data analysis section, but primarily centers on the importance of understanding students' holistic, career development stories. Data reduction began with an initial round of reading each interview transcript. Throughout this process, notes and jottings were used to record early impressions of, and thoughts/wonderings, about the data. After reading each interview as a

whole, structural coding (Namey et al., 2008) was used to identify and extract data that related to the following categories: (a) how and why students make career decisions; (b) what influences students' career decisions; and (c) who influences students' career decisions, worries about career, and labor market knowledge. Due to the dynamic nature of students' career development and decision-making processes, demonstrated in both the literature and preliminary data analysis, the researcher believed it was important to understand the career development story of each participant holistically before engaging in qualitative thematic analysis of the entire career data set. Therefore, the extracted data for each participant was reconstructed into a brief career development story. The career development story briefly tells the story, dependent on the data available, of how, why, and what students' chose as their major and career as well as documented any changes in their paths. Each of these career development stories was crosschecked with an additional round of reading their corresponding transcript. Through these efforts, patterns started to emerge related to students' levels of uncertainty, labor market knowledge, networks of support, and factors that influence students' major and career decisions. At this stage, the researcher utilized extensive notes and jotting to record these patterns.

Data Analysis

There is a body of literature that addresses the career decision-making process and career development of emerging adults in college. However, the majority of this literature is based on the experiences of students in 4-year universities. Furthermore, as explained in the literature review, the historical development of career identity and career development theories largely excluded Students of Color, immigrant students, low-income students, and women. While there has been a recent resurgence of literature that addresses the career development, aspirations, and decision-making processes of Students of Color, low-income students, and women, there are

very few studies that have been conducted on the career development of these populations in community college. As the majority of the participants in this study are Students of Color, low-income, and women and considering the significant number of immigrant students in the population, the researcher made the decision to utilize an inductive thematic coding process rather than a theoretical thematic coding process for the first round of coding.

The *how and why students make career decisions* and *what influences students' career decisions* data sets were merged resulting in 4 data sets: (1) the how, why, and what of career decisions; (2) worries about career; (3) labor market knowledge; and (4) students' networks of career support and information. As disaggregation was important to this study and RPP practitioners, the data sets were organized by race/ethnicity, gender, and first generation (FG) status to make comparisons across these groups more feasible. The Asian student population was also organized by international student resulting in the following identity categories: Latinx FG male, Latinx FG female, Latinx non-FG male, Latinx non-FG female; Asian FG male, Asian FG female, Asian non-FG male, Asian non-FG female, Asian international FG female, Asian international non-FG female, Asian international male. There were only 3 black student participants and 8 white student participants. Furthermore, the White population was not representative of the average White community college student population as 3 out of 8, 38%, identified as students with disabilities, and two were international students. While the data was still disaggregated to better understand the unique experiences of Black and White student populations, the size of the Black participant sample and the unique identity status of the White student populations greatly limit the reliability of findings that speak to the general experiences of Black and White community college students.

After organizing the data sets, line-by-line InVivo coding and frequency coding (Saldana, 2015) were used in the first round of data analysis with each data set. As this was a large data set, the researcher also included the InVivo codes for each participant in a table with their career development stories to preserve the feasibility of understanding emerging themes in relation to students' career development. The InVivo codes were then themed using Axial coding (Saldana, 2015) into categories and their frequencies were counted (Ryan & Bernard, 2007) to better understand the patterns that were beginning to emerge in the data. To ensure that ideas related to specific subgroup populations were not lost, the theming of the InVivo codes was conducted by each subgroup population, then merged across the whole population. This turned out to be an essential part of the data analysis process as it revealed factors influencing students' career development that were very significant for certain populations (e.g. Latinx students' desire to know how to decide upon a career; the importance of persistence for Latinx males; Asian females focus on the work environment), but would have otherwise been insignificant in relation to the total population. For the *networks of support and information* data set, the researcher recognized that family was a significant source of support for the majority of students. However, the type of support students reported receiving from family varied significantly. Therefore, for the *networks of support and information* data set, domain and taxonomic coding (Saldana, 2015) was also used to better identify the types of career guidance family provided for students, resulting in 3 main categories: support and motivation, expert knowledge and information, and connections/networking.

After identifying major themes and patterns emerging within each data set, a second round of coding was conducted for each data set using the themed categories. The frequency of these codes was counted for each subgroup population and the total population (Ryan & Bernard,

2007). The researcher believed the frequency counts were important not only due to the size of the sample, but also for making comparison across subgroup populations and for visualization purposes (Namey et al., 2008). Utilizing a combination of excel and online visualization software, these frequencies were translated to bubble charts, word clouds, and graphs. Next, the researcher revisited the transcripts to identify specific examples and quotes from interviewees that could represent each important theme for each data set. These would later be used in the construction of the findings section.

Career Development Stories

Throughout the data analysis process, beginning with the construction of the career development stories and extending through the analysis of the career data sets, it became increasingly clear that there were important differences between students' decision-making processes. Some students never changed paths, while others had changed paths multiple times. The researcher and practitioners in the RPP became curious about patterns in students' career decision-making processes. Therefore, the career development stories went through their own rounds of data analysis. The researcher had noticed students' career development stories varied by *change or no change in their paths* and *levels of uncertainty* with their current major or career path. The first round of data analysis of the career development stories utilized open coding with the following codes: *change*, *no change*, *certainty*, *uncertainty*. To identify patterns across the stories, *certainty* and *uncertainty* were only coded for the final outcome of students' career decisions. For example, if a student felt uncertain about their original major and career path and changed to a new one in which they now expressed certainty, they were given the *certain* code. At this point, the researcher was not exploring why the individual changed paths, but rather, if they had changed paths and where they were currently at on a continuum of uncertainty. The researcher

recognized an important distinction between career development stories in the *no change* categories. Specifically, the stories of students in the *no change* category varied significantly by their level of in-depth career exploration. Therefore, the *no change* categories went through an additional round of coding to identify the career development stories of participants who had demonstrated a high level of in-depth exploration and those who had engaged in limited career exploration.

In the next round of data analysis, students' career development stories were analyzed to learn the reason why students change major and career paths. For this round of data analysis, the career development stories of students who had changed paths were extracted from the larger data set. InVivo coding was used to identify, solely, the reasons students had changed paths. Axial coding was used to identify patterns and theme this list of codes into categories (Saldana, 2015). Frequency coding was then used to order and develop visualization of the major reasons students change career paths (Namey et al., 2008). At this stage, domain and taxonomic coding (Saldana, 2015) was also utilized for larger categories like classes that included several subthemes such as, *math and science*, *professors*, and *too demanding*. Again, a combination of Excel and online visualization software was used to develop bubble charts to visually represent the data. The stories were scoured one last time to identify career development stories that would be representative of each type of decision-making profile that emerged through data analysis: *change, uncertain*; *no change, uncertain*; *change, certain*; *no change, certain*; and *uncertain*.

Special Population Interviews

It became very evident throughout the data analysis process that specific special populations experienced unique challenges in their career development and decision-making process. Specifically, foster youth, undocumented students, and students with disabilities experienced

unique barriers and challenges that could not be represented adequately through the data analysis process described above. Their challenges were also much harder to separate from their individual stories. Therefore, the individual transcripts for these populations were reanalyzed separately and formed into their own findings chapter. The first round of data analysis involved InVivo coding of all participants who identified as one of the three special populations mentioned above. Axial coding was used to identify themes across the participants within each identity category. Next, participants were chosen whose stories represented the broadest array of challenges facing that population. For former foster youth and undocumented students, only one participant's interview was chosen. It is important to note that there were only two foster youth in the sample, one of whom asked that I do not disclose his/her status as former foster youth. However, this student's challenges were represented in the challenges of the participant's story chosen to represent the foster youth community college student experience. For students with disabilities, three were chosen as there was not one student whose story encompassed the majority of challenges represented in the larger population. This is most likely due to the vast diversity of disability statuses (e.g. learning disability, mental illness, physical disabilities, etc.). The researcher chose to identify participants who would represent the population because she believed it was essential to keep these students' stories intact. After selecting the cases that would be used for this finding section, each transcript was analyzed once more using narrative coding. The researcher was *not* looking for codes or themes from the first round of coding, rather the stories were analyzed as if new pieces of data to "find a form to represent ... storied lives in storied ways, not to represent storied lives as exemplars of formal categories" (Clandinin & Connelly, 2000, p. 141). Other special populations also demonstrated distinct unique challenges, such as LGBTQ students and English Language Learners. However, in their telling of their

career development stories, these identities were not as front and center for these participants; instead students made mention to these identities at various points throughout their interviews. This was most likely due to the limitations of the structured protocol. The researcher is currently in the process of conducting follow-up interviews with these populations to better understand the unique challenges they face.

Study Limitations

There were limitations to this study. First, while representative of the statistical proportion of Black students in the student population at FCC, there were only 3 Black students in this study. Therefore, interpretations of disaggregated findings are extremely limited. Furthermore, the White participants in this study are not representative of the average White community college student populations as 38% of students identified as students with disabilities. There were also only 2 former foster youth in the study. Another limitation of this study was that it did not disaggregate participants by age or year in school, which might have produced significant findings about the development of participants' career identity. The decision to not disaggregate by age was largely due to the needs of the RPP, specifically a focus on equity that was more centered on differences between racial/ethnic groups.

Chapter 4: Findings

The findings chapter is organized into three sections: Career Development and Decision-Making, Labor Market Knowledge, and Special Populations. The first section, Career Development and Decision-Making, has three aims: (1) to examine the factors that influence students' career development and decision-making; (2) to identify patterns in students' decision-making trajectories and explore the reasons students' change major and career paths; and (3) to explore the networks of support and information that influence students' career development and decision-making. The second section, Labor Market Knowledge, explores: (1) students' perceptions and understandings of the labor market; and (2) the questions students have, and information they desire to know, about the labor market. The final section, Special Populations, demonstrates the unique challenges of participants who identify as belonging to one of the following special populations: students who are former foster youth, undocumented students, and students with disabilities.

Section 1: Career Development and Decision-Making

Community college students are tasked with making high-stakes decisions about their major and career path in a very confusing and complex decision-making context. They not only have to navigate an increasingly dynamic labor market, but also an ecosystem of postsecondary credentials (Carnevale et al., 2017) that is also extremely complex, convoluted, and fragmented. The confusion students experience in developing and actualizing their educational and career plans is confounded by the fact that most students enroll in community college without clear goals for college and career nor a clear understanding of the opportunities available to them (Gardenhire-Crooks et al., 2006). So, how do students make decisions about their career in this complex decision-making environment? What factors influence their career development and decision-making? The following section explores the factors that influence students' career development and contribute to the complex decision-making context community college students navigate to make a decision about their major and career path.

Factors Influencing Students' Career Development and Decision-Making

Over half of the participants, 59%, felt a degree of uncertainty throughout their career decision-making process. Many participants were worried they would choose the wrong path and wanted to be certain about their chosen major and career path to avoid changing paths in the future. A majority of participants were also worried about the level of competition in the labor market and were therefore looking for a career that they were certain they could obtain and through which they could become an irreplaceable worker. For the majority of students, enjoying or loving their career and job availability/sustainability were driving factors in their career decision-making processes. Slightly less than half of the participants also reported that their

families and their desire to help others and make an impact influenced their career decisions. In this section of the findings, these and other factors shared amongst the participants have been organized into 4 categories: constructing coherence, learning experiences, contextual factors, and sociopolitical barriers and critical consciousness.

Constructing coherence

Honestly I really don't know, I'm still thinking, I'm still looking around, what exactly suits me, what feels right...that kind of thing. (Student Interview, December 2018)

Most participants were in a process of “becoming committed to a group of people and to a set of ideas one can trust, a process of active selecting and searching...for to whom and what they will be faithful” (Penuel and Wertsch, 1995, p. 88). Erickson (1968) explains that during this time, individuals conserve what feels right to them and correct, or destruct, what has lost its regenerative significance. Ideological commitments are vital to the construction of coherence as they “provide a convincing world image” and hope for an “anticipated future” (Erickson, 1968, p. 30-31; Penuel & Wertsch, 1995). For most participants, constructing coherence included figuring out what they would love, or enjoy, doing for their career. It also included a work environment that aligned to their goals, interests, and values and a career that would afford them a work-life balance. Enjoyment, work environment, and work-life balance were not simplistic ideas for participants, but rather a complex search for continuity and sameness through their interaction with the people, institutions, and discourse in their context.

I want to enjoy/love my future career

For the majority of participants, finding a career that they were passionate about, loved, or enjoyed was essential to their career decision-making processes. For some participants, their career interests and passions developed at a young age,

I decide based on my interests of my major is computer science, and I always loved to learn about computer and coding and the RAM in stuff since I was young. So, I think it will be a good decision to do something you love doing for a job too. So that's how I decided. (Student Interview, December 2018)

and in relation to their K-12 educational experiences.

It happened around 7th grade. I had a very interesting Honors Biology teacher. Yea, we understood evolution and like taught us all about it and would also just talk about it a lot. That, and I watch a lot of science fiction. Jurassic Park, or like I see Wolverine and Deadpool. And don't judge me, I wanna live forever, like be biologically immortal. I feel like a lot more is possible today. So I am thinking about also having my own laboratory. (FCC Student Interview, December 2018)

Choosing a career participants enjoyed and felt passionate about was increasingly important to participants in the context of uncertainty. For example, Cruz, a 2nd year Asian student, explains that he feels a high level of uncertainty about his career path. He started out as an English major, but the more he learned about his chosen career path while in college, the more worried he became about finding a job. Therefore, he switched to Business. However, now he is worried that he will not enjoy a career in Business and is considering switching back to English. He explains that figuring out what he enjoys doing is one of the few things over which he feels like he has some level of control.

Coming out of high school I was like, "I don't know. I'm just here." Now that I'm here, now that I've done all this stuff, I'm aware of the fact that there are these certain fields I could go into. It hasn't made me certain of anything, but that's me in life, I'm uncertain of everything. It hasn't made me feel like, "Oh, this is exactly what I want to do," but it has made me feel like there are a lot of options and a lot of things that I could do. I'm just scared that it's going to be boring. It doesn't need to be the highest, like I don't need a seven figure job, but I just want something that doesn't make me feel like I want to kill myself. Like at least I can figure that out...what I like doing or I don't know. (Student Interview, December 2018)

Other students expressed concern about their lack of concrete knowledge about the daily experience, demands and requirements of their future careers and were therefore searching for a career that they would enjoy doing even during times of stress,

I want to do something that I'd love. Like even if it's stressful, I'd still enjoy the process. I think that's something that I'm still looking for, because it's hard to know until you're there. (Student Interview, December 2018)

or a career that provided them with knowledge and skills that were useful in their daily lives.

I like to learn things that I'll be able to use like from the moment I learn it, until the end of my day, basically. So I know like technology is something like, is a very wide career, so you can take it in different directions and do something new. Like you're not stuck in case...yeah. (Student Interview, December 2018)

Work environment

Students were also searching for a work environment that aligned to their goals, interests, and values. Aubrey, a 1st year Asian student, explains that she has always wanted to work at a big tech company like Google because she had heard that organizations like Google not only have great work environments, but people also enjoy their jobs at Google.

I always have a dream. I want to work at Google or one of the big companies, one of the tech companies. Yea, I want to work really hard for one of the big tech companies. The environment is great there I heard. At Google, well I heard people at Google like their jobs, they have a good pay and also other people, like that work with them, care about them. (Student Interview, December 2018)

Petra, a 2nd year Latinx student, was basing her career decisions on her desire to work for a specific hospital. Due to her brother's medical issues, she had spent a great amount of time in this hospital. She grew to love the work environment there, especially how friendly everyone was to each other. Therefore, her career goals were not only to become an RN, but to become and RN to work in that specific hospital.

My biggest goal is to work at [...] Hospital. And that's because my little brother, the one that's in 9th grade. I have so many siblings to keep track. He's in 9th grade right now. He was born with a heart problem so, I grew up basically in [...] Hospital because of him. I just love the environment and I love everybody there, it's so friendly. So, if I end up at Kaiser, I failed. That's literally, if I end up working at Kaiser, I'll hate myself. Or if I end up working anywhere that's not [that hospital], I would feel like I failed because the only reason why I'm going to school to be an RN and trying to do so good, is to work at [...]

Hospital. The environment's so friendly. And I want to make that kind of difference. (Student Interview, December 2018)

For some students, various aspects of the work environment were deal breakers for them and either caused students to doubt their chosen major and career path or served as a way for students to completely eliminate certain career fields and lines of work. The work environment factors that were most important to students included the quality of leadership and relationships with colleagues,

I don't know who the boss of teachers are...Principal? I think the staff people I just hope they're not rude. I wouldn't like that and it would just frustrate me- and make me not want probably lose interest in my job. So it really does depend on those kind of people. Like if I keep hearing stories like that, I'm not sure...yea, that's important. (Student Interview, December 2018)

daily responsibilities, tasks, and time requirements of the career,

I took a sports medicine class and I kind of wanted to go into being an orthopedic surgeon for a while. I shadowed an orthopedic doctor for a little bit and saw that I didn't like it, like how much you have to do, it's too much. (Student Interview, December 2018)

alignment to their morals and values,

I decided I couldn't do it, like be a lawyer because what happens when you have to defend someone who hurt people. Like this guy hurt these children, but I have to protect him. I just don't think I could that. Or, I don't know maybe there is a way to do that but I just don't know enough. It's ok though because I like Kinesiology. But, that used to be my dream. (Student Interview, December 2018)

and the types of activities involved in specific career paths. For example, some students reported changing their career paths or eliminating career options that required them to “be chained to a freakin' desk,” “sit at a table, just typing code,” or “work in an office sitting down for 8 hours” and instead desired work environments that allowed them to “interact or socialize and network with people,” “manage people and talk to people, not only on a computer,” and “work on things with [their] physical hands” (Student Interviews, December 2018).

Finally, students also worried about discrimination in the workplace. This fear was most prevalent for female participants and students belonging to special populations (e.g., LGBTQ, English Language Learners, students with disabilities). Rosa, a 2nd year Latinx student who identified as lesbian, explains that one of her worries about becoming a teacher is the discrimination she might face in her workplace. She was originally a Marine Biology major, but the math and science courses were very challenging for her so she switched to Child Development upon the advice of her friend. She fell in love with her major and the idea of teaching, but recently Rosa has thought about switching her major and career path back to Marine Biology because she worries about having to hide her identity.

I don't want to overstep, like sharing information I guess because I know, it's still pretty controversial to be like gay even though it shouldn't be. And so I don't want that interfere with my job because, like you hear about those stories about those teachers who like, they get fired because they're gay, and because they told their students they were gay. And I don't want that to be me. I feel like it's been heightened more recently. Since I changed my career path, I've been worried about that because I felt like if I stayed with Marine Biology, like I really wouldn't, like I don't think other people that I was studying or working with would care. I have to like uphold to this like weird unsaid standard to be a teacher I guess. (Student Interview, December 2018)

Work-life balance

Students were also searching for a career that helped them achieve a healthy work-life balance. Participants explained that after the amount of time they had already dedicated to school and after watching their family members work tirelessly and have minimal time for their families, they wanted a career that afforded them a work-life balance. Specifically, participants were searching for careers that would allow them to spend time with friends,

I guess, having a schedule that's really free. I really like spontaneous hang out sessions with friends. Sometimes, they'll just text me at 7 PM and be like, "You want to go out and get some food?" And I'll be like, "Sure." I really like that, so I really want a schedule that allows me to hangout with friends but also have time for me to do work also. I chose my own hours. That fits with journalism. (Student Interview, December 2018)

have time for themselves,

I guess ... I'm not really sure, to be honest. I would just say I didn't want a job that required so many hours, like a doctor would, so I guess I kind of knew I wanted to do something that still gave myself time for myself. So I guess I was just looking into like ... I guess social work is like a 9:00-5:00 and I was like I'm okay with that, because some people they want to do their own hours, but I'm pretty fine with the 9:00-5:00, so I was just like this gives me some time for myself, this also doesn't have that much bad of a pace. Might as well just go for that kind of major, hopefully getting my future job. (Student Interview, December 2018)

and spend quality time with their families.

I have this experience with my dad. The leaves work at six because the traffic in Indonesia is just crazy. And then he gets home by 12am or 11 at night, and that's considered- for him, that's pretty tame. He used to work for a worse boss. He used to leave by six and sometimes he didn't even come home. And they underpaid him, so I just didn't want that, so I have time for my family. He worked all the way from the bottom, so I respect that. But I don't know, I'm not really like my dad. He's all about the job and he really doesn't communicate with family. So I kind of want to be like 50-50. (Student Interview, December 2018)

Rima, a 2nd year Middle Eastern student, has become aware of a stigma that women can't be in medicine because it is too challenging to balance work and home life. However, Rima has also recognized that more and more women are becoming doctors and balancing their lives. She is determined to pursue a career as a doctor, but she explains that she needs to figure out how to achieve a healthy work-life balance because even now, as a student, she is struggling to construct this balance between her studies, internship, and home life.

I need to have a balance between work and my life at home. Because I feel like work is at work and when you come home you should just live your life and I'd like to have a family, like kids. But I feel like medicine is really intense and time-consuming ... a lot of people have been telling me, 'Are you sure you want to do medicine? You're a female and ...' It's that stigma that a woman can't be in medicine and it's just like I really don't like that because I feel like other women have been doing it and if I'm really passionate about it, then I can too. And so I really want to figure out how to have that balance because I'm also struggling completely with balancing my life right now. I'll like get stuff done, but not in the way that I want to. You know like maybe last minute, you should've done that a week in advance. But, there is no time. So, I feel like balance is definitely something that I want to have in the future. So it's like maybe if I can train myself now, then it will be easier when I get there. (Student Interview, December 2018)

Learning experiences, self-efficacy, and outcome, expectations

I am realizing that, this whole fear I have of not fulfilling my life the way I want to. Like, I could just keep going the way I am now, or I could just try something different and see. So I guess I am debating whether I wanna be safe or just do what I want to do. Or, maybe there is a happy medium? (Student Interview, December 2018)

Students' major and career decisions were impacted by their learning experiences, including what learning experiences they had access to. For many students, their performance in and enjoyment of (which were often related) their classes impacted their career decisions. While most of these experiences were negative and occurred in a math or science course, some students reported that positive experiences in their courses helped them refine their decisions about major and career. For example, students reported that persisting through a challenging course or receiving praise from a professor influenced their major and career decision-making process. In addition to courses, gaining labor market knowledge and learning about the demands and requirements of different careers and workplace experiences impacted their self-efficacy and outcome expectations and subsequently, their career development and decisions.

Experiences in college courses

For many students, their experiences in their courses impacted their self-efficacy and outcome expectations, which greatly influenced their career decision-making process. Students reported eliminating or changing major and career paths after taking a particular course that was too boring,

I am majoring in Psychology and I was thinking of being a counselor, but I took a psychology class that bored me, and last semester I took an English class that I enjoyed a lot. So that's kind of making me reconsider my major. Next semester I wanna enroll into the next English class. And if I enjoy that too, then I might switch, but I know that I don't have a lot of time to decide what major. (Student Interview, December 2018)

or too difficult and demanding.

I think when I was switching from the criminal justice to psychology I was ... I don't know why I really chose it, I just thought I had to pick something, but then when I went to psychology we wrote a ton of research papers and I was like, oh this is really a lot of science. I was kind of just like, I don't think I can do this. I'll just probably switch over to sociology, which honestly it's like the same thing. You're still doing a lot of research papers. So that's why I heard about social work, and it's a little bit different because you're working one on one with people. You're still writing, but it's not necessarily just research papers all the time, which made me seem like ... at least there's a little bit more of a social aspect to it, which is something I think I am better at and I really enjoyed. (Student Interview, December 2018)

Mathematics and science courses

Dependent upon their prior and current educational experiences in mathematics and science, students reported pursuing or avoiding STEM-related major and career paths. For example, Belle, a 2nd year Asian student, explained that she has been a “math person” since middle school. She was originally majoring in Sociology because she wanted to go into educational reform, but did not like that her Sociology major had so few math courses. She has since changed her major to mathematics.

I'm not really sure how I would approach it but I feel like I want to be an education reformer because I don't feel like the educational system in China is really working effectively. On the other hand, I feel like I'm a math person, I just happened to like math since middle school or high school so now I'm trying to combine them, I don't know, I am still exploring. When I came here, I first majored in sociology because I felt it's a good approach to go to education reform but then I feel like, we don't really like do math, I don't know, and I feel like I'm still a math person and I still like math so I changed my major to math right before summer. (Student Interview, December 2018)

However, the majority of students reported more negative experiences in their mathematics and science courses, many of which impacted students' self-efficacy and outcome expectations, resulting in participants changing their major and career path. For example, Justin, a first generation 2nd year Asian student, explains that he was originally pursuing Business Management because he has a strong desire to work in the K-Pop entertainment industry. However, after not doing well in his mathematics courses and worried that his GPA and chances

of transferring might decrease as a result of the courses he still had to take in math and science, he changed his major to Korean Literature.

I chose Business Management. But a little after the first year of [my college], I actually got one C and prior to that I had all As and Bs. Then I said, 'Oh gosh, this math is actually getting pretty hard for me, and I still have statistics and accounting.' So that's when I thought if I kept going like that, I probably couldn't be eligible to transfer to the university and program I wanted. So I started to take a step back, and think about do I really need business? So yea, I switched to Korean Literature. (Student Interview, December 2018)

Tania, a 2nd year Latinx student, had a similar experience. Since high school she has had a passion for, and hoped to pursue a career in, Marine Biology. However, she struggled in her Math and Chemistry courses and believed she was also bringing down her groupwork partners in her Chemistry class. Realizing she would probably fail Chemistry, she withdrew from the course. After experiencing similar challenges in her mathematics course, she decided it would be best to change her major and career path. She learned about Child Development from her friend and has now switched her major to Child Development and her career path to teaching.

I took a marine bio class in high school in my junior year, and I fell in love with it. And I just thought the ocean was really cool and that's something I want to do when I grew up, like study the ocean. So I came here, I enrolled in like STEM courses and as soon as ...well first I was taking math and I was doing okay, because I'm not good at math very much. But then I finally took a Chem class and I completely bombed it, I couldn't even finish it, I had a withdrawal from it. I felt like I was just bringing down my other partners too, because we had to do labs together and it's just not something I could handle. And that was only Chem 22, which is Intro to Chem. And I still had to take like another three Chem classes before I could even take like my bio class that I wanted to take. And then the math, I also couldn't, I failed that one too. The math that was together with the Chem 22 and I was like, I can't handle the introduction to STEM, I'm like not gonna be able to handle STEM. It was hard to break it off but, yeah. My friend convinced me to take childhood development class, just like you'd have something to do on Fridays with her. And I've been a early childhood major since this semester. (Student Interview, December 2018)

Educational requirements, demand, and time

As students progressed through their chosen major and career paths, they encountered learning experiences outside of their classes that made them doubt both their capability of completing the educational requirements for specific careers and whether the career outcome was worth the educational investment. For example, Cerisa, a 2nd year Asian student, wanted to be a pediatrician since elementary school, but after learning the amount of time and effort she would have to dedicate to school, she switched her major and career path to nursing.

Since elementary, I wanted to become a pediatrician but then as time progressed, I was like I can't do school anymore. I was like, I'm just gonna stick with nursing and if the hospital that I work for or anywhere that I work for decides to pay for my masters, then I'll get my masters. For now, it's just RN. (Student Interview, December 2018)

Brittany, a first generation 1st year Asian student, was considering becoming an orthopedic surgeon. However, after shadowing an orthopedic doctor Brittany doubted her capability and willingness to not only complete the necessary educational and career requirements, but also perform the daily duties of an orthopedic surgeon.

I took a sport's medicine class and I kind of wanted to go into being an orthopedic surgeon, actually for a while. But then, I shadowed an orthopedic doctor for a little bit and saw that I didn't like it. It's very time consuming, like all of it, even the job, job. I mean, not that law isn't, but also there is just so much you have to do to get there. And, I kind of just wasn't, I didn't want to deal with it, basically. (Student Interview, December 2018)

Persistence and praise

While the majority of students reported learning experiences in classes that negatively impacted their self-efficacy and often led to the revision of their major and career path, there were also students whose experience in class solidified their major and career decisions. These students reported a sense of accomplishment they felt when persisting through a challenging class or a class they originally thought they would do poorly in. Participants also reported that praise from professors and peers influenced their career decision-making. Sylvia, a 4th year Latinx student,

explains that she enrolled in college after years of working a minimum-wage job she did not enjoy. She was nervous about enrolling in college, but also determined to change her life. Upon enrolling, she was told she had to take a placement exam. Not fully understanding the gravity of this exam, Sylvia took the placement exam without preparing for it. She was placed in the lowest level math course and spent most of her first two years of college taking non-credit remedial math courses. She describes this time as very challenging, but also the reason she is now majoring in Mathematics. She had to work extremely hard to do well in these courses and also seek help from the math tutoring center and her math professors. Slowly, she became more and more confident in her math ability and also began receiving praise from her professors and her peers. In class, many of her peers would turn to her for help and she remembered feeling valued and happy that she could help people in her same situation. One of the students she helped in her math class ended up becoming her best friend and still is to this day. Her professor recommended that she think about majoring in Mathematics and she was also offered a part-time job as a Math tutor on campus. She has since been able to help many students. Not just with their mathematics courses, but also, through her story, she has been able to encourage them to keep going, not give up, build their confidence, and cope with their anxiety. Sylvia currently aspires to be a Math professor and is deciding between STEM mathematics and Pure Mathematics.

Work experiences

Students' work experiences also impact their major and career decisions. For some students, their workplace, volunteer, or internship experiences solidify their chosen career path. For example, Zhang, a 2nd year Asian student, has always wanted to work in the medical field. He was able to intern at a hospital in high school and through this experience fell deeper in love with the medical field. He is now pursuing Nursing.

I've always wanted to be in the medical field since I was little. In high school I was actually in a Health Careers Academy and we had an internship at a hospital and I really loved it, so I've always wanted to be in the medical field and then when I found out that [my college] had a nursing program I checked it out and I kind of fell in love with it, so I'm hoping to be in the program next Fall. I'm hoping to, well transfer, well not transfer, graduate and then start an accelerated Bachelor's program in nursing. (Student Interview, December 2018)

For other students, their work experiences help them refine their interest within a particular field.

For example, Rima, a 2nd year Middle Eastern student, is secure in her decision to become a doctor. She is currently volunteering at a local hospital where one of her responsibilities is patient care for people with mental illnesses (e.g., Schizophrenia and Alzheimer's). Due to her work experience, she is now considering specializing in neurology.

Basically the volunteer program that I'm part of, it's mainly geared towards patient care. So I go and have a chat with them, help them eat their breakfast, really listen to what they have to say because it is really sad how they are diagnosed with certain illnesses ... oh, and also the department that I'm working at is mainly schizophrenic patients and behavioral and mental illnesses, like they have and Alzheimer's. So that- Yeah, I actually requested to work in the neurology center. I really want that exposure to hopefully specialize in that in the future. (Student Interview, December 2018)

Finally, for some students their work experiences impact their belief in their capability to work in a particular field and lead them to change their major and/or career paths. For example, Sabrina, a first generation 2nd year Asian student, used to be very interested in a Nursing career.

However, after volunteering at a local hospital, he learned from how exhausting the work can be and realized that her soft voice makes it difficult for her interact with elderly patients. Therefore, she has since decided changed her major to Occupational Therapy and is uncertain about her future career path.

I volunteered at [a local] Hospital on the nursing floor. That's when I was really interested in the nursing field. But then almost all the nurses I came in contact with told me it's a rewarding job but it's really tiring. And, I would interact with patients too, and my voice is really soft so when I came in contact with older patients they could not hear

me at all. So, that's when I sorta decided it wasn't the right job. (Student Interview, December 2018)

Contextual factors: The labor market and complex ecosystem of credentials

When making decisions about their career, students have to negotiate a dynamic and shifting labor market and a complex ecosystem of postsecondary credentials. Secure pathways to a career are not as readily apparent as they once were. As a result, students have reported feeling anxious about the sustainability and job availability of certain careers. Therefore, when making decisions about their future careers, students report that labor market factors (e.g., job availability and stability, competition, jobs in high demand, the impact of technology, etc.) make a difference in major and career paths they choose. For example, Li, a first generation, 2nd year international Asian student, explains that while her dream is to become a Child Psychologist, she has to be realistic and prioritize the survival and well being of her family. Therefore, she is pursuing a major in Business Management, a field in which she already has experience.

I'm a very realistic person. Actually, my dream is become a psychologist. Child psychologist to help the children. I think that's my dream job. But I have to survive first. I have to live in a good environment to keep myself and my families healthy and safe first. So I think if I keep doing the business/marketing manager, which is basically the same job as when I was China, then, at least I have a guarantee that I can get a good pay to maintain my lifestyle and, yeah, manage myself. But later, if I have the opportunity and I can make a lot of money. Then, I would definitely would continue my study in Master for psychology. (Student Interview, December 2018)

Yugene, a first year Black student, explains that labor market trends and the future outlook of specific career paths were factors that impacted his career decisions. He had learned about Industrial Psychology in high school and thought it sounded interesting. After speaking to someone who works in the field, he learned that it was a cutting-edge career and that upon finishing school, he would be entering the profession at a lucrative time. Industrial Psychology

was also appealing to Yugene because he believed its job availability and sustainability would not be heavily impacted by advances in technology.

I learned that it's more of a demand to be on the academic side, like a professor, but also it's like a growing major and stuff so not a lot of people are in it at the moment. So I'm kind of catching it at the right time. Because he [person in the field] started when it wasn't really big, and not a lot of people knew about it. So like, I'm just like going on from there. And it's just like, it's gonna increase soon. I'm going to get out of school around like, 28 maybe. So what like, ten years from now. So ten years from now, it probably will be like a big thing... cause it's not like a thing yet. And then like you know how people talk about careers and like how you need to pick your career based on what technology won't take over? Cause like a lot of technology will take over a lot of jobs? So, my job's sort of like, you can't do that. Because it's actually like a person. You know, people's minds and stuff and how to speak to people, so like yea, I won't have to worry. (Student Interview, December 2018)

Jie, a first generation 2nd year Asian student, has a passion for and originally wanted to pursue a career in music. However, after hearing how challenging it is to secure a career in music, he switched to video production, which he enjoyed learning in high school. When he enrolled in college, he took a College 1 seminar in which he learned about the salary differentials between the lowest and highest earners in the field of video production. After interviewing someone in the field he learned that unless he was in the top-tier of the business in video production, he would not earn a high salary. Upon finding this out, Jie switched his major and career path back to music.

Seeing how hard the music career is too, it kind of made me want to go deal with video production. I learned video production through in high school. When I got to FCC and was in College 1, they made me do an interview. I went to FCC Pathways and they said to me "Look, if you're not up to a certain level, almost top-tier level, you're not going to earn much from this." Only people with a certain amount of skills is actually making a good earning from that. That kind of pushed back to music. (Student Interview, December 2018)

Salary was an important factor in students' career decision-making process. Nguyet, a 2nd year Asian student, explains that a stable salary is an important factor in her online job searches and

that, even if she loved a major or career path, she would reconsider her decision if it was not lucrative in the labor market.

I will say when I search on Google I do look at the job that has a stable salary because I think that is really essential element to consider when you focus on the major too. I will say if a job that I love a lot, but not gonna be really favorable in the labor market, I will still have to reconsider that. (Student Interview, December 2018)

Students were not necessarily looking for extremely high salaries, but they did want to be financially stable enough to live comfortably,

Their salary, their median is like eighty thousand. Which is like, what you start with. But the guy I talked to, he says he makes well over two hundred thousand like a year. It depends like what you do, but I know it comes with a lot of money if you do good in it and like you go the right places. So like, that's my desire to just be like that basically. Like I want to live comfortably and have a family and yea. (Student Interview, December 2018)

provide for their families,

Basically, I wanna be able to provide for my parents, so that means a job with an above-average salary, and occupational therapists' salary is not that bad, so I will be able to provide for them and make sure they're ok. (Student Interview, December 2018)

and not have to struggle.

I just don't want to have to experience what it's like to struggle. I already know what it's like and I don't ever want to have to do that. As an RN you only work 48 hours a week, too. So, 48 a week, you can get that done in two days or you can split it up, whatever. Not two days. Like, three. But, they get paid good, so it's like salary that will make sure I'll be good and won't have to like struggle, yea I don't want that. (Student Interview, December 2018)

Finally, students reported concern and anxiety about the level of competition in the labor market.

Resultantly, students often chose jobs that would make them competitive in the labor market or they chose career paths that were less competitive. For example, Samara, a 3rd year Asian student, originally wanted to study Computer Science, but was worried about how popular of a major Computer Science had become recently. She decided to switch to mathematics because it

wasn't as popular and would she believed it would therefore make it easier for her to transfer and find employment.

I feel like with math it's easier for me to get around because it's not as popular as computer science. Computer science is crazy, every university has a major specific to computer science. And, everyone is doing it. And I'm not sure if we really need that many. Like everyone studies it. It's crazy. So yeah, math isn't that popular. So probably I will get in to every university that I apply to. I feel like teachers probably are needed everywhere, anytime. But I don't wanna teach in school, like in high school or middle school, but I know it'd be easy to get a job. (Student Interview, December 2018)

Many students also reported anxiety about not standing out from their peers and being a “replaceable worker” in the labor market. For example, Yong, a 1st year Asian student, explained that her high school was very competitive and produced students who were all very capable and accomplished, but also all the same types of people. She wanted to learn how to differentiate herself from her peers and to stand out to increase her chances of obtaining employment.

I wish I'd been born like 50 years earlier because it would've been so easy to be successful back then than it is now. There's just much higher expectations and I don't think that climb is ever going to stop. They're going to demand more and more, and then people are going to burn out so quickly. School is literally just pumping out the same types of people. There's nothing that's going to differentiate any of them; you can just have your pick and you're going to know that person is going to do the job right. My high school was super competitive, like everyone was super smart, and all their lists of accomplishments were like three feet long. If everyone is so qualified, how do you even choose which one to pick? They're all the same. I don't know. I'm worried about me, what's going to make me stand out from all the other people who probably want the same job as me. (Student Interview, December 2018)

Similarly, Ki-nam, a 2nd year returning Asian student, worried about labor market competition and job stability. He believed that unless he stood out from his peers, he would be easily replaced and wanted to make sure he was an irreplaceable worker.

When I was working, I just craved for more knowledge. I wanted to be more competent in my skills and be unique and not really a replaceable labor worker. So that's what made me come back to school. A lot of people say cliché stuff like, ‘Oh, you need to get your education.’ “If you get this degree, you're going to get a good job and you're going

to make decent money so you can live a stable life.’ That I heard ever since I was a kid, but I felt from my own personal experiences through working here ... and there were multiple jobs ... I realized that I felt like an easily replaceable worker. Which I hated. And I was working really hard to be competent at my job so that I’ll be outstanding, so that I’ll be better than my peers. So that I would be less replaceable. I need to ensure my place and make sure that I have job stability. (Student Interview, December 2018)

Sociopolitical barriers and critical consciousness

Diemer (2009) argues that while the negative effects of students’ experiences with sociopolitical barriers are significant, students’ desire, agency, and capacity to negotiate and alter these conditions of oppression remain underexamined. In his work, Diemer (2009) found that underrepresented students often have a sociopolitical development, or a critical consciousness and motivation to change one’s social reality and help others by addressing sociopolitical inequalities through community action (Ginwright & Cammarota, 2002; Watts & Flanagan, 2007). This was the case for many participants who, after experiencing myriad life challenges and sociopolitical barriers, wanted to pursue a career through which they could help others, make an impact, and that had relevance to their lives and the lives of their family. For example, Brenda, a 2nd year Latinx student, grew up with a cousin who had Down syndrome and learned a lot about how to support children with special needs. She also had family members who struggle with mental illness and had experienced her own struggles with depression and anxiety. Brenda explains that she originally did not seek therapy because of the stigma surrounding mental health. However, she tried therapy and realized how important it is. She now wants to be a behavioral or general therapist to change the stigma around mental health in her community and also make services more affordable.

I have a cousin with Down syndrome. She's a little ray of light and she's just so wonderful, and I wanna be around kids like that to help them or any child with special needs. I just wanna be there for them. Also last winter, I was depressed, so I went to therapy. At first I was like the hell is therapy? I'm not even gonna talk to them. They're weirdos. I went in and I kid you not, she asked me like two questions, I started bawling.

I didn't even know I had that in me. Once I started talking I couldn't stop, and I was crying. I was a hot mess basically. I was like, she made me feel better, so I wanna help other people feel better. So yea, I wanna be a therapist. And I want to change the stigma about mental health in my family and community. But also, like make services more affordable for people because they need it. Like in my family, last week, oh my God. My aunt called me. She was like, hey, don't go out...I had just gotten home from a class, and nobody was home, and I was like what do you mean don't go out? She was like, okay, your uncle stopped taking his meds and he has a gun. He's just losing it and I left him and took the kids. I was like, okay, but how does that affect me? She was like because he thinks that they're staying with you. I was like oh... So yeah. I know everybody loses it at one point, and I feel like there's always gonna be a demand for therapists. And, whether they want to acknowledge it or not, people need help. So yea, I hope I can change that or help that. (Student Interview, December 2018)

Si Woo, a 2nd year Asian student, explains that when he used to live in China, he saw a lot of people who lacked access to adequate health care. While living in China, he experienced huge natural disasters, such as earthquakes, that resulted in many people dying, especially homeless people, because they could not access medical treatment and care. Si Woo wants to become a doctor to help people in these situations.

I used to live in China. I'm a Korean and I lived in China for 10 years. I lived in Mongolia for about one year around and here for like three or four years. And my experiences in mostly China and Mongolia, I saw a lot of people who weren't able to access medical treatment and care. Actually, when I was in China I experienced huge disasters like earthquakes. One was like an 8.0 earthquake. A lot of people died. It was chaos. Being in that, those environments and seeing all the homeless people in Mongolia. It just inspired me to want to help them. It motivated me to pursue a career as a doctor. (Student Interview, December 2018)

Rima, a 2nd year Middle Eastern student, wants to become a doctor to help people like her grandfather. Rima's grandfather passed away from a stroke. He was living in Syria during the revolution and lacked access to adequate and immediate medical treatment. He was driven two hours to the borderline between Syria and Turkey to receive care, but his stroke required immediate attention. He was in a coma for a week before passing away. Rima's grandmother was also given the wrong medication for her cancer, causing her early death. Rima explains that after both of them passed away, she wanted to fix things in medicine.

My grandfather passed away from a stroke. And he lives in Syria and because it was during the revolution, there's no adequate and immediate medical attention. When it happened ... so there were like borderline between Syria and Turkey so they actually took an ambulance from Syria to Turkey, but that's two hours. And like a stroke you need to do it like in ten minutes-So he unfortunately was in a coma for a week and he passed away. It was really difficult for my family. That time my mom didn't get to say good-bye. Also, my grandmother, she was diagnosed with cancer and they messed up with her medication and it killed like everything in her body, and she died at the age of 63. Because both of them passed away you feel like things are messed up in medicine. Like, I need to fix that. So that was also one of the major things that really pushed me to pursue medicine as my major, because you really get to look at like, the brain and like, factors that cause something like a stroke. (Student Interview, December 2018)

Melissa, a 2nd year returning Latinx student, originally left school to have a family. When her son was three years old, he was diagnosed with autism. Melissa explains that it has been a really long journey. She has learned a lot about supporting her son and communicating with his school and teachers. She has also developed a passion for helping students like her son and families that are in similar situations as her own. She has decided to return to school to become a Special Education teacher. In her years of experience navigating the school system to ensure her son received quality learning supports, Melissa also recognized that there are very few quality services for the Spanish-speaking community. While she believes it will be challenging to translate these services into Spanish, she wants to try and hopes to be an advocate and someone Spanish-speaking parents can turn to for support.

My second child, he is autistic. So when he was three years old, the doctors and all that was like a boom to me! He's 8 now, and it's been a really long process with him. Learning all what special education is and all that. It was a new window. And I found great people in the field, but I've found people that just do it because of the money. So he is my biggest motivation to come back to school. So I came back to school about two and a half years ago. I'm looking for a teacher credential in special education. We need people that want to do it with their heart, not just about the money. It's just to help someone because my son is so blessed. He has my husband and I. And we have a great group of people at school working with him as a team. But not every child has the same. So I'm looking forward to that. And then people, a lot of people who has special children, that are Hispanic, don't speak English. So it's hard to deal with a child with

special needs, and then like not understand what people are telling you. It happens to me all the time. The translation gets lost, I'm like what, I'm sorry. Because the translation get lost. It's not the same. Whatever, the computer, maybe someone has a paper in Spanish they give to you... But it's not the same. It's usually not accurate language and it doesn't make sense. So yea maybe I can help people, like who don't understand English. I mean, my English may not perfect but I totally can communicate. And I understand all of this better in English than in Spanish right now too. You can tell me how to say the whole thing in Spanish, maybe I will get lost, but I can try. It's just funny, you know, like I always think, my life was going a different way and then because of my son, I'm here. (Student Interview, December 2018)

Socorro, a 2nd year Latinx student who recently transferred to community college from a 4-year university, explained that her experiences as a first generation student made her want to become a PreK/K teacher, which she believes is a crucial time in a child's development. She wants to become a teacher to teach, prepare, and nurture our future generation.

I decided on PreK/K because I think that is the most important and also crucial time in a child's development and growth. And I feel like I could have more of an impact on their learning at that age just because they're at such a young age. And so it's like once you start from the beginning, that's where you have the most impact on their growth throughout the course of their lives. They're just so eager to learn, so it's like having that impact on them will help them feel more comfortable with not only themselves as individuals but being able to help them be more educated throughout their growth. My biggest worry is probably that I don't wanna be a bad teacher. I don't want to fail my students. Just because as teachers, we have the role where we're growing these students into the next generation. So it's like you're taking care of the next generation that's to come. So I just want to work hard to try not to fail them. (Student Interview, December 2018)

While the findings here attempted to demonstrate a broad range of examples of students' sociopolitical development, the majority of participants who demonstrated a sociopolitical development were most often choosing lower-paying major and career paths (e.g., Child Development and Sociology) and very rarely choosing pathways careers in STEM, finance, business, or law.

Variation within and between subgroup populations

Disaggregation of the data revealed that the factors influencing students' career development varied in degree by race/ethnicity, first generation status, and gender. When making decisions about their careers, first generation (FG) participants were more concerned than non-FG participants with factors related to family influence, helping others, and finding a career relevant to their lives, and less concerned than non-FG participants with factors related to the labor market, specifically job sustainability, salary, competition in the labor market and being competitive, and work environment. In comparison to male participants, the career decisions of female participants were more influenced by factors related to family influence, helping others, finding a career that was relevant to their lives, and work environment and less influenced by factors related to the labor market (i.e., job sustainability, competition and being competitive in the labor market, and work-life balance).

When making decisions about their career, Latinx participants, more than all other racial/ethnic groups, were searching for a career through which they could help others and make a difference. Latinx participants also expressed a higher level of concern with the alignment between their values, interests, and life experiences and their future career. Furthermore, while persistence (e.g., in a class, learning skill, or in the workplace) did not significantly influence the career development and decisions for the general population, over a quarter of Latinx students reported that factors related to persistence (e.g., success in a difficult course or the workplace, learning a new skill, overcoming a major life challenge) influenced their major and career decisions. The career development and decision-making of Latinx participants was also less affected by factors pertaining to the labor market (e.g., job sustainability, competition, work environment, salary, and work-life balance). Within the Latinx population, Latinx females were

more concerned than Latinx males with enjoying their future careers, salary, and finding a career that was relevant to their life and the lives of their families, while Latinx males were more concerned than Latinx females with job sustainability and being competitive in the labor market. Latinx males were also more influenced by factors related to persistence and reported a higher level of fear of failure. Finally, the career development and decisions of first generation Latinx students, more than any other subgroup population, were influenced by factors related to persistence and the desire to gain a level of control over their lives. FG Latinx students were also the least concerned with competition in, and being competitive in, the labor market.

When making decisions about their careers, Asian students were the most influenced by factors related to the labor market, specifically job availability and sustainability, being competitive and the competitiveness of the labor market, work environment, salary, and the demand of a particular major and career path. The career decisions of Asian students were least influenced by factors related to helping others, fit, and fear of failure. With respect to gender, the career decisions of Asian female participants were more influenced than Asian male participants by factors related to work environment and helpings others, while Asian male participants were more concerned than Asian females with factors related to competition in, and being competitive in the labor market, and salary. More than non-FG Asian participants, the career development and decisions of first generation Asian participants were more influenced by factors related to family influence, life relevance, and work-life balance and less influenced by factors related to sustainability and salary. Finally, the international Asian population reported, at higher levels than the general Asian population, that their career decisions were influenced by factors related to job sustainability and less influenced by factors related to the desire to enjoy their career and help others. When making decisions about their careers, Black students were most concerned

with factors related to fit, job sustainability, and salary. They also demonstrated the highest levels of family influence and the lowest levels of fear of failure. White students' career development and decisions were most influenced by their desire to be competitive in the labor market, salary, and factors related to uncertainty and least affected by factors related to fit and work environment.

Career Development Stories

Career exploration is an essential process in the healthy development an individual's identity and involves exploring one's self in relation to the world of work, which can be done through both in-breadth and in-depth exploration. Career commitment extends beyond making a choice about one's career to being attached or committed to that choice. Therefore, career commitment involves both career decidedness and career attachment. Career reconsideration involves examining alternative occupations that may be a better fit. Depending on its interaction with career exploration and commitment, the process of (re)considering other occupational alternatives can support the crystallization of one's vocational preferences and can therefore, be an essential process in an individual's identity development.

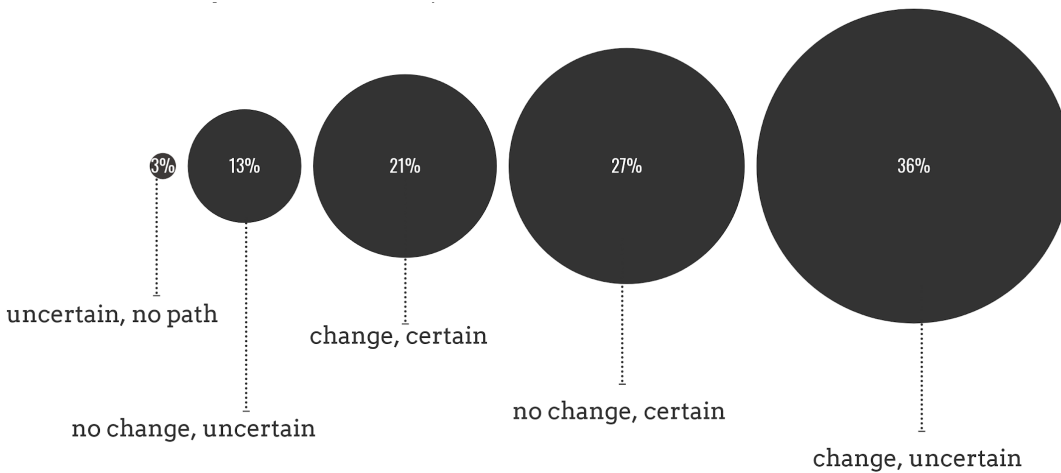


Figure 1. Students' career decision-making process organized by level of uncertainty and change

Analyzing students' career development stories, see Figure 1, revealed that more than half, 51%, of the participants have changed major and career paths since enrolling in college. Approximately 40% of students have not changed paths since enrolling in college and 3% are too uncertain to choose a path and remain undecided. Furthermore, 33% of students who have not changed paths and 63% of students who have changed paths still remain uncertain. Table 1, below, provides examples of students' career development stories for each category (i.e., *change, uncertain; change, certain; no change, uncertain; no change certain; uncertain*). Digging deeper into the career development stories of each group, revealed important differences between participants in the *no change* categories. Within these categories, the stories of participants ranged by their level of in-depth exploration, which impacted their career development. Take, as example, the career development stories of the two participants in the *no change, certain* category. The first student has never changed her path and is certain that she will stay on a major and career path to become an author. However, evidenced by both her career development story and the rest of her interview, she has had limited opportunities to explore and learn about what a

career in writing entails. Conversely, the second participant in the *no change, certain* category has engaged in a high level of in-depth exploration about her future career in pediatrics. Both of these students have stayed on and demonstrate certainty about their chosen career paths.

However, they are at very different stages of their career development and need differentiated forms of career guidance.

Type	Examples
Change, Uncertain <i>High level of exploration, low commitment</i>	In high school, I volunteered at a hospital on the nursing floor and became really interested in Nursing. But, then I spoke to some people in the field and they said that it's rewarding but also really tiring. I was also worried because there is a lot of patient interaction and I have a very soft voice. If I needed to help an older patient, I was worried they wouldn't be able to hear me. Also, I found out how many courses it took to become a nurse and it is very demanding. I wanted to be certain about what I was doing because I have to do it the rest of my life and I didn't want to waste time or money or have to come back here and redo it all over again. So I switched to occupational therapy. Someone at my church is an occupational therapist and they told me about it and it seemed interesting. But it's competitive and there aren't a lot of schools in CA that offer a Masters program for it. I am trying to avoid rejection. I don't know, I am still questioning if I want to change my major again. I don't know.
Change, certain <i>High level of exploration, high level of commitment</i>	I wanted to be a psychologist or psychiatrist since the 9th grade. But the more I learned about it, the more I realized it was not for me. I didn't like the barrier between the patient and therapist. There was no bond. My mom works in hospitals and I also used to work as a receptionist in a hospital where I watched nurses interact with patients. They had closer relationships with patients. So I saw the difference between psychologist and nurses and decided to switch to nursing. My parents also wanted me to be a nurse. Also, it doesn't require med school. I want to be at the top of my field, be a nurse practitioner. I want to be paid well. CA is very competitive so I might have to leave because jobs available here are not as high paying.
No change, certain <i>1. Low level of exploration, High level of commitment</i> <i>2. High level of in-depth exploration, High level of commitment</i>	<ol style="list-style-type: none"> 1. Poetry has always been therapeutic for me. I took creative writing in HS and I liked that I could create something from my own thoughts and control stories. It was interesting. It was also easy for me. It feels right and is fun and enjoyable. I also received praise from my friends and teachers. I chose the romance genre because it helps me solve the problems in my life. 2. My mom was a pediatric nurse. So I remember visiting the hospital and seeing those kids there and it made me want to find a way to help them and sparked an interest in preventative care and stuff. So I am pursuing pediatrics and neonatal care.; I am also inclined towards research and laboratories. I chose Biology over Chemistry because I am better at it. Taking classes also made me realize what I didn't want to do. Like math, even though it's a good major or engineering. Also, I thought about Microbiology, but is a harder major to transfer with because university programs are so impacted.
No change, uncertain <i>1. Low level of exploration, low level of commitment</i>	<ol style="list-style-type: none"> 1. I have wanted to be in business since I was little. My father is in business. He works for a car company. I liked how in business you get a lot of respect and power and have control over other people. But, I am worried about how competitive it is, it makes me feel uncertain, like I have no control over the future. 2. I chose my path by what I was strongest in. I love computers, but I am not super into

<p><i>2. High level of in-depth exploration, low level of commitment</i></p>	<p>programming so I was trying to think about what I could do with computers that didn't require programming. So I chose business and computer information systems. I am still uncertain. At first I thought it aligned with my interests, but then I took an intro class and questioned that. At this point, I feel like I just have to stick with whatever I'm going for. I also used to think I would get a job easy, but the more I learn the more I realize how competitive it is. And you need experience, but you can't get experience without having experience.</p>
<p>Uncertain <i>Low level of exploration, low level of commitment</i></p>	<p>Every week I am thinking of pursuing something new and different. I really need help figuring out my life. I'm not sure where to start or who to go to. It is too hard to start with career and then pick a major, but that's what everyone wants you to do right now. So I have just decided to start with the school I want to go, then look at the program that look interesting and competitive and work backwards. But, I am just really unsure. I just can't think about it. I have to ignore it and hope it works out.</p>

Table 1. Students' career development stories organized by level of uncertainty and change

The intent of organizing students' career stories into a particular category based on the level of uncertainty and level of exploration is not to argue that all students fall into these categories. Rather, it is to demonstrate that the career guidance students need must be differentiated.

For example, students who are engaging in high levels of in-breadth exploration, but remain uncertain about their major and career paths may need guidance that helps them organize the various career paths they have explored. They might also need support in English or Mathematics courses. As described in more detail below, students report that the most common reason they changed major and career paths was due to their experience in a particular course. Or, they may have lacked career exploration opportunities in high school and/or currently lack labor market knowledge. Furthermore, they might also be receiving advice or pressure from multiple conflicting sources.

A student who has engaged in a high-level of in-breadth exploration and is now certain about their career path might need someone to help them incorporate the credits they have accumulated along the way into a minor or certificate.

Or, a student who appears confident in their decision, but has engaged in very little career exploration might need more information about the options available to them and information

about the labor market knowledge. This student might also need support in courses as their hesitancy to venture into new majors and career paths could stem from a fear of failure.

A student who has never changed paths and engaged in a high-level of in-depth exploration may need career guidance that helps them decide upon a specialty within their field or potentially early access to internships and research opportunities.

Students who have never changed paths and are uncertain about their major and career decisions often reported that their parents or connections in the labor market influenced their major and career decisions. These students might need reassurance that they can secure a job outside of the networks that are available to them.

Finally, while all students should be provided with emotional support and guidance when making decisions about their occupations as these decisions are inextricably tied to their identity development, students who are uncertain and have engaged in little career exploration often require additional emotional support. These students are more likely to take noncredit courses, end up with credits they do not need, have prolonged times to completion, dropout of school, and experience high levels of anxiety and stress (Porfeli et al., 2013).

These are only a few examples of the diverse supports students need when making high-stakes decisions about their major and career paths. However, they speak to the importance of differentiating for students' levels of uncertainty and career exploration.

Why Did Students Change Their Major and Career Paths?

Students changed major and career paths for a variety of reasons, the most common being their experience in a particular class, see Figure 2. The majority, 80%, of these experiences were negative causing students to doubt whether they would be fulfilled and/or capable of persisting in a particular career field. Furthermore, approximately half of these negative course experiences

were attributed to students' difficulties in math and science courses. However, in a few cases, positive experiences in a course (e.g., persisting in a challenging course, a great professor, interest/engagement) also led to students switching paths.



Figure 2. Reasons students change major and career paths

Other significant reasons students changed major and career paths included factors related to the labor market. For example, students desired a higher salary; were worried about job availability and sustainability in their current field; or were concerned that their current major and career path were too competitive for them to be successful. Students also reported changing career paths to a field in which their family had experience or connections because they were worried about securing employment after graduation. Demand, or the amount of time, effort, and education a particular career required, was also a major determinant. Students reported changing their major and career paths upon learning—in classes, through counselors and friends, or by conducting their own research—how much time they would have to spend in school and/or the

amount of work the classes in their major required. Similarly, upon learning more about the requirements of their future career, some students changed their paths because they worried they would not be able to achieve a healthy work-life balance through their current major and career path. Finally students with a high level of uncertainty more likely to change their major and career path: (a) to a path that was more broad and flexible (e.g., Communications, Business, Political Science, Sociology) so they would not be stuck later in a career they did not enjoy or in which they could not find employment later in life; (b) in response to advice from family or friends; and (c) after learning about, and in efforts to meet the requirements of, a specific transfer program or internship that sounding appealing.

Networks of Support and Information

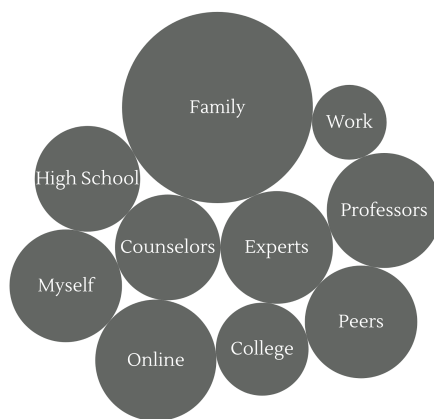


Figure 3. Students’ networks of support and information

Students were asked to identify the sources of support and information they rely upon to make decisions about their career. Family was identified by the majority of participants as an important source of career guidance for participants, see Figure 3. Approximately 71% of students reported asking a family member for help, advice, or encouragement when making a decision about their future career. Online searches and social media (e.g., Google, Reddit, university websites, instagram, YouTube, blogs, Indeed, Monster, USAjobs, company websites,

etc.) were the next highest reported source of information at 30%, followed by professors (26%), experts (25%), myself (25%), peers (25%), counselors (22%), high school teachers or counselors (22%), other college staff (17%), and finally workplace or work colleagues (11%).

Disaggregating student responses by race/ethnicity, gender, first generation status, and international status revealed significant differences in the networks of support and information participants draw upon to make decisions about their career.

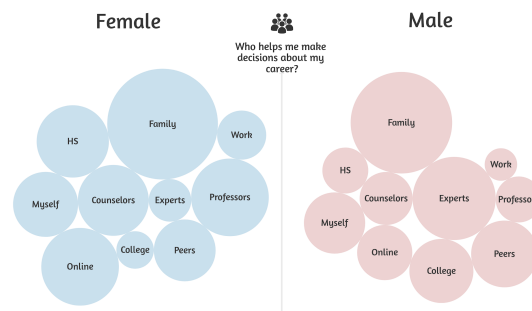


Figure 4. Networks of support and information by gender.

Gender

When making decision about their careers, female participants were more likely than male participants to seek help and advice from high school staff, professors, and online sources, while male participants were much more likely than female participants to seek help from experts, see Figure 4.

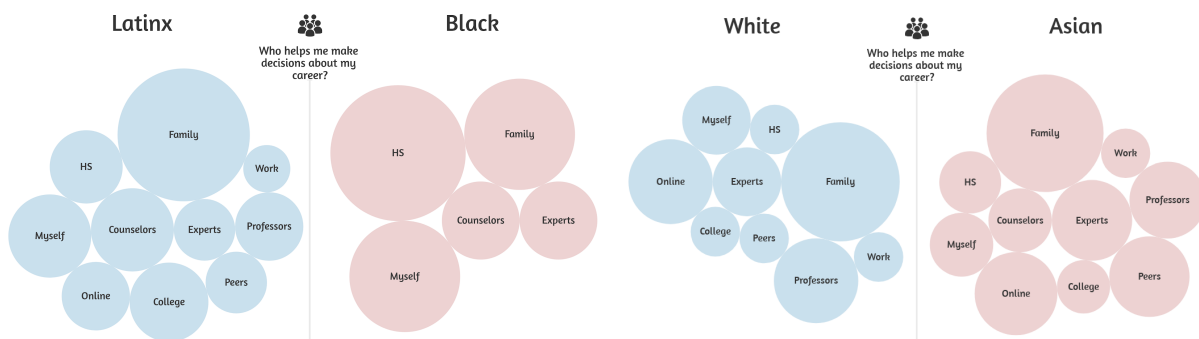


Figure 5. Networks of support and information by race/ethnicity.

Race/Ethnicity

All racial/ethnic groups reported family as an important source of career guidance, with Latinx participants reporting the highest level of family support, see Figure 5. More than all other racial/ethnic groups, when seeking help and information in the career decision-making process: (a) Latinx students turned to counselors and college staff; (b) Black students reported relying on themselves and their high schools; (c) White students turned to professors and online support; and (d) Asian students turned to experts and peers. White and Asian students were less likely than Black and Latinx students to rely on themselves, while Black and Latinx students were less likely to seek online support and information for career-decision making. Latinx students were least likely to report seeking career support and information from experts. *It is important to note that the Black sample was very small and only consisted of three students. The White sample was also small (i.e. 8 participants) and was also not representative of the White community college population (i.e., 3 out of 8 of the White participants had a disability, two were international, and one was a returning student).

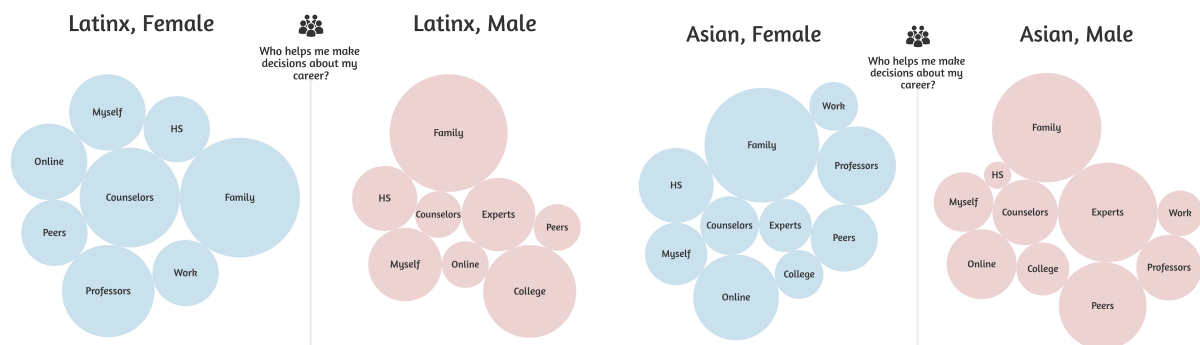


Figure 6. Networks of support and information by gender and race/ethnicity.

Race/ethnicity and gender

Both the Latinx and Asian student populations were large enough to disaggregate by gender, see Figure 6. Doing so revealed meaningful differences. Latinx female participants were

more likely than any other subgroup to seek career guidance from professors, counselors, and their workplace, and the least likely to seek career guidance from experts. Latinx male participants were more likely than all other subgroups to rely on college staff for career guidance, and the least likely to turn to peers and counselors. Asian males were more likely than all other subgroups to turn to their peers and experts for career guidance, and the least likely to seek help from their high schools.

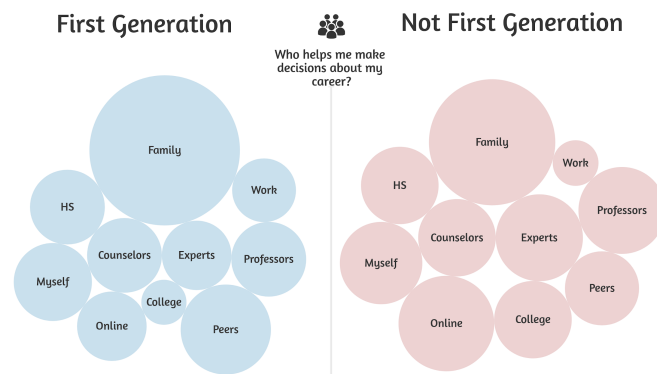


Figure 7. Networks of support and information by first generation status.

First generation students

First generation (FG) students reported turning to family for career guidance more often than non-first generation students, see Figure 7. First generation students were also more likely to turn to peers and their workplace and less likely to turn to experts, online sources, college staff, and their professors for career guidance.

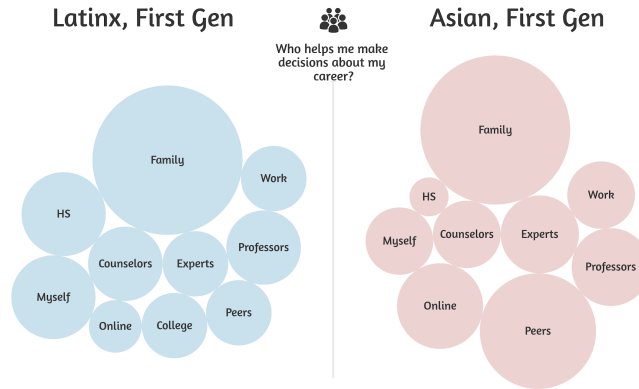


Figure 8. Networks of support and information by first generation and race/ethnicity.

First generation and race/ethnicity

Disaggregating first generation status across Latinx and Asian populations, see Figure 8, revealed that FG Latinx students are more likely than FG Asian students to rely on themselves and turn to their high schools and college staff and less likely than FG Asian students to turn to experts, peers, and online sources of support and information. There were too few FG students within the Black and White participant population to produce meaningful comparisons between and within these racial/ethnic groups.

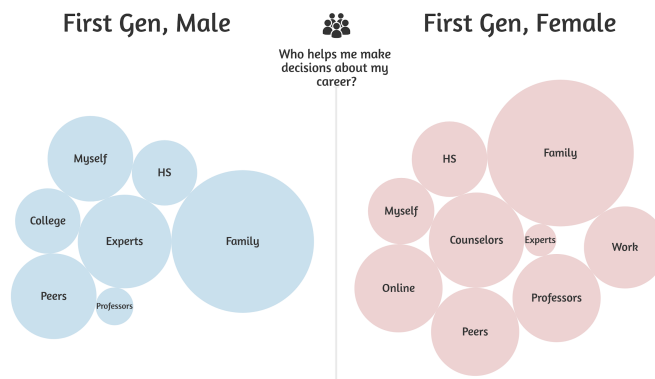


Figure 9. Networks of support and information by first generation and gender.

First generation and gender

Disaggregating first generation status by gender revealed FG female students are more likely than FG male students to rely on counselors, their workplace, online sources, and professors, while FG male students are more likely than first generation female students to rely on experts, college staff, and themselves.

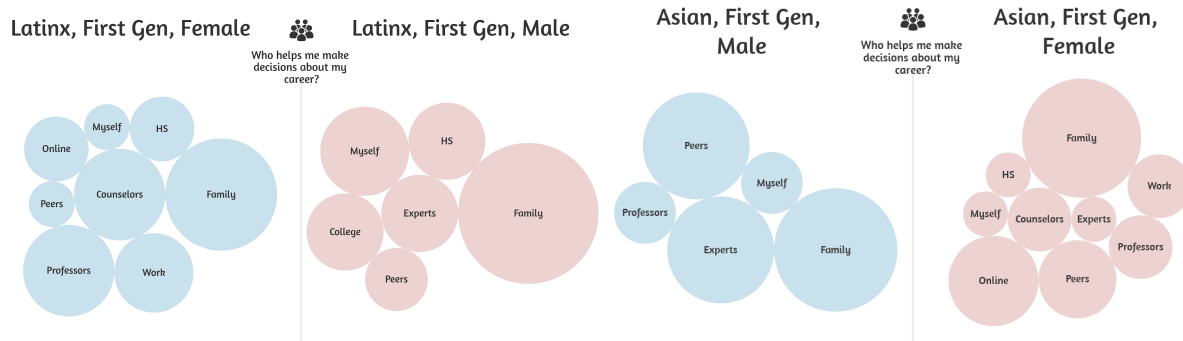


Figure 10. Networks of support and information by first generation, race/ethnicity, and gender.

First generation, race/ethnicity, and gender

To better understand intersectionality within the first generation (FG) student population, data was disaggregated even further to identify differences, if any, between FG female and male students within the Latinx and Asian student populations, see Figure 10. FG Asian female participants were more likely than FG Asian male participants to rely on career guidance from online supports, counselors, and their workplace, and less likely to rely on themselves, experts, and peers. FG Latinx female students were more likely than FG Latinx male students to utilize counselors, professors, online supports, and their workplace and less likely to rely on themselves, peers, experts, and college staff for help making career decisions. FG Latinx and Asian males were less likely than any other subgroup populations to turn to counselors and professors for career support and information. FG Latinx and Asian female students were more likely than other subgroup populations to turn to their workplace for career support and information.

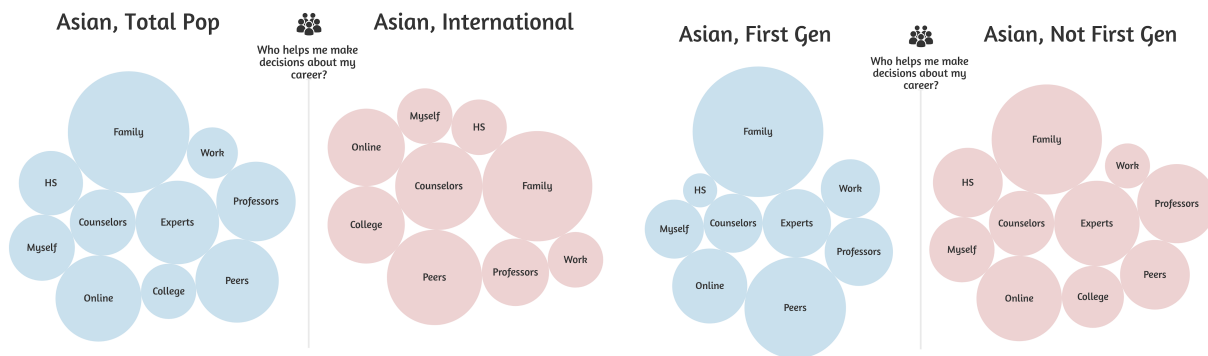


Figure 11. Networks of support and information, diversity within the Asian population

Diversity within the Asian student population

The Asian participants population was a diverse sample, including international students, first generation, and non-first generation students. Disaggregating the data revealed differences between their networks of career support and information, see Figure 11. The international Asian participants were more likely to turn to peers, counselors, college staff, and their workplace for career guidance. First generation Asian students were more likely than non-FG Asian students to seek career guidance from family, peers, and their workplace. Whereas non-FG Asian students were more likely to seek career guidance from experts, their high schools, and professors.

Different Types of Family Support

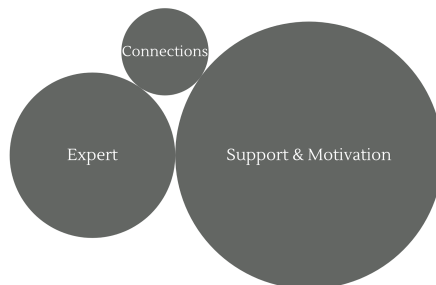


Figure 12. Variation in the type of career guidance participants received from family.

While participants from all subgroups reported family as a primary source for career guidance, the nature of the career guidance participants' families provided for participants varied

significantly across subgroups, see Figures 13 and 14. Family provided 3 main types of career guidance for participants: (1) support and motivation; (2) expert knowledge and advice; and (3) connections to the labor market, see Figure 12. Support and motivation was the most common form of guidance and included items such as, encouragement, motivation, housing, food, transportation, emotional support, financial assistance, and nonjudgmental listening. Expert knowledge and advice was the next most common type of support provided by participants' families and specifically refers to family members who work in the career field students are exploring or to which they have already committed. Finally, family members also provided connections and networking opportunities for participants by connecting them with friends and colleagues in participants' fields of interest.

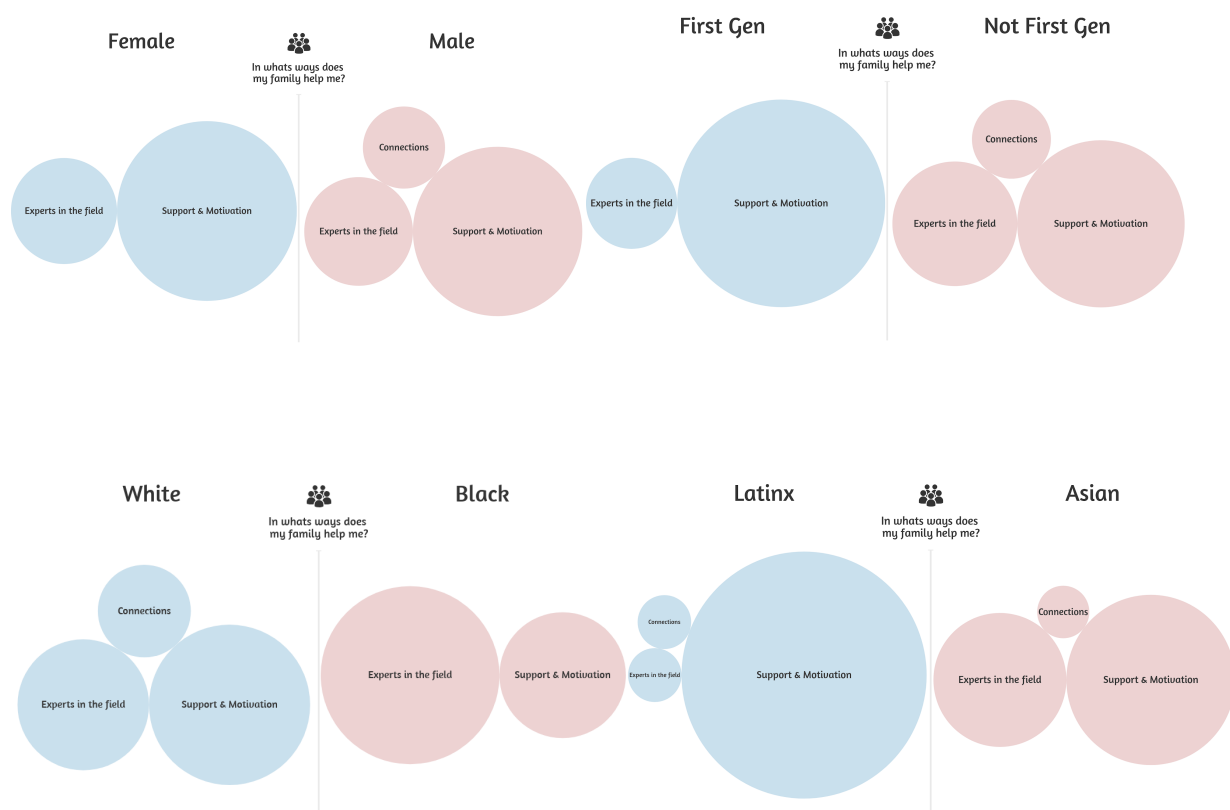


Figure 13. Variation in types of family support by gender, by first gen, and by race/ethnicity.

Female students and first generation participants did not report connections as a source of support they receive from their families. Male participants and non-first generation participants reported receiving all three types of family support—expert knowledge and advice, connections, and support and motivation. Non-FG participants reported receiving from their families the highest levels of expert knowledge and advice. In comparison to all other racial/ethnic groups, (1) Latinx participants were least likely to report career guidance from their family in the form of expert knowledge and advice; had very help from family in the form of connections to the labor market; and also reported the highest levels of support and motivation; (2) Black and Asian students reported the highest levels of expert knowledge; and (3) White and Asian students reported the highest levels of family career guidance in the form of connections to the labor market.

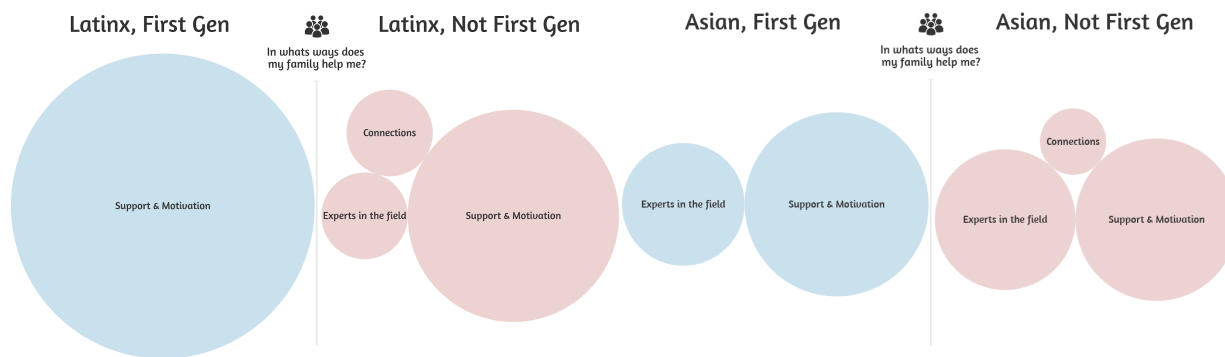


Figure 14. Variation in family support by first gen and race/ethnicity.

Finally, disaggregating the first generation population by Latinx and Asian revealed: (1) Asian first generation participants did not receive help from their families in the form of connections and (2) first generation Latinx participants only received career guidance from their families in the form of support and motivation, but did not receive help in the form of connections or expert knowledge and advice.

Section 2: Labor Market Knowledge and Knowhow

Recently an increased amount of attention and investment, especially in the community college arena, has been dedicated to improving labor market outcomes and supporting students and schools in the process of using labor market information to guide decision-making (Baker et al., 2018; Xu & Trimble, 2016). These efforts are attempting to understand if, and how, community college students use labor market information in their career decision-making processes (Baker et al., 2018). It has been found that, while less important than factors related to enjoyment and course experiences, students' perceptions of labor market outcomes (e.g., job availability and stability, salary, employment, etc.), including their ability to perform in a given field, influence their major and career decisions (Arcidiacono, Hotx, & Kang, 2010; Baker et al., 2018; Stinebrickner & Stinebrickner, 2014).

Today, students must navigate an increasingly complex labor market and ecosystem of postsecondary credentials. The world of work has changed drastically over the past 50 years. The idea that an individual chooses a career they will stay in for the rest of their lives is becoming less and less of a reality due to globalization, downsizing, the shrinkage of unskilled work, the expansion of service jobs, and technological advancements (Fouad & Bynner, 2009). Furthermore, frequent job dislocation and career destabilization have also produced "gaps between what higher education can deliver and what labor needs" (O'Banion, 2019). Today, more than ever, students are questioning the return for their investment in higher education. While educational attainment remains positively correlated with employment rates and more pay, there are significant differentials in pay between the major and career paths (Carnevale et al., 2015). In some cases, less education is actually worth more (Carnevale et al., 2015) and the value

of specific programs or majors also varies depending on regional labor market demands (Carnevale et al., 2015).

Furthermore, the ecosystem of postsecondary credentials is more complex, fragmented, and multilayered than ever as a result of dramatic increases in (1) occupations (from 270 to 840 between 1950-2010); (2) postsecondary programs of study (410 to 2,260 between 1985-2010); (3) colleges and universities (from 1,850 to 4,720 between 1950-2014); and (4) college student population (2.4 million to 20.2 million between 1950-2014) (Carnevale et al., 2017). There are an exhaustive number of factors that impact the value of a postsecondary credential, such as type of credential (e.g. degrees, certificates, certifications, licenses, badges, etc.); delivery mode and models (e.g. distance learning, e-learning, competency-based, hybrid models, etc.); and alignment to workforce demands and requirements (Cappelli, 2015; ConnectingCredentials, 2015). And, while career has increasingly become a focal point of postsecondary education, alignment efforts between college and career rarely, if ever, address the knowledge and knowhow employers need to navigate, and accurately assign value to, postsecondary credentials, further contributing to the uncertainty of their payoff in the labor market. Practitioners and policy-makers currently lack the knowledge and knowhow about this complex ecosystem of postsecondary credentials to effectively support and guide students' major and career decision-making processes.

Therefore, students are tasked with making high-stakes decisions about their major and career paths in a very complex and confusing decision-making environment, often without adequate labor market knowledge and guidance which can have a direct impact on their future earnings and employment (Baker et al., 2018; Scott-Clayton, 2015; Rosenbaum, Deil-Amen & Person, 2006; Wolniak et al, 2008). As a result, students report feeling a high level of anxiety

and stress when making decisions about their major and career path (Rosenbaum et al., 2006; Scott-Clayton, 2015). Baker et al. (2018) argue that in order “for community colleges to best fulfill their mission of improving the labor market outcomes of their students, both students and schools need to be aware of and responsive to expected economic outcomes” (p. 18) and an essential starting place for this work is to investigate how students navigate the complex decision-making space of choosing a major and career path. This findings chapter explores students’ perceptions of, and knowledge about, the labor market and reports the most common questions participants had about the labor market.

Labor Market Knowledge

Students were asked to identify the top 3 careers in the following categories: highest paying (see Figure 15), highest job stability/security (see Figure 16), and highest employment rates (see Figure 17). While most students were able to record at least one response to these questions, 13% of participants either left the questions blank or wrote “I don’t know.” For the highest employment rate category, this number increased to approximately 25% of participants who left the question blank or wrote “I don’t know.”

Highest-paying careers:

1. Anesthesiologist
2. Surgeon
3. Oral and maxillofacial surgeon
4. Orthodontist
5. Psychiatrist
6. Physician
7. Chief executive
8. Prosthodontist
9. Pediatrician
10. Dentist



Figure 15. Bureau of Labor Statistics list of top 10 highest-paying careers (left) and student-identified top 3 highest-paying careers (right).

Highest salary

According to the Bureau of Labor Statistics (BLS), the top 10 highest paying jobs in the United States as of May 2018 include, respectively, anesthesiologist, surgeon, oral and maxillofacial surgeon, orthodontist, psychiatrist, physician, chief executives, prosthodontist, pediatrician, and dentist. The top 10 student responses for careers with the highest salary included doctor, surgeon, CEO, lawyer, engineer, celebrity, finance, businessman, politician, and IT consultant, see Figure 15. The majority of students were able to identify doctors as being one of the highest paying professions. Lawyer, 35%, was the second highest chosen profession. While lawyer is not on the list of the top 10 highest paying jobs, it does fall within the top 20 highest paying jobs. Approximately 20% of students could identify surgeon and Chief Executive Officers as being amongst the highest paying jobs. It is important to note that the Bureau of Labor Statistics does not include self-employment data in its analyses. Therefore, careers like celebrity and famous athlete, while definitely high paying, will not be included on this list.

Careers with highest job stability:

1. Solar photovoltaic installers
2. Wind turbine service technicians
3. Home health aides
4. Personal care aides
5. Physician assistants
6. Nurse practitioners
7. Statisticians
8. Physical therapist assistants,
9. Software developers
10. Mathematicians

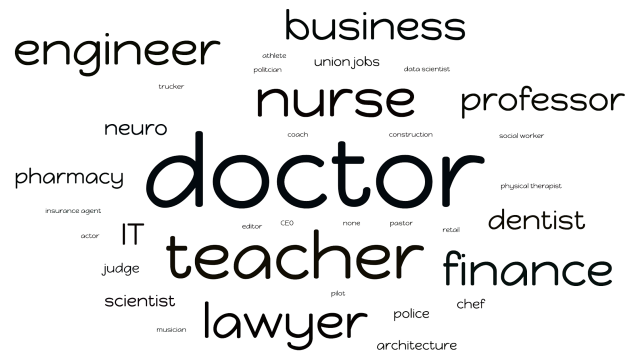


Figure 16. Bureau of Labor Statistics list of top 10 careers with highest level of job stability (left) and student-identified top 3 careers with the highest level of stability (right).

Highest job stability

The top 10 careers with the most job stability/security include, respectively, solar photovoltaic installers, wind turbine service technicians, home health aides, personal care aides, physician assistants, nurse practitioners, statisticians, physical therapist assistants, software developers, and mathematicians (BLS, 2018). The top 10 students responses for the careers with the most job stability included doctor, teacher, nurse, lawyer, finance, engineer, business, finance, IT, and professor, see Figure 16. While not among the top 10 or even top 20 careers with the highest job stability, the majority of students identified doctors as the career with the most job security. 27% of students believed teaching was among the top 3 careers with the highest stability, followed by nursing at 19%, law at 16%, and engineering and finance each at 15%.

Careers with highest employment rate:

1. Retail salesperson
2. Food preparation/serving workers
3. Cashiers
4. Office clerks
5. Registered nurses
6. Material movers
7. Customer service representatives
8. Waiters and waitresses
9. General and operations managers
10. Personal care aides

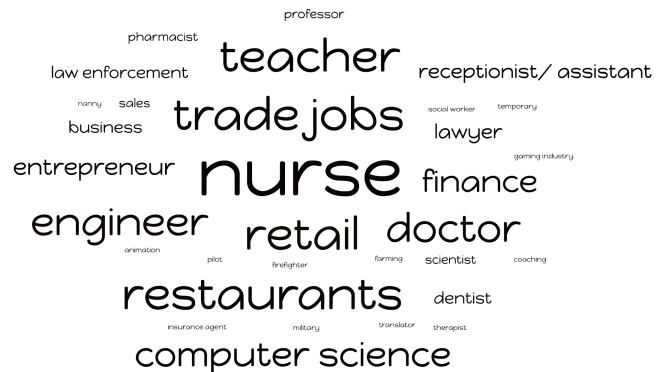


Figure 17. Bureau of Labor list of top 10 careers with the highest employment rate (left) and student-identified top 3 careers with the highest employment rate (right).

Highest employment rate

The top 10 careers with the highest employment rates include, respectively, retail salesperson, food preparation and serving workers, cashiers, office clerks, registered nurses, material movers, customer service representatives, waiters and waitresses, general and operations managers, and personal care aides (BLS, 2018). The top 10 student responses for the careers with

the highest employment rate included nurse, retail, trade jobs, restaurants, teacher, engineer, doctor, computer science, finance, and entrepreneur, see Figure 17. Approximately 33% of students identified nursing as one of the top 3 careers with the highest employment rates, followed by trade jobs, retail, teaching, and food and restaurant service each at 16%, and doctor and engineer each at 12%. Students seemed to demonstrate more accurate knowledge of careers with the highest employment rate than careers with the highest job stability.



Figure 18. Student-identified top 3 careers that are the most rewarding (left) and top 3 things that make a job rewarding (right).

What jobs are most rewarding? What makes a job rewarding?

Students were also asked to identify the top 3 most rewarding careers and to name the top 3 things that make a job rewarding, see Figure 18. The majority of participants identified doctor as the most rewarding career, followed by teacher at 37%, therapist at 20%, nursing at 18%, and engineer at 13%. Over 64% of responses indicated a helping profession as the most rewarding career. In response to what makes a job rewarding, the majority of students named helping others and salary as two factors that would make a job rewarding. Approximately 35% of students also named enjoyment as a factor that would make a job feel rewarding, followed by making an impact (28%) and work environment (21%). Making an impact differed from helping others as

students responses in the making an impact category had to do more with transforming systems, fighting oppression, and influencing policy than it did with helping through providing a service or support to others. Work environment included responses such as understanding my boss; relationships with co-workers/working with like-minded people; praise and external motivation; work environment is aligned with my values; and a stress-free work environment. Participants also named work-life balance (17%), feeling accomplished (15%), and learning and growth (15%) as factors that would make a job rewarding. Work-life balance included responses such as, flexible work hours, the ability to travel, time for family, and low-stress. Feeling accomplished included responses like being able to see the results of my work; showing off my skills; doing a good job; and being satisfied with my work. Finally, learning and growth included responses such as, learning something new everyday, self-improvement, and learning a new skill.



Figure 19. Student-identified top 3 reasons they would turn down a job.

What would make you turn down a job?

Finally, students were asked to name the top 3 reasons they would turn down a job, see Figure 19. Over half of the participants named work environment and salary as the primary reasons they would turn down the job. Work environment was the top answer and included reasons that include: (a) colleagues who have a poor attitude, are hostile, or do not give me the recognition I deserve; (b) working for a boss that is difficult, has no vision, is not inspirational,

or has poor leadership and management skills; and (c) a work environment that is too strict, monotonous, unethical, unfriendly, unsafe, physically unhealthy, or makes me conform. Salary included: (a) receiving a salary that was too low to provide for my family; (b) not getting paid at the level I deserve; (c) unreliable pay; and (d) getting paid less than the state and county average. No flexibility/long hours was identified by 38% of the participants as a reason they would turn down a job, followed by location (26%), discrimination (20%), boring/do not enjoy (18%), and misaligned with interests and values (16%). While location was not identified as a factor that would make a job rewarding, it was indicated here as a reason participants would turn down job. The majority of location responses indicated participants would be unwilling to move for a job (e.g., distance from home, commute, relocating, not nearby). A smaller portion of students reported they would turn down a job that required them to relocate often. Discrimination included responses that include: (a) discriminatory work environment; (b) abuse of employees; (c) an organization that is racist or homophobic; (d) no respect for women or men; and (e) bias and inequality in the workplace. Participant responses for boring/do not enjoy included: (a) slow pace of work; (b) no room for creativity and innovation; (c) stuck behind a desk; (d) working on the same task everyday; and (e) uninteresting. Boring/do not enjoy also included work that is too challenging for them or for which they do not feel prepared. Finally, under misaligned to my values and interests, students indicated they would turn down a job that went against their morals; made them do something that contradicted their values; had a mission that contradicted their belief and value system; or exploited people/treated people badly.

Students' Questions About the Labor Market

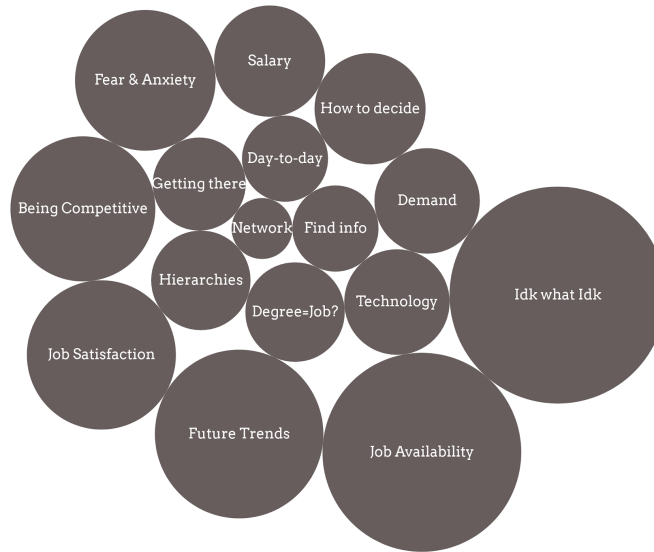


Figure 20. What participants desire to know about the labor market.

Students made various references to the labor market throughout their interviews and were also asked explicitly if there was anything they would like to know about the job market. These responses went through several rounds of coding, resulting in a list of 16 questions that students had about the labor market, see Table 2 and Figure 20. Many students had multiple questions and are therefore represented across the frequency counts in the table.

Labor Market Questions	Total	Latinx	Asian NFG	Asian I	Asian FG	White
Idk what Idk: What should I be asking?	.41	.55	.23	.25	.42	.63
What careers have the most job availability?	.34	.33	.4	.41	.25	.13
What is the future outlook of the labor market?	.24	0	.49	0	.33	.25
Which careers have the highest job satisfaction?	.19	0	.46	.08	.08	0
How can I be competitive/an irreplaceable worker?	.18	0	.29	.33	.25	0
What happens if I fail, hate it, or change my mind?	.17	.48	.09	0	0	0
Which jobs have the highest salary?	.11	0	.14	.17	.17	0
How do you decide what job is best for you?	.11	.37	0	0	0	0

What are the requirements/demands of the job?	.10	0	.17	0	0	.38
How will technology affect the labor market?	.10	.11	.11	0	.17	0
What is the relationship between degrees and careers?	.09	0	.17	.17	0	0
What are the various levels of employment within my field?	.09	0	.23	0	0	0
How path do I take to get into the labor market?	.07	.26	0	0	0	0
What is the job actually like on a daily basis?	.06	.07	.11	0	0	0
How do I find reputable information?	.06	.11	.06	0	0	.13
How do I learn to network?	.03	0	.09	0	0	0

Table 2. Participants’ questions about the labor market.

I don’t know what I don’t know

Slightly less than half of the students reported that they knew very little about the labor and wondered what they should be asking. Berenice, a 2nd year Latinx student, explained that she didn’t know what she was doing and wondered what she should know about the labor market and how to best prepare herself for the world of work,

Just how it runs, how it is. What I should know. What I should be prepared for. [Right now] I don't know what I'm doing. (Student Interview, December 2018)

Due to their lack of knowledge about the labor market, participants also had difficulty explaining what they would want to know,

I feel like I just want to know more about how it's so ... I don't know how to explain this. How ... I actually don't know how to explain it. (Student Interview, December 2018)

Participants were also unsure of what they should even be asking, explaining “I don’t know what I don’t know.” (Student Interview, December 2018) Some participants did not know what the job market or labor market was and asked for (and were provided with) clarification. Sharon, a 3rd year international White student explains,

I don't know, I [honestly] don't know what to ask. I feel like everything. I would like to start with just an explanation of what it entails, what it is and what you can learn from it,

and what classes would I take to learn about that? Is it business? Is it-yea. (Student Interview, December 2018)

Many of the students also expressed a level of embarrassment for not knowing much about the labor market, and indicated that they believed it was an important topic for which they should have more knowledge. Maria, a 2nd year Latinx student, believed she should be more educated about the labor market and wished her community college would provide more opportunities to learn about the labor market through classes and events.

Honestly, I don't know a lot about the job market. I really should be more educated on that, and I should look into that. But I would like more opportunities where either there's events or even classes if there's possible. To just be educated on the job market. Or have events where they bring people from different job markets, talking about their job or the different aspects within the job market. I feel like that could be beneficial for me, just because I'm not really that knowledgeable about the job market. (Student Interview, December 2018)

Paola, a 2nd year Latinx student, scrunched up her face, raised her eyebrows, pursed her lips, and then covered her face with her hands before responding,

I'm not really sure. And that's a good question, in this type of economy. That was a really good question, I am like, wow, I don't even know that. I should definitely know that. (Student Interview, December 2018)

Nhat, a second-year first-generation Asian student, similarly sighed, shook his head, and frowned before replying, "Yea so there is a lot of things I need to know. Very, very broad. I really need to know just everything" (Student Interview, December 2018).

Students also expressed worry and concern about their lack of labor market knowledge and knowhow. For example, Edgar, a first-year Latinx student, worried that making "so many decisions about [his] future without knowing anything about that [the job market] would put [him] in a bad place in the future, like when it is too late" (Student Interview, December 2018).

Other students explained that they purposefully avoid learning and thinking about the labor market until they are done with school. Bae, a 1st year non-FG Asian student explained, "Labor

market? I do not pay attention to that. I think I would like to know that after I transfer” (Student Interview, December 2018).

Finally, students also wanted to know more about the labor market outside of their specific majors and fields of interests. Kim, a 2nd year first generation student, explained that her knowledge was very limited and she would like more information about the labor market, especially pertaining to fields and sectors outside of the healthcare industry.

But about the job market, I would still like to understand a lot more, because my knowledge is still so limited right now. The only knowledge I really know about the job market is pertaining to health care industry positions. Not really so much outside of that. Let's say perhaps like the education system, or the law, any positions pertaining to those two I don't really know much about. As well as many others. Engineering or the restaurants. Really any of them. (Student Interview, December 2018)

Job availability, future outlook, and technology

Students expressed concern about the current level of job availability in our society and worried they might not be able to find work.

I don't know. I don't have that much knowledge, I just know that a lot of people are struggling with jobs. Like all over the world. And I think that's one of my worries, what if I don't find work? (Student Interview, December 2018)

They wanted to know which careers have the most job availability and hoped their community college could help provide them with this information,

Yeah, what's available. I'm gonna go back to that question, what my college can do to help me. Yeah, tell me about what jobs are available. I feel like that would help a lot. (Student Interview, December 2018)

If it's gonna go up hopefully. Yeah, I mean, I know that they tell you to do what you're passionate about and that's what I'm doing. But it'd be nice to at least have a general idea of what are the jobs opening up. I mean I know that's like one Google away and like it kind of feels like really entitled me to like ask for that, but it'd be nice. (Student Interview, December 2018)

Students also wanted to know the future outlook of the labor market, and specifically what jobs would be available in 5-10 years or when they are finished with their degree. Don, a

non-FG 2nd year Asian student, explained that he would like to know more about predicted trends in the labor market and believed this type of information would help college students plan for their future.

Well, of course I would like to know how the job market would perform in the future. I feel like ... predicting the future job market is pretty hard, but I feel like it would be useful for college students so they can kind of plan out ahead of time. (Student Interview, December 2018)

Students also expressed fear that unemployment rates might increase in the future and worried about the stability of the labor market.

I just want to know if, in the future, will it still have the same stability, like, market or will there be more unemployment rates and stuff like that. That's really my main fear. (Student Interview, December 2018)

Students were also curious about how changes in our world and society impact the growth of specific careers. John, a non-FG 2nd year Asian student, wondered how the development of the Earth would impact the growth of the environmental science field. He explains,

It would have been good if we knew about starting salaries and what a couple years would be like-like for that specific job. Like the growth of it- If it's like environmental science, since the Earth is dying in a couple years, would it grow more? Just stuff like that- (Student Interview, December 2018)

Tiffany, a non-FG 2nd year Asian student, worries that certain careers might not be available when she is finally ready to pursue a career. She is concerned that her college courses focus too much on history and not enough on problems of the current day. Tiffany fears that if she does not learn about the present state of our world, she might make a wrong decision and desires information that would help her figure this out before it is too late.

I think it's still figuring out what availability there is for your job. Because you take all these classes and then you're finally ready, but if you don't really know ... if you don't really know what the job availability is and stuff like that, it's really worrisome, and I feel like [my college] doesn't really talk much about like this is what's going on right now in the current day, because we talk a lot about history, and that's what we're studying and stuff like that, but when I'm thinking about present stuff like now, it's very

hard to grasp and take a hold on like is this really what I should be doing, or should I look into another field before it's too late. (Student Interview, December 2018)

Students also wanted to know the difference in availability between levels of employment and specializations within a specific field. Han, a non-FG 1st year Asian student, felt an increased level of stress upon recently learning that job stability and availability varied across the different levels within a specific career field. He hoped to learn more about the various levels within his field, including the reality of what it would take to obtain certain jobs within his field.

I had somewhat of a preconceived notion of what the labor market would look like in terms of pay and stability and everything before college, but since I was in college I really learned the reality of what it takes educationally to get to certain levels of jobs in certain levels in those fields. So, that's definitely a little bit more stressful. I'd really like to know the projected futures into where the employment rates would be for those careers by the time I get out of college. (Student Interview, December 2018)

Jane, a non-FG 1st year Asian student, wanted information about specializations within her field of environmental engineering. She wanted to figure out which specializations suited her and also afforded her the most job opportunities.

Especially in the job market, when it comes to environmental engineering, I feel like it's important to have a specific ... what is it called ... like hydrology, like air-Oh, yeah. A specialization. I am looking into it right now, but I'm wondering where should I specialize so that I can get more opportunities and where I would like it more, stuff like that. (Student Interview, December 2018)

Students also wondered if advances in technology would impact the availability of jobs in their particular fields. They had heard that there would be less jobs in the future due to increases in technology,

I've heard that there will be less jobs in the future because of the increase in technology. I think that jobs are becoming less and less frequent due to technology. (Student Interview, December 2018)

robotic efficiency taking over jobs in engineering,

So one of my friend's moms, she was talking about how some engineering jobs and stuff, like mechanics and stuff, and like all those people, they'll be out of jobs soon

because like technology... There'll be like robots being able to do it better than humans, so like. (Student Interview, December 2018)

and artificial intelligence dominating fields like medicine.

I've heard that there's like AI technology that's going to dominate the medical field. But I don't think that will affect me. (Student Interview, December 2018)

Participants wondered what job prospects would look like in the future, when robots had taken over,

I want to look into the future and see what's still around, I guess. Like what happens when taken over by robots. (Student Interview, December 2018)

in order to choose a career that would outlast technology.

I would say definitely ... what's going to last, or what seems like it's going to last, because everyone's always talking about like technology is rising, and they're taking people's jobs. It's not necessarily always true, but definitely what is going ... what is a job that, perhaps, will last longer that is something technology can't really touch or do. (Student Interview, December 2018)

Job satisfaction, salary, and the day-to-day

Students wanted to know more about people's daily experience in their career and "if people like their jobs or not." Students expressed frustration that "[they] never really hear if people enjoy what they're doing or if they think it's rewarding. They just do the jobs." For example, June, a non-FG 2nd year Asian student, wished she could learn from the actual experiences of people in the field and have the opportunity to visit her desired future workplace to see what it was really like.

I wish there was ... I guess, maybe it's because I'm so new to it, I wish that they would let more people or students and prospective people who want to go into that field, have more knowledge than just general research information that you can find online. Like, if there were more chances or opportunities to go and hear about this career, or go and see those things, versus getting that information so late, like, after you choose that career, and then three or four years later, you find out what it's really about and like what if— Because pre-med is so ... Everything is so general. Like, pre-engineering, pre-med and everything like that. What you know and what you want to do is really from your

research, and not from the experience point and seeing it. So, yea I wish I knew what it was like. (Student Interview, December 2018)

Mario, a 36 year-old first-year Latinx student who is returning to school after many years of working, wants to know more about the day-to-day reality of careers he is interested in because in his experience, job advertisements (e.g. responsibilities, duties, skills required, expectation) are usually not an accurate portrayal of what the job is actually like.

To have a real, real description, like job description, because, most of the time. Based on my experience you go to a place and they hire you for something or they give you like a job description and then at the end it's completely different. And that has happened at different times too, you know. They said okay, you are going to be this. You are gonna be hired for this and then you end up doing something completely different. So, I don't like to base my like my decision on the job name or description. For the salary or for what to expect. Most of the time they use words to attract people. They say we have this, I don't know like, data, business or like artificial intelligence analyst, super elevated and high. You say okay, this sounds super cool and then you go and you have to work with excel spreadsheets. (Student Interview, December 2018)

Students also wanted to know about the challenges and obstacles they might face in their future careers. For example, Jack a non-FG 2nd year Asian student, recognized that some of his friends had settled for jobs they did not truly enjoy. He believed that obtaining a career you truly enjoy required a lot of hard work. Therefore, he wanted to know more about the various struggles people face in the labor market.

A lot of my friends right now, they're just settling for what they have, they're like, oh I'm just gonna do the bare minimum here and the transfer out, and then just get my degree and then just get a job. But honestly if you want to get to where you actually want to be in life you have to put so much work and hard labor, because nothing comes easy in life, you have to work for what you want, and you can't wait for things to come to you, you have to chase what you want. I really want to know basically how hard is it for some people in the job market, cause I know some people, they think that working for what they want is easy but for some people it's hard because not only do people have to work for what they want but they have to face all these struggles, like financially, mentally, educational struggles, so I just want to know what obstacles are most common in the job market. (Student Interview, December 2018)

Thao, a non-FG 1st year Asian student, similarly wanted to know more about the challenges of the labor market. Specifically, she wanted to learn more about the downside and reality of a career and the differences between working for someone and freelancing.

I would like to know the downside of the career. Like, once you land in that position, how would your day to day life be, and how's the reality of that career life. So, it's not just recruiting, but tell me what it's really like. And then what's better or worse, working for someone, or being an independent freelancer. And, how does it differ. (Student Interview, December 2018)

Students also doubted whether they could obtain a long-term career that they actually enjoy.

Chen, a non-FG 1st year Asian student, explained that he knows people, and has heard many stories of people, who end up in a career that has nothing to do with their degree. He has started to believe that the job market is more helpful for finding jobs that will provide a stable income, but not as good for finding a long-term career he will actually enjoy.

I think the job market right now is pretty good if you want to find a job, but not good if you want to find something you actually want to do. There's a lot of jobs available ... anyone can go work at a boba place or McDonald's. I see so many stories of people who comes out college with a job that has nothing to do with their degree, like my brother. He works in IT with a psych degree. I see so many stories about that and I keep on seeing them. I don't really see any good news. So it makes me think the job market is really good for finding jobs that just pay off stuff, but not good for finding something that will last you for life. (Student Interview, December 2018)

Finally, students desired more information about salary. Questions about salary were often asked in conjunction with questions about the demand of a job (e.g., getting paid what I deserve; doing too much for too little pay, etc.). However, students also wanted more information on how salary actually works,

I think I have a basic understanding of it. I'm not sure what salary is, but I know what you need to do education wise for that. But, more information about it would help. (Student Interview, December 2018)

While a few participants from every Asian population asked about salary, only one participant from the Latinx student population mentioned salary, but only to explain that it was not important to her career goals anymore because she would rather focus on doing something she enjoys.

I wanted to know, before like the average salary for authors, but I don't really care about the money. It was just like I really just want to do something that I want to do instead of like being a manager at like a sales store or something. (Student Interview, December 2018)

Fear and anxiety: failing, changing my mind, and being competitive

Fear and anxiety was demonstrated differently between the Latinx and Asian student populations. For Latinx students, slightly less than half of the population wanted to know what would happen if they fail, hate their job, or change their mind. For example, Ariana, a 1st year Latinx student, wanted to know more about best job rankings so she could take classes to construct a back-up plan in case her first career path did not work out.

I feel like I want to know what is the best jobs in order, in case my plan fails, which I hope it doesn't. But, if it does what classes should I take in case I need a backup, just to have that. (Student Interview, December 2018)

Beto, a 2nd year Latinx student, wanted to learn more from people who had changed their career paths. He had become aware that people often change their mind about their careers either because they originally chose an easier path or because they were uncertain and followed the advice of a trade test. He wanted to hear more about their experience in the labor market.

I'd probably want to see how much people are dedicated to it, like how much time people actually spend trying to figure out their path. There a lot of people who change their mind and then feel like, "Oh, I kind of messed up, this isn't the career path I want to go into, it's not enough money," so maybe like a little glimpse of that, of like what happens then. Yeah, because I know people who just pick a job because, you know those trade tests? Or because it's an easy career and you don't have to wait too long, but then later on, they're like, 'Oh, that's not what I wanted to do.' Like I'm just a little curious about that. (Student Interview, December 2018)

Asian students from all populations also expressed a level of fear and anxiety, but it was mostly concerning the competitiveness and instability of the labor market. They wanted to know what they should do to be a competitive worker and to also make themselves irreplaceable to ensure they could keep their jobs. Since being in college, Danilo, a non-FG 2nd year Asian student, has realized that the job market is much more competitive than he previously assumed. He would like to know how to make himself a more competitive candidate and what he should do to ensure he obtains employment.

I definitely have a sense that it's way more competitive than when I started because I didn't really think about it at all. But now that I'm getting closer to that, it's like how can I make myself look more competitive? How can I maybe land this job? Stuff like that. (Student Interview, December 2018)

Similarly, Mei, a first generation, international 1st year Asian student, wanted to know more about the educational requirements and soft skills she should have for not only obtaining, but also keeping a job.

Like what requirements, educational requirements and also what skills do I need. Logical thinking or communicating ... Like the strong points I should have for getting that job and doing the job. (#83)

Students also recognized that the labor market is much more competitive today than it was 50 years ago. They recognized that there are usually many qualified people for one job and that the expectations and qualifications for employment keep growing. Students wanted to learn how to set themselves apart from the competition. For example, Yong, a non-FG 1st year Asian student, explained that her high school was very competitive and produced students who were all very capable and accomplished, but also all the same types of people. She wanted to learn how to differentiate herself from her peers and to stand out to increase her chances of obtaining employment.

I don't know. I don't think I necessarily have a lot of questions about it, but I wish I'd been born like 50 years earlier because it would've been so easy to be successful back then than it is now. There's just much higher expectations and I don't think that climb is ever going to stop. They're going to demand more and more, and then people are going to burn out so quickly. School is literally just pumping out the same types of people. There's nothing that's going to differentiate any of them; you can just have your pick and you're going to know that person is going to do the job right. My high school was super competitive, like everyone was super smart, and all their lists of accomplishments were like three feet long. If everyone is so qualified, how do you even choose which one to pick? They're all the same. I don't know. I'm worried about me, what's going to make me stand out from all the other people who probably want the same job as me. (Student Interview, December 2018)

Job requirements and the relationship between school and work

Many students questioned the relationship between their education and their future career. They wanted to know if the time and effort they were currently investing in their education was going to translate into a career. Many students had siblings, classmates, and friends, or had heard stories of people, who attended college and earned a degree (or degrees) and were either working in an unrelated field or struggling to find employment. For example, Yong's sister had earned two degrees from the University of California, Berkeley and was still struggling to find a job. She questioned whether she wanted to dedicate so much time and effort for a degree that may or may not translate into a career

I don't know. I always thought once you have your degree, it's so easy to find a job. But, my sister went to Berkeley and she has two degrees, like she double majored, but it was still so hard for her to find a job. I was kind of just like, "What? Okay, so then why am I going to put myself through this to do that?" (Student Interview, December 2018)

Participants wanted to know more about the job opportunities available for their particular major and desired a level of reassurance that their degree would help them obtain a career in their field.

Nabila, a 1st year Middle Eastern student, explains,

Well we talk about the job market in general, but if I wanted to be more reassured about it, I just feel like I would like to know more about, like I know my major so I wanna know what options I have. Like if I do my major, like as a psychology major what I can do into, and what are the job opportunities for this major? What country has the highest

rate of employment for this job so I would know where to go if I wanna get employed? So I wouldn't struggle or anything, that would be nice. (Student Interview, December 2018)

Students also want to know if their degree will enable them to pursue a career in a different field or if it limits them to a particular career path. For example, Li, a non-FG 1st year Asian student, is majoring in political science and wanted to know if her degree would enable her to pursue a career in business.

I guess at the end of the day from my field, the political science field, I read stuff where if you want to be in political science you can get into business, politics, whatever, right? Just a lot of things... But when you talk about political science, it's also very focused, right? You're learning about policies and stuff like that, and government. So, I was wondering if I wanted to go into business, would a political science degree really give me that opportunity, really put me out there I guess? Would my degree satisfy your qualifications or whatever? So, just kind of what I'm doing now, is it meeting the qualifications for a certain job? Or maybe for a lot of jobs? (Student Interview, December 2018)

Students also wanted to know what the educational requirements were for various jobs within their chosen field of interest. They had some knowledge about careers that only require minimal education, yet pay a decent salary. Jian, a non-FG 1st year Asian student, is majoring in accounting and had heard of jobs in his field that did not require a degree and also had a bright outlook.

Okay, so honestly, I didn't do much research for the future. So I don't even know what to look for. Maybe just like what's going good right now? For accounting? And what are some really high demand jobs? Because there are some jobs out there that actually don't require a degree and they're really going up. So, I don't know, maybe I could learn them. (Student Interview, December 2018)

Similarly, Paul, a 1st year White student, wants to know which jobs require a BA degree and if a BA degree is even necessary to obtain employment. While he does not think this information would influence his aspirations to pursue a BA degree, he still believes it is important information to know.

I think any information would be helpful. Just in terms of how it's evolving. I mean, if I look at job postings now and see that not that many jobs are requiring a BA, I don't think it would change my aspiration right now, I'd still wanna get a BA, but I would still like to know that information. It'd be good to be in the know. (Student Interview, December 2018)

How do I...

Participants had many *how to* questions. Latinx students were predominantly concerned with questions like, 'How do I decide on a career path?' and 'How do I get there?' For example, Rachel, a 4th year Latinx student, wanted to know why people choose certain jobs over others. She wondered if it was because people did not feel they were good enough, money, or some other reason.

So, if I can know anything about why are people going to certain jobs rather than others. Is it because they think that they can do it? Is it because they think that they're not good enough? Is it because of the money? I would like to know that, and also like, "Don't fall for that." Like, "Consider this." That would be it. Why is it people make the decision to get a job? (Student Interview, December 2018)

Erika, a 1st year Latinx student, wanted information that would help her develop a more clear and secure pathway to her future career. Erika also desired more knowledge about the alignment between her major and career decisions.

I'd say make it more clear how to develop the pathways to get where you want to be. Because I think it's very unclear sometimes what major you're supposed to be to get to wherever you want to go, and I think if there was a more clear pathway that would be easier for a lot of students, yeah. (Student Interview, December 2018)

Adriana, a 3rd year Latinx student, wanted to know more about how discrimination operates in the job market, and specifically how it would impact her earnings and her ability to obtain employment.

I want to know if there's racial discrimination. You know on college applications they say we don't discriminate, but of course they do. I want to know, how does that work when it comes to jobs? Does it affect you? Does it affect you if you're female, if you're Hispanic, if you're not? Also, the area that you work...I want to know how does working

in a specific area affect the earnings that you make, like if I had the exact same job, exact same degree, exact same everything as someone working in a white area, would I get the same earnings? (Student Interview, December 2018)

Asian students were predominantly concerned with how to find reputable sources of information and questions that pertained to the world of work like 401Ks, salary, and networking. Bao, a first-year international Asian student, wanted to know how to find someone who could provide him with accurate information about his career. He explained that he had gone to the Career Center, but believed the information they gave him was not useful.

I tried to go to the Career Center and find some information but it's not useful for me. I want to know how I can find someone who can help me choose my major and also how to choose my job. I just want to ask them questions like, what's the challenges with this job? What's the salary? And how can I succeed? (Student Interview, December 2018)

Students also believed “networking is what it is all about” and wanted to know how to network, specifically “where to make connections and [how to] be aware of social networking events” (Student Interview, December 2018). Finally, students worried that they lacked the labor market knowledge and knowhow they needed to be successful in their future careers after college. For example, Asha, a non-FG 2nd year Asian student, wanted information about how to start her own business. She explains that there is no textbook or guide for starting a business and learning how to network and meet the right people.

How I can succeed, because if I want to have my own business, there's no textbook or guide to be like this is what you have to do. It's a lot of persuasion and meeting the right people, but how do meet the right people or where do you go to network and stuff. (Student Interview, December 2018)

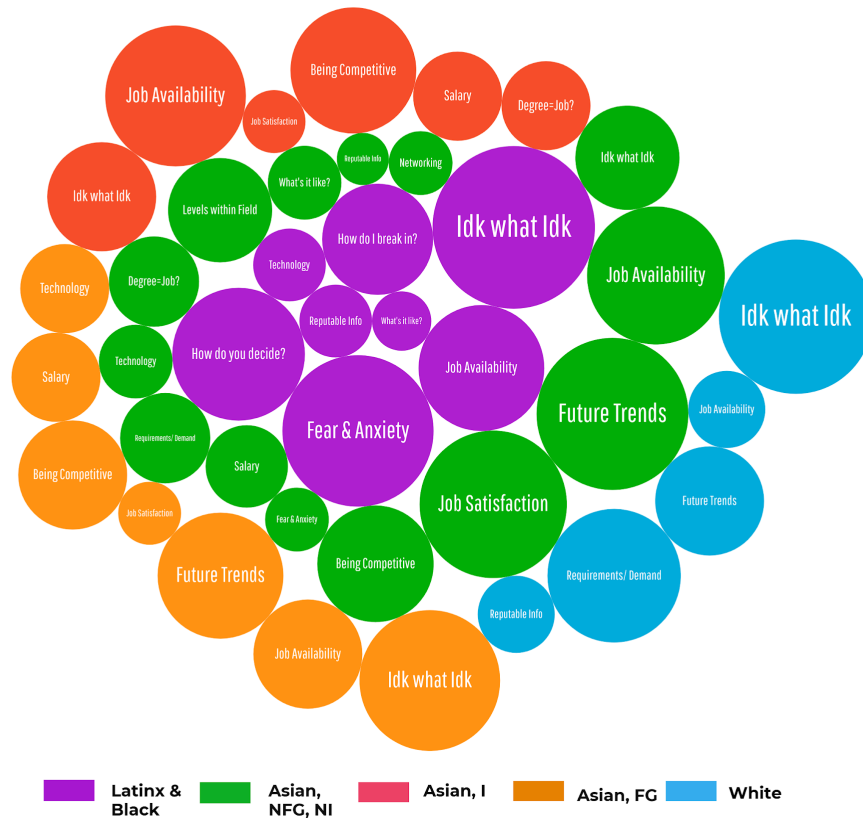


Figure 21. Variation in participants' questions about the labor market by race/ethnicity.

Variation between subgroup populations

There were several major differences between Latinx and Asian participants in relation to what they wanted to know about the labor market, see Figure 21 and Table 2. For example, while both groups asked about current job availability, Latinx participants made no reference to labor market trends or the future outlook of the labor market. Non-FG Asian participants had the most questions related to the future outlook of the labor market. Non-FG Asian students also demonstrated the lowest levels of uncertainty (i.e., the Idk what Idk category). Perhaps the most significant difference between the Latinx and Asian participants is that Asian participants' questions were primarily about factors related to the workplace (e.g., job satisfaction, job requirements, promotion, varied levels in a career field, and being competitive), while Latinx

participants asked questions related to navigating entry into the labor market and that displayed higher levels of uncertainty, specifically “How do I decide what job is best for me?,” “What happens if I fail? Will I hate it? What happens if I change my mind?,” and “How do I break into the labor market? What is the path I need to take?”

Section 3: Special Populations

Community colleges play an essential role in meeting the needs of a diverse range of students, many of whom identify as belonging to one, or multiple, special populations (e.g., former foster youth, LGBTQ, students with disabilities, undocumented students, English Language Learners, single parents, etc.). These students face unique challenges that impact their career development and decision-making processes. It is helpful to understand the challenges these populations face when making career decisions in the context of their daily lives and lived experiences. This finding section examines the stories of students who identify as former foster youth, undocumented students, or students with disabilities to provide a window into, and key insights for supporting, their career development and decision-making.

Transitional Age and Former Foster Youth

In recent years, increased investment and attention has been given to the trajectories of transitional age youth (TAY) into and through higher education. The majority of foster youth aspire to attend college. However, college-going, persistence, and completion rates of foster youth have remained low (Okpych, Courtney, & Charles, 2015). Challenges facing foster youth college-going include meeting their basic needs such as housing, food, and financial stability; attending underperforming and underserving schools; mental health struggles and trauma effects; difficulty building healthy relationships; and a lack of advocates (Children's Advocacy Institute, 2010; Courtney & Dworsky, 2006; Osgood, Foster, & Courtney, 2010). Strengthening pathways for foster youth into and through community college takes on unprecedented importance as community colleges are the primary point of entry into higher education for the majority of the foster youth population. Studies have found that the foster youth population in California community colleges experiences a 40% drop in enrollment from one term to the next and only 34% of foster youth community college students remained enrolled for three consecutive terms (CA College Pathways, 2015). Furthermore, only 8% of the 40% of foster youth who complete at least one year of college go on to earn a degree from a two- or four-year university (Courtney et al., 2011). Lack of educational attainment directly affects career outcomes for foster youth who struggle to find gainful and consistent employment (Day, Dworsky, Fogarty, & Damashek, 2011; Hook & Courtney, 2011). Without access to steady employment, foster youth transitioning into adulthood have been found to struggle meeting their basic needs and are more likely to experience homelessness, incarceration, poor health, and mental illness (Shook et al., 2011).

Student-Level Barriers

Transitional age foster youth (TAY) in community college often lack access to stable housing, food security, employment, and transportation (Schoeni and Ross, 2005). Foster youth report food security as one of the greatest challenges they face (CA College Pathways, 2015). In addition to homelessness, transitional age foster youth experience higher rates of incarceration, substance abuse, trauma, and mental illness than their peers (Berzin, Rhodes, & Curtis, 2011; Shook et al., 2011). Resultantly, the amount and type of services TAY need to successfully navigate adulthood, including higher education, are often not immediately available to them.

While Independent Living Programs, EOPS, and NextUp services are available for foster youth, studies have found that not all foster youth have access to information about, qualify for, or take advantage of these programs (CA College Pathways, 2015). One reason TAY struggle to take advantage of the programs available to them is a disconnect between social welfare and education systems. TAY report an abrupt ending of support and access to their previous social workers, foster families, and advocates (Collins et al., 2010; Stott, 2013). In addition to these challenges, many foster youth attend multiple K-12 schools, most of which are underperforming and underserving which (a) leaves many foster youth academically unprepared, (b) lowers the academic confidence of TAY, (c) makes it very challenging for TAY to form trusting, long-term relationships with adults and peers on campus, and (d) lessens their sense of belonging on campus (Antle, Johnson, Barbee, & Sullivan, 2009; Arnett, 2004; Settersten & Ray, 2010; CA College Pathways, 2015; Samuels, 2008; Samuels & Pryce, 2008). Furthermore, TAY have been found to rely on their immediate, trusted peer and social networks—including social workers, foster families, group homes, and boarding schools—for information, support, and advice. These networks tend to be abruptly disrupted as TAY transition into adulthood (Samuels, 2008; Samuels & Pryce, 2008) decreasing the number of advocates they have access to and their ability

to provide the proper documentation needed to identify as former foster youth and qualify for resources and programs.

Finally, while there are many funding sources available for TAY pursuing higher education that include the Extended Foster Care Stipend, TAY-specific scholarships and financial aid grants (e.g. Chafee grant), and the Emancipated Youth Stipend, TAY students report experiencing great difficulty when filling out the FAFSA as they have often experienced a great deal of transition and instability throughout their life (CA College Pathways, 2015). Each of the funding sources listed above also have time stipulations that pose great barriers to TAY college completion. The majority of TAY have been underprepared and underserved in their K-12 education and therefore, start college later, place into remedial courses, attend school part time, and struggle to complete their education in less than 6 years, long after they stop qualifying for services.

TAY also face unique financial challenges. It has been found that TAY students work on average 20+ hours per week limiting their ability to (a) take advantage of on-campus resources, (b) develop and sustain relationships with campus affiliates and peers, and (c) feel ownership and a sense of belonging on campus (CA Community Pathways, 2015). A well-known, but largely unaddressed, problem facing foster youth is credit fraud. Many foster youth are unaware that their identity is being used to open credit lines until they become adults and attempt to gain access to loans, credit or housing. TAY report addressing these credit issues and developing the financial literacy skills needed to provide for their basic needs as significant barriers to their educational success (Antle et al., 2009; CA College Pathways, 2015).

Institutional Level Barriers

Institutions also face several challenges in meeting the needs of TAY. Identifying foster youth remains a challenge for community colleges. While there have been efforts to improve identification through entry paperwork and applications; FAFSA and Chafee Grant applications; community agency partnerships for referrals; and student self-referral strategies, institutions vary in their consistency of recording the enrollment of foster youth and the definitions they use to track foster youth. While California has gone great lengths to ensure community colleges are collecting data on their foster youth population, there is very little understanding of the diversity and subsequent diverse needs, of their TAY students. Research has shown that the number and type of placements, exposure to various levels of trauma, involvement of foster and birth families, and the number of schools attended affect college and career outcomes (Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 2001; McCoy, McMillen, & Spitznagel, 2008; McMillen & Tucker, 1999). However, community colleges lack access to this type of data and therefore often fail to differentiate for TAY students' needs.

Additionally, many foster youth are not informed of the benefits of self-reporting and therefore will opt to not report their involvement in the foster care system. Furthermore, while great progress has been made in providing funding to establish programs for foster youth on campus, most commonly through EOPS, these programs face many challenges in reaching, serving, and sustaining their support of foster youth. Foster youth have been found to rely on their immediate, trusted peer and social networks for information, support, and advice and have difficulty forming trusting, long-term relationships with adults on campus (CA College Pathways, 2015; Samuels, 2008; Samuels & Pryce, 2008). Therefore, many TAY students do not take advantage of the programs and services for foster youth on their campus (CA College Pathways, 2015). Furthermore, community college advisors and counselors have very large

caseloads and time limitations making it challenging for them to track and follow-up with students (CA College Pathways, 2015). These barriers also include a lack of access of financial aid information, a lack of staffing and an overreliance on volunteers to provide services, unstable funding streams, a lack of intuitional understanding about how to best meet the needs of foster youth, and reaching part-time students due to both restrictions and limited time with TAY students (CA College Pathways, 2015). Lack of staffing remains the greatest concern for meeting the needs of TAY students. TAY students face multiple, coexisting challenges that make it difficult for them to attend school full-time, persist from one term to the next, and re-enter college after taking time off. Therefore, TAY students would most benefit from invasive counseling styles. However, lack of staffing and effective professional development impedes counselors' ability to effectively track and build a rapport with TAY students as well as proactively meet their needs and hold them accountable.

Antonio's Story

Antonio is a 3rd year college student. He is 25 years old, was born in the United States, and has declared Business as his major. He is Latinx, but is unsure of his entire racial and ethnic background, identifying as "TBD," to be determined. In addition to being former foster youth, Antonio is also the first in his family (that he knows of) to go to college, has a learning disability, was formerly homeless, and is currently serving a deferred sentence for felony charges. He has high educational and career aspirations and is extremely resilient and adaptive. Antonio originally enrolled in community college for two reasons: (1) a building program that would provide him with a General Contractor's License and (2) he was "in the middle of a bunch of court cases and it looked good for court." Due to external circumstances, his major and career path has since changed. His story provides a window into the educational and career experiences,

aspirations, and resilience of TAY in community colleges and key insights for supporting one of the most underserved populations in our nation.

Going back in time to move forward: Expelled from multiple high schools

Antonio's transition from high school to the workforce and eventually college began when he was expelled from his public high school in 9th grade. Antonio was sent to continuation school and was soon thereafter expelled from both his continuation school and his school district. He was then sent to an alternative school, was expelled for fighting, and "sent to some other type of schooling and then [he] just stopped going." He explains that at that point, "I decided to just do my own thing...on the streets from when I was like, 14 to like, yeah about 15 and then yeah I was sent to foster care." Antonio entered foster care when he was 15 years old. At that time, he also reentered high school where he was able to complete the majority of his credits.

So, I was just doing my own thing on the streets from when I was like, 14 to like, yeah about 15, and then yeah I sent to foster care and I was in foster care for like, a year, and then that year I was sent to foster care I finished high school at like a, they sent me to some school where you worked at your own pace. So, I was able to, in one school year do 120 credits. And then I went to the summer school and stuff too, and I picked up more credits. I was going to school as much as I could because I wanted to be done, and I just was doing work like crazy. I was taking two classes at once, and then also doing a lot for the classes I was in. When I got out of foster care and I went back to go live with my mom, I had 40 credits left to graduate. So, I had 180 credits when I left foster care, and when I went into foster care I had zero. (Student Interview, March 2019)

Even though Antonio had made tremendous progress on high school credits during the year he was in foster care and felt extremely motivated to finish the rest of his credits and graduate from high school, he was denied entry to his public high school because he was coming from juvenile institutions and had previously been expelled.

So then, when I came back I was trying to go to the regular high school, and they wouldn't let me go to the regular high school because I was coming from juvenile institutions, and stuff. They said that their policy doesn't let you in there. So, then I went to the district to try to see what was going on and they said it doesn't even matter because you're still under an expulsion. (Student Interview, March 2019)

Antonio was sent to another alternative school. He was still motivated to finish his credits and requirements at the alternative school so he could re-enroll in and graduate from his high school, but soon found out this would never be an option for him.

They basically said that either I do their school work at a steady pace, or I'm not gonna graduate, and I was like, 'Well, I'm trying to get out of here as soon as possible.' They told me that, no matter what, you have to stay here an entire school year to get out, and I'm like, "why? This is stupid. I'm just trying to go back to a regular high school. I'm not gonna do nothing. And then-I talked to the whatever, the dean of the school too, and he was basically like, 'we just want people to graduate from our school. We're not gonna let you leave. You're close to graduation, and we need people graduating from our school otherwise we'll get shut down. You're not leaving.' That was literally what he told me, and I felt like socking him in the face. They said basically, you're not gonna be able to leave, either you're gonna do the work and you're graduating from here, or you don't do the work and you just don't graduate, and so there was no option to get back into regular high school. (Student Interview, March 2019)

Antonio had to finish high school at this alternative school that did not provide him with access to courses that would prepare him for college, work, and civic participation.

So, I had 40 units left and I did them in two weeks there, because it was the same type of deal, work at your own pace. But, all of mine were elective credits, so they didn't have any electives, so I didn't get to do my second language, you know? What you have to do to transfer, you have to one of those. I never got to do that. I had to do the computer stuff, they didn't have that either. So, all they had were art, and so I did 40 credits of art, which was just stupid. It was like, you had to do some dumb drawing and they'll give you a credit. So, I just did 40 drawings over the span of two weeks. (Student Interview, March 2019)

Furthermore, the leader of the school, who Antonio already did not trust due to his negative interactions with him, was forced to resign from his position for trying to sleep with his students.

Antonio finished high school when he was 16.5 years after attending 6 high schools, being expelled from 4 high schools, and finishing at a school that he was forced to attend regardless of the limited access he had to quality courses and a school leader who not only had poor relationships with students, but also caused harm to his students. Furthermore, Antonio's

request to re-enroll in and graduate from his traditional high school was denied. Therefore, at 16.5 years of age when most students would be in high school, Antonio was not.

Antonio's first attempt to enroll in community college

After completing high school and his program, Antonio was allowed to move back in with his mother, but he did not have a good relationship with his mother. During that time, he wanted to enroll in college, but he needed his mother's financial information. His mother refused to provide him with the information he needed and he therefore could not enroll in college.

Shortly thereafter, at 17, he moved out.

I left my house when I was 17 anyways. So, I came back from being in placement and my Mom was just like, it was a really bad relationship, and it was just like ... I didn't stay there. She also, she wouldn't help me get into college. I was telling her, I needed her financial information so I can get into college, and she was telling me that I can't have it because I'm gonna make it so she's gonna fuck up her welfare, or whatever the hell she's on. So I stopped talking to my Mom, and so I left, and I was like, "I never wanna talk to you, just fucking leave me alone." Basically. Yea, I fell out of contact with her. She lives in Ohio now. (Student Interview, March 2019)

After leaving his house, Antonio was homeless, living on friend's and business associate's couches, and became involved in various criminal activities.

I've been homeless so many different ... Like, when I left when I was 17 from my mom's house, I was basically just a traveling [omitted for Antonio's safety], but I had a lot of homegirls and homies that would drive me around and shit. So, I was just staying in different chicks houses and shit like that really, and different homies houses. But, I didn't have my own place really. ... I didn't even go to that graduation ceremony. I actually remember, I was out in the middle of nowhere [omitted for Antonio's safety]... I never get caught or anything. But, I got caught for other shit, like robberies, and stealing cars and gun charges later...(Student Interview, March 2019)

Antonio pursues community college: Funds of knowledge and court cases

When Antonio was 22 years old, people that were going to FCC told Antonio about a building program that was being offered at FCC. The program provided a year of experience needed for a General Contractor's License.

I started because I wanted to do a building program here. I knew other people who came to FCC, but not doing the program. They were students, they would see the other students walk, because they bring supplies from inside the, you know the little storehouse area that was over there? And brought, you know like in dolly type stuff, and shit, you know? So, the people would see it and they realized that there was a building program here, and they seen the students building the houses, so yeah. It was like the 230 series, and it was like, if you finished it you got a certificate of completion in building construction and it counted as a year towards the four years of experience you need for your General Contractor's License. (Student Interview, March 2019)

The building program appealed to Antonio due to his background working in construction that dated back to when he was 12 or 13 years old. He not only enjoyed the work, but had already gained a level of expertise and knowledge in the field through working for someone in his neighborhood. This person would also go on to build a longstanding friendship with Antonio.

I started working on the construction field when I think, I was like 13, 12, or something. Yeah. I was living in an apartment complex, and they needed somebody to help run the HVAC, and they couldn't fit up in the attic. I was skinny back then, so they had me ... Or, I told them, I was like, "hey man, shoot me some money and I'll run that shit for you." And they were like, "okay." And then it was just, from that I kept working with them and then the person taught me a bunch of stuff. I stayed with them and I grew my skills. But, then I would be in and out of juvenile hall. I'd still make contact with them and get work when I was out. I still talk to him; I just don't work with him anymore. But, yeah I was working in the construction field the whole time. So, it was like, when I came here, I already knew how to do it. I just wanted more experience in understanding all the codes, and all that. But, it was like, straight A's through that, cause already knew it. I didn't even need to pay attention, because I knew it already. (Student Interview, March 2019)

At the same time, Antonio had been arrested on felony charges and was in the middle of multiple court cases. He was hoping to get a deferred sentence² and had learned that going to school would look good for his court case. As a multiple felon in the middle of court cases and with a history in construction that he could put to use, Antonio was motivated to pursue college again.

Also, it looked good for court. I was in the middle of a bunch of cases, so it looked good to be in school. I had gun charges, so I was in the middle of ... I had got the case right as I was enrolling, so they kind of went, this was kinda kept me out of jail, so it was cool. I mean, I still went to jail, but it kept me out of going and doing longer prison time. So,

² A deferred sentence means Antonio would serve probation instead of jail time, but if at any point he violated his probation, he would have to serve his entire sentence regardless of the amount of time he spent on probation.

right now I'm sentenced to like, I think three years in prison, but I'm not doing the prison time unless I mess up. If I commit another crime, I go to prison. (Student Interview, March 2019)

Antonio's second attempt enrolling in community college: Dependency override

Upon deciding to enroll in community college, Antonio faced the same challenges he did when he was 16.5 going on 17 years old. He did not have the financial information he needed from his mother, he no longer had a relationship with her, and she had moved out of the state. However, this time around, at 22, he was able to ask people for help and found out about the dependency override process that enabled him to apply for financial aid without his mother's information. While he was fortunate to have a friend whose mother had known him for a while and was willing to write him the letter of recommendation he needed to file for a dependency override, the process was emotionally challenging and almost deterred him, once more, from attending college. He not only had to find someone willing to vouch for him, he also had to secure and provide his father's death certificate, and was forced to share personal pieces of his story.

Well, I fell out of contact with [my mom], so then by the time I came back here when I was 22 and trying to get in, I had my close friend's, my buddy's Mom—she knows me well and she's an alumni from [a nearby college], and she's also a counselor for people who are suicidal or whatever, but only the ones who tried to really kill themselves; she rehab's those type of people—so she wrote me a letter of rec to give to the financial aid office, saying she's known me since I was nine years old and she's known that I've always had a bad relationship with my household, and that I don't talk to my mom, and my dad's dead. So, I just had to show them his death certificate, and I had those letters and my personal statement saying I don't talk to my fucking mom, and I'm not gonna talk to her, because if you guys make me go try to find her, you're just gonna make it, I'm gonna be in a bad position. My mom still tries to talk to me but she's, yea. (Student Interview, March 2019)

He also had to repeat this process every year until he was 24.

So, for every year I had to do the dependency override. So, then I had to do that for two years, and then I turned 24, so then now I'm here. (Student Interview, March 2019)

While the process posed several challenges and barriers for him at both 17 and 22 years of age, Antonio expressed that he just felt grateful to have good people in his life who could write a letter, reflecting on the fact that other people in his situation might not have anyone to write the letter.

But, it's all good. I was fortunate to have some good people to right me the letters of recommendation and stuff, other people might not be able to get that. (Student Interview, March 2019)

Antonio loses time, credits, money, and trust: Building program falls apart

Antonio was excited to start the building program; it was one of his main reasons for pursuing college. He explained that it was a two-year, hands-on program to learn how to build houses and that at the end of the program you get a certificate that provides you with a year of experience towards your General Contractor's License. However, you could not start in the middle of the project, so Antonio had to wait until the fall of the following year to start the program. While he was waiting for the next cohort of the program to start, he took the building courses he needed for the program. Unfortunately, after Antonio had taken 40+ units in the building program, a scandal involving the Dean led to the termination of the building program. While this scandal was different in that it involved money, Antonio paused in reflection as he compared the scandal to the one he experienced involving the principal at the high school he graduated from. Lack of trust for authority figures is a common experience amongst foster youth, demonstrated by the events in Antonio's story.

[When it was my time to start the program], they didn't bring it because of that whole scandal that happened with the dean, and he got fired, or whatever, resigned. There was a big thing with that. It was pretty crazy... Yeah, so [the principal at my high school] had to resign too, kinda like the scandal with the dean here. But, I mean, not the same, but in the

same meaning. Eventually, he had to resign. I think the guy here got fired. (Student Interview, March 2019)

Originally, after learning about the scandal, Antonio was encouraged by the leader of the program to continue taking courses for the Building program. He told Antonio that they were bringing the program back and that regardless, he would give him with the certificate that provided him with a year of experience towards the General Contractor's License. Unfortunately, that person retired and Antonio never received the certificate. Antonio's experience left him in a bad position in regards to time, credits, and financial aid. He had spent time and his financial aid taking 40+ credits for a Building program that he did not get to partake in and that did not provide him with the certificate he needed for his career goals. He still has a lot of credits left to take for his new major/career path, but he is ineligible for financial aid.

I don't even get financial aid anymore either, because I've been here too long. It's a certain amount of units, and I don't know. I'm at like, 90 units, or something like 94 units right now. I've still got a lot to go. It's because the freaking building program, I was doing classes for it because they were telling me they were gonna bring it back, and then the leader of the program, he told me, he was like, 'just do the classes' and he was like, 'I'll approve it and you'll still get the certificate.' But, then he retired. I was getting financial aid, but now that's wasted. (Student Interview, March 2019)

Antonio explained that the school will still offer him a Business Inspection certificate instead of the certificate for the General Contractor's License. However, for Antonio, the Business Inspection certificate is not helpful due to his criminal record. While he still thinks he might apply for the certificate just to have it in case it useful much later in life, he lost a lot of time and money to the Building program.

I can still get a certificate, but it's in building inspection. I was gonna apply for it. I just didn't wanna apply for it yet. At first, I was like, "Oh, I don't want none of this" because I didn't want the building inspection one. I'm probably gonna get it anyways, but I'm not gonna be able to use it. They're not gonna hire me. I even talked to the professor. My professor was the principle inspector. There's only like, one or two positions higher than him, and he told is the one who told me, "they're not gonna hire you." I told him about my crimes, and he's like, "No." He's like, "definitely, they're not gonna hire you."

Because it's like, there's just such a big pool. For one position, hundreds of people come. So I told him what I wanna do is get my general contractors license, and then later on when I'm like, 50, I'll just retire as a building inspector, and he's like, "That'll probably work as long as you don't commit crimes anymore and you're last crime was like 30 years ago. But yea I just got a charge a few months ago. So I'm still in the process, so yea they're not gonna hire me. Really there was no point of even pursuing it. I mean, I could have, but I'm just gonna be wasting other people's time, so I was like, "no." Instead I switched to a business major here. (Student Interview, March 2019)

“Yo, I’m Next Up!”: Racing to access NextUp services before it’s too late

Fortunately, as a former foster youth and low-income student, Antonio qualifies for various types of financial support from NextUp, or Cooperating Agencies Foster Youth Educational Support (CAFYES). However, the time Antonio lost through this situation is extremely significant considering NextUp services end for students when they are 26 years old. When foster youth attend college, they tend to be older than the general student population, stop out more frequently, and take longer to complete due to reasons that include housing instability, transportation, employment, food insecurity, financial issues, and various psychological hardships. For Antonio, we have learned that these reasons included the Building program, his relationship with his mother, his previous schooling experiences and relationships with authority, housing instability, and incarceration. Antonio also dedicates a great amount of time to work and the community labor he has to complete as a condition of his parole. Between these two activities, Antonio works 40 hours per week on top of taking classes. Due to all of these circumstances, Antonio is currently 25 years old and will lose his NextUp services this coming year when he turns 26.

Antonio expressed his frustration with the process for applying for EOPS and NextUp that originally denied him services because his GPA was too high. Therefore, he lost close to a year of services. At the time, Antonio was seeing a court-ordered therapist at his college who heard about his situation and, dismayed that Antonio wasn't receiving services, advocated for

him. But, now that he has finally qualified for the services, he is about to lose them because he is aging out.

Since I'm turning 26 in June I'm gonna lose the Next Up program, but I've only been in it less than two years. When you turn 26 you lose it. I mean, that fucking sucks because I barely got into the program, because I applied for it and they denied me originally. When I first came to FCC I applied for EOPS and NextUp, and they denied me. They said my graduating GPA was too high, so they didn't accept me. But then yeah, so I do personal counseling here, because I'm court ordered to do personal counseling, so I just do it here and so he knew whatever the people were in the office... I told him about my life and a little bit about myself, or whatever, and the next meeting I had with him, he's like, "you shouldn't be denied," he's like, "dude, you need to go over here to this place, bro. There's no way you should've ever been denied." Basically I had three, I don't remember the disability, but being first generation, or coming from foster youth, I automatically should've been accepted. (Student Interview, March 2019)

Antonio tried to find out why he was denied, but no one could inform him about the reasons he had originally been denied.

They said that I was just some, they didn't know how my application got denied, and I was like, "Fuck. I really could've used the program." (Student Interview, March 2019)

Antonio also questioned what happens to people who want to come back to college when they are older, alluding to how the concept of time is different for former foster youth.

It should be later than 26. Because also think about it, people like me, what if they're like, 30 and they're barely coming in college for the first time. They can use the help too. (Student Interview, March 2019)

For Antonio, NextUp services make a huge difference in his life. For example, he explains that the ability to just walk in and ask questions and not have to make an appointment makes a huge difference for his motivation to persist.

They make it so if you need to ask questions you can just walk in, especially if you're Next Up. So I was like, "Yo. I'm Next Up." And they were like, "Okay. We'll get you to talk to someone right now." Because I'm former foster youth, I guess people know we're more fucked up than other people, because so often things are running through my mind to just be like, "No, screw this shit. I might as well just go back to [omitted for Antonio's safety] or some shit." Especially when I was younger, I never thought I'd still be alive today, now I'm still here and I'm trying to do school. I don't know. (Student Interview, March 2019)

He also believes the resources they provide are essential for his ability to attend, and be successful in, school and that he doesn't know what he is going to do without them, especially because he has just lost all of his financial aid, in large part due to the building program.

This program helps so much for people like me. They give you separate grant money, and all this shit, they give people food vouchers, and they give them parking permits. They gave me this fucking backpack dude, you know what I mean? So they give you all this shit to really help you, and now I'm losing it at the time I need it most, when I'm losing my financial aid. I think that's a big fucking problem. It really pisses me off, because right when I get in and I'm all so happy, and it's so great, and then I'm getting kicked out. (Student Interview, March 2019)

Antonio also questioned who receives these services, expressing his frustration about people he has met who do not need the resources, but get them anyway.

I see other people who are in the fucking program and they're like, "oh, I got the NextUp grant for being in foster care." I look at them, and they're some white fucking dude. I mean, this is something that literally I've just seen, wearing like expensive ass clothing and shit, dressed up like some idk... He looks like he's fucking from like... I'm just like when did you go to foster care? Because I knew other people like that too, they always be like that. One person I know he's just in foster care because his Dad is paying for him to be there, to try to scare him straight. And I just heard that guy talking, and it just made me angry, because he was like, "yeah, I just got this grant and I'm getting all this money and shit." And I'm like, it's not fair, it doesn't look like he needs the help. But, it was just the fact that he was talking about a grant that I'm only getting one time, and that I could've been getting the whole time I was here. I really could've used it, even more right now that I don't have financial aid anymore. (Student Interview, March 2019)

While there is no formal process for appealing the NextUp age limitation, Antonio is still going to try. Unfortunately, due to the credits he has wasted in the Building program, he also will not be eligible for EOPS. Former foster youth who age out of NextUp can remain eligible for EOPS until they complete 70 degree applicable units (100 for high unit majors) or participate in EOPS six consecutive semesters, whichever comes later.

I'm appealing it, so I'm hoping I can approve it. I've still got a long time here. I've got at least another year here. (Student Interview, March 2019)

Just gotta keep going

Reflecting upon the many challenges he faced throughout his life, Antonio expressed his gratitude for community college as an opportunity to transform himself and his life.

So, I came here when I was 22, and I already had like ... I'm a multiple felon, and shit, so. It's like, I like school man. I feel like here, it's helped me transform myself into something different, you know? I don't do none of that stuff anymore, so I've been really thankful to FCC. It's because, it's this type of environment, so you have to change yourself entirely. Which is good, I think it changed me for the better. (Student Interview, March 2019)

However, he also explained that it has not been easy transitioning to community college. In many ways, community college is an entirely different world for him that has changed his mindset, who he looks up to, and the hopes and dreams he has for his future.

It's because when I came, obviously I didn't have guidance or anything. I was all over the place, doing a bunch of dumb shit that people that I was idolizing now, are the type of people that, they hold no respect from me now. But, the type of people I used to think were like, these people are great. I'm telling you, my whole mindset is shifted. I honestly didn't think I'd still be alive today. I was seeing people die all the time, that was our ... well, I seen that as the future. I never really wanted this, I never saw myself in prison, I either saw myself dead or rich as hell, or someone eventually killing me or something. But, it's like now, I'm older and I'm trying to ... I don't know, it's just crazy. (Student Interview, March 2019)

Antonio therefore finds it challenging to not, from time to time, compare himself and the types of struggle he has experienced to the stress other students complain about,

I like being stressed out now. I used to be stressed out about like, oh who's gonna try to kill me, or something like that. I had to [omitted for Antonio's safety] for a reason, and people don't realize that shit. So, there's different types of stress, and you should be fortunate you have these types of stress, rather than where am I gonna get food, and where am I gonna sleep tonight. But people, they like to play victim, because I talk to people and I don't usually tell people about my life. I don't tell people I was in foster care and I spent three years locked up, and I've spent ... I don't tell people about that type of shit, or how my family were so poor that we didn't have food, being homeless and shit like that. I don't tell people about that type of stuff, and I hear about their problems and they're like, "Oh. I'm stressed out because I wanna go to this concert or festival." Or, some shit, or, "I'm stressed out because my dad's making me pay my car insurance now." I like it here, but I get those moments where I feel like I'm trying so hard and you just see other people. I don't know, I guess it's like, jealousy and shit too, because you know when

you look at people and it's like, I've worked so hard to have the little bit that I have, ridiculously hard. (Student Interview, March 2019)

and to the success of people his age.

I'm kind of old, you know? They're near the same age as me, maybe a couple years older and they're already really well established and shit, and it's just like, "damn that could've been me, if I would've chose a different route." It was more like, I can't dwell on that shit, I've just gotta keep going and just not let it deter me, or make me sad, kind of just like, "Just gotta keep going." (Student Interview, March 2019)

At times, Antonio also feels out of place, judged, and reactive,

It's just funny how you can just change the way you look and people look at you differently. You know what I mean? I feel like people still give me dirty looks, but less. And then also people be fucking on some dumb shit. I came from, I'm telling you, in my neighborhood, if someone said something to me, I would probably just immediately sock them in the face, and people say shit here. They bump, walking in to me, and I'm like, "dude." There's that trigger in my mind, if someone would do that shit to me back in the day, I would've dropped them right there. Here, people think that shit's normal. (Student Interview, March 2019)

and is constantly questioning his decision to attend college instead of potentially making more money on the streets.

So often things are running through my mind to just be like, 'No, screw this shit. I might as well just go back to [omitted for Antonio's safety] or some shit.' Especially when I was younger, I never thought I'd still be alive today, now I'm still here and I'm trying to do school. (Student Interview, March 2019)

However, Antonio has become very resourceful, resilient, adaptive through his the various struggles and challenges he faced.

It's because, it's this type of environment, so you have to change yourself entirely. Which is good, I think it changed me for the better, and I feel like I can handle a lot. I feel like especially from all this shit I've had to go through. It's made it so I can really endure, and I'm adaptive, and the way I live now is people, they don't think I'm a criminal. I've completely... I don't know. It's different. (Student Interview, March 2019)

He draws upon the lessons he has learned and barriers he faced for motivation to persist,

You know, I think about it and I just weighed all the options and it's just like, do I really wanna be back in that situation. I'm better off here. I can meet better people here and stuff too, rather than doing that where you're just hanging out with a bunch of people who are selling drugs and shit, and everyone's trying to stab you in the back. That's just the whole feeling of it. I don't know. (Student Interview, March 2019)

and to handle moments of stress and feeling overwhelmed.

I get overwhelmed and when you get overwhelmed you don't do nothing because you're either panicking, you can't get nothing done, so it's about being able to calm yourself down and then really assess what you can do, because sometimes you're not gonna be able to finish everything you have, because shit gets in the way, like life. And you gotta make stuff work. Like recently, I lost my computer so my computer didn't work and I had like two days to finish everything. Instead of panicking, I was like, okay I'll go to the library, and I started asking people if I could get some help from people, like if they'd let me use their computers and shit, and then yeah, I was trying to do the work on my phone, and then in the end I eventually got everything done. (Student Interview, March 2019)

Antonio also attributes his resilience and persistence to the support he received from his court-ordered therapist to stop drinking and smoking and start making healthy decisions for his life, like exercising.

I get counseling here at FCC. I usually talk to my counselor, he's helped me so much, man. I used to drink and smoke weed and stuff, I don't do that shit anymore. I haven't drank, I've been sober for like a year and a half now so far. Yeah, so he's helped me a lot, he's like, 'you're still smoking weed. You're not sober, you're smoking weed.' So, I quit smoking weed too, and then he was telling me, he's like, 'you should exercise. It'll make you feel better.' So, then I started exercising, and lost weight and everything. I do feel better. (Student Interview, March 2019)

as well as his ability to move away from everything.

I just kind of had my own personal revelations, and I was, "no, I need to get away from all this shit." And I was just able to move away from everything, and just get a different phone and everything. I didn't have like, you know how people live with their family? I didn't have family, or nothing. So, people didn't know where the hell I was. (Student Interview, March 2019)

Antonio currently lives with his girlfriend who is a college graduate and is currently pursuing further education. While he appreciates his current living situation, he hopes to one day have a place he can call his own.

It took me a long time to finally get my own place, and it's still not really like, now I live with somebody. I live with my girlfriend, that's what I'm saying. It's not purely my place, you know what I mean? One day I want my own place. Even if it's like an RV I park right outside. (Student Interview, March 2019)

Realistically high educational and career aspirations

Antonio holds himself to very high expectations and has high educational and career aspirations. After the Building program was terminated, he declared a Business major and hopes to transfer and eventually pursue an MBA at the Haas School of Business at the University of California, Berkeley. He demonstrated a high level of career adaptability when he chose business for several reasons. When he was making his decision, his uncle had just recently been deported to Mexico and left his engraving business to Antonio and his cousin. Even though Antonio does not love engraving, he sees it as a viable option for his future due to his familiarity working in the business as his current place of employment, the current success of the business, and the difficulty he will face obtaining employment as multiple felon. In reflecting on the time he spent involved in criminal activity, Antonio also recognized that his disposition and ability to network would help him be successful in the field of business.

At that time, I got really big ... well I met people. I'm still good at networking too, but yea I somehow was able to get clicked up with people that were on bigger moves than me, because I went from [omitted for Antonio's safety] on the streets to [working] for bigger people. It was interesting, yeah. I have this weird thing with people. They either really like me, or they fucking can't stand me. So, the people I worked for, they loved me. Also, I was young, and it felt like maybe I was like their protege. (Student Interview, March 2019)

He also sees Business as a way to make money, have a better life, and bring money back into the community to bring people up with him.

Be a millionaire. Yea, my goal is to be a millionaire. I wanna help people too. I'd be that type of person like, if I have a lot of money, I'm gonna bring it back into the community,

man. I wanna bring people up. I don't know, I just feel like the world could be a lot better. (Student Interview, March 2019)

Antonio recognizes the difficulty of transferring to a place like UC Berkeley and has been working very hard to achieve straight A's due to challenges he faced in his courses early in his academic career that lowered his overall GPA. These challenges included two missed finals. One of the finals he missed was due to him being in jail and the other, a miscommunication with the instructor.

I did bad on a couple classes, because for one of the classes I was in jail so I missed the final, and then the other final there was a miscommunication with the instructor. Our class was always at 7am. He told us in class that our final was going to be at noon in the classroom next to our classroom. But, then he sent an email out saying it's gonna be at 8am in the morning in our classroom. So, I came to school to do the final and nobody was in the classroom they were supposed to be. So, I looked around and then I was like, "oh well, I missed it. Whatever." (Student Interview, March 2019)

Antonio recognizes that he could have advocated for himself. But, advocating for oneself in situations like these are challenging for a lot of students, especially former foster youth, who have been found to stop out for reasons like incomplete or challenging assignments, reading in class, a lack materials and supplies, groupwork, and failed courses.

But you see, what I should've done, was I should've emailed him and been like, 'Oh. I didn't see the email. Can we work it out?' But, I didn't do that, instead I just took the C. So, I got a couple C's that dropped my GPA pretty badly. So, my GPA isn't that high, it's like 3.5. (Student Interview, March 2019)

Antonio has since worked very hard to bring up his GPA, but still worries it may not be enough.

Right now I'm doing okay, except for my stats. I mean, I have A's and everything, but if I don't keep doing everything good, I'm not gonna maintain A's, because I'm at like, I feel like 95% A's. They're cool A's, but you know? ...So, if I get pure A's until I'm done here, I'll bring my GPA back up, probably not to good enough GPA, but I'll definitely bring it up. (Student Interview, March 2019)

Antonio, following his current educational plan, will be graduating FCC with three degrees.

I'm doing a bunch of degrees. So, right now with my ed plan, if I just do my ed plan, I'll leave with a Associates for Science, for transfer. I'll also have my associates, or

whatever in Arts, for the business admin. And I will also get a political science one.
(Student Interview, March 2019)

Undocumented Students

In 2017, there were 11-12 million undocumented people living in the United States, 1.3 million of whom were under the age of 18. Every year approximately 65,000 undocumented students graduate from high school, but due to myriad legal, economic, social, and political barriers only 7,000-13,000 will enroll in college (Abrego, 2006; CA CC, 2017; Greenman & Hall, 2013). The majority of undocumented students who are able to pursue higher education enroll in community colleges due to lower tuition rates, more flexible enrollment processes, the need to stay close to home, and work demands to both pay for school and support their families (Chen, 2013; Fuligni & Pedersen, 2002; Teranishi, Suarez-Orozco, & Suarez-Orozco, 2011). In California, anywhere from 66-81% of undocumented students attending college were enrolled in community colleges (CA CC, 2017). There is a great need for more research on the experiences of undocumented students in higher education, and community colleges more specifically. Much of the research that has been conducted has found that “although some community colleges have implemented various efforts to recruit, enroll, and support undocumented students, others have taken few efforts, if any, to support this vastly underserved population” (Valenzuela et al., 2015, p.95).

Undocumented students experience extreme financial difficulties when attempting to attend college (Chavez, Soriano, & Oliverez, 2007). Coming from predominantly low SES backgrounds (Donato & Armenta, 2011), they often work to financially support their families (Fuligni & Pedersen, 2002). They also do not qualify for in-state tuition in most states (Flores, 2010) and also face a cumbersome scholarship application process that often requires them to

provide a social security number (Perez & Cortes, 2011). In states like California, where undocumented students can apply for financial aid if they qualify under AB540, the application process can be very complex and counselors often lack up to date knowledge and knowhow to advise students through the process. Resultantly, many students are mistakenly enrolled as international students, which not only requires them to pay a higher tuition, but also disqualifies them from receiving resources and support (e.g. money for books) through sources like the California College Promise Grant (i.e. Board of Governors fee waiver).

It has also been found that many counselors do not understand and/or lack empathy for the situation of undocumented students (Karunanayake & Nauta, 2004). Cases like these not only impede undocumented students from receiving the information and guidance they need, they also contribute to undocumented students' fear of asking for help, sharing their status, and the unfair or biased treatment they experience on a daily basis in the form of political and everyday microaggressions (Valenzuela et al., 2015). Furthermore, up-to-date information regarding the policies and laws that affect undocumented students is rarely shared across community college offices, greatly slowing down the college, financial aid application, and scholarship process (Valenzuela et al., 2015). Most community colleges also lack clubs or centers for undocumented students. The smaller number of campuses that do provide such services have demonstrated that these spaces are not only helpful to improve the persistence of undocumented students, they are also capable of harnessing a wealth of knowledge students have gained from advocating for themselves. This knowledge is not only useful for other incoming undocumented students; it has also proven to be valuable, timely information that can support the development of institutional knowledge and knowhow (Ortiz & Hinojosa, 2010). At the very least, it is important that the community college's position of support for undocumented students, confidentiality promises,

and institutional allies be made transparent. Most undocumented students who pursue higher education name an ally they learned of through a friend or high school counselor (Ortiz & Hinojosa, 2010). For some students, the presence of a known ally is the reason they decide to enroll in a specific community college (Ortiz & Hinojosa, 2010).

These allies should also be located in the surrounding labor market as undocumented students face similarly challenging and complex transitions into the workforce (Valenzuela et al., 2015). Due to their legal status, undocumented students do not have a clear path to work or citizenship and often face insurmountable barriers (Gonzales, 2011; Roth, 2004; Terriquez, 2015). Undocumented students therefore often have to choose between entering an unstable illegal labor market, pursuing higher education in hopes of a law or policy change, or returning to their country of origin (Terriquez, 2015). In addition to being extremely resourceful and knowledgeable of local, state, and federal policies that promote or hinder their ability to work, undocumented students have the challenging task of learning how to advocate for themselves against employers who attempt to take advantage of them, substandard working conditions, and various forms of discrimination (Milkman, 2011). The rescindment of the Deferred Action for Childhood Arrivals (DACA) policy greatly exacerbates the challenges undocumented students experience when transitioning to the labor market. The ability to network to learn about potential opportunities, fair employers, and the process for navigating the labor market makes a significant difference for the labor market outcomes of undocumented students (Ortiz & Hinojosa, 2010). Identifying allies in the workforce can therefore provide undocumented students with invaluable information and guidance that can support their transition from school to work is essential for their success, safety, and overall health in the workforce (Ortiz & Hinojosa, 2010).

The extreme challenges that undocumented students face in their attempt to pursue higher education and enter the labor market are often sources of great psychological distress for undocumented students (Constantine & Flores, 2006; Gonzales, Suarez-Orozco, & Dedios-Sanguinetti 2013; Perez & Cortes, 2011). It has also been found that the psychological distress undocumented students experience is further exacerbated by the conflict they experience between pursuing their educational and occupational goals and serving as an integral component in their family structure (Terriquez, 2015). This psychological distress can also make them susceptible to other health problems for which, due to their ineligibility for government-subsidized healthcare, they do not receive medical care (Ortega et al. 2007; Terriquez, 2015). Yet, undocumented students remain extremely resilient. In spite of the barriers undocumented students face in pursuing higher education due to their legal status, they hold exceptionally high educational and occupational aspirations (Contreras, 2009; Perez & Cortes 2011). They also tend to have very supportive and broad networks from which they are able to draw invaluable knowledge and knowhow for navigating seemingly impossible systems (Enriquez, 2011; Gonzales, 2011), which may be related to the high level of advocacy and activism that exists within the undocumented student population (Nichols, 2013; Terriquez, 2015).

Chris's Story

Chris is in his first year of community college at FCC. He is Latinx, 22 years old, and was originally born in Mexico. He moved to the U.S. in 2015, 4 years ago, and is currently living with his aunt and uncle. He enrolled in an adult school, obtained his GED, and in 2017 he attempted to enroll in community college to “pursue something other than just learning English and finishing high school” (Student Interview, March 2019).

Reading within the little letters: Chris's first attempt to enroll in school

During his first attempt to enroll in community college, Chris experienced many barriers. While he was able to enroll in school, the counselors suggested he should enroll in classes he did not want to take so he could pay less for his tuition.

I could apply and everything, but it wasn't the right way to do it, because my counselor recommended that I had to enroll in different courses in order for me to be able to pay less basically for classes. (Student Interview, March 2019)

Chris was enrolled as an international student, which meant he had to pay more for classes.

They mark me as an international student. So I needed to tell the school that I wasn't part of international student, that I wanted to be considered as undocumented under AB540 because of all the time that I live here, and because I finish high school here in the US. (Student Interview, March 2019)

To fix his enrollment, Chris went to the student services building to seek help from general counseling. Unfortunately, the counselor did not have the information Chris needed. He informed Chris he was not eligible, but did not provide him with an explanation about why he was not eligible or what his options were.

The first time that I came to see a counselor, I went to the help building with general counseling, and I talked to one of them. [The counselor] told me, "To be honest, I don't have any information of the law that you are talking about." And then he looked up the law and everything, and he just basically skimmed through the information. He told me, "You are not eligible," but he didn't explain to me why. That was back in 2017 when the law [referring to AB540] wasn't updated, basically, when the law hadn't been passed yet. But he didn't know anything about it. He just told me, "To be honest, I don't know. I don't have that much information on it." (Student Interview, March 2019)

Chris decided to try to enroll in a community college that was further from his home, but that had ties with his adult school. Upon arriving at this community college, Chris sought general counseling and once again, could not find the support and guidance he needed. The counselor he interacted with explained that he did not have information that could help Chris and that he would have to go see a different person.

And then that's when I went to see the [other college's] counselor, and he told me, "Personally, I don't have any information on it, you have to go see this other person." (Student Interview, March 2019)

Chris explained his situation to one of his friends at the adult school he attended whose friend happened to be in his same situation and who fortunately had the email of a knowledgeable counselor at FCC, the community college from which he originally sought guidance.

I have a friend. She was taking classes at the same high school that I was, and she also was in classes here. And then basically one of her classmate happened to be in the same situation that I am, and she asked them and learned everything, and then she helped me out. She told me I have to go see this person, this counselor, and he helped me do everything. (Student Interview, March 2019)

Chris emailed the counselor who responded and informed Chris to not only set up a meeting with him, but also bring all of his documentation. A year had passed since he originally attempted to enroll, but with the help of this knowledgeable counselor, Chris was finally able to get the information and guidance he needed.

I came to FCC and I talked to this counselor, he helped me to do everything. He told me, "You have to do this, you have to do this, and then you have to do this." But he like actually told me, "Okay, just send me an email, make an appointment with me, and then come see me. Bring all the other documentation that you have." Because I have a type two visa, so he told me, "Okay, bring me your visa, bring me your passport, bring me everything." (Student Interview, March 2019)

The counselor also made an effort to reassure Chris that he was an ally explaining that he would not make copies of his information, but just needed it to help move Chris's process along.

He told me, 'I don't want to take a picture of anything. I don't want to copy anything. I just want to see the date, so I can show them, I can prove them, that your visa is no longer valid.' So he just wanted it to explain to the workers so they can help me. (Student Interview, March 2019)

At the meeting, the counselor not only gave Chris the information he needed, he took time to explain to him why he was experiencing so many difficulties enrolling and what he needed to do to move forward in the process. He explained that when Chris was originally trying to enroll in

college, his educational credits did not count towards AB540. At the time, AB540 allowed undocumented students who had attended high school in California for 3 or more years and earned a diploma to be exempt from paying nonresident tuition at California public universities. Adult schools were not included in AB540 until the passing of Senate Bill 68 on October 5, 2017. Therefore, Chris was enrolling in school right as SB68 was being passed and implemented, demonstrating the need for community colleges to constantly update and communicate the information they have on laws and policies affecting undocumented students.

He told me, “The thing is that for this law, you were not not eligible yet last year.” Because at the time I hadn't finished high school and it was valid only for those who had finished high school, or regular high school per se; it didn't count with adult school. Basically what I had is the same as the high school diploma, but it comes from adult vocation center, so it wasn't the same, so it didn't count with this. At the time I didn't know any of this, and then when I came to see the counselor, he told me, "Well, the thing is that this year is when it just happened to pass, this addition to the law" so because of the law I'm able to study, basically. So he told me, “Basically you had to finish high school first. Your diploma is basically your pass. Bring your diploma to me, I'll make a copy of it and give it to records, and records will now accept you as a AB540 student.” (Student Interview, March 2019)

This information, and more importantly the guidance, the counselor provided for Chris made a huge impact on Chris's ability to enroll and persist in community college. Chris explained that even though the information is there, it's not easy to understand and undocumented students need support to interpret what is “within the little letters.”

We need a bit more clear path so we can move from point A to point B. The thing is that the information is there. You know, if right now I get my laptop out and I start looking for the information, at least for the law, the law is there. But, it's not easy to understand. We need somebody that is there to explain it to us in a way that we understand. Basically, we don't really know what is within the little letters. We don't know how to read between the lines, so we need somebody that is there for us to explain, “Okay, you have to do this, but you don't qualify because of this. In order for you to qualify for this you have to do this.” (Student Interview, March 2019)

Chris explained that without this type of support, he would have to attend school as an international student, which would be financially straining and prohibit him from taking classes.

Also, as an international student he would not qualify for funding support, such as the California College Promise Grant (i.e. BOG fee waiver), making it difficult for him to buy books and supplies.

If I hadn't had the information, I would have to be here in school as an international student. That would mean that I could only take one or two classes at a time, because of all of the money that had to be paid. And it's not only the money of the classes, I would have to pay for my own resources. Basically I would have to pay for my own books, and not only books, I have to fund everything, all the supplies that I need. (Student Interview, March 2019)

California DREAMer: High-stakes applications and deadlines

Chris also faced several barriers when attempting to apply for the California Dream Act, which, if approved, would allow him to apply for state financial aid. For one, he almost missed the deadline due to how busy he was between work and all of his classes. To support undocumented students, community colleges should not only communicate important information, they should also send timely reminders regarding major deadlines. Chris remembered to file his application 3-4 days prior to the deadline and due to the challenges he experienced filling out the application and finding a knowledgeable counselor who could help him, he almost missed the May 2nd deadline. Chris particularly struggled with the question of how many people lived in his household. He did not originally understand the difference between people living in the household and dependents living in the household.

I believe the deadline for applications for California Dream application was May 2nd. I forgot to finish it earlier. I was doing it like three or four days prior to the deadline, so I went to the other campus to ask someone from financial aid. One of the counselors there, he kind of helped me. I say kind of, because he didn't really explain any of that information to me. He was helping not just me, he was helping other two person as well, but he was just walking around and asking, "Okay, are you okay?" I will say, "Okay, I have a question over here." He would ask me the same thing as the question was. "How many people live with you? Okay, three, four, five, and then just put five." But then why would I put five when basically the question is asking me how many dependents are within your household? I was like, "okay, what if I just finish what I can do right now, and then just send my application, and then I can go talk to the original counselor, the

one who actually helped me to do everything right when I was enrolling, and ask him just to make sure that I'm doing it right?" (Student Interview, March 2019)

After not receiving the information and support he needed, Chris attempted to track down the counselor who originally helped him enroll. However, that counselor was not in his office because he had other obligations on campus. The counselor's secretary emailed him to see if he would be coming back into the office. The counselor immediately replied that he could not meet that same day, but to schedule an appointment for the next day. He again told Chris to bring all of his documentation with him. The next day, on his break between classes, Chris met with the counselor. The counselor not only helped him fill out the application correctly, he also walked with Chris to the financial aid office, found a financial aid officer, and walked Chris through the entire process.

I don't know exactly if the other person is his like secretary or something like that, but she told me, "Give me your email, so I can email you whether he is already here or not." Then she emailed me and told me that he wasn't going to be able to be there that same day, but he asked her to email me and tell me that I could give him my availability for the next day. So the following day, I only had like an hour between the time that he was going to come in and my class starts. So he told me, "Okay, just come the next day at this time." And I came, and he helped me learn it. And not just that, because when I applied there was something going there that wasn't letting me sign in. So he said, "Okay, let's go to the financial aid right now." So we went and he told me, "Just get in line right now. I want to see if I can't talk with one of the persons inside." And then he just came back and basically walked me through it. He walked me through everything. (Student Interview, March 2019)

Chris expressed his deep gratitude for this counselor explaining that the only reason he even knew about and qualified for the Dream Act was due to the original support he received from the counselor.

Because I was able to have that information, I am able to apply for the California Dream Act, this whole thing that I didn't know either. So I didn't even know that something like that actually exists. So the same counselor, he's the one who told me, "Once you have your information, once you are in basically, if you can't afford it, come with me and I will help you to apply for the California Dream Act." But, it's scary to fill out that paperwork and not know if you're doing it right, too, especially when it's high stakes like

that. I am thankful that there was somebody knowledgeable enough to really help me make sense of the law, make sense of how it's going to impact my education. And not just being knowledgeable, but more to be willing to help somebody.

What does this all mean?: GPAs, educational plans, and transferring

Once enrolled, one of Chris's first obstacles was to make sense of his community college's grading and assessment system and how it related to his educational and career goals. It is often assumed that students understand the inner workings of a Grade Point Average (GPA), including why a higher GPA is better and the relationships between the numerical value of a GPA and the letter value students receive through assessment. However, this process was new for Chris.

Well, at the beginning I didn't know anything. We are not connected, so I didn't know. I didn't know what the letters on the page mean. I just got an A, a B, a C, a D, or an F. Okay, I just got it, so what does that mean? How does that transfer to my GPA and what does the GPA mean? Or why is it that 4.0 is okay, and a 2.0 is not okay? Why is it that 2.5 is better than a three? Basically the value of each grade. So at the beginning I didn't know anything, so I didn't know what I wanted to do. I mean, I knew what I wanted to do, but I didn't know what I had to do. But, my counselor he helped me to learn it. (Student Interview, March 2019)

The counselor that originally helped Chris enroll in college and apply for the Dream Act also encouraged Chris to apply for Pathways. Chris explains that his Pathways coach was instrumental in helping him understand the transfer process, make sense of the various degrees available to him, and choose his classes.

He [Pathways Coach] put me as a business major, which is something that I wanted to do, but I didn't know what classes I had to take, or I didn't know which classes I needed, whether I wanted to transfer, all of it. Whether I wanted to just finish my AA or AS and transfer, or just I didn't know that I could get the AA here. So once I started going to classes, I came to Pathways and they tell me, 'Okay, at least here this first semester you are on list, need these two classes.' Which was English, so I understand, and college math, which is required for progress. (Student Interview, March 2019)

In a follow up meeting, Chris's Pathways coach also encouraged him to go to a university recruitment fair. The Pathways coach also provided Chris with guidance regarding what to ask the different universities to be sure they had programs related to the specific area of business he

hoped to go into. He also explained to Chris that if he could not ask a question, he should look for and pick up specific materials and also showed Chris what information he look for when reading the flyers and brochures. Furthermore, the Pathways coach spent time showing him the colleges that were close to him in case that was important to Chris.

So I just started taking those classes, and then my coach he told me, “Okay, there's going to be universities here today. I need you to go there and just start talking with the different universities that they have. And I need you to explain to them which career you want to go into and ask them what they offer. And then they will tell you, ‘Okay, we offer this, or we don't offer exactly what you want to do.’” Because many universities, they offer business, but not exactly what I want to do. And a lot of them offer business and they offer what I want to do. And he didn't just tell me, “Oh, go and talk to them.” He told me, “Okay, these are the schools that are the closest to you, but there are many other universities and colleges that you can go to.” Basically he told me, “okay, I need you to go and ask these questions, and if you don't want to ask them, just simply get a flyer and look for this information,” which were all the careers that they have, and under that career is listed what you want to do or not. (Student Interview, March 2019)

Provided with the information about the university fair as well as the guidance he needed to navigate the fair, Chris attended the event and returned to his Pathways coach with the information he had gathered. His Pathways coach then walked him through the process of creating an educational plan. Chris had never heard of an educational plan and was also unfamiliar with the various requirements for transferring. Chris explains that prior to this meeting with this coach, he assumed he just finished at his community college and then applied to schools. The Pathways coach took the time to explain to him what an educational plan was and why it was an essential component of the transfer process as well as important details regarding how some courses transfer for certain universities, but not others.

Once I got the four, I think there were four universities, I show it to him, and he told me, “okay, now I need you to note your ed plan.” And I said, “What is an ed plan?” He told me, “basically, it's a plan. It's the map for you from here, your first semester, to there, when you get to the end of your semester, to when you get your graduation. The ed plan is going to show you what classes you need in order for you to get there, to be able to transfer.” And I ask him, “Well, isn't it like I just finish here and I apply there?” He's like, “No, no. I'm sorry.” He explained to me, “This is why I want you to build your ed

plan, because your ed plan's going to show you which classes according the university that you want to go to are the best for you to take. Different universities require different transfer classes. Some universities require this class, but it's not transferable if you take it here. So it doesn't really make sense that you take it here if it's not going to be valued over there.” So all of those stuff, all of it, he explained to me. (Student Interview, March 2019)

Career compromise: FK, real life relevance, and gaining experience

Chris’s undocumented status plays a primary role in his career decision-making processes. Currently Chris is pursuing a degree in Business Administration with a specialization in Real Estate. His desire to specialize in Real Estate was greatly influenced by the experiences of his family, specifically the challenges his aunt experienced when trying to buy a house. Chris believes Real Estate will not only allow him to help people in this situation, but also provide him with useful knowledge for navigating the complex context of housing.

I mean real estate, it's something that I like. I mean, I've never practiced real estate, but it's something that I feel very attracted to, because my family, my aunt just worked quietly and then she tried to buy a house at the beginning, before the depression in 2011 I think. Unfortunately she wasn't able to get the house. So I see them try, working hard and everything in order for them to try and buy a house once again. That had like an impact on me. It's like, “Oh, I would like to help them.” You know, but not just them, anybody in that situation. And I just got the registration for real estate, and going now and seeing houses, and learning how the value of the houses is affected, and what I can do to help the value of the house to go up. It’s important to know those things. (Student Interview, March 2019)

However, after taking, feeling challenged in, and persisting through a few accounting classes, he is considering changing his specialization from Real Estate to Accounting.

I'm taking accounting classes. At the beginning I was like, “What the heck is this?” And now, I'm trying to do all the exercises, as much exercises as I can to get more familiarized with the process. And I’m like, “Wait, what am I doing?” I get lost, and I get frustrated, but I enjoy doing it. So I don't know. (Student Interview, March 2019)

Although not his first choice for a major and career path, Chris decided upon a Business path because after speaking to a customer at his workplace, he learned that it would provide him with the most opportunity to enter the labor market on his terms. This customer spoke with Chris

about his situation and showed him a chart of the various laws related to his situation. One of these laws allows undocumented people, within Southern California, to obtain a business license.

Personally I'm most worried that I won't be able to practice because of my status. I mean, there are different ways. I know I can make my own business, because a customer told me, "Once you're finished, do you understand what you need? You finish on that thing, you can work on anything like that." He actually gave me this chart where it had different laws that could personally benefit my situation. So there's this, I don't remember for sure, but there's this one law that basically allows people within the state, within Southern California, to get the license and practice on their own. Not being an employee, but being employed by some company to do the same job. Basically work on our own. (Student Interview, March 2019)

While Chris is excited about the potential of his new career path, he originally wanted to become a nurse. Both Chris's cousin and aunt are nurses. Furthermore Chris's uncle died from medical complications and his father nearly died two years prior in an accident. Chris believed that as a nurse he could help people in these types of situations.

My cousin, she's a nurse, and my aunt, she's a nurse as well. And my uncle, he died from complications, and then my father as well, he had an accident I would say two years ago where he almost died. He had to have three operation on his back, two on his hips, and one on his hand, and he was told that he wasn't going to be able to work. Yeah, so I wanted to be able to help people in that way. (Student Interview, March 2019)

However, when Chris learned about the barriers he would face in the labor market due to his legal status, he decided it would be too challenging to pursue a career in nursing. He thought about using the same licensing route to open his own nursing practice, but did not think he would not be able to gain work experience in the field, which is essential in a field like nursing.

I moved here and I wanted to do nursing. But it's harder. I can apply and everything, I could get accepted, even get the license but the thing is that I won't be able to work. Because order to get experience, you have to practice, and in order for you to practice, you got to be able to work, basically. Yeah, if you don't have experience, you don't kind of got anything in nursing. (Student Interview, March 2019)

Chris has demonstrated a great amount of career adaptability in his willingness to compromise his interests in relation to the sociopolitical and legal constraints he faces in his daily life. And,

while he has managed to find the allies, information, guidance, and the support he needs to develop a solid plan for his future, there is not a day that goes by that he does not worry about the law changing in ways that will negatively impact his future. However, he explains that he can't think about it. He has to continue focusing on school and postpone those worries for later.

To be honest, every day I think about it. It's hard right now. It's hard to think about it. I mean, it's hard not to think about it, because it's something that I see everyday. If you watch the news or hear at school that something happened or that maybe the laws are changing. So it's hard not to think about it, but basically it's all about our determination. If we want to do something, basically the more that we think about it, the more worried that we get, and the more worried we get, then we lose basically. And for me personally, I just rather focus on school right now, basically postpone everything for later. Unless they start affecting my situation, then I will start worrying about it. (Student Interview, March 2019)

But, they can't take my knowledge: Psychological distress and resiliency

For undocumented students like Chris the future remains uncertain. Chris describes this uncertainty as being a state of limbo over which he has very little control. He tries to not think about the future and just focus on what is front of him, but the reality he faces is that if the laws change it could affect his ability to pay for and attend school, work, and remain in the United States. And, while changes in certain laws have been beneficial for undocumented people in the past, Chris does not believe, within our current sociopolitical context, that any good changes will occur in the next 3 or 4 years. Therefore, the changes in the law Chris anticipates and worries about are those that will impact his life negatively.

Me personally, my major worry about life is that one day things will change, and am I going to be kicked out? ...Or, I won't be able to continue studying. I mean, I know I will, because it's something that I want to do, but I'm worried that one day all [these supports] are going to be taken away, and they're going to leave us basically in the limbo. We will be able to study, but not as well as we would like, in the way that we won't be able to take three, four, five classes at a time, because we have to see where we're going to get the money for the separate classes. Not just to pay for the classes, we have to see where we're going to get the money for the books, it's not cheap...And within the next three years I would say, there's nothing going to be changed for good. For bad, something could happen tomorrow. But something for good, in a way that it's going to have some

benefits for us, there is nothing that is going to happen within the three, four years. Me personally, I'm try to not be worried or scared about it, it's something that I try to be realistic about. I know that something could happen today, or something happen tomorrow, and it's not going to be for good. (Student Interview, March 2019)

To cope with the stress and anxiety that he feels on a daily basis, Chris focuses on what is in front of him, school, and reminds himself that the knowledge and information he is learning through his education cannot be taken away from him. He explains that they can kick him out of the country and try to take everything away, but they can't take his knowledge.

Basically I get the best of what I have right now and I am able to say, "Okay, you know what? What if I was deported today, or what if I was deported tomorrow? What did I do, what did I have?" So basically they can kick me out of the country, but they can't take away the information or the knowledge that I got. So basically that. All the information, all the knowledge, all the foundations that I got is going to be for myself. That is what I do for myself. I say, "They can take everything away, but they can't take my knowledge." (Student Interview, March 2019)

The psychological distress Chris experiences as a result of his undocumented status also stems from tensions between his educational and career goals and his responsibility to his family.

Chris is currently living with his aunt and uncle. However, they are considering moving out of California and Chris's mother wanted Chris to move with them. However, Chris did not want to move because California provides the most educational and labor market opportunities for undocumented people. At first, his mother could not understand his decision to not stay with his family. Chris had to explain to his mother that if they move, he will have to find a way to stay in California.

My family, I mean, my uncle, my aunt, they were thinking of moving to a different state, and my mom would tell me, "Are you going to move with them?" I told her no, and she asked me, "Why? They're your family." I told her, "It's a lot of things like the state, because this state is the one that's giving me the most." She would ask me, "Why, what do you mean?" And I explain to her that this state has all these advantages that I can't take. And with all these new laws, I can build a history that I can use later on, or something that's going to give me a foundation that I can use to basically lift myself. If I move I'm not going to be able to use or even have all this in a different state. So yeah,

basically that. So just not being able to continue if all these resources are taken away from us. (Student Interview, March 2019)

Becoming my own advocate and advocating for others like me

One of Chris's greatest accomplishments was learning to advocate for himself. He explained that his greatest success since being in community college was going from not having the information he needed and having to depend on others to doing his own research and speaking to counselors for their *perspective* on the choices he was making.

My greatest success is how I pass from knowing nothing to now kind of being able to do my own research. And now I don't just depend on the counselors to help me, or tell me which class I might need. Now, I'm able to start my own research and decide which school might be better for me if I decide to go for accounting instead. So basically now I talk to the counselors just to get a perspective, because that's what they do. Basically not just go there and explain to them what I want to do and then expect them to tell me how. Now I do my own research, and then bring my research to them. (Student Interview, March 2019)

Chris's other major success was his ability to help people in his situation. Through his experiences navigating his community and his workplace, Chris has learned invaluable information and also become a role model for people in his community. For example, after learning pieces of Chris's experience, one of his co-workers approached Chris and asked him if he could help his nephew who was in the same situation. Chris was able to walk his co-worker's nephew through the process of enrolling in school and applying for the Dream Act. Prior to Chris's support, his co-worker's nephew was not going to pursue college. The counselor that originally helped Chris enroll in college and apply for the Dream Act had a lasting impact on Chris. Chris explained that when he was helping his co-worker's nephew, he didn't just give him the information; he also offered to go with him and show him how to do it.

At first my co-worker, he just asked me, "How are you doing it?" And I told him and then he came back another day and basically he told me about his nephew and that basically his nephew is in my similar situation. So I gave him the information, but I also

told him, “Call me for help or I can go with you to help you”... like the counselor did for me. So he is trying school now. (Student Interview, March 2019)

Chris has learned a great deal about how to advocate for himself in community college and has started learning how to make decisions that will put him in the best possible position to enter the labor market. However, he feels less confident about his ability to advocate for himself after college, when he is pursuing his career. He explained that with great determination he believes he will make it through his education, but continues to question what will happen when he gets to that point.

At least, I mean, I won't say that all of us, or 100% of undocumented students I know, will get there, but I would say that at least, I don't know, 15, 20%? It depends on our determination, but I will say that many of us will get there. But once we get there, what are we going to do? (Student Interview, March 2019)

Chris also desires more information about labor laws and how he can safely advocate for himself in the workplace. Through his current place of employment, Chris has witnessed and experienced unfair and discriminatory hiring and salary practices. However, he lacks the knowledge and knowhow he needs to effectively and safely advocate for himself. Learning how to exercise agency in the workplace is an essential skill that most students do not learn and all students would benefit from.

I want to know what can we as workers can do to make some lasting change. For example, in my work we were not getting paid as well. And the business, they want to get their own way. They have the money to pay different people to fuel their own research to find a way that they can pay us less. But, who do you talk to or where do you go? Like, there are different levels, or different departments, where I can go within the state. So it just feels like there's not much that we can do, because the business has their own laws as well. So, what can I do to make them change, basically? Or what can I do to help somebody else that is in the same situation so we can get together or we can do something about it? (Student Interview, March 2019)

Students with Disabilities

Approximately 11% of undergraduate students in the U.S. report having a disability (NCES, 2016). For reasons that include proximity, more flexible admission processes, and lower tuition rates, the majority of students with disabilities attend community colleges (Flink & Leonard, 2018; Lewis & Ferris, 1999). While students with disabilities are one of the fastest growing student populations in institutions of higher education (Hitchings et al., 2010), their postsecondary experiences remain vastly underresearched and the majority of the research available focuses on the experiences of students with disabilities in 4 year universities (Hitchings et al., 2010; Vaccaro et al., 2015). The most common disabilities reported by students are learning disabilities, specifically dyslexia and ADHD (Dipeolu, 2011). Within 2-year colleges, students with learning disabilities complete at a lower rate than the general population, 41% compared to 54% (National Center for Learning Disabilities, 2014).

Students with disabilities experience several barriers along their educational and career trajectories. Stigmatization is one of the greatest challenges students with disabilities face, which not only impacts their sense of belonging and levels of psychological distress, but also affects their classroom and campus experiences. In the classroom, these challenges include higher workloads; peers and teachers questioning, or not taking seriously, their diagnosis; lowered expectations; and being underestimated (Denhart, 2008; Flink and Leonard, 2018). Students with disabilities also experience difficulties navigating their community colleges that include unwelcoming and negative interactions with college staff; lack of awareness regarding available services; overenrollment in noncredit courses; and confusion about the process for qualifying for services (Flink & Leonard, 2018; Hadley, 2017). Furthermore, some students struggle to name and fully understand their disability and how it interacts with their educational and career goals

(Hitchings et al., 1998). For some students, this could result from a lack of communication between their families and their K-12 institutions. In other cases, this could be due to their reliance on their parents or guardians. As interaction with parents and guardians decreases immensely between high school and college, this can be a challenging transition for students. The legal frameworks that guide students' high schools (i.e. IDEA) are also different than the ones that guide postsecondary institutions, like community college (i.e. Section 504 of the Rehabilitation Act and the Americans with Disabilities Act) (Stodden, Jones, & Chang, 2002; Wolanin & Steele, 2004). Therefore, if a student struggles to name, fully understand, or provide the proper documentation for their disability, they are likely to not receive the support they need.

These and other challenges impact career development and decision-making processes of students with disabilities. For one, studies have shown that students with disabilities either do not have access to or choose to not access the career development activities in their high school (Enright, Conyers, & Szymanski, 1996; Luzzo, Hitchings, Retish, & Shoemaker, 1999; Kosciulek, 2003). Therefore, they start college with less information about the labor market and having done less career exploration, which are essential for developing educational and career goals that take into account their specific needs (Zunker, 2002). And, while students with disabilities are increasingly taking rigorous academic courses in high school (Wagner, Newman, & Cameto, 2004), they are often less prepared academically. Finally, it has been found that students with disabilities, for many of the reasons outlined above, are less confident in the decisions they make about their careers (Adelman & Vogel, 1990; Ohler, Levinson, & Sanders, 1995).

However, studies have also shown that students with disabilities are a resilient population and, if provided with the information and guidance they need, persist and complete college at

high rates. For example, a recent report released by the California Community Colleges Chancellor's Office demonstrated that with quality counseling and services, students with disabilities persisted and completed their programs at higher rates than the general population (CCCCO, 2018). Furthermore, while some students experience difficulties naming their condition and fully understanding how it impacts their educational and career trajectories, many students with disabilities demonstrate a sense of expertise regarding their condition. These students are not only able to advocate for themselves on campus and in their classrooms, they also support the trajectories of their peers in similar situations (Flink & Leonard, 2018).

Marcel's story

Marcel is an 18-year-old White male who is in his first year of college. Marcel did not experience a typical high school to college transition. In the middle of his 11th grade year, he entered a mental health facility. He explains that he was there, on and off, for quite a while. While he would not return to high school, he was able to complete his GED.

I'm not a typical person in the transition to college sense. I was actually in a mental health facility for a while. Yeah, so for quite a while, actually. I was on and off. I didn't take 12th grade, I finished half of 11th grade and that's about as far as I went. And then I took the GED. Then I was doing a bunch of ... like there was a couple medical things and other things going on but yeah, took the GED, and then now I'm back for college. (Student Interview, December 2018)

Marcel had high educational aspirations. He hoped to transfer to one of the 4-year University of California campuses. However, Marcel's biggest worry was that he would not be prepared and perform poorly due to how much time had past since he was last in school.

My worries were definitely because I hadn't been to school in a while after the GED that I wasn't really going to do well. That's my worry now actually. My goal is just to be able to transfer actually. I want to transfer to a UC. (Student Interview, December 2018)

Marcel also experienced a few challenges when first enrolling in community college. He explained that the process of enrolling was very slow for him because he was unsure of what he

was doing. He was also unaware of the steps and requirements involved in obtaining disability services (i.e. providing various forms of documentation and completing multiple interviews).

Well because I didn't really know what I was doing, it was slow. The thing that took the longest time was the student disabilities services part...you just have to submit a lot of papers and you have to go to some interviews and it was a lot. (Student Interview, December 2018)

In pursuit of a happy medium: Not “school smart” and career compromise

Marcel often worries that he is not “school smart” enough to achieve his educational and career goals. As a result of his prior schooling experiences, he believes he is not good at school and worries that his capacity for learning will not be reflected in his grades.

My biggest worry, even now, is that I'm not smart enough. Because I've never been great in school although I think I'm smart. I'm just not good at the school system. I just worry that like my capacity for learning will not be reflected in my grades at school. (Student Interview, December 2018)

Marcel's academic challenges have also impacted his career goals and aspirations. Marcel originally wanted to go into medicine. First semester, he enrolled in Biology and while he found it very interesting and liked his professor, he has not been doing well in the class.

I am worried that I won't be able to translate school into a career because school doesn't really work well with me. I was first trying to go to med school. But then I had just took this biology class. It was great and I found it really interesting. It's on Saturday morning, which is not so great, but the teacher, he lets us leave early, in a way that we still learn what we're supposed to, and he does a lot of drawing on the board, so that's a new way for me to learn. So yeah, there's really no excuse, but I just haven't been doing well at that class and so I was like “This is not what I want to do.” (Student Interview, December 2018)

Marcel decided to change his career path and is now pursuing a career in law enforcement, with the hope of working for the FBI. His desire to work for the FBI stems from his own experiences. He is fascinated by mental health, and specifically with the criminal mind. He enjoys spending time reading autobiographies of people who solve crimes to learn more about the mind of criminals. He believes a career as an FBI agent could be a way for him to combine his interests

in criminal science and psychology. Through his experiences, he has also learned that he would have a moral issue with, and therefore not be able to do, on-the-ground work in law enforcement, such as being a police officer.

I want my major to be, I think is what I'm going to focus on, is probably psychology. My career path, my big dream is to be able to work in criminal science and psychology. If I could be in the FBI, that's what I'd wanna do. Nothing police, like on the ground sort of thing, 'cause I feel like I'd have a moral problem doing that. (Student Interview, December 2018)

One of Marcel's biggest fears is that he will not be satisfied with his future career and life in general. He wants a career that is interesting and through which he can make a positive impact. However, he often struggles between pursuing the career and life that will fulfill him and pursuing the one that is safest. He is currently searching for a happy medium.

I am worried that I won't be satisfied with the life that I live, that I'm just gonna be bored, and nothing will interest me, and I want to do something that not necessarily changes the world, but changes something for the better, and I feel like if I don't do that, I won't be fulfilled. It's like I could just keep going the way I am now, or I could just try something different and see. So I guess I'm debating whether I wanna be safe or just do what I want to do. Maybe there's a happy medium? (Student Interview, December 2018)

Classroom struggles: It's just how it is

When asked if he had experienced any barriers or obstacles since enrolling in college, Marcel quickly named his ceramics class. One of the challenges he faces in his ceramics class is groupwork. He explained that he sometimes “bumps heads with people” in his class when there are group projects due or in-class group work. However, he is more concerned about his relationship with his professor. After turning in his disability sheet to his ceramics professor, she started treating him differently. Marcel feels like his teacher now believes he is dumb and treats him accordingly in front of his peers. For example, she will tell his friends to not speak with him because it would distract him. Or, she would doubt the quality of his work even if it was done well, simply because it took Marcel longer to finish. However, Marcel has come to expect that

his teachers will not understand his disability and how it impacts his learning and therefore, does not blame his teacher because “it’s just how it is.”

I turned in my disability sheet to my ceramics teacher and I feel like she thinks that I'm dumb. I do things slowly, and she comes in and thinks that I'm not doing the right thing because I'm not doing it as fast as everyone else is doing it, it's hard to explain. And she would kind of berate me in front of my friends, which was annoying. And then also, tell my friend to stop talking to me 'cause it's distracting me, and just stuff that, it just pissed me off, but that's because I'm a temperamental person. So my obstacle has been getting through the class, which I really haven't, like I don't think I'm gonna get a good grade in it. I just feel like something was miscommunicated along the way. I guess I just wanted to tell her that I know what I'm doing, I don't know, I'm just slow at things. I'm not dumb, but I feel like she just doesn't get that, which is not her fault, it’s just how it is. (Student Interview, December 2018)

In reflecting upon how he could have been better supported through this challenge, Marcel recognizes that he could have gone to the disabilities office to try to find support for dealing with this situation. However, he explained that he has a hard time doing that partly because he does not believe his learning disabilities are as severe as other people’s disabilities. Therefore, he felt he should not be complaining.

I feel like now looking back, I could have turned to the disabilities office, but I didn't. So I guess I didn't really deal with it. And I think FCC could have helped me if I reached out, I just have a really hard time doing that. I don't wanna come across as, it sounds odd, but I always feel like my learning disabilities are not as bad as some people's, and I shouldn't be complaining and that sort of thing. (Student Interview, December 2018)

Jesse’s Story

Jesse is a 33-year-old White student who is returning to community college after stopping out. After graduating high school, Jesse immediately enrolled in a different community college. However, he had to leave shortly thereafter due to a medical emergency. He spent approximately 5 years readjusting. During that time, Jesse worked various customer service jobs, some of them he enjoyed, but he was mostly working to make a sustainable living wage. After a great amount of convincing from his friends and family, mostly his mother, Jesse decided to return to school.

My first transition high school to community college, it was really nothing. Snap of the finger, no different. Choosing to come back after everything, that actually took ... my family members pushed me to do it. Especially my mother. Like every time at dinner. It actually got to the point where I basically was like fine I'll go as long as you stop asking me. But yea otherwise I probably wouldn't have considered going back...To explain the circumstances, I had to leave due to a medical emergency and at that time I focused more on work, instead of schooling. I did various temporary jobs, but I still have trouble recovering from my medical issue. So, it really wasn't always in fields that I wanted. It was mostly customer service jobs. Some were enjoyable, some were not. But it was more about having a sustainable living wage. Which even then wasn't that sustainable. So yea, my schooling got sidelined completely. Which is why there was a gap from I would say 2011 to 2016. (Student Interview, December 2018)

Jesse technically registered in the fall of 2015, but was unaware of the deadline for classes and therefore had to wait a semester to enroll in courses. Jesse reflects on this time as an opportunity to make a plan for what he wanted to do. Like it was for Marcel, the process for qualifying for disability services was very slow for Jesse. He was not able to receive services, such as priority registration, his entire first semester. This made it challenging for him to pick supportive professors.

I registered technically in the fall of 2015 but I just missed the deadline to join classes. So it was kind of a disappointment that I didn't take the initiative to do earlier. But it also give me a little bit more time to plan out what I wanted to do. In terms of picking professors, the very first semester, because I hadn't been established as a disabled student at this university. So the first semester, I was only able to pick the instructors that were available, that had room available. But thereafter, I've always had early registration, been able to research instructors, ask for feedback from other students I know, generally picked teachers that have been pretty good. (Student Interview, December 2018)

Since qualifying, Jesse has been very appreciative of the services and support he receives from the disabilities office. He has also learned about and taken advantage of various other services that have contributed significantly to his ability to persist towards his academic and career goals. These services include psychological services, tutoring and writing center support, and EOPS. However, he wishes he would have known about these services much sooner and believes the college could do a better job of informing students about these resources.

I didn't know I qualified for EOPS. I thought it was for freshmen. I was never told the look at EOPS. I think it would've been a little beneficial to have been told by this institution or it's various departments, maybe you should look at this because it has helped so much. I also utilized the transfer center, which does reviews, or did reviews and went to the English department here which reviewed my grammar. That is my biggest concern and issue because of my disability. So, yeah, they have services, some aren't readily apparent, or should I say advertised. Like for example the English department I think is mainly reserved for people who are currently enrolled in an English course. Which I have completed those requirements long ago. So technically I don't think I was allowed to use their services. And then yea, they have a therapist service on campus that I found out about. I think students should be informed of all of these. Like find out what the students needs and then make sure they know. (Student Interview, December 2018)

Making Decisions: Feasibility, job stability, and workplace discrimination

Upon deciding to return to school, Jesse not only changed community colleges, after a lot of thought, he also changed his major and career path. When he first enrolled in college, he was pursuing theater because he wanted to work in the acting realm, either as an actor or in technical areas like stage production. However, he worried that theater was not a good choice because there was no guarantee he would get a job and it did not pay well. Jesse explained that if he had to choose between a job he enjoyed and long-term stability, he was choosing long-term stability.

I knew theater was not feasible anymore. There's little to no money in it, it's a gamble, even if I have a Master's degree in the theater area, doesn't guarantee anything so ...I told my family, I said I'm not doing that, I'm not do anything that I personally would enjoy or have aspirations for over something that has long term stability. (Student Interview, December 2018)

Jesse became interested in law. He had gained a lot of legal knowledge through his experiences and also was excited about the paralegal program that would provide him with a certificate.

Therefore, he switched his major and career path to law and completed the paralegal program.

However, after finishing the paralegal program Jesse realized that neither schools nor employers cared about the certificate he earned. He tried to apply to transfer and was rejected and he could not find a job as a paralegal because it was very competitive and he did not have experience or a

degree. Therefore, he is changing his major and is currently deciding between Sociology and Criminology.

And that's when I looked at the area of law, which I have knowledge of. I came here for a paralegal certificate. I completed that. I realized oh nobody really cares about that. So I looked at transferring to a university. And I worked on major prepare courses, applied to schools, didn't get in. And then I expanded my major or majors. So I am now concentrating on sociology and criminology. (Student Interview, December 2018)

Jesse is still uncertain about his career path. While he is very interested in becoming an attorney, he worries that his limb disabilities will interfere with his ability to perform. Jesse also has learning disabilities that impact his writing and the amount of time it takes him to comprehend and retain information. He explains that what takes most students an hour to complete or study will take him three to five hours.

I don't know if I want to because an attorney. That would be pretty big. Because I have limb disabilities and other medical issues that I think would hinder me...But, my concerns will always be with my learning disabilities, which more specifically involve comprehension and basically retention of information. So that's a daily battle for me. If a standard regular student, average Joe or Jane has to study one hour for a quiz, it's three to five hours for me. Just to ensure that I've absorbed everything. That is always gonna be a challenge. Especially when it comes to writing...But I'd still like to try, so the BA process of going into sociology or criminology would be a start. Get a BA and then reevaluate my position and decide between the paralegal field or maybe do I wanna shoot higher? (Student Interview, December 2018)

Jesse is considering different career paths, but knows for certain that he wants to be able to address inequalities in the justice system. His current plan is to finish his BA degree and then decide whether he wants to be a paralegal or shoot higher and become a lawyer or possibly find another line of work within the social sciences.

I don't know. I haven't expanded entirely on all of the career paths but anything that involved the relationship of inequalities within the justice system. So maybe the social science areas and that might actually put me on a different path than being a paralegal or attorney. (Student Interview, December 2018)

While Jesse is very motivated to finish his BA degree, he still worries that it will not be enough to find a job. Due to his disabilities, Jesse cannot work and attend school and he worries the gap in his employment will make it difficult for him to pursue his career goals. He has also been discriminated against in the workplace due to his disabilities. His previous employer fired him for having epilepsy. Therefore, Jesse has decided that he will never disclose his disability information so that it cannot be used against him, but still worries about having to face those types of situations.

I am mainly worried about getting a position. Even if I get a bachelor's degree, what about all of this time that I didn't have a job? And it's like, explaining that it's because I can't do work and school with my disabilities ... No, based off of one not so good experience, I choose not to disclose my disabilities to employers anymore. Because I got discriminated against based off that. A horrible employer fired me for having epilepsy. So, I take off this bracelet whenever I go to an interview. Because if anybody recognizes it, they might ask...so to bring it back around, it's hard to explain to an employer the reason why I don't have this job experience is because I need to focus on my studies rather than work because of a disability. I will never disclose that to them. I'll tell them that after a probationary period, where they can't fire me. Up until that point, they won't hear anything about that. (Student Interview, December 2018)

Kate's Story

Kate is a 25 year old, White student in her first year of community college. Kate has a learning disability, dyslexia, which has significantly shaped her educational and career aspirations and trajectory. In high school, Kate did not have plans to attend college and therefore, stopped trying. She explains that she ditched a lot, had very low grades, and never attempted to talk to a college or career counselor. After high school, she started working. However, upon learning she would qualify for financial aid, Kate decided to come back to school.

I was bad in high school. I was so bad. I had bad grades, I ditched a lot, had a really low GPA and all that. Because I figured, well I wasn't gonna go to college, so I just said screw it. I never went to a college center or talked to any counselor or anything. So I went working from 18 to basically last summer. And then, yeah, it was really only just being able to get money, like the financial aid that started me to go. (Student Interview, December 2018)

Kate was worried she was going to do really poorly in college because it had been so long since she attended school. She also believed she was terrible at math. Upon enrolling, she took the placement exam and was placed in remedial English. Kate was almost too depressed to continue, but she stuck it out.

I felt like I was gonna do really badly. Because I was like, I haven't been in school in years, and I was like I'm terrible in math. I took a placement test at a previous school and I placed remedial in English, which was my strong point in school. So I was just like, ugh, no, I'm too depressed, I can't go. And I almost walked away. (Student Interview, December 2018)

Classroom struggles: I'm gonna fail everything

Kate explains that classes are really hard for her, especially if they involve reading, because she has dyslexia. She often worries that she will fail everything, be seen as the dumbest person in the class, or have to start all over.

I was like I'm gonna do so bad, I'm gonna fail everything. I'm dyslexic so I don't like reading ...I just feel like I'm scared to fail. I'm scared to be like the dumbest person in the class, you know what I mean? Or just fall so behind or do so badly that I have to start over. (Student Interview, December 2018)

Kate also worries that she will get a professor who does not understand her condition or who is not willing to support her. Unfortunately, Kate is not receiving disability services for her learning disability. Therefore, the support she receives in classes is dependent upon the willingness of her professors to provide it for her. Without the supports she needs, classes are very challenging for Kate not only due to her dyslexia, but also her auditory processing challenges.

I'm scared of getting a bad professor, or just doing badly, or taking a class that has way too much reading material and not getting help. I always tell them in the beginning of the class, oh I have this disability. Some of them are like, oh, well DSPS might do this for you. And then I tell them DSPS won't do anything for me and they either don't help or they say well technically, we can't help, but we'll see what we can do. Like some of the professors will be like we'll let you record in class, but most ... I don't know why most professors I have they don't allow phones or laptops, which is really weird. So,

most of the time I'm just writing things down really fast, and then I have a group chat with a bunch of students in that class also, where we all help each other. Because the dyslexia kind of comes with the auditory processing. You say something, and I'm like, what? And then a minute it registers. Like I'll say, "What" to somebody and they repeat themselves, but before they finish I answer them. They're like, "Why'd you say what?" And I was like, it wasn't done yet. I don't know. So I worry about that in class, especially the language class. She's just teaching all this stuff, and I'm like yeah, I write it down. But then I'm like what does this mean? We have an exercise on what we just learned and I'm asking other people what's going on? So classroom performance is tough without support. (Student Interview, December 2018)

The (im)possibility of accessing services

Kate has been unable to qualify for disability services because she does not have an official diagnosis for her dyslexia. She cannot get an official diagnosis because she has to get the diagnosis from a psychologist, not a doctor. Unfortunately, Kate's insurance does not cover psychological services. Therefore, the official diagnosis would cost Kate \$3,000 to \$4,000. She never had an official diagnosis because her parents never took her to the doctor as a child. She has tried speaking with DSPS to explain the situation, but there is very little they can do for her. Furthermore when she tried calling the doctor to get her own diagnosis, they asked her how old her child was and when she explained it was for her, they told her they do not do adult diagnosis of dyslexia. Therefore, Kate is having difficulties figuring out where to even get a diagnosis.

I went to the DSPS building, which is for students with disabilities, but you need a official doctor's diagnosis. And what I have can't be diagnosed by a doctor, it has to be a psychologist. And the insurance that I have doesn't cover it, so it's about three to four thousand dollars and I'm like, nope, I'm just gonna struggle. So yea, I can't get an official diagnosis without \$4,000. I told them all this and they're like, you didn't get diagnosed in school? I was like, no, my parents never took me to the doctor when I was a kid, because my parents ... we grew up with very traditional medicines. They don't use medications or go to the doctor. The only time I went to the doctor was to get the shots you needed to be enrolled in school. That's all I ever went to the doctor for. Anything dyslexic, no, nothing. And I did try calling to see and when I called an office, I was like, do you diagnose dyslexia? They're like, "Yeah, how old is your child?" And I'm like, "for me." And they said we don't do that. So yea, it's impossible. (Student Interview, December 2018)

Making Decisions: Self-efficacy and transfer program requirements

Kate's dyslexia has also played a significant role in the development of her career goals and aspirations. Kate grew up in a multilingual neighborhood and her grandmother speaks seven languages. She has always been fascinated by languages and would love a career that allows her to learn new languages. Therefore, Kate has been interested in majoring in linguistics. Kate spoke to a counselor about her career path. The counselor gave her a list of universities to call and told her to ask them about the requirements and potential career paths for their linguistic departments.

I went once and then that's what made me find out the careers ... The counselor was basically was like, "Okay, what schools do you wanna go to?" And I'm like, "I don't know any schools." She's like, "Okay, I need you to go and call all these schools and ask them what their requirements are and what careers you could go into." So I did and that's how I started choosing schools and maybe even a career. (Student Interview, December 2018)

Kate started with [a nearby college] because her sister-in-law went there. She called and found out that the linguistics major at [this college] required courses that were heavy on reading, such as anthropology and psychology. Kate decided the reading requirements at [this college] were too much in light of her dyslexia. Therefore, she continued calling schools until she found a school that required fewer courses.

When I went to the counselor and I told her [this college], we looked at the linguistics requirements. You need to take anthropology and psychology and all this other weird shit. And I was like, what? Why? This makes no sense. And I looked at the other ones and you literally only need like intro to linguistics classes, and a language class, and I was like, that's kind of what I'm doing. (Student Interview, December 2018)

Kate was still uncertain about transferring, but on her phone call with [a different college] that offered a similar program with less required courses, she learned about the Teaching English as a Second Language program. Kate liked the idea of learning languages, working abroad, and teaching. Therefore, Kate has since decided she wants to transfer and pursue a career in TESL.

And we asked them about it and then he starts talking about the TESL program and all this teaching. They send students abroad literally. And you teach English but you learn new languages. So that helped me figure out that I probably should transfer. I didn't plan on it at first, I didn't wanna go to school that long. So they helped me figure out that I should probably transfer to that school. (Student Interview, December 2018)

Chapter 5: Discussion and Implications

This study utilized a mediated-action approach (Penuel & Wertsch, 1995) to examine the career development and decision-making processes of community college students. Researching the action of choosing a major and career path, rather than the individual making the decision, enabled the researcher to foreground structural and contextual affordances and barriers and provided a window into how students construct coherence (Erickson, 1968) in a complex decision-making environment (Baker et al., 2018). The factors found to contribute to the complex career decision-making space for community college students were translated into a visual diagram, see Figure 22. This diagram is by no means a complete representation of the career decision-making space community college students navigate; however, it does begin to paint a picture of its complexity.

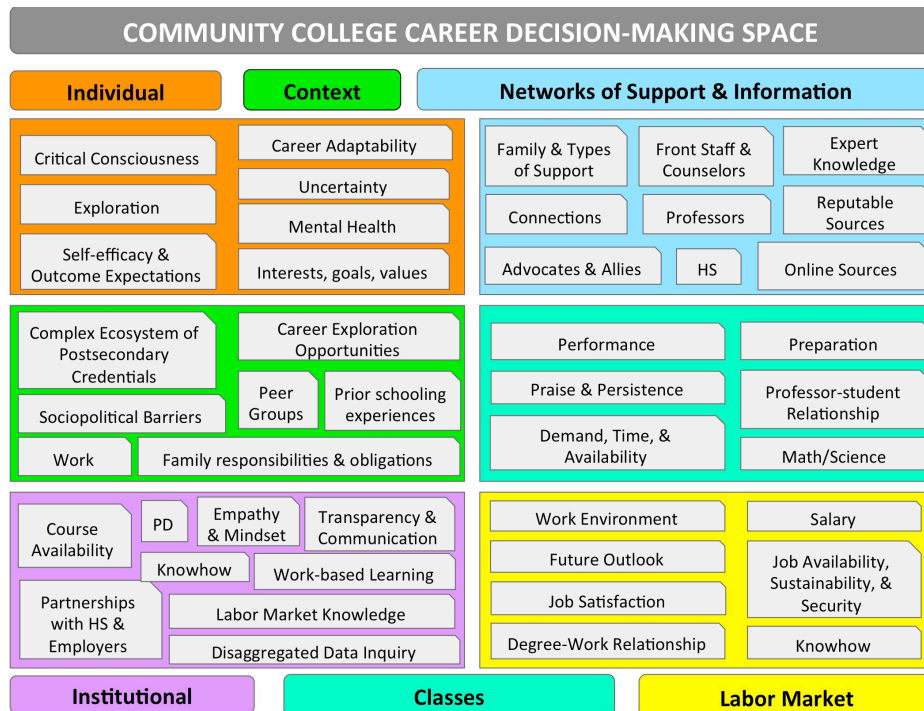


Figure 22. Community college career decision-making space

For the participants in this study, making a decision about their major and career path required navigating a dynamic and shifting labor market (Fouad & Bynner, 2009), a complex ecosystem of postsecondary credentials (Carnevale et al., 2017), and various contextual and structural affordances, barriers, and constraints (Duffy et al., 2016). For many participants, this complexity was confounded by a lack of labor market knowledge and knowhow (Baker et al., 2018), minimal opportunities for career exploration in high school, sociopolitical barriers and previous schooling experiences (Diemer, 2009; Duffy et al., 2016), efforts to balance peers, family obligations, and work (Saenz et al., 2018); and experiences in classes, especially math and science, that impacted their self-efficacy and outcome expectations (Baker et al., 2018; Lent et al., 2000, 2013). Furthermore, many students struggled to locate expert knowledge and advice about the labor market or their specific career field (Karp et al., 2008; Simon & Tovar, 2004). In light of these factors, it is not surprising that the majority of participants felt a high level of uncertainty about their major and career decisions.

This discussion section explores, in more depth, the complex career decision-making space that community college students must navigate. Selected findings across the previous chapters will be discussed and organized across 4 domains: labor market knowledge and knowhow, differentiating for students' career development trajectories, nurturing sociopolitical development, and the career adaptability of special populations.

Labor Market Knowledge and Knowhow

Recently an increased amount of attention and investment, especially in the community college arena, has been dedicated to improving labor market outcomes and supporting students and schools in the process of using labor market information to guide decision-making (Baker et al., 2018; Xu & Trimble, 2016). These efforts have been attempting to understand if, and how,

community college students use labor market information in their career decision-making processes (Baker et al., 2018). It has been found that—while less important than factors related to enjoyment and course experiences—students’ perceptions of labor market outcomes (e.g., job availability and stability, salary, employment, etc.), including their ability to perform in a given field, influence their major and career decisions (Arcidiacono, Hotx, & Kang, 2010; Baker et al., 2018; Stinebrickner & Stinebrickner, 2014). The findings from this study support and contribute to this body of literature.

The majority of participants reported lacking the labor market knowledge and knowhow they need to support their career development and decision-making processes. Not having the labor market knowledge and information they needed in the career decision-making process contributed to their levels of uncertainty, stress, and anxiety. Participants’ levels of uncertainty and anxiety were often exacerbated by what they did know about the labor market. Most participants reported an awareness that jobs are limited and the labor market is competitive. Some participants also reported hearing that advances in technology would affect the sustainability and future outlook of different career fields. Many participants also questioned the relationship between an educational degree and a career. They had heard stories about and witnessed friends and family members who, after obtaining a degree, could not find a career in their field and, in some cases, any field. Many participants also had a sense that people were not satisfied with their careers and had limited work-life balance. Overall, students were worried about entering a world of work they knew little about beyond its unpredictability. Participants wanted to learn more about the labor market and believed labor market knowledge and knowhow was an important part of their career development and decision-making process. Specifically, they wanted to know: (a) what questions they should be asking; (b) more about job availability,

sustainability, and the future outlook of the labor market; (c) if people enjoyed their jobs; (d) how to be competitive and irreplaceable; and (e) how to decide on a job and navigate the labor market.

The labor market information that students desired varied significantly by race/ethnicity, which may be related to the types of career guidance participants had access to in their networks of support and information. The most significant difference was found between the Latinx and Asian participants. Asian participants were most likely to report seeking out and receiving career guidance in the form of expert knowledge and support. Furthermore, Asian participants were most likely to receive career guidance from their families in the form of expert knowledge and advice and connections to the labor market. Latinx participants were most likely to report seeking out and receiving career guidance from their families. However, the types of guidance Latinx participants reported receiving were largely in the form of support and motivation, with very little guidance in the form of expert knowledge and advice and connections to the labor market.

The difference between the networks of support and information Latinx and Asian participants reported having access to was reflected in their questions about the labor market. Asian participants' questions were majorly about factors related to the workplace (e.g., job satisfaction, job requirements, promotion, varied levels in a career field, and being competitive), whereas Latinx participants asked questions related to navigating entry into the labor market and that displayed higher levels of uncertainty, specifically "How do I decide what job is best for me?," "What happens if I fail? Will I hate it? What happens if I change my mind?," and "How do I break into the labor market? What is the path I need to take?" This finding is by no means meant to minimize the power of family career guidance in the form of support and motivation; it

has been consistently documented in literature that family support and motivation is positively correlated with increased persistence and completion in postsecondary education, especially for Latinx students (Liou et al., 2009; Luna & Martinez, 2012; Perez Huber, 2009). Rather, these findings are meant to demonstrate that the types of career guidance students need vary by their networks of support and information and the labor market knowledge and knowhow they have access to.

The majority of participants, regardless of their racial/ethnic group, reported that: (a) factors related to the labor market significantly impacted their career development and decision-making processes; and (b) not having access to labor market knowledge and knowhow contributed to their levels of uncertainty about the decisions they were making regarding their major and career path. Guiding students' onto streamlined pathways to and through higher education to the labor market requires ensuring that students have (and understand) the accurate, up-to-date, and relevant information *and knowhow* they need to make a high-stakes career decision. Without access to career guidance in the form of labor market knowledge, students can end up feeling lost. As one participant explained,

So the way that they're redesigning the way we apply to colleges and stuff as it's like first you decide what career you want. Then based off your career, you decide your major. And then based off of that, you decide the school you want to go to, which is kind of like opposite of how it's been in the past. And so that's kind of hard because like I don't know what career I want to go into. So I don't know what major to be and I don't know what classes to take. And so it's kind of lost in that way. So I think the hardest decisions I had to make was just choosing stuff like when I have no idea. (Student Interview, December 2018)

Differentiating for Students' Career Development Trajectories

The findings revealed that the majority of participants changed their major and career paths at least once, and sometimes more, since enrolling in college. Furthermore, approximately half of all participants, whether they changed paths or not, demonstrated uncertainty about their

current major and career path. Organizing students' career development stories by level of engagement in career exploration and level of certainty with their final decision, revealed 5 patterns in students' career development trajectories: (1) students who changed paths and are still uncertain; (2) students who changed paths and are now certain; (3) students who did not change paths and are uncertain; (4) students who did not change paths and are certain; and (5) students who are too uncertain to choose a major and career path. The career development stories of students who did not change paths varied significantly by their level of engagement in in-depth exploration, which has important implication for providing students with career guidance. It indicates that students who both appear to committed to a career path (i.e., no change and certainty) might be at very different places in their career development and therefore, need different types of guidance and information.

While there are forms of career guidance all students need (e.g., access to labor market knowledge and knowhow; navigating coursework; learning about variation between careers in one's field, etc.), career guidance must also be differentiated. The need for differentiating career guidance was supported by the differences in students' career development stories, including the reasons why they changed major and career paths. For example, students who changed paths and were still uncertain often reported that their performance in, or enjoyment of, a particular class led them to switch paths whereas students who did not change paths, but were uncertain about their major and career path reported a higher level of family influence (e.g., advice, connections to the labor market, family work history). These two students require different types of guidance. The first student would benefit from support, and possibly encouragement, in her/his classes. The second student might benefit from career exploration opportunities and reassurance related to job availability in a different field of interest.

The findings also demonstrated that it is possible for a student to change paths, remain uncertain, and still be at a completely healthy place in their career development, whereas a student who has not changed paths and expresses certainty might be in great need of career guidance and information. In the context of Guided Pathways and decreasing time to transfer and completion, certainty about one's major and career path seems to take priority to an individual's process of career exploration. However, in the context of identity development, career exploration is essential to the healthy development of one's identity and career reconsideration has also been found to support the crystallization of one's vocational preferences. However, career exploration opportunities must be guided and differentiated for students. The findings demonstrated that without guidance, high levels of in-breadth career exploration and changing major and career paths can result in an increased level of uncertainty and stress (Porfeli et al., 2013).

Finally, while all students should be provided with emotional support and guidance when making decisions about their occupations as these decisions are inextricably tied to their identity development, students who are uncertain and have engaged in minimal career exploration often require additional emotional support. These students are more likely to take noncredit courses, end up with credits they do not need, have prolonged times to completion, dropout of school, and experience high levels of anxiety and stress (Bailey et al., 2015; Gordon & Steele, 2015). These are only a few examples of the diverse supports students need when making high-stakes decisions about their major and career paths. However, they speak to the importance of differentiating for students' levels of uncertainty and career exploration.

Learning Experiences: Courses and Self-efficacy

Career guidance for students must include support in their classes. In examining the determinants of major choice amongst community college students, Baker et al. (2018) found course enjoyment and grades were the most important determinants. This finding was supported here by participants who changed their major and career path. Participants' experiences in a particular course was the most common reason participants reported changing their major and career paths. The majority, 80%, of these experiences were negative causing students to doubt whether they would be fulfilled, and able to persist, in a particular career field. Approximately half of the negative course experiences participants reported were attributed to their difficulties in math and science courses. In a few cases, positive experiences in a course also led to students switching, but more often confirming, their major and career paths. Positive experiences included persisting through a challenging course, receiving praise from classmates or the professor, engagement in a course, and feeling successful in a course.

Students who attend community colleges are more likely to come from populations that experience less access to qualified teachers; high quality curriculum, instruction, and resources; laboratories, computers, STEM programs, and internships; and even the math, science and AP courses needed for college (Battey, 2013; Darling-Hammond, 2010; Dondero & Muller, 2012; Noguera, 2004; Oakes, 2005; Riegle-Crumb & Grodsky, 2010). As a result, they are often underprepared for their college courses and need additional supports to feel and be successful in these courses. Some of these students are also likely to have developed a fear of math and science that limits their major and career decisions. This was the case for the majority of the participants in this study who changed major and career paths due to their experience in courses, and most often math and science courses, which supports the literature on the exclusion of

Students of Color and low-income from STEM pathways (Riegle-Crumb, King, & Irizarry, 2019). For many of these students, additional support in their classes might have supported their persistence in and through their chosen major and career path. This was evidenced through the few cases in which participants reported praise and positive feedback from their professor as an important factor in their career decision-making processes. Therefore, it is essential that career guidance extends into classrooms and involves faculty. This includes contextualizing students' career exploration through the disciplines. Participants reported the desire for more labor market information, *in relation to* societal issues, disciplinary knowledge, and the real world context.

Nurturing Sociopolitical Development

In his work, Diemer (2009) found that underrepresented students often have a sociopolitical development, or a critical consciousness and motivation to change one's social reality and help others by addressing sociopolitical inequalities through community action (Ginwright & Cammarota, 2002; Watts & Flanagan, 2007). This was the case for slightly less than half of the participants who, after experiencing myriad life challenges and sociopolitical barriers, wanted to pursue a career through which they could help others, make an impact, and that had relevance to their lives and the lives of their family. For Latinx participants, helping others and making an impact were the most commonly reported factors that influenced their career development and decision-making and went hand-in-hand with factors related to enjoyment and fit. Diemer (2009) explains that students' sociopolitical development can be "an antidote to oppression" by serving as a successful means for students to: a) implement their occupational self-concept in the world of work; b) increase the clarity of their vocational identities; c) realize their vocational expectations; d) expect to attain higher-paying, higher-status

occupations; and e) enhance their ability to critically assess and act upon the sociopolitical barriers of their lived realities (Diemer & Blustein, 2006; Watts, Griffith, and Abdul-Adil, 1999).

The findings in this study support Diemer's (2009) claims, however they also pose an important question to expand upon and be critical of the notion of a sociopolitical development. The findings revealed that, outside of Psychology, participants who chose major and career paths they believed would allow them to help others and make an impact were most often choosing lower-paying major and career paths (e.g., Child Development and Sociology) and very rarely choosing pathways careers in STEM, finance, business, or law. The author is not arguing that students should prioritize salary, but is rather posing a question, *Would having more knowledge about how to make an impact and help others through these other career fields, encourage students to explore their options within these fields?* Nurturing students' sociopolitical development in these ways might be an important strategy for increasing diversity in career fields that Students of Color, low-income students, women, and special populations have been excluded from for far too long.

The Career Adaptability of Special Populations

Community colleges are play an essential role in meeting the needs of a diverse range of students, many of whom identify as belonging to one, or multiple, special populations (e.g., former foster youth, LGBTQ, students with disabilities, undocumented students, English Language Learners, single parents, etc.). These students face unique challenges that impact their career development and decision-making processes. Analyzing the findings from the experiences of participants who identify with three of these special populations (i.e., former foster youth, undocumented students, and students with disabilities) revealed unique challenges that should be taken into consideration when differentiating career guidance. These include: (1) accessing

services; (2) sense of belonging; (3) prior educational experiences; (4) trauma and mental health; and (5) labor market challenges. While all of these challenges are important, and explored in depth in the findings chapter, this section of the discussion is going to focus primarily on the labor market challenges participants from these special populations experience and the career adaptability they demonstrated in response to these challenges.

In addition to homelessness, transitional age foster youth experience higher rates of incarceration, substance abuse, trauma, and mental health issues than their peers (Berzin, Rhodes, & Curtis, 2011; Shook et al., 2011). This is the case for the former foster youth participant in this study, Antonio, who experienced every challenge listed above and was currently attending community college while completing a deferred sentence for felony charges. Antonio was aware that his felony charges would hinder his ability to be successful on many of the major and career paths available to him. He worried he would not get hired anywhere and was therefore trying to construct a major and career path that would afford him the most opportunity in the labor market. Chris, an undocumented student, also worried about finding employment after college and therefore, like Antonio, but for different reasons, was trying to construct a major and career path that afforded him the most opportunity in the labor market. Through their own research and exploration, both of these students learned business would be their best option as it would afford them the opportunity to be self-employed in spite of their legal constraints. Now, they are trying to figure out what they would like to do within the field of business and like the majority of participants, are navigating factors related to the labor market and enjoyment.

The participants who identified as students with disabilities also face constraints and barriers in their career decision-making process. For Marcel, who has struggled with mental

illness and learning disabilities, these challenges have largely occurred in the classroom. Marcel originally wanted to go into medicine, but his difficulties in his Biology class made him question and change his major and career path. Marcel fears his intelligence won't be recognized in the context of college. The struggles he experiences in class have made him very uncertain about the possibilities for his future career, but he is trying to piece together his life experiences, interest in the human mind and psychology, and his interest in law enforcement into a career in criminal psychology. Similarly, Kate, who has dyslexia, explains that her struggles with reading have led her to search for transfer programs and career pathways that require minimal reading. Finally, Jesse has limb disabilities that physically limit what he is able to do in the labor market. He also has learning disabilities that impact his writing and the amount of time it takes him to comprehend and retain information. Jesse originally wanted to become an attorney, but is worried his disabilities will make it challenging for him to be successful at his job. He has become very uncertain about his major and career path. Jesse has also been discriminated against in the workplace for his disability. Therefore, he does not believe he will disclose his disability status because he lacks trust that it will not be used against him.

A common theme across all of these participants is their demonstration of a high level of career adaptability (Savickas & Porfeli, 2012). Each of these participants were in a process of career construction (Savickas, 2012) and were searching for career guidance and information that could help them construct a major and career pathway that afforded them the most opportunity in the labor market in light of their needs and constraints. This is not an easy task. It requires information about labor laws; local, statewide, and federal policy; examples and career role models from similar populations; and more nuanced information about majors and careers. It also requires "psychosocial resources for coping with current and anticipated vocational

development tasks, occupational transitions, and work traumas” (Savickas & Porfeli, 2012, p. 662). The stories of these participants call for career guidance that not only provides students with the knowledge and knowhow they need, but also supports them through the process of “constructing and narrating a story that portrays their career and life with coherence and continuity” (Savickas et al., 2009, p. 245). Career adaptability is essential for *all* students, especially in the context of an increasingly dynamic and unpredictable labor market.

Intersectionality and Career Development

Race, culture, gender, first generation status, international status, and other identity axes (e.g., immigration, class, (dis)ability, LGBTQ, foster youth, age, etc.) intersect in ways that influence students’ career development. Disaggregation of the data revealed that the factors influencing students career development and decisions varied in degree by race/ethnicity, first generation status, and gender. For example, first (FG) participants and female participants were more concerned than non-FG participants and male participants with factors related to family influence, helping others, and finding a career relevant to their lives. Non-FG participants and male participants were more concerned than FG students and female participants with factors related to the labor market. When making decisions about their career, Latinx participants, more than all other racial/ethnic groups, were searching for a career through which they could help others and make a difference and were also most influenced by factors related to persistence (e.g., persisting through a challenging course or job, overcoming a life challenge, learning a skill). FG Latinx participants were the least concerned with competition in, and being competitive in, the labor market. When making decisions about their careers, Asian students were the most influenced by factors related to the labor market, specifically job availability and sustainability, being competitive and the competitiveness of the labor market, work environment,

salary, and the demand of a particular major and career path. However, more than non-FG Asian participants, the career development and decisions of first generation Asian participants were more influenced by factors related to family influence, life relevance, and work-life balance and less influenced by factors related to sustainability and salary.

Disaggregating student responses by race/ethnicity, gender, first generation status, and international status also revealed significant differences in students' networks of support for making career decisions. For example, when making decisions about their careers, female participants were more likely than male participants to seek help and advice from high school staff, professors, and online sources, while male participants were much more likely than female participants to seek help from experts. First generation students were more likely to turn to family and less likely to turn to experts for career support and information than non-first generation students. Latinx male participants were the least likely to turn to peers and counselors. Asian males were more likely than all other subgroups to turn to their peers and experts for career support and advice. However, FG Asian students were more likely than non-FG Asian students to seek career guidance from family and peers and less likely to seek career guidance from experts.

All racial/ethnic groups reported family as an important source of support and information for making decisions about their career, with Latinx participants reporting the highest level of family support. While family was an important source of career support and guidance across all subgroups, the nature of the help participants' families provided for them varied significantly across subgroups. For example, non-FG students reported receiving from their families the highest levels of expert knowledge and advice. In comparison to all other racial/ethnic groups, Latinx students were least likely to report help from their family in the form

of expert knowledge and connections to the labor market and also reported the highest levels of support and motivation. FG Latinx participants only received career guidance from their families in the form of support and motivation, and did not receive family support in the form of connections or expert knowledge and advice. Latinx female participants were more likely than any other subgroup to seek career support and advice from professors, counselors, and their workplace, and the least likely to seek career support and advice from experts. Asian students reported the highest levels of family support in the form of expert knowledge and connections to the labor market. However, FG Asian students did not receive help from their families in the form of connections.

Utilizing an intersectional lens to examine students' career development and decision-making revealed significant differences in students' students' perceptions of their capabilities (e.g. the relationships between prior math experience and STEM careers), networks of career support and information, labor market knowledge and knowhow, previous career exploration opportunities, and career aspirations. Additional research on the relationship between intersectionality and career development and decision-making should be conducted to supplement efforts to differentiate students' career guidance and supports in pursuit of equity.

Limitations and Future Directions

One limitation this study was the small number of Black participants. There is a growing concern about the community college enrollment and completion rates for Black students. A recent report on the state of higher education for Black Californians found that Black students are becoming increasingly overrepresented in for-profit colleges (10% compared to 7% in community colleges), often due to heavy for-profit recruitment and promises of entry into the labor market (Campaign for College Opportunity, 2019). Yet, only 7% of Black students who

start at a for-profit complete a BA degree in 6 years or less, which takes on heightened significance in the context of student loan defaults (Campaign for College Opportunity, 2019). Black men also experience overwhelming challenges in the labor market, including discriminatory hiring practices, lower earnings, and sociopolitical barriers (e.g., racism, hyperincarceration, profiling) that act as a form of exclusion from the labor market (Bell, 2018). Bell (2018) explains that—in light of the unique life-career experiences Black men navigate—career guidance for Black men should also aim to incorporate principles of existential psychotherapy, particularly *death, freedom, isolation, and meaning*. There is a need for research that explores the career development and decision-making processes of Black community college students, especially when considering Black students are often choosing to attend for-profit colleges for the promise of a career. This is an essential future direction for this research.

Another limitation of this study and direction for future research was practitioner voice. Examining the experiences of career counselors, Pathways coaches, and faculty would provide important insight into: (a) the contextual factors impacting students' career development and decision-making; (b) the labor market knowledge and knowhow practitioners have and need; and (c) the challenges practitioners experience and the support and resources practitioners need to provide career guidance and embed career exploration into disciplinary learning.

In addition to those outlined above, directions for future research also include: (a) an in-depth analysis of the low-income student population; (b) a mixed methods, longitudinal analysis that incorporates students' completion and labor market outcomes; (c) a deeper investigation into the relationship between mental health and students' career development and decision-making processes; and (d) a more robust exploration of the career development and decision-making of special populations in community college.

Chapter 6: Conclusion and Recommendations

In the last decade, local, state, and national initiatives have turned to community colleges to educate and train significant numbers of student populations to address educational, social, economic, and political shortcomings and workforce needs in the United States (Anderson, et al., 2015; Dowd 2003; Kiyama & Rios-Aguilar, 2017; Rosenbaum et al., 2006; Stevens et al., 2015; Teranishi & Bezbatchenko, 2015). Furthermore, through interventions like Guided Pathways, career has been brought to the foreground of localized community college reform efforts. Therefore, as evidenced through this RPP, community colleges are becoming increasingly aware of the gaps in their knowledge related to students' career development and knowhow for advising students through the career decision-making process. Career decisions are among the few decisions that have lifelong consequences. Therefore, advising students through the career decision-making process is a high-stakes activity that requires first, understanding the complexity of community college students' career decision-making space. Lacking an understanding of this complexity not only makes it extremely challenging to differentiate career guidance for students, it can also lead to the (re)production of equity gaps.

This study sought to characterize the complexity of the career decision-making space students navigate in the context of Guided Pathways in efforts to support community colleges in the process of learning what types of knowledge and knowhow, resources, and guidance students desire (and need) to make decisions about their major and career paths. This study revealed that, in order to make a high-stakes career decision, community college students must construct coherence within and between an increasingly dynamic and shifting labor market; a complex ecosystem of postsecondary credentials; myriad sociopolitical and structural barriers; and varied

networks of support and information. The findings of this study suggest that community college students would benefit from:

1. access to timely, relevant, and contextualized *labor market knowledge and knowhow*;
2. career guidance and career exploration opportunities that *differentiates* for students': (a) levels of uncertainty/decidedness and labor market knowledge and knowhow; (b) previous career exploration opportunities and schooling experiences; (c) networks of support and information; (d) academic and socioemotional needs; and (e) individual aspirations, restraints, and/or constraints (e.g., staying close to home; legal constraints; desire for a specific work environment; etc.);
3. career guidance and support that is *contextualized in disciplinary learning* and *extends into the classroom*—especially *math and science* courses—including in-time academic support, praise and feedback, and opportunities to learn about the relationship between major paths, courses, and a broad range of career possibilities and specializations;
4. opportunities to explore and cultivate their *sociopolitical development across career fields*;
5. career guidance focused on developing the *career adaptability skills* students need to navigate and adapt to change in an increasingly complex and unstable labor market, including career narrative exercises that supplement students' efforts to *construct coherence* between their life experiences, vocational interests, and the demands of the labor market (Savickas et al., 2009);
6. *emotional and psychological support* to navigate the stress, anxiety, and uncertainty students report feeling throughout their career development and decision-making processes.

Appendix A: Consent Form

UNIVERSITY OF CALIFORNIA LOS ANGELES STUDY INFORMATION SHEET

Educational and Career Decision-making at FCC

Good morning/afternoon. My name is {enter your name} and I am here today to interview students as part of a research project we are conducting at UCLA.

Dr. Cecilia Rios-Aguilar and PhD candidate Rebecca Neri from the Graduate School of Education & Information Studies at the University of California, Los Angeles (UCLA) are the primary investigators for the research study we are conducting. You were selected as a possible participant in this study because you are a FCC student.

The purpose of this project is to learn more about community college students' educational and career decision making. We would also like to know if and how FCC is providing support and resources to help students reach their educational and career goals. We also believe it is very important to learn about the educational experiences of specific groups of students such as, foster youth, LGBTQ, undocumented students, students with disabilities, language learners, first generation, and others. If you are a part of any of these groups, we encourage you to share your specific experience so FCC and other community colleges can learn how to better serve their diverse students.

By volunteering to participate in this study, the researcher will ask you to do the following:

Participate in this 1 hour, one-on-one interview.

Possibly participate in a focus group with 3-5 other individuals to collectively discuss your experiences as FCC students.

Write monthly journal entries about important decisions you make for your education and future career.

There are no anticipated risks or discomforts.

You may benefit from the study by getting a better understanding on how to reach your career goals. The results of the research may help college faculty and staff better understand how to help students persist in college and reach their career goals.

You will also receive a \$25 Amazon gift card directly after the interview..

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. We will protect your identity by assigning you a code so that your name will not be used or recorded on any documents. There will be no way to link a participant to their code. We will record the interview, but rest assured, your personal identifying information will not be shared with anyone, and once we transcribe and code it, it will be destroyed.

You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time. Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled. You may refuse to answer any questions that you do not want to answer and still remain in the study.

If you have any questions, comments or concerns about the research, feel free to contact Rebecca Neri at r.neri@ucla.edu or Dr. Rios-Aguilar at rios-aguilar@gseis.ucla.edu.

If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researchers, you may contact the UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406

Appendix B: Demographic Form and Labor Market Questionnaire

Demographic Questionnaire

1. SUID: _____
2. Year (in college): _____
3. Pathways (circle one): **Yes/No**
4. **Please check all that apply:**
 - International student
 - Returning Student (you stopped out for a semester or more)
 - Former or Current Foster Youth
 - First Generation
 - Student with Learning Disabilities
 - English Language Learner
 - Undocumented Student
5. Gender: _____
6. How do you identify? (circle one):
 - a. Gay/Lesbian
 - b. Heterosexual
 - c. Bisexual
 - d. Other _____
7. Age: _____
8. Race/Ethnicity (list all that apply): _____
9. What country were you born in? _____
How long have you lived in the United States? _____
10. What was your first learned language? _____
What language do you speak at home? _____
11. Who do you live with? _____
12. What do you want to pursue after completing FCC? _____
What does your family/household want you to pursue? _____

13. Are you currently employed? **Yes/No**

If employed, where do you work? _____ and
how many hours/week do you spend working? _____

Brief Labor Market Questionnaire

➤ **List the top 3 most rewarding jobs.**

- 1.
- 2.
- 3.

➤ **In your opinion, list the top three things that makes a job rewarding.**

- 1.
- 2.
- 3.

➤ **List the top 3 highest paying jobs.**

- 1.
- 2.
- 3.

➤ **List the top 3 jobs that you believe have the best long-term stability.**

- 1.
- 2.
- 3.

➤ **List the top 3 jobs that have the highest employment rate (*i.e. job availability*).**

- 1.
- 2.
- 3.

➤ **List three things that would make you turn down a job.**

- 1.
- 2.
- 3.

Appendix C: Interview Protocol

Getting in: *Where do I want to be? What do I want to learn?*

1. When and why did you **enroll** in FCC?
2. Please describe your **transition from high school to college** for me.
 - a. What were your **goals**? What were your biggest **worries**?
 - b. What were the major **decisions** you were facing?
 - i. **Who and what** helped you make those decisions?
 - ii. **Where** did you get your **information** to make those decisions?
3. Once you made the decision to attend college, what was the **enrollment process** like?
 - a. What were the major **decisions** you were facing?
 - i. **Who and what** helped you make those decisions?
 - ii. **Where** did you get your **information** to make those decisions?
 - iii. How could **FCC have helped you** better throughout this process?
4. How did you decide your **major and career path**?
 - a. What were your **goals**? What were your biggest **worries**?
 - b. What were the major **decisions** you were facing?
 - i. **Who and what helped** you make those decisions?
 - ii. **Where** did you get your **information** to make those decisions?
5. What are the **experiences and skill sets needed** to enter your desired career field?
 - a. What **educational degree** do you need to get your ideal job?
 - b. What **steps are you taking** to ensure you achieve your career goals?
 - c. **Who has helped you** most in ensuring you reach your career goals?
 - d. How do **conversations with your family** about your career goals tend to go?

Fitting in: *How do I make this work for me?*

1. Describe your **experience at FCC** so far.
 - a. [only if a Pathways student] Describe your experience **in Pathways?**
2. What are your biggest worries about your **education**?
 - a. **Who** do you turn to when you are worried about your education and **why?**
3. What are your biggest worries about your **future career**?
 - a. **Who** do you turn to when you are worried about your career and **why?**
4. What are your biggest worries **about life**?
 - a. **Who** do you turn to when you are worried about your life and **why?**
5. Please describe **1-2 challenges** have you faced throughout your educational and career trajectory while at FCC. For each challenge, please describe:
 - a. The **obstacle** you faced
 - b. **Who** you turned to for support
 - c. **How you dealt** with the obstacle
 - d. How **FCC** could have helped you
6. Describe **2-3 successes** you have experienced while at FCC.
7. Have you **changed majors/coursework/career paths** since being here?
 - a. What were the major **decisions** you were facing?
 - a. **Who or what helped** you make those decisions?
 - b. **Where** did you get your **information** to make those decisions?
8. How has **FCC supported** your educational and career goals?
 - a. What could **FCC do better** to support your educational and career goals?
 - b. [only if Pathways student] How about **Pathways** specifically?
9. How do you **practice self-care?** (i.e. stress relief, mindfulness, spirituality/religion, etc.)

Moving on: *Where does this accomplishment take me?*

1. How will your chosen educational and career path and decision-making help you accomplish your **desired future lifestyle?**
 2. How have your **career aspirations developed** from the time you entered college to now?
 3. How has your **knowledge about the labor market changed** from the time you entered college to now? Is there anything you would **like to know about the job market?**
-

References

- American Association of Community Colleges (AACC). (2012). *Reclaiming the American dream: Community colleges and the nation's future*. Washington, DC: Author.
- Abrego, L. J. (2006). I Can't Go to College Because I Don't have Papers": Incorporation Patterns of Latino Undocumented Youth. *Latino Studies*, 4: 212–231.
doi:10.1057/palgrave.lst.8600200.
- Adelman, P. B., & Vogel, S. A. (1990). College graduates with learning disabilities: Employment attainment and career patterns. *Learning Disability Quarterly*, 13, 154-166.
- Anderson, G. M., Barone, R. P., Sun, J. C., & Bowlby, N. (2015). The new stratification: Differentiating opportunity by race and class at community colleges in the United States. *Critical approaches to the study of higher education*, 257-284.
- Antle, B. F., Johnson, L., Barbee, A., & Sullivan, D. (2009). Fostering interdependent versus independent living in youth aging out of care through healthy relationships. *Families in Society: The Journal of Contemporary Social Services*, 90(3), 309–315.
- Arcidiacono, P., Hotz, V. J., & Kang, S. (2010). *Modeling college major choices using elicited measures of expectations and counterfactuals*. Cambridge, MA: National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w15729>.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press.
- Attewell, P., Heil, S., & Reisel, L. (2011). Competing explanations of undergraduate noncompletion. *American Educational Research Journal*, 48(3), 536-559.
- Baber, L. D., Zamani-Gallaher, E. M., Stevenson, T. N., & Porter, J. (2019). From Access to Equity: Community Colleges and the Social Justice Imperative. In *Higher Education:*

- Handbook of Theory and Research* (pp. 203-240). New York, NY: Springer.
- Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New directions for community colleges*, 2009(145), 11-30.
- Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges*. Cambridge, MA: Harvard University Press.
- Baker, R., Bettinger, E., Jacob, B., & Marinescu, I. (2018). The effect of labor market information on community college students' major choice. *Economics of Education Review*, 65, 18-30.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Macmillan.
- Battey, D. (2013). "Good" mathematics teaching for students of color and those in poverty: the importance of relational interactions within instruction. *Educational Studies in Mathematics*, 82(1), 125-144.
- Bell, T. J. (2018). Career Counseling With Black Men: Applying Principles of Existential Psychotherapy. *The Career Development Quarterly*, 66(2), 162-175.
- Bensimon, E. M. (2018). Reclaiming Racial Justice in Equity. *Change: The Magazine of Higher Learning*, 50(3-4), 95-98.
- Bensimon, E. M., & Malcom, L. (2012). *Confronting equity issues on campus: Implementing the Equity Scorecard in theory and practice*. Sterling, VA: Stylus Publishing.
- Bensimon, E. M., Dowd, A. C., Longanecker, D., & Witham, K. (2012). We have goals. Now what?. *Change: The Magazine of Higher Learning*, 44(6), 14-25.
- Bensimon, E. M., Dowd, A. C., Witham, K. (2016). "Five principles for exacting equity by design." Diversity and Democracy, The Equity Imperative. *Association of American*

Colleges and Universities, 19:1

- Bigler, R.S. Averhart, C.,J. & Liben, L., S. (2003). Race and the Workforce: occupational Status, Aspirations, and Stereotyping Among African American Children, *Developmental Psychology*, 39(3), 572–580.
- Blustein, D. L. (2017). The psychology of working: A new perspective for career development. *Career Planning & Adult Development Journal*, 33(2). 60-68.
- Blustein, D. L., McWhirter, E. H., & Perry, J. C. (2005). An emancipatory communitarian approach to vocational development theory, research, and practice. *The Counseling Psychologist*, 33(2), 141-179.
- Borgen, W. A., & Maglio, A. S. T. (2007). Putting action back into action planning: Experiences of career clients. *Journal of Employment Counseling*, 44(4), 173-184.
- Bragg, D. D., & Durham, B. (2012). Perspectives on access and equity in the era of (community) college completion. *Community College Review*, 40(2), 106–125.
- Brint, S., & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America* (Vol. 53). New York: Oxford University Press.
- Brown, D. (1990). Summary, comparison, and critique of the major theories. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (2nd ed., pp. 338-3631), San Francisco, CA: Jossey-Bass.
- Brown, D. (2002). The role of work and cultural values in occupational choice, satisfaction, and success: A theoretical statement. *Journal of counseling & development*, 80(1), 48-56.
- Brown, D., Minor, C. W., & Jepsen, D. A. (1991). The opinions of minorities about preparing for work: Report of the second NCDAs national survey. *The Career Development Quarterly*, 40(1), 5-19.

- Bullington, R. L., & Arbona, C. (2001). Career development tasks of Mexican American adolescents: An exploratory study. *Journal of Career Development, 28*(2), 139-153.
- Bureau of Labor Statistics. (2016). *Employment and Wages, Future Outlook, 2016, Table 2 May 2018 National Occupational Employment and Wage Estimates*. Washington, DC: U.S. Department of Labor.
- Bustillos, L. T. (2017). *The Transfer Maze: The High Cost to Students and the State of California*. Sacramento, CA: Campaign for College Opportunity.
- CA College Pathways (2015). *Charting the Course: Using Data to Support Foster Youth College Success*. Los Angeles, CA: John Burton Foundation
- Cahalan, M., Perna, L. W., Yamashita, M., Wright, J., & Santillan, S. (2018). *Indicators of Higher Education Equity in the United States: 2018 Historical Trend Report*. Washington, DC: Pell Institute for the Study of Opportunity in Higher Education.
- Calcagno, J. C., Bailey, T., Jenkins, D., Kienzl, G., & Leinbach, T. (2008). Community college student success: What institutional characteristics make a difference?. *Economics of Education review, 27*(6), 632-645.
- Cappelli, P. (2015). *Will College Pay Off?: A Guide to the Most Important Financial Decision You'll Ever Make*. New York, NY: PublicAffairs.
- Carnevale, A. P., Cheah, B., & Hanson, A. R. (2015). *The economic value of college majors*. Washington, DC: Georgetown University Center on Education and the Workforce.
- Carnevale, A. P., Garcia, T. I., & Gulish, A. (2017). *Career Pathways: Five Ways to Connect College and Careers*. Washington, DC: Georgetown University Center on Education and the Workforce.
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education*

- requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce.
- Carnevale, A., Rose, S., & Hanson, A. (2012). *Certificates: Gateway to gainful employment and college degrees*. Washington, DC: Georgetown University Center on Education and the Workforce.
- Chavez, M. L., Soriano, M., & Oliverez, P. (2007). Undocumented students' access to college: The American dream denied. *Latino Studies*, 5, 254–263.
- Chen, A. C. R. (2013). *Undocumented students, institutional allies, and transformative resistance: An institutional case study* (Doctoral dissertation, UCLA).
- Clandinin, D. J. and Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco, CA: Jossey-Bass.
- College Campaign for College Opportunity. (2019). *State of Higher Education for Black Californians*. Los Angeles, CA: The College Campaign for College Opportunity.
- Collins, M. E., Spencer, R., & Ward, R. (2010). Supporting youth in the transition from foster care: Formal and informal connections. *Child Welfare*, 89(1), 125–143.
- Conchas, G. (2001). Structuring failure and success: Understanding the variability in Latino school engagement. *Harvard Educational Review*, 71(3), 475-505.
- ConnectingCredentials.org. (2016). *Connecting Credentials: From National Dialogue to Collective Action: Building Learning-based Credentialing Systems*. Indianapolis, IN: Lumina Foundation and Corporation for a Skilled Workforce. <http://connectingcredentials.org/wp-content/uploads/2016/09/Action-Plan.pdf>.
- Constantine, M. G., and Flores, L. Y. (2006). Psychological Distress, Perceived Family Conflict, and Career Development Issues in College Students of Color. *Journal of Career*

- Assessment*, 14, 354–369.
- Contreras, F. (2009). Sin papeles y rompiendo barreras: Latino students and the challenges of persisting in college. *Harvard Educational Review*, 79(4), 610-632.
- Coons, A. G., Browne, A. D., Campion, H. A., Dumke, G. S., Holy, T. C., McHenry, D. E., & Sexton, K. (1960). *A master plan for higher education in California, 1960-1975*. Sacramento, CA: California State Department of Education.
- Courtney, A. Dworsky, A. Brown, C. Cary, K. Love, V. Vorhies. (2011) *Midwest evaluation of the adult functioning of former foster youth: Outcomes at age, 26*. Chicago, IL: Chapin Hall at the University of Chicago.
- Courtney, M. E., & Dworsky, A. (2006). Early outcomes for young adults transitioning from out-of-home care in the USA. *Child & family social work*, 11(3), 209-219.
- Courtney, M. E., Charles, P., Okpych, N. J., Halsted, K., Courtney, M. E., Charles, P., & Hall, C. (2015). *California Youth Transitions to Adulthood Study (CalYOUTH): Early findings from the child welfare worker survey*. Retrieved on October, 24, 2014.
- Courtney, M. E., Piliavin, I., Grogan-Kaylor, A., & Nesmith, A. (2001). Foster youth transitions to adulthood: A longitudinal view of youth leaving care. *Child Welfare*, 80(6), 685–717.
- Creswell, J. W. (2007). Five qualitative approaches to inquiry. In J.W. Creswell (Ed.), *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed., pp. 53-80): Thousand Oaks: California Sage.
- Crisp, G., & Nora, A. (2010). Hispanic student success: Factors influencing the persistence and transfer decisions of Latino community college students enrolled in developmental education. *Research in Higher Education*, 51(2), 175-194.
- Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). Identity formation in early and

- middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of youth and adolescence*, 37(8), 983-996.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of teacher education*, 61(1-2), 35-47.
- Day, A., Dworsky, A., Fogarty, K., & Damashek, A. (2011). An examination of post-secondary retention and graduation among foster care youth enrolled in a four-year university. *Children and Youth Services Review*, 33(11), 2335-2341.
- Denhart, H. (2008). Deconstructing barriers: Perceptions of students labeled with learning disabilities in higher education. *Journal of Learning Disabilities*, 41(6), 483-497.
doi:10.1177/0022219408321151
- Diemer, M. A. (2009). Pathways to occupational attainment among poor youth of color: The role of sociopolitical development. *The Counseling Psychologist*, 37(1), 6-35.
- Diemer, M. A., & Blustein, D. L. (2006). Critical consciousness and career development among urban youth. *Journal of vocational behavior*, 68(2), 220-232.
- Dipeolu, A. O. (2011). College students with ADHD: Perspective concepts for best practices in career development. *Journal of Career Development*, 38(5), 408-427.
doi:10.1177/0894845310378749
- Donato, K.M. & Amada, A. (2011). What We Know about Unauthorized Migration. *Annual Review of Sociology*, 37: 529-543.
- Dondero, M., & Muller, C. (2012). School stratification in new and established Latino destinations. *Social Forces*, 91(2), 477-502.
- Dowd, A. C. (2003). From access to outcome equity: Revitalizing the democratic mission of the community college. *The ANNALS of the American Academy of Political and Social*

- Science*, 586(1), 92-119.
- Dowd, A. C. (2007). Community colleges as gateways and gatekeepers: moving beyond the access “saga” toward outcome equity. *Harvard Educational Review*, 77(4), 407–418.
- Dowd, A. C. & Tong, V. P. (2007). Accountability, assessment, and the scholarship of “best practice.” In J.C. Smart (Ed.), *Handbook of Higher Education*, 22, 57–119. New York, NY: Springer.
- Duffy, R. D., & Klingaman, E. A. (2009). Ethnic identity and career development among first-year college students. *Journal of Career Assessment*, 17(3), 286-297.
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K.L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, 63, 127–148.
- Edgecombe, N. (2011). *Accelerating the Academic Achievement of Students Referred to Developmental Education. CCRC Working Paper No. 30*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Enright, M. E., Conyers, L. M., & Szymanski, E. M. (1996). Career and career-related educational concerns of college students with disabilities. *Journal of Counseling & Development*, 75, 103-113.
- Enriquez, L.E. (2011). ‘Because We Feel the Pressure and We Also Feel the Support’: Examining the Educational Success of Undocumented Immigrant Latina/o Students. *Harvard Educational Review*, 81: 476–499.
- Erikson E. H. (1959) *Identity and the life cycle*. New York, NY: W.H. Norton.
- Erikson, E. H. (1963). *Childhood and society*. New York, NY: W.H. Norton.
- Erikson, E. H. (1964). *Insight and responsibility*. New York, NY: W.H. Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: W.H. Norton.

- Ferri, B. A., & Connor, D. J. (2010). 'I was the special ed. girl': urban working-class young women of colour. *Gender and Education*, 22(1), 105-121
- Fine, M., & Weis, L. (1999). *The unknown city: Lives of poor and working class young adults*. Boston, MA: Beacon Press.
- Flores, S.M. (2010). State Dream Acts: The Effect of In-state Resident Tuition Policies and Undocumented Latino Students. *Review of Higher Education*, 33: 239–283.
doi:10.1353/rhe.0.0134.
- Fouad, N. A., & Byars-Winston, A. M. (2005). Cultural context of career choice: meta-analysis of race/ethnicity differences. *The Career Development Quarterly*, 53(3), 223-233.
- Fouad, N.A. & Bynner, J. (2008). Work transitions. *American Psychologist*, 63(4) pp. 241-251
- Fuligni, Andrew J., and Sara Pedersen. (2002). Family Obligation and the Transition to Young Adulthood. *Developmental Psychology*, 38: 856–868. doi:10.1037/0012-1649.38.5.856.
- Gardenhire-Crooks, A., Collado, H., & Ray, B. (2006). *A whole 'nother world: Students navigating community college*. New York, NY: MDRC.
- Ginwright, S., & Cammarota, J. (2002). New terrain in youth development: The promise of a social justice approach. *Social Justice*, 29(4), 82–95.
- Gloria, A. M., & Hird, J. S. (1999). Influences of ethnic and nonethnic variables on the career decision-making self-efficacy of college students. *The Career Development Quarterly*, 48(2), 157-174.
- Gloria, A. M., Castellanos, J., Scull, N. C., & Villegas, F. J. (2009). Psychological coping and well-being of male Latino undergraduates: Sobreviviendo la universidad. *Hispanic Journal of Behavioral Sciences*, 31(3), 317-339.
- Gonzales, R.G. (2011). Learning to be Illegal: Undocumented Youth and Shifting Legal

- Contexts in the Transition to Adulthood. *American Sociological Review*, 76: 602–619.
doi:10.1177/0003122411411901.
- Gonzales, R., Suarez-Orozco, C., & Dedios-Sanguineti, M.C. (2013). No Place to Belong: Contextualizing Concepts of Mental Health among Undocumented Immigrant Youth in the United States. *American Behavioral Scientist*, 57: 1174–1199.
doi:10.1177/0002764213487349.
- Gordon, E. W. (1974). Vocational guidance: Disadvantaged and minority populations. In E. L. Herr (Ed.), *Vocational guidance and human development* (pp. 452–477). Boston: Houghton Mifflin.
- Gordon, V. N., & Steele, G. E. (2015). The undecided college student: An academic and career advising challenge. Charles C Thomas Publisher.
- Greenman, E., and M. Hall. (2013). Legal Status and Educational Transitions for Mexican and Central American Immigrant Youth. *Social Forces*, 91: 1475–1498.
doi:10.1093/sf/sot040.
- Grubb, W. N. (2006). “Like, what do I do now?”: The dilemmas of guidance counseling. In T. Bailey and V. Morest (Eds.), *Defending the community college equity agenda* (pp. 195–222). Baltimore, MD: Johns Hopkins University Press.
- Gushue, G. V. (2006). The relationship of ethnic identity, career decision-making self-efficacy and outcome expectations among Latino/a high school students. *Journal of Vocational Behavior*, 68(1), 85-95.
- Hadley, W. (2017). The four-year experience of one student with multiple learning disabilities. *College Student Journal*, 51(1), 19–28.
- Harbour, C. P., & Smith, D. A. (2016). The completion agenda, community colleges, and civic

- capacity. *Community College Journal of Research and Practice*, 40(2), 100-112.
- Harper, Shaun R., Edward J. Smith, and Charles HF Davis III. (2018). A critical race case analysis of Black undergraduate student success at an urban university." *Urban Education*, 53(1), 3-25.
- Hastings, J., Neilson, C.A., & Zimmerman, S.D. (2015). *The Effects of Earnings Disclosure on College Enrollment Decisions*. Working Paper 21300 National Bureau of Economic Research. <http://www.nber.org/papers/w21300>.
- Hess, F. M., & Hatalsky, L. E. (2018). *Elevating College Completion*. Washington, DC: American Enterprise Institute.
- Hill, N. E., & Torres, K. (2010). Negotiating the American dream: The paradox of aspirations and achievement among Latino students and engagement between their families and schools. *Journal of Social Issues*, 66(1), 95-112.
- Hinkelman, J. M., & Luzzo, D. A. (2007). Mental health and career development of college students. *Journal of Counseling & Development*, 85(2), 143-147.
- Hitchings, W. E., Kophamer Johnson, K., Luzzo, D. A., Retish, P., Hinz, C., & Hake, J. (2010). Identifying the career development needs of community college student with and without learning disabilities. *Journal of Applied Research in the Community College*, 18(1), 17-24.
- Holland, J. J., Gottfredson, D. C., & Power, P. G. (1980). Some diagnostic scales for research in decision making and personality: Identity, information, and barriers. *Journal of Personality and Social Psychology*, 39(6), 1191.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments*. Englewood Cliffs, NJ: Prentice-Hall.

- Hook, J. L., & Courtney, M. E. (2011). Employment outcomes of former foster youth as young adults: The importance of human, personal, and social capital. *Children and Youth Services Review*, 33(10), 1855-1865.
- Horn, L., & Skomsvold, P. (2011). *Community college student outcomes: 1994-2009*. Washington, DC: National Center for Education Statistics.
- Hotchkiss, L., & Borow, H. (1996). Sociological perspective on work and career development. In D. Brown & L. Brooks (Eds.), *Career choice and development (3rd ed., pp. 281–336)*. San Francisco, CA: Jossey-Bass. <https://www.nclد.org/wp-content/uploads/2014/11/2014-State-of-LD-FINAL-FOR-RELEASE.pdf>
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education*, 4(3), 235-251
- Hussak, L. (2018). *We asked 1,600+ college leaders about their Guided Pathways progress. Here's what we found. Expert Insight*. Washington, DC: EAB Community College Executive Forum.
- Gallup, Inc. (2016). *Great jobs, great lives: The 2016 Gallup-Purdue index report*. Retrieved from <https://news.gallup.com/reports/199229/gallup-purdue-index-report-2016.aspx>
- Jenkins, D., & Cho, S. W. (2012). *Get with the program: Accelerating community college student's entry into and completion of programs of study (Working Paper No. 32)*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Jenkins, P. D., Lahr, H. E., Fink, J., & Ganga, E. C. (2018). *What we are learning about guided pathways*. New York, NY: Community College Research Center, Teachers College, Columbia University.

- Karp, M. M., Hughes, K. L., & O'Gara, L. (2010). An exploration of Tinto's integration framework for community college students. *Journal of College Student Retention: Research, Theory & Practice*, 12(1), 69-86.
- Karunanayake, D., & Nauta, M. M. (2004). The relationship between race and students' identified career role models and perceived role model influence. *The Career Development Quarterly*, 52(3), 225-234.
- Kerr, C. (1963). *The uses of the university*. Cambridge, Mass: Harvard University Press.
- Kerr, C. (1999). Testimony to the Joint Committee to develop a master plan for education: Kindergarten through university. Retrieved from <http://www.ucop.edu/acadinit/mastplan/kerr0822499.htm>
- Kiyama, J. M., & Rios-Aguilar, C. (Eds.). (2017). *Funds of knowledge in higher education: Honoring students' cultural experiences and resources as strengths*. New York, NY: Routledge.
- Kosciulek, J. F. (2003). An empowerment approach to career counseling for people with select disabilities. In N.C. Gysbers, M.J. Heppner, & J. A. Johnston (Eds.), *Career counseling: Process, techniques, and issues (2nd ed.)*, pp 139-155. Boston: Allyn & Bacon
- LaViolet, T., Fresquez, B., Maxson, M., & Wyner, J. (2018). *The Talent Blind Spot: The Practical Guide to Increasing Community College Transfer to High Graduation Rate Institutions*. Washington, DC: Aspen Institute.
- Leal-Muniz, V., & Constantine, M. G. (2005). Predictors of the career commitment process in Mexican American college students. *Journal of Career Assessment*, 13(2), 204-215.
- Lease, S. H. (2006). Factors predictive of the range of occupations considered by African American juniors and seniors in high school. *Journal of Career Development*, 32(4), 333-

350.

- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of counseling psychology, 60*(4), 557.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior, 45*(1), 79-122.
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of counseling psychology, 47*(1), 36.
- Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. *Career choice and development, 4*, 255-311.
- Lent, R. W., Hackett, G., & Brown, S. D. (1999). A social cognitive view of school-to-work transition. *The career development quarterly, 47*(4), 297-311.
- Lewis, L., & Farris, E. (1999). *An institutional perspective on students with disabilities in postsecondary education (NCES 1999046)*. Washington, DC: National Center for Education Statistics.
- Liou, D. D., Antrop-González, R., & Cooper, R. (2009). Unveiling the promise of community cultural wealth to sustaining Latina/o students' college-going information networks. *Educational Studies: A Journal of the American Educational Studies Association, 45*, 534- 555. doi:10.1080/00131940903311347
- Littig, L. W. (1968). Negro personality correlates of aspiration to traditionally open and closed occupations. *Journal of Negro Education*.
- Luna, N. A., & Martinez, M. (2012). A qualitative study using community cultural wealth to

- understand the educational experiences of Latino college students. *Journal of Praxis in Multicultural Education*, 7, 1-18.
- Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of adolescence*, 29(3), 361-378.
- Luzzo, D. A., Hitchings, W. E., Retish, P., & Shoemaker, A. (1999). Evaluating differences in college students' career decisionmaking on the basis of disability status. *Career Development Quarterly*, 48, 142-156.
- Ma, J., & Baum, S. (2016). Trends in community colleges: Enrollment, prices, student debt, and completion. *College Board Research Brief*, 4, 1-23.
- Marcia, J. E. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology*, 3, 551-558.
- Marcia, J. E. (1980). Identity in adolescence. *Handbook of adolescent psychology*, 9(11), 159-187.
- Matthews, D. (2009). *A stronger nation through higher education: How and why Americans must meet a "big goal" for college attainment*. Indianapolis, IN: The Lumina Foundation.
- McCoy, H., McMillen, J., & Spitznagel, E. (2008). Older youth leaving the foster care system: Who, what, when, where, and why? *Children and Youth Services Review*, 30(7), 735-745.
- McMillen, J., & Tucker, J. (1999). The status of older adolescents at exit from out-of-home care. *Child Welfare*, 78(3), 339-360.
- McWhirter, E. H. (1997). Perceived barriers to education and career: Ethnic and gender

- differences. *Journal of vocational behavior*, 50(1), 124-140.
- Meeus, W. (1996). Studies on identity development in adolescence: An overview of research and some new data. *Journal of youth and adolescence*, 25(5), 569-598.
- Mejia, B. X., Navarro, R. L., & Gushue, G. V. (2008). Latina/o college students: The positive influence of ethnic identity on career decision self-efficacy, perception and coping with career barriers. In *Poster session presented at the National Latina/o Psychological Association Conference, Costa Mesa, CA*.
- Milkman, Ruth. (2011). Immigrant Workers, Precarious Work, and the US Labor Market. *Globalizations*, 8(3): 361–372. doi:10.1080/14747731.2011.576857.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data reduction techniques for large qualitative data sets. *Handbook for team-based qualitative research*, 2(1), 137-161.
- National Center for Learning Disabilities. (2014). *The state of learning disabilities (3rd edition)*. Retrieved April 3, 2019, from <https://www.nclld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf>
- Nichols, Walter J. (2013). *The DREAMers: How the Undocumented Youth Movement Transformed the Immigrant Rights Debate*. Stanford, CA: Stanford University Press.
- Noguera, P. A. (2004). Social capital and the education of immigrant students: Categories and generalizations. *Sociology of Education*, 77(2), 180-183.
- Noonan, B. M., Gallor, S. M., Hensler-McGinnis, N. F., Fassinger, R. E., Wang, S., & Goodman, J. (2004). Challenge and success: A Qualitative study of the career development of highly achieving women with physical and sensory disabilities. *Journal of counseling psychology*, 51(1), 68.
- O'Banion, T. U. (2019). A Brief History of Workforce Education in Community Colleges.

Community College Journal of Research and Practice, 43(3), 216-223.

Oakes, J. (2005). *Keeping track*. New Haven, CT: Yale University Press.

Obama, B. (2009, February 24). *Remarks of President Barack Obama – Address to joint session of Congress*. *The White House*. Retrieved from <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-barack-obama-address-joint-session-congress>.

Olsen, J. P. (1988). Administrative reform and theories of organization. In C. Campbell and B.G. Peters (eds.), *Organizing Governance: Governing Organizations*. Pittsburgh: University of Pittsburgh Press.

Ohler, D. L., Levinson, E. M., & Sanders, P. (1995). Career maturity in young adults with learning disabilities: What employment counselors should know. *Journal of Employment Counseling*, 32, 64-78.

Okpych, N. J., Courtney, M. E., & Charles, P. (2015). *Youth and caseworker perspectives on older adolescents in California foster care: Youths' education status and services*. Chicago, IL: Chapin Hall at the University of Chicago.

Olson, T. F., & Matkin, R. E. (1992). Student and counselor perceptions of career counselor work activities in a community college. *The Career Development Quarterly*, 40(4), 324-332.

Ortega, Alexander N., Hai Fang, Victor H. Perez, John A. Rizzo, Olivia Carter-Pokras, Steven Wallace, and Lillian Gelberg. (2007). "Health Care Access, Use of Services, and Experiences among Undocumented Mexicans and Other Latinos." *Archives of Internal Medicine*, 167: 2354–2360. doi:10.1001/archinte.167.21.2354.

Ortiz, A. M., & Hinojosa, A. (2010). Tenuous options: The career development process for

- undocumented students. *New Directions for Student Services*, 2010(131), 53-65.
- Osgood, D. W., Foster, E. M., & Courtney, M. E. (2010). Vulnerable populations and the transition to adulthood. *The Future of Children*, 20(1), 209-229.
- Osipow, S. H., & Fitzgerald, L. F. (1996). *Theories of career development (4th ed.)*. Boston: Allyn & Bacon.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research. Volume 2*. Indianapolis, IN: Jossey-Bass.
- Penuel, W. R., & Wertsch, J. V. (1995). Vygotsky and identity formation: A sociocultural approach. *Educational psychologist*, 30(2), 83-92.
- Perez Huber, L. (2009). Challenging racist nativist framing: Acknowledging the community cultural wealth of undocumented Chicana college students to reframe the immigration debate. *Harvard Educational Review*, 79, 704-729.
- Perez, William, and Richard Douglas Cortes. 2011. *Undocumented Latino College Students: Their Socioemotional and Academic Experiences*. El Paso, TX: LFB Scholarly Publishing LLC.
- Perez, William. (2012). *Americans by Heart: Undocumented Latino Students and the Promise of Higher Education*. New York: Teachers College Press.
- Perin, D. (2011). Facilitating student learning through contextualization: A review of evidence. *Community College Review*, 39(3), 268-295.
- Porfeli, E. J., & Skorikov, V. B. (2010). Specific and diversive career exploration during late adolescence. *Journal of Career Assessment*, 18(1), 46-58.
- Porfeli, E. J., Lee, B., & Vondracek, F. W. (2013). Identity development and careers in adolescents and emerging adults: Content, process, and structure. In W. B. Walsh, M. L.

- Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (pp. 133-153). New York, NY, US: Routledge/Taylor & Francis Group.
- Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to The Condition of Education 2008 (NCES 2008-033)*. Washington, DC: National Center for Education Statistics.
- Rhoades, G. (2012). The Incomplete Completion Agenda: Implications for Academe and the Academy. *Liberal Education*, 98(1), 18-25.
- Riegle-Crumb, C., & Grodsky, E. (2010). Racial-ethnic differences at the intersection of math course-taking and achievement. *Sociology of Education*, 83(3), 248-270.
- Riegle-Crumb, C., King, B., & Irizarry, Y. (2019). Does STEM Stand Out? Examining Racial/Ethnic Gaps in Persistence Across Postsecondary Fields. *Educational Researcher*, 0013189X19831006.
- Rios-Aguilar, C., & Deil-Amen, R. (2012). Beyond getting in and fitting in: An examination of social networks and professionally relevant social capital among Latina/o university students. *Journal of Hispanic Higher Education*, 11(2), 179-196.
- Rodriguez, C. E. (2004). Psychotherapy with gay Chicanos. In R. J. Velasquez, L. M. Arellano & B. W. McNeil (Eds.), *The handbook of Chicana/o psychology and mental health* (pp. 193-214). Mahwah, NJ: Lawrence Erlbaum
- Rose, M. (2016). Reassessing a redesign of community colleges. *Inside Higher Ed*.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A. E. (2006). *After Admission: From College Access to College Success*. New York, NY: Russell Sage.
- Roth, S. (2004) Undocumented Immigrants and Higher Education: A Call for Federal Change [Electronic version]. *Advocates Forum*, 6–16.

- Sáenz, V. B., García-Louis, C., Drake, A. P., & Guida, T. (2018). Leveraging their family capital: How Latino males successfully navigate the community college. *Community College Review*, 46(1), 40-61.
- Saldaña, J. (2015) *The coding manual for qualitative researchers*. London: Sage.
- Samuels, G. M. (2009). Ambiguous loss of home: The experience of familial (im)permanence among young adults with foster care backgrounds. *Children and Youth Services Review*, 31, 1229–1239.
- Samuels, G. M., & Pryce, J. M. (2008). “What doesn't kill you makes you stronger”: Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review*, 30(10), 1198–1210.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The career development quarterly*, 45(3), 247-259.
- Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development*, 90(1), 13-19.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M. E., Guichard, J., ... Van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75, 239–250.
<https://doi.org/10.1016/j.jvb.2009.04.004>
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673. <https://doi.org/10.1016/J.JVB.2012.01.011>
- Schoeni, R. F., & Ross, K. E. (2005). Material assistance from families during the transition to adulthood. In R. A. Settersten Jr., F. F. Furstenberg Jr., & R. G. Rumbaut (Eds.), *On the*

- frontier of adulthood: Theory, research, and public policy* (pp. 396–416). Chicago, IL: The University of Chicago Press.
- Scott-Clayton, J. (2011). The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges? CCRC Working Paper No. 25. Assessment of Evidence Series. *Community College Research Center, Columbia University*.
- Scott-Clayton, J. (2015). 'The shapeless river: Does a lack of structure inhibit students' progress at community colleges?', in Castleman, B.L., Schwartz, S., and Baum, S. (eds.), *Decision Making for Student Success: Behavioral Insights to Improve College Access and Persistence*, New York, NY, Routledge, pp.102-123.
- Shapiro, A. F., & Gomez, A. G. (2017). Credit market imperfections, labor markets, and leverage dynamics in emerging economies. *Journal of International Money and Finance*, 78, 44-63.
- Shook, J., Goodkind, S., Pohlig, R. T., Schelbe, L., Herring, D., & Kim, K. H. (2011). Patterns of mental health, substance abuse, and justice system involvement among youth aging out of child welfare. *American Journal of Orthopsychiatry*, 81(3), 420–432.
- Simon, M. A., & Tovar, E. (2004). Confirmatory factor analysis of the career factors inventory on a community college sample. *Journal of Career Assessment*, 12(3), 255-269.
- Smith, E. J. (1983). Issues in racial minorities' career behavior. In W. B. Walsh & S. H. Osipow (Eds.) *Handbook of vocational psychology: Vol. 1. Foundations*. (pp. 161–222). Hillsdale, NJ: Erlbaum Associates.
- Smith, T. (2007). Speaking Against Norms: Public Discourse and the Economy of Racialization in the Workplace. *Am. UL Rev.*, 57, 523.
- Sponsler, B. A., Pingel, S., & Anderson, L. (2015). Policy trends impacting community colleges:

- An ECS perspective. *Community College Journal of Research and Practice*, 39(10), 891-895.
- Stadtman, V. A. (1970). *The University of California, 1868-1968*. New York: McGraw-Hill.
- Stevens, A. H., Kurlaender, M., & Grosz, M. (2015). *Career technical education and labor market outcomes: Evidence from California community colleges* (No. w21137). National Bureau of Economic Research.
- Stinebrickner, T. R., & Stinebrickner, R. (2014). Academic Performance and College Dropout: Using Longitudinal Expectations Data to Estimate a Learning Model. *Journal of Labor Economics*, 32(3), 601–644.
- Stodden, R., Jones, M. A., & Chang, K. (2002). Services, supports and accommodations for individuals with disabilities: An analysis across secondary education, postsecondary education and employment. Retrieved July, 19, 2004.
- Stott, T. (2013). Transitioning youth: Policies and outcomes. *Children and Youth Services Review*, 35, 218–227.
- Strayhorn, T. L. (2008). The role of supportive relationships in facilitating African American males' success in college. *Naspa Journal*, 45(1), 26-48.
- Super, D. E. (1963). Self-concepts in vocational development. *Career development: Self-concept theory*, 1-16.
- Super, D.E. (1957), *The Psychology of Careers*, Harper & Row, New York, NY.
- Teranishi, R. T., & Bezbatchenko, A. W. (2015). A critical examination of the college completion agenda. *Critical approaches to the study of higher education: A practical introduction*, 241-256.
- Teranishi, R. T., Suárez-Orozco, C., & Suárez-Orozco, M. (2011). Immigrants in community

- colleges. *The Future of Children*, 153-169.
- Terriquez, V. (2015). Dreams delayed: Barriers to degree completion among undocumented community college students. *Journal of Ethnic and Migration Studies*, 41(8), 1302-1323.
- Vaccaro, A., Kimball, E. W., Wells, R. S., & Ostiguy, B. J. (2015). Researching students with disabilities: The importance of critical perspectives. *New Directions for Institutional Research*, 2014(163), 25–41. doi:10.1002/ir.20084
- Valenzuela, J. I., Perez, W., Perez, I., Montiel, G. I., & Chaparro, G. (2015). Undocumented students at the community college: Creating institutional capacity. *New Directions for Community Colleges*, 2015(172), 87-96.
- Wagner, M., Newman, L., & Cameto, R. (2004). Changes over Time in the Secondary School Experiences of Students with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). *Online Submission*.
- Watts, R. J., & Flanagan, C. (2007). Pushing the envelope on youth civic engagement: A developmental and liberation psychology perspective. *Journal of Community Psychology*, 35(6), 779-792.
- Watts, R. J., Griffith, D. M., & Abdul-Adil, J. (1999). Sociopolitical development as an antidote for oppression—Theory and action. *American Journal of Community Psychology*, 27(2), 255–271.
- Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Random House.
- Wolanin, T. R., & Steele, P. E. (2004). Higher education opportunities for students with disabilities: A primer for policymakers. Washington, DC: Institute for Higher Education

Policy.

Wolniak, G. C., Seifert, T. A., Reed, E. J., & Pascarella, E. T. (2008). College majors and social mobility. *Research in Social Stratification and Mobility*, 26(2), 123-139.

Xu, D., & Trimble, M. (2016). What about certificates? Evidence on the labor market returns to nondegree community college awards in two states. *Educational Evaluation and Policy Analysis*, 38(2), 272–292.

Zeidenberg, M., Cho, S. W., & Jenkins, P. D. (2010). *Washington State's integrated basic education and skills training program (I-BEST): New evidence of effectiveness*. (CCRC Working Paper no. 20). New York, NY: Columbia University, Teachers College, Community College Research

Center. <https://ccrc.tc.columbia.edu/publications/i-best-new-evidence.html>.

Zunker, V. G. (2002). *Career counseling: Applied concepts for life planning (6th ed.)*. Pacific Grove, CA: Brooks/Cole.