

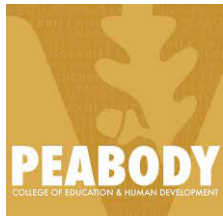
University X:

*Exploring the Online Student Experience to Identify Differentiators,
Supportive Others, and Potential Interventions to Enhance On-Time Pacing
& Graduation Rates*

DIANE MARTY
AUGUST 2021

*IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION IN LEADERSHIP
AND LEARNING IN ORGANIZATIONS*

PEABODY COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
VANDERBILT UNIVERSITY



Acknowledgements & Dedication

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And to the Marty Men. Kirk, without your love, support, and encouragement, this would not have been possible. Ditto without your patience, your smile lines, your tolerance of all the nights and weekends I was there but it was like I wasn't, and all the things you picked up (literally and figuratively) over these last three years...it really wasn't possible without you. And I don't ever want it to be. Max, thanks for being the guy who can always make me laugh and who knows when I need a hug. My heart is full as I watch you start to make your own way in the world as that kind of man to me and to others. Please know you make me proud every day. George, thanks for being so dichotomous, as you're the quietest guy who is still the life of the party; a big presence from someone with bigger humility. Thanks, too, for your direct answers (because who needs more words?) or for the most ambiguous answers when you want to make sure no one's feelings get hurt. *You three propel me, and I'm so grateful that you love me inclusive of all my flaws, carbs, and special time zone. For all the hard work I watch the three of you put into everything you do, I dedicate this project to each of you.*

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Table of Contents

Acknowledgements & Dedication.....	ii
Executive Summary.....	iv
Introduction & Context.....	5
Literature Review.....	6
Tinto's Student Integration Model (SIM).....	8
Figure 1: Tinto's 1975 Schema for Dropout from College.....	10
Figure 2: Tinto's 1987 Student Integration Model (SIM).....	11
Figure 3: Tinto's 1993 SIM.....	12
Bean & Metzner's Student Attrition Models (SAM & NSAM).....	13
Figure 4: Bean's 1980 Student Attrition Model (SAM).....	14
Figure 5: Bean & Metzner's 1985 Nontraditional Student Attrition Model (NSAM).....	15
Rovai's Composite Persistence Model (CPM).....	16
Figure 6: Rovai's (2003) Composite Persistence Model (CPM).....	16
Remaining Gap in the Postsecondary Literature.....	17
Thriving Theory as a Theory Elaboration.....	17
Elaborated Conceptual Framework.....	19
Figure 7: Rovai's (2003) CPM, Adapted.....	19
Methodology.....	20
Interview Data Collection.....	21
Interview Data Analysis.....	21
Figure 8: Interview Descriptor Data.....	21
Figure 9: Coding Co-Occurrence in the Interviews.....	22
Figure 10: Coded Mentions of Education Champions and Estimated Study Hours/Week.....	24
Interview Findings.....	25
Secondary Literature Review.....	26
Organizational Socialization: Theory and Re-examination of Findings.....	26
Figure 11: The Model of Antecedents and Outcomes of Newcomer Adjustment.....	27
Figure 12: The Addition of an Organizational Socialization Model to the Framework.....	28
Figure 13: Institutional Impression.....	29
Figure 14: March to May 2021 Student Pacing Data Comparison.....	31
Self-Determination Theory: Extending the Model and the Data Exploration.....	32
Figure 15: The Addition of Self-Determination Theory to the Framework.....	33
Figure 16: Organismic Integration Theory.....	34
Figure 17: The Interactionalist Expanded Model of the Student Lived Experience.....	35
Proposed Quantitative Data Collection.....	36
Quantitative Instrument Creation.....	36
Final Transcript Analysis.....	37
Table 1: Field Notes Addressed by the Literature.....	41
Discussion.....	43
Recommendations.....	43
Limitations.....	45
Conclusion.....	45
References.....	47
Appendix A: The Interactionalist Expanded Model of the Student Lived Experience.....	55
Appendix B: Proposed Quantitative Survey Instrument & Scoring Instructions.....	56
Appendix C: Interview Survey Solicitation Email.....	58
Appendix D: Verbatim Responses to Interview Questions Pertaining to Institutional Support.....	59
Appendix E: Student Personas Derived for "Flipped" Student Status March 15–May 19, 2021.....	68

Executive Summary



University X (anonymized as “UX”) is an American online nonprofit higher education institution offering undergraduate and graduate degree programs designed to be both affordable and flexible. Students pay a flat-rate fee per term; during each six-month term students complete entirely asynchronous coursework at their own pace. This delivery model enables individual learners to complete as many courses as they are able at the fixed tuition rate. Because the coursework is pre-recorded and presented online, it is available 24/7, making it a student-centric and highly flexible program, particularly for working adults who represent 82% of the school’s online enrollment through December 2020.

The University is highly interested in discrepancies in positive student outcomes, defined as on-time pacing and graduation rates. Not quite one quarter of the school’s 130,000 online students graduate in the time they anticipated they would when they enrolled. Half of UX students graduate from their undergraduate program in six years. With 50% of matriculates likely not to graduate within six years, that increases the likelihood of student attrition away from UX and perhaps out of their college or graduate school experience entirely. Despite the UX affordable model, this represents significant loss of financial resources; time spent away from work, family, and other commitments; and lost potential of self-actualization for the student-as-graduate, lending gravity and urgency to this study.

This mixed methods project involved qualitative interviews with fourteen online learners at UX beginning their first six-month terms in November or December 2020. Semi-structured interviews surfaced behaviors that differentiated successful (i.e., on-time or accelerated pacing towards their projected graduation date) from unsuccessful (off-pace) students within their first term at UX, where two credit units per month are considered on-pace. A secondary goal of the interviews was to confirm (or contradict) the importance of “Education Champions” for each student, given the emphasis on supportive others in conceptual models related to student persistence and thriving.

Deductively-reasoned patterns advised by student voices were resituated in organizational socialization (OS) and self-determination theory (SDT) to devise a quantitative survey instrument to validate (or nullify) the findings with a larger student sample to answer the research questions *What conditions differentiate successful and unsuccessful students?* and *Among online UX students, what is the level (or lack) of localized supportive others in their experience to date?* The qual→QUAN design was intended to scaffold in order to recommend targeted interventions exploring possible answers to the final research question, *What role can the institution play to increase positive student outcomes?*

Ultimately the survey portion of the study was delayed beyond the timeline of this project. Resultantly, the mixed methods design was carried out by triangulating qualitative interview data with dual-time series pacing data for the interviewees plus institutional document analysis.

Findings surfaced by qualitative data include four antecedent student characteristics and behaviors as well as two within-institution habits impacting individual adjustment at UX. Recommendations are to deploy the survey to verify or contradict these findings; cross-compare data gleaned from this project with other existing student data; and to further explore autonomy-supportive behaviors by knowledgeable insiders (UX mentors, instructors, and/or alumni) as a possible means to positively effect online student motivation. To guide continued exploration, an Interactionalist Expanded Model of the Student Lived Experience was created using theory elaboration.

Introduction & Context

University X (UX) – anonymized in this study at the institution’s request – is a nonprofit online higher education institution offering undergraduate and graduate degree programs designed to be both affordable and flexible. Students pay a flat-rate fee per enrolled term, during which they complete entirely asynchronous (pre-recorded) coursework at their own pace. This model enables individual learners to complete as many courses as they are able, based on their self-regulated learning for the flat rate fee. Coursework is designed, delivered, evaluated, and supported by subject-matter experts. Curriculum and assessment faculty, course instructors, program mentors, and evaluators each concentrate on separate but-integrated-components creating a student experience through a “disaggregated faculty model” (University X, n.d., p. 1). This higher education delivery model is designed to enhance consistency and eradicate bias in curriculum, content delivery, and assessments. For the affordability, self-pacing, and availability of the content 24/7 coupled with separate faculty to design, deliver, assess, and guide the coursework, UX offers a highly student-centric experience, validated by student voices.

Yet despite the intentionality of student-centric design, the University documents a discrepancy in successful student outcomes, defined as on-time pacing and graduation rates. Per the school’s online 2020 Annual Report, personalized on-time completion rates in 2020 were 24% (UX, 2020, p. 7), and six-year undergraduate program graduation rates are 50% (UX, 2020, p. 13). With half of nearly 130,000 currently-enrolled students (UX, 2020, p. 10) likely not to graduate within six years, that increases the likelihood of student attrition away from UX and perhaps out of their college or graduate school experience entirely. Even in an affordable model such as

the school offers, this represents significant loss of financial resources, time away from work, family, and other commitments, plus lost potential of self-actualization for the student-as-graduate. It is therefore important to determine *what conditions differentiate successful and unsuccessful students* so that UX student support teams may design targeted interventions to mitigate identified at-risk conditions.

An extensive literature review covering five decades of research on student attrition, integration, retention, and persistence within post-secondary institutions began this project. Given that UX students experience entirely asynchronous content delivery, particular attention was paid to theoretical models with a focus on external commitments and social systems, as UX students do not experience these through any face-to-face interaction with the University or fellow cohort members. From this conceptualization, a second research question arose: *Among online UX students, what is the level (or lack) of localized supportive others in their experience to date?*

An adapted conceptual model guided the creation of interview questions and an interview protocol. Student lived experiences as described in each interview (n=14) addressed all dimensions of the conceptual model (student characteristics, student needs, internal factors, external factors, and Education Champions). The project was designed as a qual→QUAN convergent mixed methods design. Interview findings guided the creation of a survey instrument to be issued to a larger student sampling. The survey data confirming or contradicting the qualitative findings was intended to advise the third and final research question, *What role can the institution play to increase positive student outcomes?*

Literature Review

UX is interested in increasing positive student outcomes, defined as on-time pacing and increased graduation rates. Research related to on-time completion and degree attainment is classified as student persistence, goal commitment, retention, and attrition in scholarly literature. For decades, significant study has been focused on college completion (Metz, 2004).

Within the literature, this research is academically categorized from two perspectives: as student persistence and goal commitment from the student perspective and as attrition and retention from the institutional perspective. Summarily, it is a student-driven decision to persist (or not), and it is an institutional-driven effort to retain its students (Braxton & Francis, 2017; Hagedorn, 2006; Tinto, 2017). Notable across more than fifty years of retention research is the evolving vernacular from early research focused on “dropout” decisions (Spady, 1971; Terenzini & Pascarella, 1977; Tinto, 1975) to the less-pejorative terminology of persistence, attrition, and retention (Bean, 1988; Manyanga, Sithole, & Hanson 2017; Tinto, 1982).

There are also ongoing calls for higher education institutions to discern types of student departure decisions (Lee & Choi, 2011; Manyanga et al., 2017; Metz, 2004; Mortagy, Boghikian-Whitby, & Helou, 2018; Muljana & Luo, 2019; Nichols, 2010; Tinto, 1982, 2006; and Tucker & McKnight, 2019). Across multiple decades, student departure from an institution has typically been characterized as dropping out, suggesting a cessation of study, when in fact students leave an institution for many reasons (see, e.g., Tinto, 1982; Tucker & McKnight, 2019). Bonham and Luckie (1993) suggest “stopout” to indicate students who take a pause, but may yet return to higher education; “optout” for students with specific goals who cease their enrollment when they have met those goals; and “dropouts” to apply to those who discontinue their education pursuits entirely

(p. 543). The research is further muddied by the fact that institutional administrators fail to track students beyond their own institution, thereby failing to account for the opportunity to transfer elsewhere in order to continue their studies (Aljohani, 2016; Tinto, 1982, 2016).

As the language within the literature has evolved, so has higher education delivery. Much of the research has been focused on the traditional four-year residential college experience (Braxton, Doyle, Hartley, Hirschy, Jones, & McLendon, 2014; Spady, 1971; Tinto, 1975), but has expanded over the years to include two-year degree programs (Deil-Amen, 2011; Pascarella, Smart, & Ethington 1986); community colleges (Bers & Smith, 1991; Coppola, 1999); the commuter and non-traditional student experience (Bean & Metzner, 1985; Liu & Liu, 1999); and online learning experiences (Alman, Frey, & Tomer, 2012; Aversa & MacCall, 2013; Hanna-Benson, 2019; Hutson, He, & Bloom, 2014; Meyer, 2014; Morris & Finnegan 2008; Muljana & Luo, 2019; and Picciano, 2019).

Since 1975, the work of researcher Vincent Tinto has evolved from his original model, presented as “A Conceptual Schema for Dropout from College” (p. 8) to account for changes in perspective, language, and higher education contexts (Tinto, 1987, 1993). Twenty-five years after his seminal 1975 publication, Braxton, Milem, and Shaw Sullivan (2000) observed, “Tinto’s interactionist theory of college student departure enjoys near-paradigmatic status” (p. 569). Nearly thirty years since the 1975 publication, Metz (2004) observed Tinto’s model remains “a starting point in...investigations into student persistence and attrition” (p. 194). And in 2019, forty-four years after the 1975 conceptual schema was first published, Braxton proclaimed that Tinto’s published work “holds the stature as a fundamental text of the college student experience” (p. 129). Across changing

contexts and multiple decades, Tinto's work has persisted within the extant literature.

This is not to say that Tinto's model is without criticism. Interestingly, even criticisms of Tinto's work simultaneously recognize it for its sustained influence in the field. McCubbin (2003) began an article exploring criticisms of Tinto's work by stating his model "remains the most influential model of dropout from tertiary education" (p. 1). Still, he called for further verification of the model (p. 1), albeit Braxton, Milem, and Shaw Sullivan (2000) conducted and published quantitative analysis of Tinto's model in 2000, empirically testing 13 embedded postulations. Their results indicated "robust" support for five of the thirteen (p. 569), with four of the five "logically interrelated" (p. 569) by way of gradually increased institutional commitment. Two decades later Braxton (2019) continued to lament the lack of unilateral empirical support for Tinto's model while simultaneously acknowledging it for "its continued stature as a fundamental text" (p. 133) and surmising "the intellectual roots of the concepts of academic and social integration will not wither" (p. 133).

Another critique has to do with Tinto's integration of Van Gennep's (1960) rites of passage theory into the 1975 model. Though Bean (1988) hailed it as "a brilliant addition to retention theory development" (p. 709), Tierney (1992) published concerns that Tinto's model fundamentally misapplied Van Gennep's theory by excising an anthropological study of distinct cultures into a model of social integration (p. 608). This idea was notably rebuked by Elkins, Braxton, and James (2000) who stated, "fresh insights into a phenomenon frequently emerge when constructs from related academic disciplines are borrowed" (p. 254). Nora (2001) took specific umbrage with Tinto's use of rites of passage to suggest that students must sever pre-matriculation social ties upon entering college. But just as Nora criticized Tinto's application of the theory, he in turn leveraged Tinto's integration of rites of passage as a foundational element within his own work,

making the case for "support and encouragement from significant others" (p. 50) across the student lifecycle as defined by each stage.

Tierney (1992) also expressed that the model, for its comprehensive generalization of a complex process, failed to address retention of underrepresented racial and ethnic minorities within higher education (p. 605). His objection was summarized by Elkins et al. (2000) that Tinto's model addressed "dominant majority students" (p. 253) to the exclusion of the non-majority experience. Bean (1988) echoed Tierney's criticism, addressing the generalization as an "uncertainty of modeling" relative to quantitative research on specific populations (p. 710).

Additional concerns with Tinto's model focus on within-institution goal commitment and integration. Bean (1980) then Bean and Metzner (1985) proposed that factors in the student environment outside the institution play an antecedental role in student integration into higher education. Reviewing Tinto's 1987 evolved model inclusive of external commitments as a post-integration consideration in the decision to remain or leave the institution, Bean (1988) commented on a noticeable similarity between Tinto's external commitments to "environmental variables" (p. 710) in other research. Bean had good reason to raise this point, as the overlap occurred with his own research. Bean and Metzner (1985) identified environmental variables as having critical impact on student persistence decisions, and defined these variables to be inclusive of family, finances, employment, "outside encouragement" and "opportunity to transfer" (p. 485). Moreover, their model highlighted these variables to be particularly relevant for nontraditional students, whom they defined as adult part-time commuter students more concerned about goal attainment through academic accreditation than communal campus experiences (p. 489).

Rovai (2003) writes of student persistence in online programs, noting as did Bean and Metzner that Tinto's work largely ignores multiple impactful factors external to the institution, a fact highlighted yet again by Aljohani as recently as 2016 (p. 11).

Type-of-student differentiation (i.e., nontraditional, online) and non-institutional impact factors recall the non-generalizability critique of Tinto's model. Yet researchers also caution that exploring student decision to persist or depart is highly complex (Kucker & Martiros, 2019; Lee & Choi, 2011; Nichols, 2010; Su & Waugh, 2018; and Tinto, 1982), including for online students (Lee et al., 2015). Tinto (2006) himself has acknowledged shortcomings in his earlier work, while also noting a multidisciplinary gamut of models now applied to persistence research, including economic, sociological, and psychological theories, suggesting that for the complexity of the subject, no single model will be generalizable. Finally, a shortcoming within

the half-century of work on student retention and empirical testing is that research has largely been quantitative in nature (Aljohani, 2016). Resultantly, "students' experiences in the academic and social systems of their academic institutions and in their own external off-campus communities might have been inadequately captured" (Aljohani, 2016, p. 13), suggesting a need for qualitative exploration of unique student context and environment external to the institution.

The present study begins to address that dearth, starting with a qualitative exploration of online student experiences through UX. While an extensive literature review made it clear that Tinto's work is not universally applicable, it remains prevalent in the extant literature. For that reason, and to contextualize a guiding framework to UX and its asynchronous-only pedagogy, the development of a conceptual model derives from multiple combined models, including those by Tinto and others scaffolded from his work.

Tinto's Student Integration Model (SIM)

Tinto's Student Integration Model (SIM), first created in 1975 (see Figure 1) maps the student pathway from prospective student (pre-admission) to matriculated (admitted) student to a (then-termed) "dropout decision" (p. 8) for students who did not remain at their institution. Later revisions by Tinto to the SIM included reconstituting his vernacular, "to avoid the pejorative term 'dropout'" (Bean, 1988, p. 708). A revised vernacular had also become evident in the literature by the early 1980s (Manyanga et al., 2017, p. 35) with theory instead referencing attrition, retention, or persistence. Discernment between stopout, dropout, and optout became advocated in the research (Bonham & Luckie, 1992; Lee & Choi, 2011; Manyanga et al., 2017; Metz, 2004; Mortagy et al., 2018; Muljana & Luo, 2019; Nichols, 2010; and Tinto, 1982, 2006), such as delineating a transfer from a temporary medical withdrawal from someone permanently ceasing their pursuit of a college degree. These distinctions between voluntary and involuntary reasons to depart from college are important, as "up to 75% of students that are not retained stem from nonacademic reasons" (Tucker & McKnight, 2019, p. 170).

Tinto theorized that factors existing pre-admission contributed to student goal commitment (obtaining a postsecondary education) as well as institutional commitment (personal choice of higher education institution). Once admitted, academic and social factors within the institution constituted a level (or lack) of academic and social integration that in turn codified (or diluted) the student's goal and institutional commitments. Cumulative consideration of these factors *within the institution* created a pathway to individual student outcomes to remain in or leave college. Tinto's integration

theory along the pathway was derived from Durkheim's suicide theory (1951), attributing suicide "to the individual's lack of social and intellectual integration into the social life of his or her society" (Aljohani, 2016, p. 3). Durkheim's psychology-based theory painted an individual's inability to successfully integrate into society as a failure resulting in death.

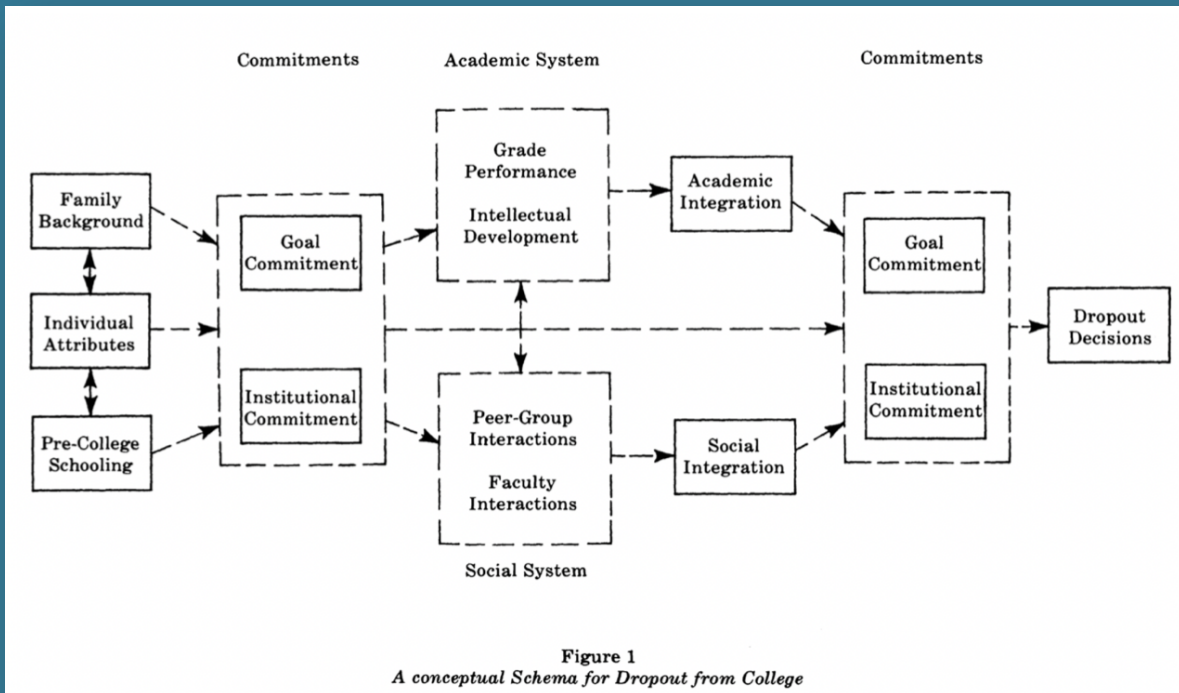
Situating post-admittance factors within the institution distinguished (and continues to distinguish) Tinto's work from other theories. He based this distinction on Van Gennep's (1960) anthropologically-based rites of passage theory (Aljohani, 2016; Bean, 1988; Nora, 2001), which "contended that the movement of individuals from one group to another was marked by three distinct stages or rites of passage: separation, transition, and incorporation" (Elkins et al., 2000, p. 252). Tinto perceived these stages to be "useful in understanding malintegration and hence departure for college students" (Bean, 1988, p. 709), positing in his original model (1975) that pre-admission social relations must be severed in order for college students to become fully socially and academically integrated into – and thus committed to – their institutions. Tinto revised his original model in 1987 (see Figure 2) to acknowledge outside-of-institution context in the form of "external commitments" at the end of the model, somewhat haphazardly positioned as a possible influence on final constitution of student intentions and commitment. This placement caused Bean (1988) to note, "there is good reason to believe that the external commitments variables are misplaced in the model, and should have direct effects on departure decisions" (p. 710). The 1993 model (see Figure 3), generally accepted as the "final" version of the model (Aljohani, 2016; Manyanga et al., 2017), depicts an external community parallel to the student's in-college pathway. Still, formal and informal interactions with peer groups and extracurricular activities are firmly situated within-institution. Because of this, criticism of Tinto's model persists. Writing in 2017, Manyanga et al. (2017) pronounced, "The missing part in Tinto's models is the influence of factors external to the institution on student retention" (p. 33).

Despite these criticisms, Tinto's conceptualization persists with empirical validation by multiple researchers (Meyer, Bruwelheide, & Poulin, 2009, p. 130; see also Braxton, 2004; Nora, 2001), with McCubbin (2003) asserting Tinto's SIM as "the most influential model of student retention in higher education" (p. 4). More recent research affirms Tinto's principles relative to online learners (Alman et al., 2012; Lee & Choi, 2011; Yu & Richardson, 2015), making it relevant to the exploration of online learner experiences at UX.



Figure 1

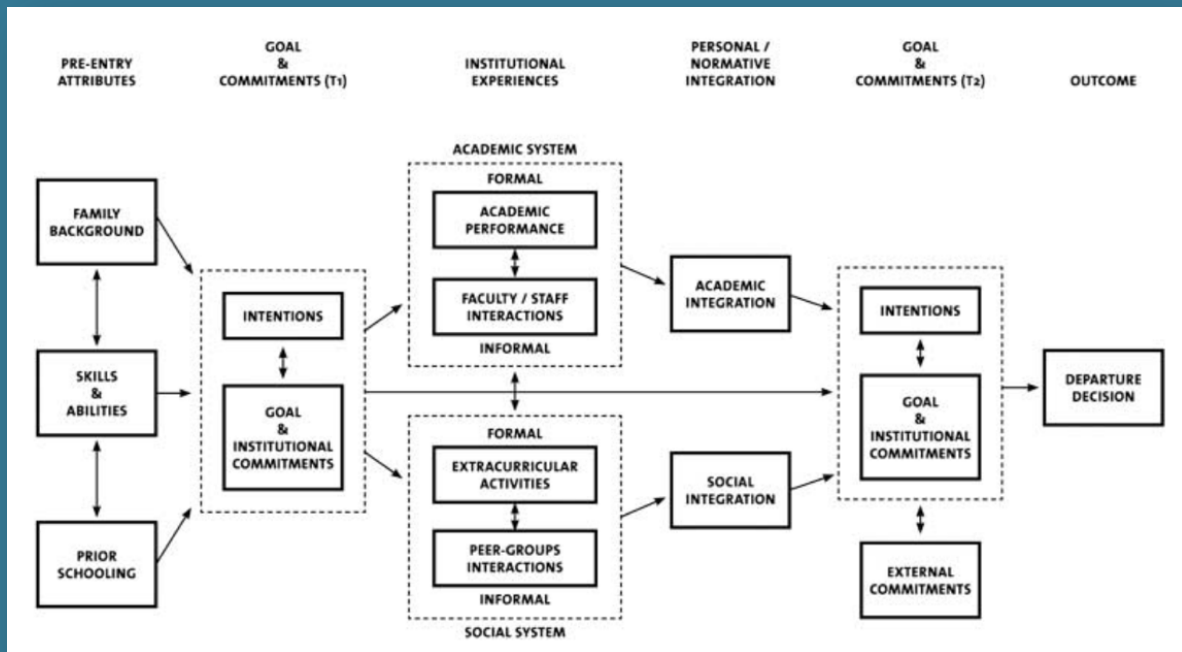
Tinto's 1975 Schema for Dropout from College



Note: Tinto's initial schema for what would become known as the Student Integration Model (SIM). This conceptualization appeared in his 1975 work *Dropout from Higher Education: A Theoretical Synthesis of Recent Research* (Tinto, 1975, p. 8).

Figure 2

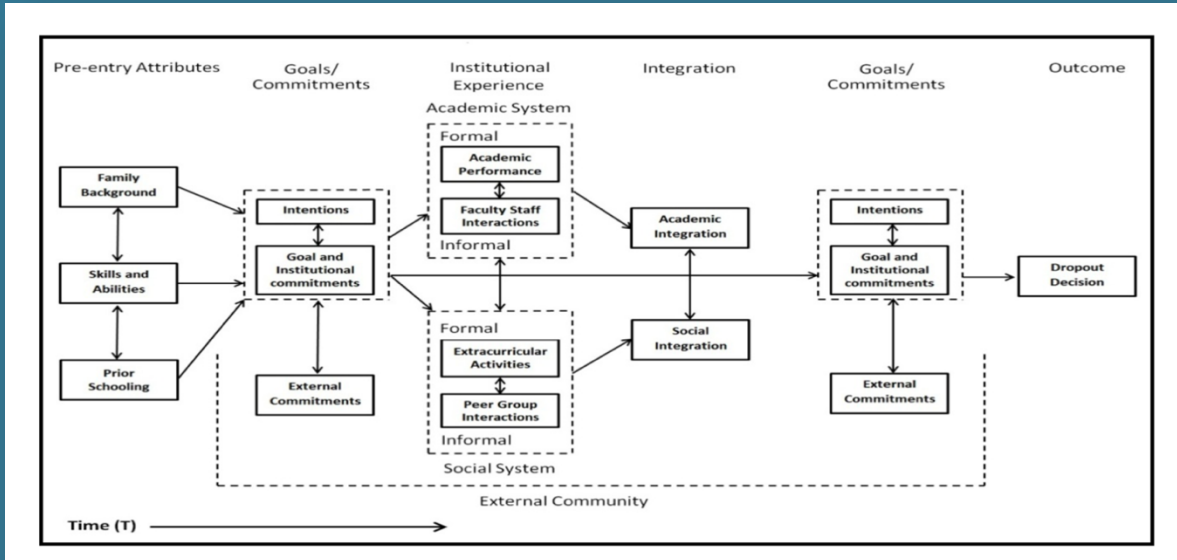
Tinto's 1987 Student Integration Model (SIM)



Note: Acknowledging outside-of-institution factors contributing to student departure, Tinto added "External Commitments" at the end of the SIM in his 1987 publication *Leaving College: Rethinking the causes and cures of student attrition* (University of Chicago Press). Source: van den Bogaard, 2012, p. 64.

Figure 3

Tinto's 1993 SIM



Note: The final iteration of Tinto's SIM (1993) depicts an external community paralleling the student's temporal experience at college, yet peer group interactions and extracurricular activities are still firmly situated within-institution. Source: Aljohani, 2016, p. 6.

Bean & Metzner's Student Attrition Models (SAM & NSAM)

Tinto's insistence of a distinct separation from pre-admission communities as students went to college caused Nora (2001) to critique his work even as he built upon it, counter-proposing that "significant others" (p. 41) assist student transitions across rites of passage. Bean and Vesper (1992) also criticized Tinto's purported separation, writing:

...such a separation is not only not desirable but counterproductive. Students beginning college are extremely vulnerable not just because of the social and academic challenges they face, but because they are no longer in close contact with their support groups: family, friends, and high school mentors. To the extent that students depend upon these groups for support (particularly, approval and encouragement), and these support groups want the student to stay enrolled in college, then separation from these groups may result in leaving college. (p. 2)

This separation, derived from Van Gennep (1960), created "theoretical consequences for racial and ethnic minorities" (Tierney, 1992, p. 603) if the expectation was that nonwhite individuals would leave their communities and cultures behind them upon entering white-dominant college environments.

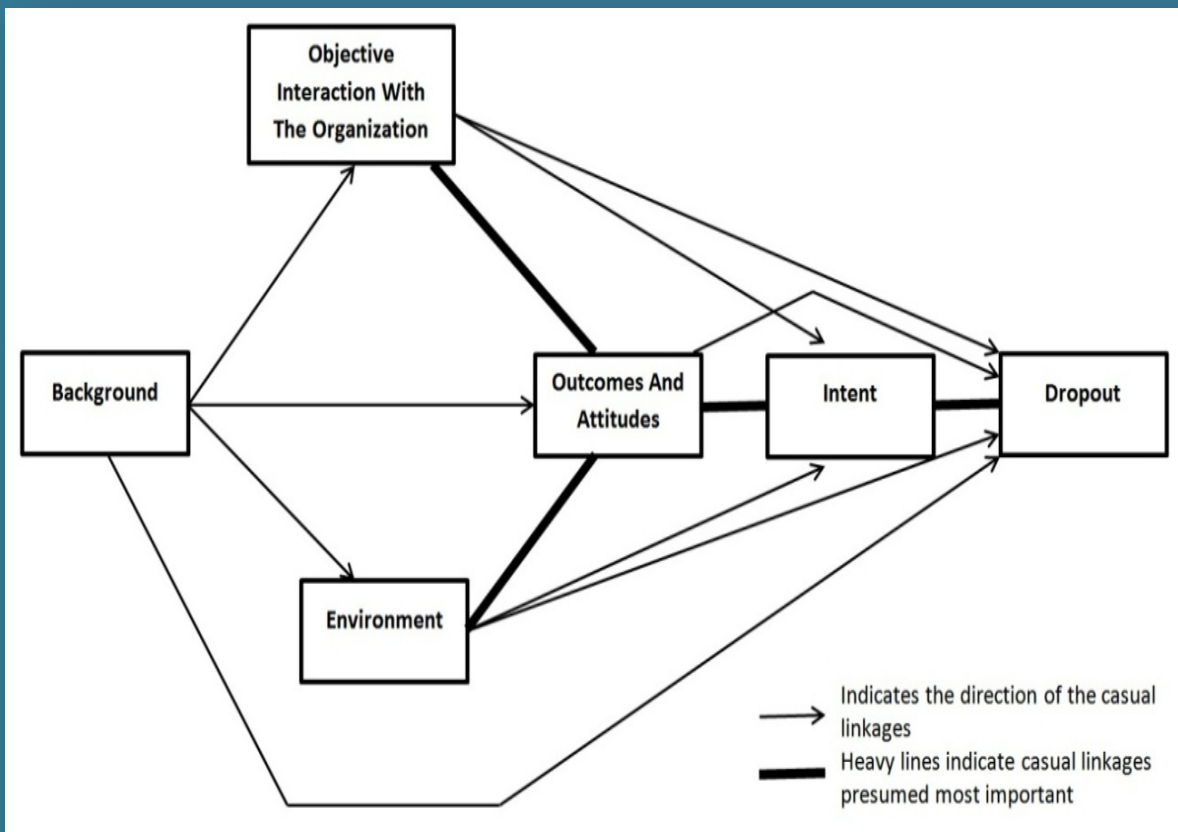
Though scaffolded from Tinto's work, Bean's (1980) Student Attrition Model (SAM) eschewed rites of passage theory for a labor perspective. In his model (see Figure 4), Bean purported "student attrition is analogous to employee turnover and both employees and students leave for similar reasons" (Aljohani, 2016, p. 3). The SAM pathway begins with pre-admission background variables and ends with an affirmation of intention just prior to decision, as does Tinto's SIM. But in Bean's theory, the external environment becomes a significant variable in a student's decision: "The Student Attrition Model...recognizes that factors external to the institution can play a major role in affecting both attitudes and decisions while the student is still attending college" (Cabrera, Nora, & Castañeda, 1993, p. 125). The key difference between Tinto's and Bean's theories "is all about the relative importance attributed to student retention factors external to the institution" (Manyanga et al., 2017, p. 34).

As higher education delivery evolved, Bean and Metzner (1985) adjusted the SAM for application to adult, part-time, non-residential learners (see Figure 5). The Nontraditional Student Attrition Model (NSAM) explicitly enunciated environmental variables outside the institution that influence a student's decision to persist or depart, including finances, hours of employment, outside encouragement, family responsibilities, and opportunity to transfer (Bean & Metzner, 1985, p. 491). Further, their revised theory posits a direct and significant effect between environmental variables and psychological outcomes for students impacting their decision to persist or depart. Publishing their model, the researchers wrote, "The chief difference between the attrition process of traditional and nontraditional students is that nontraditional students are more affected by the external environment than by the social integration variables affecting traditional student attrition" (Bean & Metzner, 1985, p. 485). This differentiation, plus the authors' definition of nontraditional students indicate durable application of NSAM theory to online learners at UX.



Figure 4

Bean's 1980 Student Attrition Model (SAM)

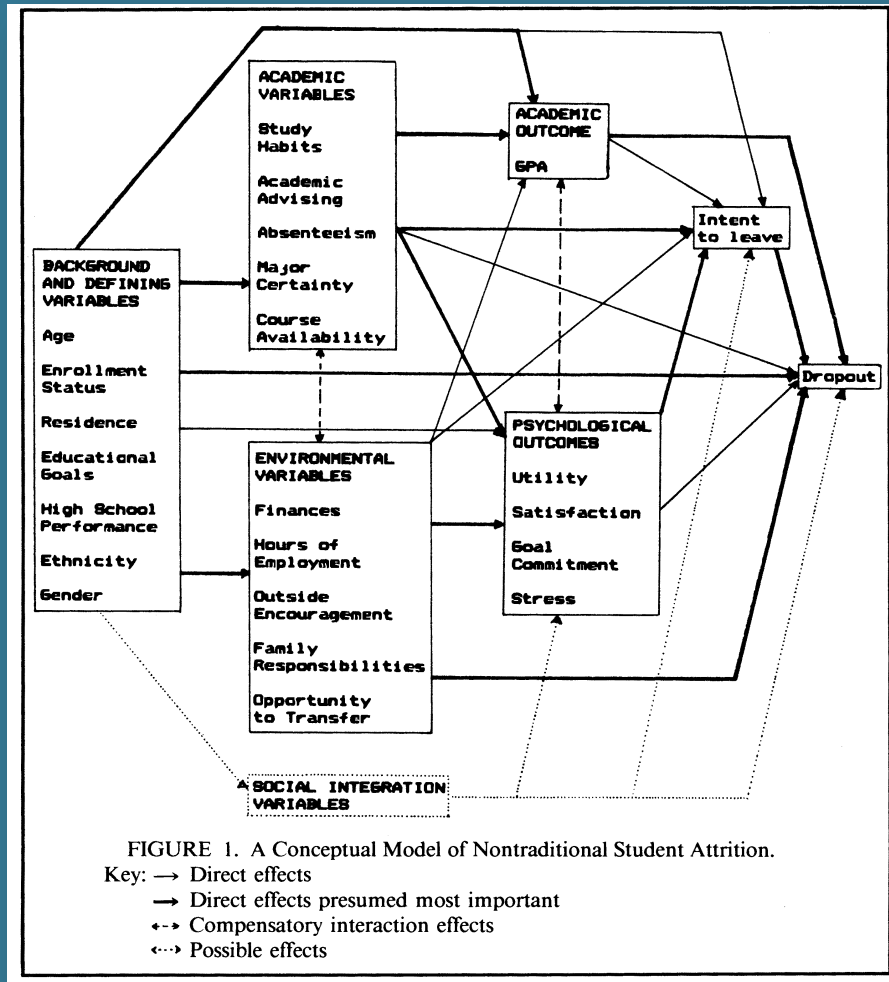


Note: Based in human resource theory (specifically employee turnover), Bean's (1980) SAM "emphasizes the role of intent to persist, attitudes, institutional fit, and external factors in the form of family approval of institutional choice, friends' encouragement to continue enrollment, finance attitudes, and perceptions about opportunity to transfer to other institutions..." (Cabrera, Nora, & Castañeda 1993, p. 126).

Source: Aljohani, 2016, p. 8.

Figure 5

Bean & Metzner's 1985 Nontraditional Student Attrition Model (NSAM)



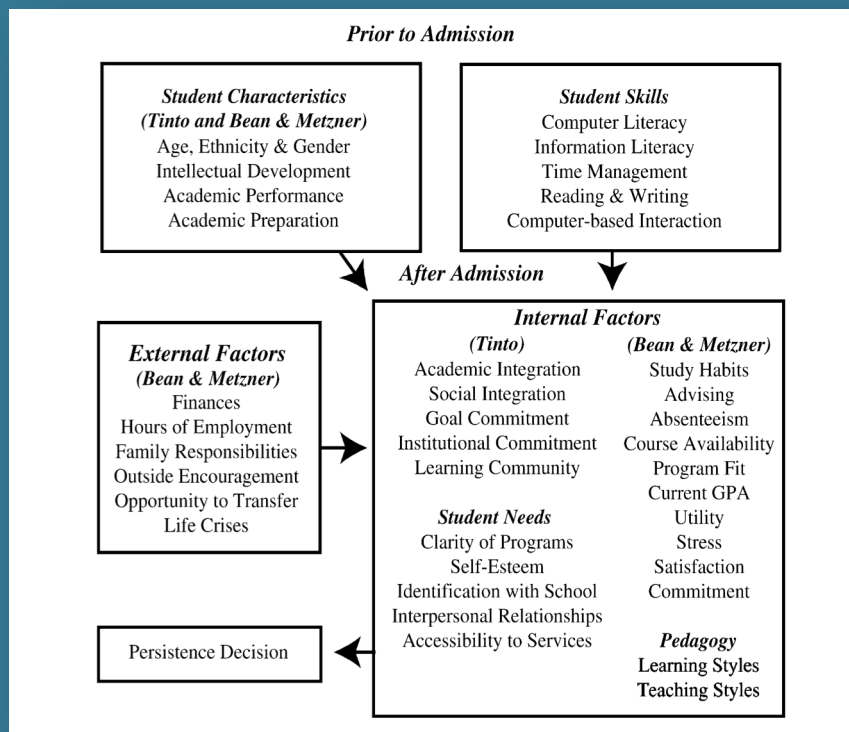
Note: Source: Bean & Metzner, 1985, p. 491.

Rovai's Composite Persistence Model (CPM)

With continued evolution and rapid growth of online coursework (documented by Aversa & MacCall, 2013; Lee, Choi, & Kim, 2013; Manyanga et al., 2017; Morris & Finnegan, 2008; Muljana & Luo, 2019; Parkes, Gregory, Fletcher, Adlington, & Gromik, 2015; Pittenger & Doering, 2010; Su & Waugh, 2018; Xu & Jaggars, 2011; and Yu & Richardson, 2015) emerging theory began to include a new category of student: online learners. Rovai (2003) distinguished two elements that theory based on education delivery in a physical institution would fail to address for this new type of student: (1) "...five specialized needs...[that will] influence the persistence of online students" (p. 10); and (2) the expectation of online students for "a pedagogy that matches their learning style" (p. 10). He created a composite persistence model (CPM) that combined Tinto's (1993) SIM with Bean and Metzner's (1985) NSAM along with unique online learner needs and technology-specific pedagogies (see Figure 6). His CPM not only adjusted earlier theory for unique applicability to education delivery through technology, but simultaneously resolidified external factors as highly relevant and contributory to the online learner experience (Lee & Choi, 2011; Rovai, 2003; Su & Waugh, 2018), rendering the CPM particularly tailored to this study of UX online learners.

Figure 6

Rovai's (2003) Composite Persistence Model (CPM)



Note: Source: Rovai, 2003, p. 9.

Remaining Gap in the Postsecondary Literature

Despite extensive literature since Bean's (1980) introduction of student attrition theory containing direct effect of external variables on student decisions to persist or withdraw from college (Aljohani, 2016; Lee & Choi, 2011; and Muljana & Luo, 2019), exploration of the means and import of externally-situated variables contributing to online student persistence remains an unfilled gap in the literature.

Lee and Choi (2010) observed “[m]any students who dropped out of online courses attributed their decision to *Environmental* [emphasis in original] factors, including work commitments, various family and social responsibilities, and insufficient supports from family, friends, or colleagues” (p. 610). Still, “...previous studies suggested only a limited number of strategies for addressing... *Environmental* factors [emphasis in original]... There is a need to learn more about

these dropout factors” (Lee & Choi, 2011, p. 616).

Tucker and McKnight (2019) cite multiple studies suggesting noncognitive measures, including family, acquired knowledge in a field, and community service – factors exerting considerable external influence – as “predictors of student success...warranting attention” (p. 179). When seeking explanations for noticeably patterned outcomes (such as differing pacing and graduation rates at UX), Berger and Braxton (1998) suggest “theory elaboration” (p. 103) – a label describing what Tinto himself did in assimilating earlier work by Durkheim and Van Gennep into his 1975 model. The essence of theory elaboration relative to this project is to link theory outside of student persistence to student persistence models to probe potential explanations for differing outcomes.

Thriving Theory as a Theory Elaboration

Examining a construct to “add value to theory, research, and application in adolescent development” (Benson & Scales, 2009, p. 85), researchers at the Search Institute in Minneapolis proposed a theory of thriving that concurrently referenced “current well-being and, even more,...[an] upward developmental trajectory” (p. 90). Their theoretical definition of thriving included three interconnected elements:

1. ...a dynamic and bi-directional interplay *over time* of [someone] intrinsically animated and energized by discovering...and the developmental context (people, places) that know, affirm, celebrate, encourage, and guide its expression;
2. ...“stability of movement” or the “balance” of movement toward something...thriving is a process of experiencing a balance between continuity and discontinuity of development over time that is optimal for a given individual’s fused relations with her or his contexts...; and
3. ...[a] person is currently in their journey to idealized personhood, and whether they are on the kind of path to get there that could rightly be called one of exemplary development regulations. (p. 90)

The intrinsic motivation that animates and energizes an individual came to be known in thriving theory as a “spark,” defined as “a metaphor for describing how young people experience talents, interests, or strengths that make them feel really happy, energized, and passionate, and that give them real purpose, direction, or focus” (Scales, Roehlkepartain, & Benson, 2009, p. 10). Knowing

one's spark and experiencing support, empowerment, and opportunity to pursue that spark creates youth thriving (Scales, Benson, & Roehlkepartain, 2011).

As Tinto and Bean adapted suicide and human resource theories, respectively, to student retention and persistence models, theoretical elaboration in a persistence model using adolescent development theory is particularly germane to online student persistence. Consider the comparison of thriving components described for youth to potential thriving for online students; though chronological age differentiates adolescents from adult online learners in higher education, both groups are:

- on an upward developmental trajectory, animated and energized by their identified talents or interests that gave them sufficient purpose, direction, and focus (for online learners, this is exhibited by their enrollment in an online degree-granting program);
- experiencing continuity and discontinuity of development over time fused with multiple contexts in their studies (for online learners in this project this is occurring at the post-secondary level); and
- on a journey that “could rightly be called one of exemplary development regulations” (Benson & Scales, 2009, p. 90), constituted for online learners as their degree-pursuit journey.

Benson (2011) shared a simplified thriving formula in a 2011 TED Talk: Spark + 3 Champions = Thriving (TEDx Talks, 2011, @15:20). He describes a champion as someone whose role is to identify, encourage, and “run interference” (TEDx Talks, 2011, @15:46) for the spark. When a spark is combined with three champions and opportunity, the result is youth thriving. This model for youth development was empirically tested (Benson & Scales, 2009; Scales et al., 2009; Scales et al., 2011), revealing that when these three ingredients were identified and present, school engagement, success in school, and a sense of purpose all rise significantly (TEDx Talks, 2011, @16:11). These adolescent outcomes are essentially the outcomes sought by UX for its online learners in order to thrive in their degree pursuit.

Linking Rovai's (2003) CPM to thriving, online learner lives are experienced at the intersectionality of school life with work life, family life, and personal life, suggesting champions in these realms similar to those postulated for youth by Benson and colleagues. Indeed, the literature makes a strong case for conceptualized champions for online students by highlighting the importance of support from family (Bean & Metzner, 1985; Lee et al., 2013; Muljana & Luo, 2019; Nichols, 2010; Gail Thomas & Hanson, 2014), work or employer (Bean & Metzner, 1985; Lee et al., 2013), supportive others (Cabrera et al., 1993; Nora, 2001), peers (Bean & Metzner, 1985; Gail Thomas & Hanson, 2014), as well as from networks (Watson & Lenz, 2020), stakeholders (Muljana & Luo, 2019), and technical support (Pittenger & Doering, 2010).

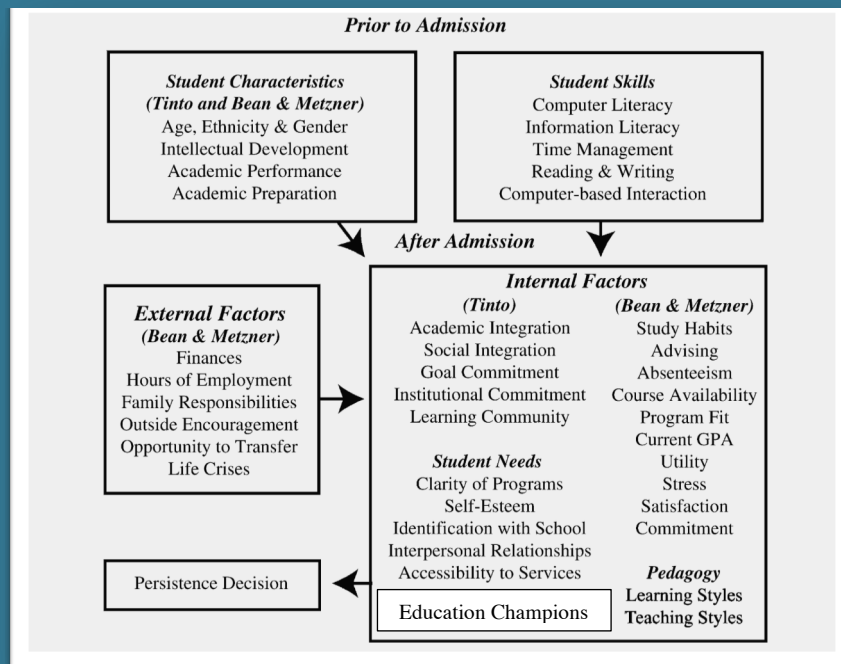
A final reason to include thriving theory is that the University already seems preternaturally aligned with its tenets based on language-in-common within its 2019 annual report. Benson (2009) advocated “Six Essential Questions” for youth development practitioners, including: “What is your spark? When and where do you express it? Who knows your spark? Who nourishes your spark? What gets in your way? How can I help?” (p. 22). Similarly, the 2019 UX annual report references “opportunity” (pp. 4, 6); “Who needs me today?” (p. 10); “thriving” and “wellbeing” (p. 18); “igniting the fire” (p. 19); and a photo of a smiling graduate appearing on page 30 with a sign reading “I did it!” and, next to an arrow pointing to those beside her, “My support team!”

Elaborated Conceptual Framework

For the relevant and scaffolded theory condensed into Rovai's (2003) CPM and its intentionality of design for application to online learners, combined with the thriving sought by UX for its online students, the CPM was adapted for this study with the addition of "Education Champions" under "Student Needs" (see Figure 7).

Figure 7

Rovai's (2003) CPM, Adapted



Note: Elaborated for the current study with the addition of Education Champions, derived from positive youth development theory on thriving (Benson & Scales, 2009; Scales et al., 2009; TEDx Talks, 2011; Understanding Sparks and Thriving, 2019).

Methodology

This mixed methods study began with qualitative interviews based on the conceptual model in [Figure 7](#). A series of open-ended interview questions was drafted, inclusive of an interview protocol script, as UX originally indicated they might want to complete additional interviews to expand the qualitative sample size. Ultimately, I was the sole interviewer, but scripting enabled consistency in covering basic information about the study and allowing each interviewee a chance to ask questions prior to beginning the interview. Questions were grounded in the literature as well as the adapted conceptual model. Successive interview question drafts were presented to and reviewed with UX until finalized. The interview script and questions were pretested with five individuals (two current college students; two college graduates; and an evaluation instructor at Vanderbilt University) to cover a range of ages, experiences, and perspectives, such as what might be found within the interview pool. Pre-testing resulted in minor changes for flow. The goal of the interviews was to better understand the online student lived experience and to explore the first two research questions: *What conditions differentiate successful and unsuccessful students?* and *Among online UX students, what is the level (or lack) of localized supportive others in their experience to date?*

Qualitative analysis of the interviews led to initial findings and then back to the literature to further explore elucidated patterns. A secondary literature search involved deductive reasoning and continued theory elaboration to seek explanations (Berger & Braxton, 1998), reconceptualizing the findings using additional evidence-based theory (see, e.g., Carton, 2018, p. 331).

Reconceptualization resulted in an evolved conceptual model (see [Appendix A](#); the evolution of this model is explained in a later

section of this paper), and the design of a quantitative survey instrument (see [Appendix B](#)) steeped in and adapted from the literature in organizational socialization (OS) and self-determination theory (SDT). The survey was designed to test the qualitative findings for durability with a larger student sample and also to explore themes within the data emerged by the literature. Survey results were intended for analysis and triangulation with the qualitative findings and existing student data from the University to derive evidence-based recommendations in answer to the third research question, *What role can the institution play to increase positive student outcomes?*

Ultimately, survey deployment was delayed by UX outside the project timeline. In lieu of the survey, the University provided follow-up data on student pacing for those within the interview sampling for re-examination, providing an opportunity to triangulate two data series with the qualitative findings. UX data on student pacing was originally pulled March 15, 2021, when interviewees were anywhere from four to five months into their first term, depending on their start date in November or December 2020. The comparative data was pulled on May 19, 2021, at which time interviewees had completed or were nearly complete with their first term, based on their rolling admission dates.

For the dual time series of institutional data provided about the students; a myriad of UX document analysis; multiple reviews of fourteen interview transcripts; and detailed post-interview field notes, the mixed methods approach remained valid, well-documented, solidly grounded in the literature, and replete with rich information affording detailed analysis, comparison, and suggestions for further exploration until qualitative findings can be confirmed within a more substantial sampling.

Interview Data Collection

The IRB for this study was approved January 29, 2021. As the interview protocol and questions were developed, reviewed, tested, and revised through February, the University simultaneously created prospective interviewee pools. Pools were pairwise matched on educational program (business or elementary education), under-represented minority ethnicity (or not), and current pacing progress (where two credit units or more completed per month is considered on-time pacing). Additional matching was based on psychometric markers indicating academic preparation prior to attending UX, income risk, and other life circumstances routinely surveyed by UX. These prospective pools were prepared March 15 and provided with instructions for interviewee solicitation to maintaining matching on March 19. Although it was known that the pools were matched, matching data were not provided at the time the interviews were scheduled (March 22 through April 5, 2021) and conducted (March

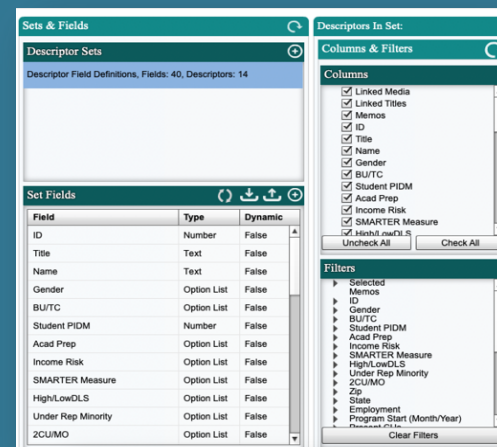
26 through April 10, 2021), thereby mitigating any preconception bias in the interviews. Potential participants were solicited via email (see [Appendix C](#) for the solicitation and voluntary consent outreach) and incentivized with a \$50 Visa gift card in exchange for their participation. Ultimately, fourteen students (twelve female and two male) self-selected into the sample by responding to the solicitation email. All students began their first term (a six-month period beginning with the date of their enrollment) in November or December of 2020. As of the interview dates, all were past the midway point of their first term. Interviews were conducted via Zoom, and all were recorded with interviewee consent at the start of the interview. Interviews lasted from 28:01 to 57:16; the average interview duration was 41:27. Minimal notes were taken during the interviews, both because they were recorded and in order to provide full attention to the participants. Copious field notes were documented immediately after each interview.

Interview Data Analysis

Interviews were transcribed using otter.ai software and reviewed for accuracy, returning to the audio recordings for clarification where the transcription was nonsensical. Reviewing the printed transcripts enabled familiarization with the content and revealed nuances within each interview. Each interview was cataloged in a spreadsheet eventually uploaded into Dedoose software. Each interviewee was treated as an individual descriptor, with forty descriptor fields (see [Figure 8](#)). Descriptors fields include: interview title, anonymized interview number, student ID, gender, geography, and college within UX; psychometric data decoded post-interviews; employment status of respondent; number of higher education institutions attended prior to UX; and short-text or short-answer interviewee description of the sense of belonging and identification at UX.

Figure 8

Interview Descriptor Data



Note: Forty descriptor fields were created for each interview.

Additional self-assessed descriptors addressed how academically prepared interviewees felt they were to begin their current program, and who – if anyone – they were able to name as an Education Champion (defined to those who inquired as someone who values and actively supports their degree pursuit in a meaningful and identifiable way). Interviewees were also asked for their presently-targeted and hopeful graduation dates (where respondents expressed a desire to self-accelerate their pace of study); and various other self-assessed behaviors and habits. UX-determined pacing data as of March 15 and (eventually) on May 19 completed the descriptor set.

Cumulative transcripts were reviewed in detail again while coding each interview in Dedoose, using parent codes derived from the original conceptual model: student characteristics, student needs, institutional (internal) factors, external factors, and Education Champions. Education Champions exogenous to UX were coded as external champions and those within the University as internal champions.

Reviewing the code co-occurrence chart produced by Dedoose (see Figure 9), interview responses clustered around student characteristics (student traits pre-admittance to UX), student needs post-admittance, and key integration, commitment, and community formation through the University all as derived from the adapted conceptual model informing the parent codes. One hundred seventy-three coding co-occurrences for Student Needs and Institutional (Internal) Factors (with positive excerpts across all dimensions of the framework constructs in each category) highlight student perception that UX is meeting their needs. (This is also addressed in the second part of this study.) The interview catalog also provided evidence from within the small sample (n=14) that students perceive themselves as academically and socially integrated into UX and that their enrollment has them on a path to attain their educational goals. All but one perceive the school to be a “part of their everyday life” – and that individual, interestingly, is the only full-time

(non-employed) student in the sample. Finally, there were ample comments throughout the interviews addressing perception of a well-formed online learning community despite the lack of knowing or face to face interaction with fellow cohort members. As one student put it, “when you’re in person, you see these people, and you make that interaction. You know, I think here that you just, you have to click, right? And I think that’s the only difference” (Interviewee 2 @35:50).

Figure 9

Coding Co-Occurrence in the Interviews

Codes	External champion	External factors	Great quotes	Institutional (internal) factors	Internal champion	Student characteristics	Student needs	Totals
External champion		33	20	14	19	47	61	194
External factors	33		55	47	17	133	133	414
Great quotes	20	55		57	8	76	91	317
Institutional (internal) factors	14	47	57		60	134	173	485
Internal champion	19	13	18	60		32	51	193
Student characteristics	47	133	76	134	32		236	658
Student needs	61	133	91	173	51	236		745
Totals	194	414	317	485	193	658	745	

However, for all of these positive findings, 78 of the 173 co-code occurrences (45%) came from students who were struggling (off-pace), based on the University’s March 15 assessment of current pacing in the program. Therefore, their view that UX is meeting their needs is not completely congruous. Further, of the six students identified by UX in March as off-pace, four describe themselves as “successful” students; one as “managing”; and only one acknowledges their status as “struggling.” This student in the off-pace

group is also the only one assessed by the school with low academic preparation for post-secondary education, and acknowledged she did not feel she was academically prepared before her UX matriculation.

Among the six struggling students, only three have utilized academic support services: one student cites use of the Writing Center; another, reliance on a “psych group”; and one student actively uses recorded cohorts, Khan Academy, and Quizlets (all non-live resources accessed by the student when convenient to her busy work schedule in a healthcare setting during the pandemic). Whereas the struggling students cited five unduplicated academic resources used, five (of eight) of the on-pace students cited ten uses of academic supports (double that of their struggling counterparts), all including at least one live (i.e., non-recorded) resource.

Finally, three of the off-pace students attended one other higher education institution prior to enrolling at UX while three (50%) attended three other institutions prior to their current enrollment at UX while attempting to attain their undergraduate degree. In the on-pace group, one student received an associate degree from another institution (tallied as a “0” in the dataset, as it was a completed and successful attempt to attain a degree); six students attended one other institution prior to UX; and only one attended two institutions without degree completion to date.

Potential implications were recorded in field notes from this initial data analysis:

- For all its supportive services, is the constant encouragement intended to motivate students contributing to a false sense of academic security for at-risk students?;
- Should UX proactively reach out to struggling students with live academic supports?; and
- As three of the currently struggling students have attended three other institutions prior to UX, do multiple prior

unsuccessful attempts suggest those students are at higher risk of transfer or attrition when confronted with the reality that they are not trending towards a positive outcome as they believe themselves to be per their interview responses?

Relative to the second research question, *Among online UX students, what is the level (or lack) of localized supportive others in their experience to date?*, descriptor field data from the fourteen interviews segmented into outcome groups (see Figure 10) indicate that students who are currently off-pace (n=6) made an average of 10.3 mentions of an *external* Education Champion (a non-UX employee who provides significant motivation, encouragement, and support of the student’s degree pursuit) and 7 mentions of an *internal* Education Champion (i.e., reference to a UX employee, inclusive but not limited to mentors, tutors, enrollment or financial aid counselors, and/or instructors). This is compared to more balanced coded references (64 and 56, representing group averages of 8 and 7 coded references to external and internal champions, respectively) amongst the on-pace student group (n=8).

Cataloging of named individuals (counted as single tallies) or groups (where referenced as more than one individual, i.e., “a handful of others”, “peers”, or “friends”, those references were tallied as three individuals in the analysis) revealed 21 external champions and 8 internal champions for the off-pace student group and 22 external champions and 10 internal champions named or otherwise referenced by the on-pace group.

Inspecting this data more closely and comparing the difference in cumulative average coded mentions and specific naming of Education Champions demonstrates 2.33 average higher mention of external Champions by off-pace students in their interviews, and .75 higher average in named external Champions for the off-pace group compared to their on-pace peers (3.5 to 2.75, respectively).

Figure 10

Coded Mentions of Education Champions and Estimated Study Hours/Week

CODED MENTIONS								
Off-pace students	External Education Champions	Internal Education Champions	# other Higher Ed attended	External Education Champion(s)	# External Champions	Internal (UX) Education Champion(s)	# Internal Champions	# hours/school/wk
Interviewee 5	13	14	1	Husband, deceased grandmother*	1	Shandon, Michelle	2	15-20
Interviewee 7	10	10	1	2 kids, 3 friends, pastor, and a handful of others	9	Robin	1	15-20
Interviewee 11	7	6	3	co-workers	3	Jada	1	Up to 15
Interviewee 12	5	1	1	husband, daughter, mom	3	Sherry	1	Up to 15
Interviewee 13	17	5	3	friend, HS counselor	2	Erin, Stephanie	2	More than 20
Interviewee 14	10	6	3	Fiancé, sisters	3	Brad	1	15-20
Total	62	42	12	<i>*because grandmother is deceased, she is not tallied as an active champion</i>	21.00	Total	8.00	Total
Average	10.33	7.00			3.50	Average	1.33	Average

CODED MENTIONS								
On-pace students	External Education Champions	Internal Education Champions	# other Higher Ed attended	External Education Champion(s)	# External Champions	Internal (UX) Education Champion(s)	# Internal Champions	# hours/school/wk
Interviewee 1	7	12	2	wife, best friend	2	Jada	1	More than 20
Interviewee 3	12	9	1	Colleague, husband, daughter	3	Natalie, Yolanda, Mike	3	More than 20
Interviewee 4	6	6	1	Dad, boyfriend	2	Allison	1	Up to 15
Interviewee 8	6	8	1	Nicky, Karen, Addison	3	Steve	1	15-20
Interviewee 6	7	6	1	Husband	1	Bob	1	15-20
Interviewee 9	7	4	1	therapist	1	[can't remember their names]	2	More than 20
Interviewee 10	6	7	0	husband, friends	4	Martinetta	1	More than 20
Interviewee 2	13	4	1	Dad, wife, friend, peers	6		0	
Total	64	56	8		Total	22.00	10.00	Total
Average	8.00	7.00			Average	2.75	1.25	Average

<i>Difference in averages, off-pace over on-pace groups:</i>	2.33	0.00		0.75		0.08
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Note: individually-named and quantified internal and external champions; and student-estimated average hours per week spent on UX coursework (dedoose.com).

Also notable are the number of hours spent on UX coursework (a self-reported estimate), highlighting a tipping point around 15 hours per week as a ceiling for one-third of the off-pace students, while that number represents the baseline minimum for all but one on-pace student response.

Here again, field notes query potential implications based upon interview analysis. As off-pace students appear more tethered to supportive individuals *outside* of the University than their on-pace counterparts, does this suggest a leverage point for a UX intervention to increase student reliance on their program mentor as an *internal* Education Champion? This set of quotes from the interviews illustrate the juxtaposition:

Interview question: *Could you do this program without your Educational Champions?*

Off-pace student response: *No...I can't even imagine getting through the process that I'm going through right now without the help of my loved ones.* (Interviewee 7 @47:25)

On-pace student response: *Yes.* [pause] *Maybe not Martinetta* [student's mentor]. (Interviewee 9 @28:57)

Outside encouragement does not necessarily support institutional commitment. Stated simply, loved ones are likely to offer encouragement non-contingent on academics. It may be, upon recognition of lagging outcomes, students turn to those external Champions for non-academic support, inclusive of a negative persistence decision to continue their degree pursuit in general, and at UX specifically.

Field notes also query "does persistent transiency of struggling students remain high if Education Champions remain situated external to the institution?" Combining field note observations in a single question for

further explanation: might increasing student reliance on an internal Educational Champion increase goal and institutional commitment sufficient to reify student persistence at UX, particularly as students voiced they have not experienced such institutional support or formed that internal relationship at prior institutions?

It should also be noted that within the sample size (n=14), all students were satisfied with their current UX mentor, per interviewee responses. This finding may not hold for those dissatisfied with their mentor; thus, field notes recommend that the planned follow-up survey test this initial finding with a larger sample size.

Interview Findings

Though field notes suggest implications from the interview data, those notes were bracketed to focus on the data itself and avoid conjecture. Reliant on the conceptual model that guided the initial interview questions, findings from the initial analysis were mapped back to the adapted conceptual model. Four of the six findings related pertained to student traits and backgrounds pre-dating their matriculation at UX:

1. Number of higher education institutions attended (unsuccessfully) prior to UX;
2. Number of hours student spent (self-estimated) completing UX online coursework each week;
3. Whether / how often student sought academic support services during their first term; and
4. What type of academic support services (live or recorded) student sought.

The final two findings suggested by qualitative interview analysis were defined within the context of UX, similar to Tinto's within-institution focus of his student integration model:

5. Off-pace students were more assured and exaggerated in their perception of their pacing success to date (as of the date of their interview); and
6. While all students were able to name Education Champions, off-pace students appeared more reliant on champions located outside of UX.

To test potential answers to the first research question, *What conditions differentiate successful and unsuccessful students?*, six independent variables were created for survey testing. Survey responses are intended to confirm or contradict the initial qualitative data as well as to explore discernible impact on the common dependent variable (Y) to "predict likelihood to struggle at UX":

- X₁: Does attending more than two other higher education institutions unsuccessfully prior to UX predict likelihood to struggle at UX?
- X₂: Does spending less than 20 hours per week on coursework predict likelihood to struggle at UX?
- X₃: Does disregard of available academic supports predict likelihood to struggle at UX?
- X₄: Does reliance on academic supports without feedback predict likelihood to struggle at UX?
- X₅: Does exhibiting a falsely positive perception of self-efficacy predict likelihood to struggle at UX?
- X₆: Does heavier reliance on a support system exogenous to the University predict likelihood to struggle at UX?

Key phrases from the X variables – "prior to," "supports," "feedback," "self-efficacy," and "reliance" – provided search words to begin a follow-up literature review to frame and design a survey to test these findings.

Secondary Literature Review

Bearing in mind the temporal progression from the original conceptual model for the project involving pre-admission characteristics, admission into a new institution, matriculation into the institution involving new expectations and routines, and the first-term pacing status of all interviewees as of March 15, a secondary literature search was conducted in late April after completing all fourteen interviews. Its purpose was two-

fold: (1) to further explore possible explanations for the initial qualitative findings; and (2) to guide the creation of a quantitative survey instrument to test the same. The first required re-examination of the interview findings (as of yet unconfirmed) using theory elaboration. Through reanalysis and the process of creating the survey, the adapted conceptual model for this study was significantly evolved.

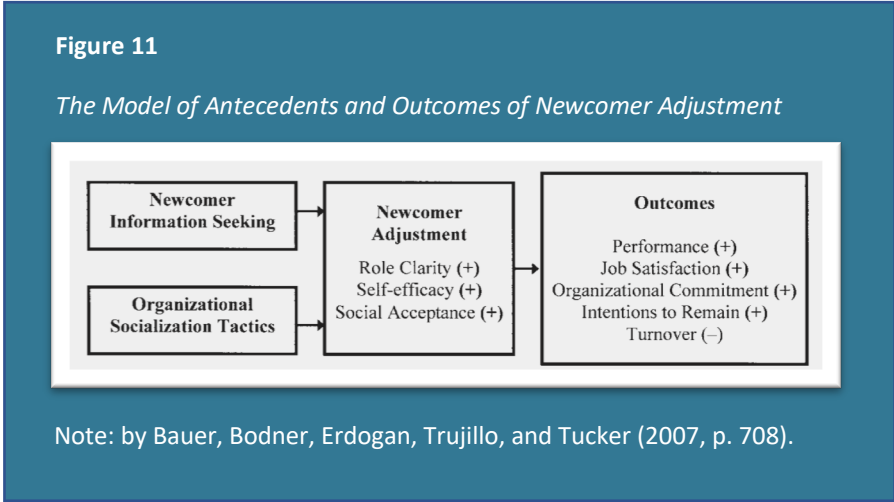
Organizational Socialization: Theory and Re-examination of Findings

The secondary literature review began with a search on key words from the independent variable phrases derived from the collective transcripts. That multiple findings in response to RQ1 (*What conditions differentiate successful and unsuccessful students?*) pointed to spillover effects from prior habits and behaviors (number of institutions attended pre-UX; weekly estimated hours spent on coursework; use [or not] of academic supportive services; and type of service utilized for those who did engage with these supports) triggered an examination of the liminal space of student (re)entry into higher education.

Tinto's original (1975) model utilized Van Gennep's (1960) rites of passage theory, which established the pre- and post-admission discernments in the original model and carried forward in updated models (Bean, 1980; Bean & Metzner, 1985; Rovai, 2003; and Tinto, 1987, 1993). Such timelines show up in other models as antecedent characteristics brought forward by the student upon entering a new institution (see, i.e., Braxton, Doyle, Hartley, Hirschy, Jones, & McLendon, 2014). Recall that Tierney (1992) criticized use of Van Gennep's theory in Tinto's work, suggesting that it was misappropriated from unrelated subject matter, but that Berger and Braxton (1998) hailed the application, suggesting that theory elaboration applies new concepts borrowed from unrelated subject matter as a means of exploring and explaining observed phenomena. Berger and Braxton explicitly stated, in suggesting theory elaboration relative to Tinto's work, that their own research "provide[s] strong support for elaborating...Tinto's theory through the inclusion of concepts from organizational theory" (1998, p. 103). These words directed the literature search to organizational socialization (OS) theory, founded by Van Maanen and Schein (1977) who similarly scaffolded from Van Gennep's theory (1960), noting "the problems of organizational socialization refer to any and all passages undergone by members of an organization. From beginning to end, a person's career within an organization represents a potential series of transitions from one position to another" (p. 6).

Van Maanen and Schein (1977) established that three domains impact an individuals' passage into his/her/their organization: function, hierarchy, and inclusion. They stated the purpose of their work in creating OS was to "heighten and cultivate a broader awareness of what it is we do to people under the guise of 'breaking them in' to an organizationally defined role" (p. 36). Thus, these researchers establish – as do models in student persistence – that there is a role played by both the individual-as-actor entering the institution, but also the institution-as-actor directly impacting the student entry and hopeful persistent experience. For these linkages of liminal stages; individual *and* institutional agency across student retention and organizational theory; and for the additional linkage that each of these models represents an interactionist paradigm, theory elaboration between the adapted CPM and

OS can be tightly coupled. This elaboration takes a further step through the work of Bauer, Bodner, Erdogan, Trujillo, and Tucker (2007), who created a “Model of Antecedents and Outcomes of Newcomer Adjustment” (p. 708; see Figure 11). They established that newcomers into an organization arrive seeking information within their new context, just as the organization employs socialization tactics to “break them into” the organization (to re-use the words of Van Maanen & Schein, 1977, p. 36). Here again the agency of the individual as well as the institution is maintained, as antecedents impact the newcomer’s adjustment within this model. The information-seeking by the newcomer and the tactics employed by the organization collectively contribute to what the authors position as “uncertainty reduction” (p. 708) characterizing the socialization process.



Both the individual and the socialization efforts by the organization endeavor to enhance three things for the newcomer into the organization: role clarity (i.e., what is expected of the newcomer); newcomer self-efficacy (i.e., ability to do what is expected of them); and social acceptance by others within the organization. When these elements are sufficed, positive outcomes including performance, job satisfaction, organizational commitment, and intentions to remain at the institution result (Bauer et al., 2007, p. 708). Using this model to situate the newcomers (interviewees) within their institution (UX), antecedents for the students include knowledge and understanding of what it takes to (re)become a student; to play that role at an exclusively online institution; how to undertake that role in the context of multiple other external commitments (work, family, friends); as well as a unique context in the present day – balancing that new role with all others in the midst of a global pandemic during 2020-2021. This transition through OS begins where it did within the original adapted CPM: during a student’s first term, as he/she/they matriculate into and begin their adjustment into the organization (Bauer et al., 2007; Cooper-Thomas & Anderson, 2006; Grant & Parker, 2009).

The adjustment progression of the student experience into the institution (UX) affords an extension of the adapted CPM to deeper explore the interview data, the eventual survey data, and possible answers to the research questions. To RQ1, *What conditions differentiate successful and unsuccessful students?* the qualitative interview findings re-examined through an OS lens suggest that self-efficacy may be an issue for the students who have endeavored twice or more to pursue their degree unsuccessfully at other institutions. Further, the role clarity may not be as crystallized as the initial analysis of the interview voices conveyed, particularly for students categorized by UX as off-pace in March. These students demonstrated, on the whole, fewer hours committed to coursework and a reticence to utilize academic support services. When they did use supports, they tended to utilize generic exogenous recorded supports (i.e., Khan Academy, Quizlets) without interactionist feedback mechanisms. Collectively these differentiators seem to seem to uphold under OS, meriting exploration with a larger sample via the quantitative survey.

To RQ2, *Among online UX students, what is the level (or lack) of localized supportive others in their experience to date?* the extended model allows exploration of whether others in their environment –

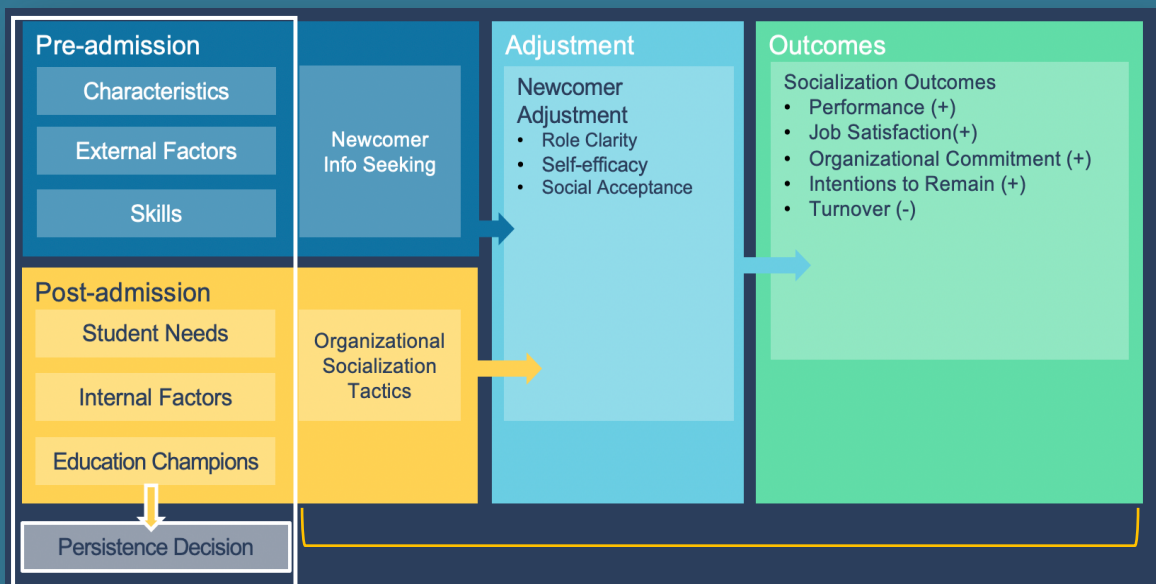
at work, at home, socially, and/or virtually – provide supportive or obstacle-laden pathways as students navigate their new role as online student, balancing both self-efficacy and social acceptance with the new demands on their time.

The initial interview findings relative to this question – that off-pace students seemingly rely more on Education Champions outside of the institution than within it – may suggest, per OS literature, that off-pace students may benefit more from insiders (Bauer et al., 2007; Cooper-Thomas & Anderson, 2006; Van Maanen & Schein, 1977). This reanalysis through OS theory appears to support Interview Finding 6, that heavier reliance on a support system exogenous to the University (may) predict likelihood to struggle at UX. If this reliance or lack thereof on insiders can be tested with a larger sampling and compared to pacing data for that larger sampling to determine a connection (or not), this may suggest further development of student reliance on those within UX may positively impact student outcomes. Thriving theory, as adapted to the CPM for this project, also supports this idea, as a knowledgeable insider is better-positioned to support a pathway to educational goal attainment by animating and energizing discovery and development within the institution; fusing a relationship between the student and the organization (UX); and guiding students to their idealized personhood, to paraphrase Benson and Scales (2008). This dyadic reinforcement between OS and the adapted CPM further supports this theory elaboration.

Finally, to RQ 3, *What role can the institution play to increase positive student outcomes?* the extended model proposes a more active role for the institution to assist the socialization process than

Figure 12

The Addition of an Organizational Socialization Model to the Framework



Note: The addition of the Bauer et al. model, bracketed at the bottom, to the adapted CPM.

Source: Bauer et al., 2007, p. 708). The adapted CPM is outlined in white.

the adapted CPM (see Figure 12) by illustrating the progression of the student’s post-secondary experience beyond a single collapsed point-in-time, “Post Admission” (Rovai, 2003, p. 9). The more the organization can reduce the uncertainty of expectations, time commitments, and balancing multiple daily priorities in order to support role clarity, self-efficacy, and social acceptance for a student, the greater likelihood of successful socialization into UX.

As the early integration models of the adapted CPM suggest, greater socialization into the University enhances organizational commitment, in turn positively impacting student persistence. Here again

Figure 13

Institutional Impression

Do you have the sense that UX cares about you as an individual?	Thinking about your UX experience, what is the first thing that comes to mind?
Yes	My mentor.
Yes	Welcoming
Yes	Community
Yes	[the mascot]
No	Success
Yes	Encouragement
Yes	Online tests
Yes	Psychology
Yes	Accessibility
Yes	Flexibility, Collaboration
Yes	Graduating
Yes	Flexible
Yes	Mentor program
Yes	Recommending to others

Note: Interview cataloguing for the questions “Do you have the sense that UX cares about you as an individual?” and “Thinking about your UX experience, what is the first thing that comes to mind?” to demonstrate the level of relatedness to the institution already expressed by the fourteen interviewees in their first six-month term at the school. (dedoose.com)

the theoretical and interview evidence suggest that such interventions to reduce uncertainty and affirm student positive disposition towards the University will enhance on-time pacing and graduation rates. From the saturated expression of strong support received from UX across all interviews (recall the 178 coding co-occurrences from the fourteen interviews), it would appear that students began their first term with a sense of self-efficacy, stemming from their acceptance back into education – literally – by way of their admittance to UX. Further, the students expressed strong appreciation for role clarity provided by the school in terms of what it would take to succeed and how the school would assist them on that journey.

Social acceptance was also evidenced by themes appearing within the interviews in answer to questions about each student’s experience of UX caring and positive institutional impression to date (see Figure 13), demonstrating that all but one student believes the institution cares about him/her/they as an individual. This is an important pattern in this small-sample response, as Braxton and Francis (2018)

empirically derived evidence that the more this level of care by the institution is perceived by its students, the greater the level of the student’s institutional commitment, with greater persistence and positive outcomes as follow-ons (p. 83). The single outlier who responded negatively to the perception of care followed up her response with:

You know, like, it's a for profit. I mean, it's a for profit endeavor...I think the people who work there are great. Like, they're very friendly and very helpful. So, like, I do think that they care about helping me. I think they care about their jobs, and care about helping students...[but] UX is ultimately a company, so no. (Interviewee 4, @15:30)

These words make it evident she answered the question based on two misconceptions. First, UX is not a for-profit institution. Second, the integration tenets of an individual into an

organizational culture per OS theory do not prohibit caring by an organization but in fact seek to explain the means by which such caring is understood between the organization and individual in order that the individual remain with the organization. So her suggestion that because the University is a (falsely perceived for-profit) corporation negates their care of individuals is based on false pretext. First-person testimony from all interviewees – Interviewee 4 included – addressed the level of support received from UX and how the University directly assisted students in their transition back to school (see [Appendix D](#)). That collective interview data is exemplified by these excerpts:

My family was really poor. And they weren't really there to support and, like, give me the information I needed. The person who was, like, enrolling me...he was really helpful. You know, he was very communicative, and like, really walked me through the process, whatever I needed... he helped me with getting scholarships together. (Interviewee 9 @6:04)

So I haven't had the need yet, to use a lot of the resources, but I love that they're there. I love the mentor component. I love the ability to just call and talk to somebody...I just, if you need help, if you have something that you've got questions on you want, I mean, there's just like, I almost feel like they've thought of everything. Like there's just, if you fail, it's in spite of everything that they've thrown at you to do that. (Interviewee 10 @8:58)

Further, the role clarity and support in navigating online coursework has cemented institutional acceptance for some – both academic and social – into UX, as illustrated by these voices:

...that kind of response time, that kind of support and knowing that any issue I have, I can either find something online or find a person to talk to makes it so much easier. And just makes it – makes you feel like you are actually a part of the school, instead of just being, you know, some person taking classes online. I feel like I'm a student at UX instead of just a virtual user. (Interviewee 5 @29:00)

I really appreciate the way that there's a mentor there you check in with every week...I think that's also something to like, push me to continue to do more in my schoolwork, because if I had no one I would be lost at times. And I just feel like I would maybe like dwindle out of it, and I wouldn't have pushed myself to set goals. So I love the fact that there's a mentor there to always help with pushing us. (Interviewee 14 @19:15)... I think that with UX, it's just like, of course, it's gonna' be a struggle, but I love this school. And I know, it's cliché. It's like, "oh, you're just saying that," but no, I really do. I appreciate everything that UX has provided for me. (Interviewee 14 @37:02)

The adapted CPM framework for this project indicated that positive academic and social integration plus institutional commitment are likely to enhance positive outcomes relative to student decision to persist (goal commitment). The OS extension acknowledges that an adjustment period will occur. Indeed, UX students vocalized this phenomenon:

I think I could do better but I'm managing, adjusting. Like I said, I think as I move forward into my career, into my degree, and just become more comfortable with balancing my time and the classes and the material...I'm definitely adjusting, not successfully 100%. But as time goes by, just every day...one day at a time. (Interviewee 7 @39:05)

Thus, the extended model inclusive of OS appears to be reified by actual student experience.

It was during this secondary literature review that the University provided eight-week follow-up data on student pacing (May 19, 2021). The updated pacing information represented completion of the first term for those who began in November, and a point approximately at the twenty-three-week mark (of a twenty-four-week term) for those who began in December. [Figure 14](#) presents a

comparison of the two data sets and also includes University-identified student risk factors, student behaviors, and outcomes in bolded and/or highlighted text. The visual illustrates those students who have succeeded (on-time or accelerated pacing) versus those who have struggled (off-pace) at these comparative points in their programs within the adjustment phase of the Bauer et al. model.

Figure 14

March to May 2021 Student Pacing Data Comparison

Interviewee #	Acad Prep (UX Assessment)	Academically prepared? (student self-assessment)	Income Risk	Program Start (Month/Year)	# hours/school/wk	Academic Services Numeric	Successful, managing, struggling	UX Pacing Assessment 3.15.21	UX Pacing Assessment 5.19.21	CU's as of 5.19.21 (12 = expectation)
Interviewee 1	ModAcademicPrep	Yes	LowIncomeRisk	Nov-20	More than 20	0	Successful	On pace	Accelerated	31
Interviewee 4	HighAcademicPrep	Yes	LowIncomeRisk	Nov-20	Up to 15	3	Managing	On pace	Accelerated	28
Interviewee 8	LowAcademicPrep	No	HighIncomeRisk	Nov-20	15-20	2	Successful	On pace	Accelerated	21
Interviewee 9	HighAcademicPrep	Yes	LowIncomeRisk	Dec-20	More than 20	0	Managing	On pace	Accelerated	23
Interviewee 3	ModAcademicPrep	Yes	HighIncomeRisk	Dec-20	More than 20	1	Successful	On pace	On-pace	17
Interviewee 5	HighAcademicPrep	Yes	LowIncomeRisk	Dec-20	15-20	3	Successful	Off pace	On-pace	14
Interviewee 6	ModAcademicPrep	No	HighIncomeRisk	Nov-20	15-20	1	Managing	On pace	On-pace	16
Interviewee 10	LowAcademicPrep	Yes	HighIncomeRisk	Dec-20	More than 20	3	Managing	On pace	On-pace	15
Interviewee 12	HighAcademicPrep	Yes	LowIncomeRisk	Dec-20	Up to 15	0	Successful	Off pace	On-pace	17
Interviewee 14	ModAcademicPrep	Yes	HighIncomeRisk	Nov-20	15-20	1	Successful	Off pace	On-pace	12
Interviewee 2	LowAcademicPrep	No	HighIncomeRisk	Dec-20	Up to 15	0	Managing	On pace	Off-pace	11
Interviewee 7	ModAcademicPrep	No	HighIncomeRisk	Dec-20	15-20	0	Managing	Off pace	Off-pace	11
Interviewee 11	LowAcademicPrep	No	HighIncomeRisk	Nov-20	Up to 15	0	Struggling	Off pace	Off-pace	9
Interviewee 13	ModAcademicPrep	No	LowIncomeRisk	Nov-20	More than 20	1	Successful	Off pace	Off-pace	6

Note: A catalogue all fourteen interviewees showing UX-assessed risk factors, student self-assessment of academic preparedness, estimated hours of study per week, academic services used, and current state (successful, managing, struggling, as self-assessed) during interviewees' first term at UX. University-assessed pacing data is presented as of March 15 and then again eight weeks later, on May 19, 2021 (with actual credit units achieved by May 19).

Within the table, the students in the bottom four rows are those who remained or became off-pace as of May 19. Two are off by a single credit unit; the other two are more dramatically off-pace. Within this subgroup is one student who began aggressively and has since decelerated to off-pace.

Of the students currently off-pace, three of the four have flagged risk factors, and highlights call out that all students in this off-pace group exhibit low to no use of academic supportive services, suggesting a lack of self-propelled effort towards academic integration (and support) within the institution. Only one student professed to commit more than 20 hours per week to UX coursework. That same individual – with the least credit units among the fourteen interviewees – also believes himself to be successful in his first term at UX.

From this analysis, those with the most risk factors and exhibiting non-optimizing behaviors (i.e., less than fifteen hours/week; low use of academic supports) are, in fact, those who comprise the students characterized as off-pace as of May 19, 2021. OS theory suggests that those who were struggling in March, but are no longer struggling as of May, are successfully navigating their adjustment into UX, returning this exploration to the original research question, *What conditions differentiate successful*

and unsuccessful students? The qualitative findings suggest explanations for further examination. Interviews and May 19 pacing information seem to bear out qualitative findings one through four:

X₁: Does attending more than two other higher education institutions unsuccessfully prior to UX predict likelihood to struggle at UX?

X₂: Does spending less than 20 hours per week on coursework predict likelihood to struggle at UX?

X₃: Does disregard of available academic supports predict likelihood to struggle at UX?

X₄: Does reliance on academic supports without feedback predict likelihood to struggle at UX?

OS theory offers a means of exploring interview finding six (*Does heavier reliance on a support system exogenous to the University predict likelihood to struggle at UX?*) by examining student reliance on knowledgeable insiders. That leaves interview finding five, *Does exhibiting a falsely positive perception of self-efficacy predict likelihood to struggle at UX?* This would seem to be the case, in analyzing the interview descriptors for students off-pace as of May, causing a return to the literature to seek a theoretical explanation for faltering self-efficacy.

Self-Determination Theory: Extending the Model and the Data Exploration

Within the literature, the adjustment mediators proposed by Bauer et al. (2007) are near-synonymous with the three elements identified by Ryan and Deci (2000) as requisite for self-determination theory (SDT): competency, autonomy, and relatedness (see also Deci & Ryan, 2012; Pelletier, Rocchi, Vallerand, Deci, & Ryan, 2013). SDT, similar to the cumulative theories contained in the adapted CPM as well as its extension with OS, is an interactionist model representing individual-as-actor navigation of a new institutional (even virtual) environment, and student behaviors within that new environment.

Relative to student adjustment at UX, individual levels of student self-determination represent the convergence of pre-existing student characteristics and behaviors contributing to adjustment that mediate and moderate outcomes. Illustrating the natural connection between SDT and student outcomes, Tinto (2017) created a model of student motivation and persistence highlighting self-efficacy, sense of belonging, and “perception of curriculum” (p. 256) impacting motivation to goal commitment. Tinto reminds us that self-efficacy falters not just for those with negative risk factors, but even for those who were – until the challenge point – confident in their own ability. Further, he notes that wavering self-efficacy is “particularly true during the critical first year as students seek to adjust” (p. 257)...which is where all interviewees are situated (in their critical first year). Continuing, Tinto advised that a self-efficacy assessment is likely to be more accurately predictive when gauged further into the course than at the start (2017, p. 257). This seems to support that those students on-pace as of May have successfully navigated their adjustment period at UX; those who are off-pace are struggling with the requisite components (role-clarity/competency; self-efficacy/autonomy; and social acceptance/relatedness, using OS/SDT language, respectively).

Importantly, Ryan and Deci (2000) write that while they do not seek the cause for SDT, they do seek information on how to enhance intrinsic motivation (p. 70), thereby increasing individual competency and autonomy. For these reasons, SDT theory is added to the model, casting student-as-newcomer (see Figure 15) as a hopeful means to elucidate student behaviors that will produce the positive social outcomes represented in the evolving model and desired by UX.

Figure 15

The Addition of Self-Determination Theory to the Framework



Note: Additions indicated by the white bracket and shading. Source: Ryan & Deci, 2000, p. 72.

Where individual levels of competency and autonomy are strained during the adjustment phase – as evidenced by four students off-pace as of May 19 – the interview data initially seemed to indicate relatively high relatedness found by all within UX, satiating that need within self-determination. However, Braxton, Milem, and Shaw Sullivan (2000) raise “The Influence of Active Learning on the College Student Departure Process” in their so-titled article, pointing out that relatedness in SDT need not be exclusively a social integration tenet, but that active learning relates the relevancy of coursework to student’s non-academic lives, posing a relatedness factor emanating from within the institution to the student’s external environment.

This enables a readapted analysis of student interviews exploring academic (not social) relatedness, revealing a resounding relatedness deficiency for off-pace as compared to on-pace student experiences. A student on-pace in March and exhibiting an accelerated pace as of May 19 observed “...so much of what UX is teaching is extremely relevant to what we deal with on a day-to-day basis” (Interviewee 9 @28:20). A student off-pace in March who was on-pace by May 19 noted:

So, when you go into that first class like I did, and you rush through, and you don't pay attention, because you're like, "oh, I know this" and then you are like, "Damn, I am really not prepared for my job." But overall, I have to say...some of this stuff that I'm learning, I'm actually able to put right into practice...I took an Excel course, I learned things in pivot tables that I was able to utilize right away. Taking a financial class now, I actually learned a little bit of terminology that helped me not look like an idiot in a meeting recently, when I was going over budgeting. (Interviewee 5 @16:40)

Finally, a student who started out with an aggressive pace early-on shared, “I'm taking a very, very aggressive approach, right? I think some of the curriculum that I've been going through...some of those concepts are very familiar to me so I was able to get through quite a

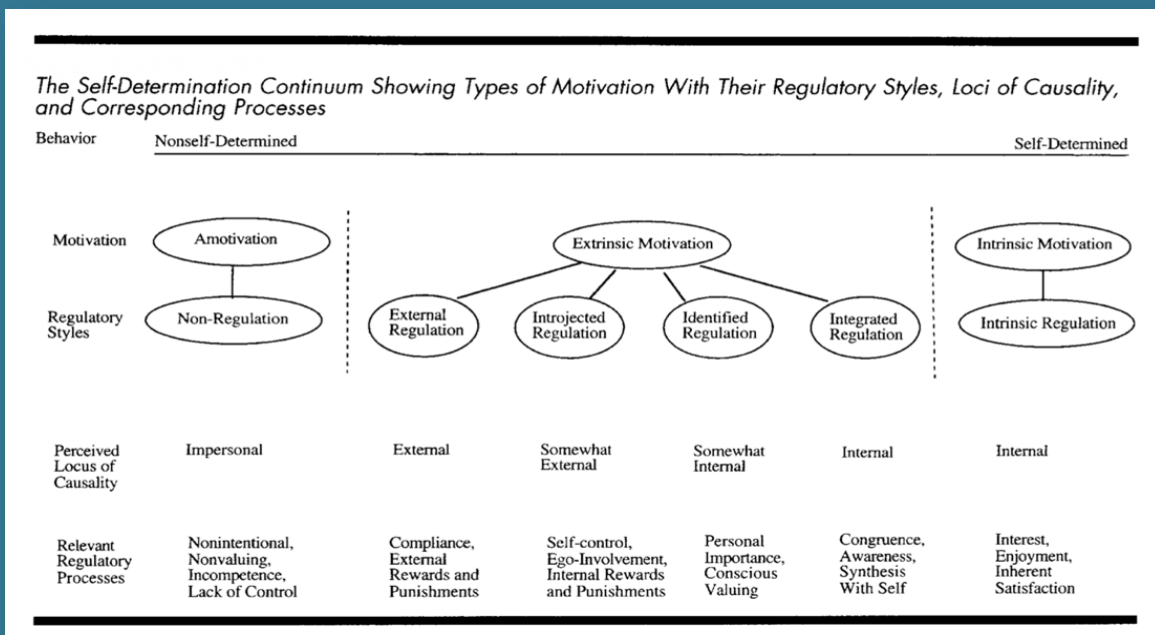
bit of those classes quickly." (Interviewee 2 @2:20) Upon re-examination it appears that as of his March 27 interview, he was perhaps beginning to experience unanticipated material or challenge:

Some people need that little extra email that pops through or that little alert that pops through that really entices them, right? No one wants to admit when they don't necessarily know something. A lot of pride around that thing as the older we get, the harder it is to admit that at times. (Interviewee 2 @33:30)

With Braxton and colleagues (2000) confirming active learning as a “source of influence on academic integration” (p. 571), we are afforded a more granular exploration of motivational locus through SDT. Ryan and Deci (2000) created a sub-theory of SDT they termed “Organismic Integration Theory,” or OIT (p. 72; see Figure 16). In short, this sub-theory model looks at learning motivation on a left to right continuum, starting from no motivation to extrinsic motivation (categorized four ways by the authors) to intrinsic motivation.

Figure 16

Organismic Integration Theory

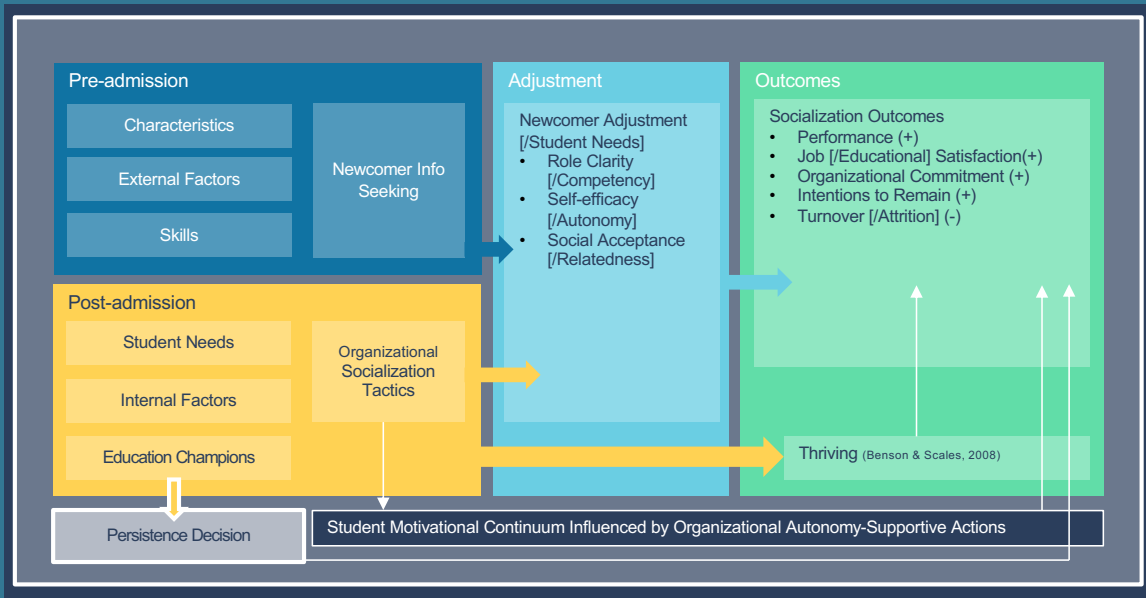


This model of learning regulation is supported by a tertiary examination of the interview data relative to competency (/role clarity) and autonomy (/self-efficacy) in the expanded model using OS and SDT, and also suggests a potential leverage point in answer to RQ3 as to what UX might do to increase motivation (and in so doing, increase learning, persistence, and improved outcomes). As learning is motivated further to the right on the OIT continuum (i.e., increasing towards intrinsic motivation), the likelihood of student persistence and successful outcomes increase.

Though not examined in-depth in this project, pending durability of the qualitative interview findings through a larger quantitative survey sampling, the literature suggests an institutional intervention in the form of “autonomy-supportive behaviors” by institutional actors to increase motivation along the continuum (Black & Deci, 2000; Lawrence, 2018; Lee, Pate & Cozart, 2015; Pelletier, Tuson, Fortier, Vallerand, Brière, & Blais, 1995; Russell, 2013; Ryan & Deci, 2000;). Thus, as a final theory elaboration, OIT (Ryan & Deci, 2000) is included in the evolved framework, tied to institutional tactics which may influence student locus of motivation, particularly through autonomy-supportive behaviors exhibited towards the students by UX mentors, instructors, and/or alumni. Lawrence (2018) writes that autonomy-supportive learning environments not only lead to positive student outcomes (p. 6) similar to those represented in the Bauer et al. (2007) OS model, but she concludes that autonomy supportive behaviors are particularly relevant for online content delivery (p. 6), well-aligning this potential strategy to UX online programs. The resulting Interactionalist Expanded Model of the Student Lived Experience presented in Figure 17 comprehensively frames data analysis for the current project as well as for future data gathered by UX using the proposed survey or other mechanisms.

Figure 17

The Interactionalist Expanded Model of the Student Lived Experience



Proposed Quantitative Data Collection

Preparing a quantitative instrument to test interview findings one through four and to gauge student self-determination (finding 5) and the potential role of University insiders to impact student motivation (finding 6), the literature also revealed survey instruments which could be adapted for the secondary information gathering originally conceived as part of this mixed methods project. A quantitative survey instrument was produced for UX to examine if the findings revealed in the small qualitative sample appear to hold up (and/or reveal other patterns) amongst a larger student sampling, while also further exploring student locus of motivation and

student perception of autonomy-supportive (PAS) behaviors exhibited by their mentor, affording UX a glimpse at another dimension of the student-mentor relationship. Positive findings from the quantitative analysis of the survey instrument relative to this measurement might also suggest the strength of the knowledgeable insider as an intervention lever to impact student motivation. In other words, survey data has the potential to suggest intervention strategies in response to RQ3, *What role can the institution play to increase positive student outcomes?*

Quantitative Instrument Creation

The survey instrument created for this project was intended to serve three purposes: (1) to confirm or contradict qualitative findings based on student behaviors (Part I of the survey instrument, questions 1-19); (2) to test student self-regulation during the adjustment phase (Part II of the survey instrument, questions 20-37); and (3) to assess student/mentor disposition, reconceptualizing the UX mentor synonymous to “knowledgeable insider” and “internal Education Champion” (Part III of the survey instrument, questions 38-52).

Part I of the questionnaire will probe a larger sample population on interview questions that produced patterned findings in the qualitative analysis. These questions also serve to gauge the accuracy of a student’s self-assessment of their ability and success in the program to date. For example, if a student self-categorizes themselves as successful yet data reveals they are currently off-pace and struggling with their coursework as evidenced by objective assessments and current pacing, they may have a distorted view of their self-efficacy.

Part II of the questionnaire is adapted from another instrument, the revised Sport Motivation Scale (SMS-II). SMS-II was created (Pelletier et al., 1995), questioned (Lonsdale, Hodge, & Rose, 2008; Mallett, Kawabata, Newcombe, Otero-Forero, & Jackson, 2007), then revised and re-validated by a team inclusive of its original principal investigator (Pelletier et al., 2013). Further, the instrument, based in SDT theory and OIT subscales, has been validated not only for application to sport motivation, but also to education (Deci & Ryan, 2012). SMS-II measures locus of self-regulation along the OIT continuum – amotivated, external, introjected, identified, integrated, and intrinsic – that have been well-established in the literature (see, e.g., Amorose & Anderson-Butcher, 2007, 2015; Black & Deci, 2000; Chen & Jang, 2010; Mallett et al.; and Pelletier et al., 2013).

Part III of the questionnaire is adapted from the Perceived Autonomy Support (PAS) Learning Climate Questionnaire (*The Learning Climate Questionnaire*, n.d.). This section will test the student’s perceived autonomy support specifically from their UX mentor, as mentors have consistent interaction with UX students across courses, posing a more sustained intervention than if it were

confined to a single course instructor. This instrument has been validated in the literature (Chen & Jang, 2010; Demir, Burton, & Dunbar, 2019) and creates a numeric barometer of PAS. A higher average score represents higher PAS, in turn leading to increased engagement and positive outcomes (Black & Deci, 2000; Ryan & Deci, 1989, 2000), including in online learning environments (Chen & Jang, 2010; Nardi, 2020).

Student-mentor relationships higher in PAS will affirm the UX mentor as a significant internal Education Champion (in thriving theory vernacular) and as “insider” and “knowledgeable insider” in the OS vernacular. Further, a high PAS score between student and UX mentor is indicative of a potential intervention leverage point to increase actualized student self-efficacy for struggling or at-risk-to-struggle students.

The survey instrument inclusive of scoring instructions and citations appears in [Appendix B](#). Though provided to UX and originally intended for deployment in late spring of 2021, internal scheduling at the University necessitated an unforeseen delay to late summer of 2021 or beyond.

Final Transcript Analysis

Using the evolved model, interview transcripts for the four individuals who “flipped” their pacing by May were reviewed a final time. Each of the four acknowledges various points of struggling in their first term during their interviews. Using Ryan and Deci’s OIT (2000) model as the examination lens, there are clear differentiations by their locus of motivation, with the three who moved from off-pace to on-pace in the eight weeks March 15-May 19 exhibiting progressive left to right loci within the model.

The first individual (Interviewee 12) offered thoughts that seemingly adopt a labor force perspective (similar to Bean [1980] and Bean & Metzner [1985] in their models), situating her locus as “external regulation” (Ryan & Deci, 2000, p. 72) contingent on external rewards for her degree pursuit. She states: “*I really would like to move into a little bit more managerial position at my work...but I feel the pressure that I need a piece of paper to do that*” (Interviewee 12, @10:58). This interviewee also identifies as “*first and foremost, [as] a mom and a wife. And then I’m an employee*” (Interviewee 12, @13:26), enunciating her labor-force perspective that completely eclipses her student identity. Finally, she exhibits a goal-oriented, highly-regimented approach to her UX coursework:

So, if my work schedule allows, I try to do an hour or two every day. If it doesn’t, then I will do like a full day Saturday and maybe part of Sunday to get my 10 hours in (@5:30)...I just feel like if I don’t spend my time doing the, you know, meeting my time commitments to spend on school, that, you know, I’m not going to meet my goals. And so, it is part of my daily life to make sure I get my hours in. (@17:57)

Though her words suggest she is lacking in social or learning community relatedness in relation to the school per OS theory, UX is clearly a steppingstone to her professional goal attainment, which fosters relatedness towards her goal to obtain the “piece of paper” to move up in her organization. Per active learning phenomena identified by Braxton and colleagues (2000), this affords an academic integration opportunity. Though the OIT regulation for this student appears externally motivated for the external rewards (job promotion) or punishment (withholding of the promotion without a degree), her goal commitment in the context of her workplace seemingly produces a surrogate intrinsic motivation. It may be that when work goals are so tightly coupled to degree persistence and attainment, students similar to Interviewee 12 may occasionally fluctuate off-pace, but

have the capacity to correctively self-steer to stay the course.

Interviewee 14 also moved from off-pace to on in the March to May window. Not unlike Interviewee 12, this student also exhibits a clear goal commitment, positioning her degree pursuit as a personal growth goal to serve a higher personal purpose: *“I know I can get this degree for my future family”* (Interviewee 14 @33:49).

This student has attended three higher education institutions prior to enrolling at UX, which was suggested by the interview data and March 15 pacing information as a potential risk factor. Examining that risk flag through OIT, this student’s regulation is somewhat internal (defined in the literature as one of “personal importance” and “conscious valuing” [Ryan & Deci, 2000, p. 72]), as she clearly identifies her future self through her degree attainment. She recognizes both her earlier lack of responsibility and accountability as well as a personal rite of passage: *“I’m more of an adult than I was when I was out of high school. And I have more things that I have to worry about, you know, living outside of my mom’s, more responsibilities”* (Interviewee 14 @13:52). Engaged and currently living with her fiancé underscores this deeper commitment to a future family state and focused “adulthood.”

Unlike Interviewee 12, what differentiates this student’s goal commitment is her strong within-institution focus. Where Interviewee 12 does not identify as a UX student when asked specifically about a student identity, Interviewee 14 responds, *“I love saying that I’m a [UX] student. And I love saying that I’m actually at a university because I never thought I’d get here”* (@17:29). She also exhibits dependence on her knowledgeable insider, her UX mentor: *“I feel like his support and his push for me to, like, do better. And to set a goal for myself, has been very, very helpful. Especially since it’s accountability as well”* (@25:44). Able to voice this appreciation, the student feels genuinely cared for by UX. This perceived care leads to

greater institution commitment, fostering persistence, and is ultimately conducive to goal attainment (Braxton & Francis, 2018), which is the ultimate positive outcome for students at UX.

Interviewee 5, the third student to move from off- to on-pacing by May, initially considered going back to school for upwardly mobile opportunities in her workplace: *“You know, you reach that point where you’ve just kind of got as far as you can go without a degree. And I wanted to be able to expand that, get some more money...”* (@2:49). Then she concluded her sentence with these words: *“...and just increase my knowledge”* (@2:53). This phrasing suggests a locus of regulation moving still further to the right on the OIT continuum, towards greater internalization. Even as she is internalizing the fact that it is her responsibility, she is simultaneously recognizing she enjoys and takes pride in that responsibility to herself:

I wasn’t expecting myself to dedicate as much as I’m dedicating...I’ve actually been kind of proud. I try to make a habit every day of reading at least an hour worth of material. And at least spending an hour focusing on something school relates. I get lucky on weekends; I’m able to dedicate a little bit more time. Some nights, I’m able to do more. But that was the most shocking thing to me is just the kind of self-realization that you are in this. And while you have plenty of support, you have to be the one to do it. And you would think that that’s not something that would be a shock, but it kind of was like, “Okay, I have to kind of get this going on my own.” (Interviewee 5 @14:20)

Another discovery for this student was the degree to which she became immersed in the UX community, a sense that is redoubled for the fact that her husband is simultaneously enrolled at UX; a good friend was a program mentor at the University; and she is literally surrounded in her company by UX graduates (three directors, one assistant director, and an IT colleague). The alumni status of her work colleagues renders each a knowledgeable

insider about the online coursework and the institutional culture. Coupled with her reliance on her mentor (*“what I do really appreciate with them is you have constant support”* [@10:08]), there is not only strong institutional commitment exhibited in this student’s interview (*“I am very proud to say I’m a UX student. I wouldn’t say it’s like my main definer. But it’s definitely a big part of me now”* @23:48), but she also recognizes active learning and self-identification: *“I actually feel like I’m getting something out of UX. I feel like I’m a part of it”* (@44:12). Ultimately, she made this unprompted statement, seemingly indicative of strong intrinsic motivation: *“I feel confident that I’m going to be able to succeed. And it’s also given me a little bit of a sense of purpose and structure in my life”* (@49:45). Where this student was off-pace in March, it appears she not only found her footing in her new routine, but likewise a prideful affiliation and communal involvement through UX to those in her immediate midst. In other words, she ultimately well-adjusted and become self-determined.

Revisiting the interview for the single student who dropped off-pace in the eight-week period between pacing data, it would appear that this student is inclined to rely more heavily on external validation while trying to “demonstrate ability to others” (Ryan & Deci, 1989, p. 267). Though this interviewee speaks of his own determination, he simultaneously makes multiple references to needing “nudges” (his word, used repeatedly at @7:10, 13:11, and 15:28) in order to stay on-task and thus on-pace. Considering external motivation characteristics associated with an ego-involved regulation focused on demonstrating worth and ability to others (Ryan & Deci, 1989, 2000), he shared how he began the program strong, commenting how one should make it a point to:

...tell everybody around you that you’re going to school. It’s super important. Tell your peers, tell your family. And if you are working, you’re a working professional, make sure your boss knows, like, “Hey, I’m going to school.” (Interviewee 2 @39:06)

In this manner, he indicated his enthusiasm not only for the program, but for the student identity he fostered with those around him. Earlier in his interview he mentioned sharing his plan to go back to school with a friend and reported the friend was *“excited to hear that I was going back so he’s like now, ‘I always thought you were, like, a very smart guy’”* (@16:20). Yet during the interview, it became obvious that some of the active-learning relevancy of the subject matter had begun to wear off, consequentially waning his enthusiasm. He spoke animatedly in his interview about his wife and co-workers commenting on hearing him talk about school at home and work, and then somewhat dejectedly about challenges: *“Well, you learn at work, and you challenge yourself at work, but you know...[you] have to take tests, right?”* (@12:02). He followed that by sharing another friend’s notice that, *“Hey, you haven’t been talking about school, like, what’s going on?”* (@13:11).

This student’s introjected regulation locus (Ryan & Deci, 2000, p. 72) associated with ego-involvement exhibited as excitement when he was able to tell everyone around him that he was back in school and also by the enjoyment he expressed during the interview regarding both the flattery of his intellect by peers as well as the way he could tout his knowledge in talking about what he was learning.

Yet asked how his enrollment at UX impacted his relationships with those around him, he responded:

You know, I think right now, that question may not be as...I think that the answer...may change later if we’re not in the middle of a pandemic, right? You’re kind of restricted on what you can and can’t do. So that was kind of part of the other motivation to get back in school...I think that just having, you know, having to stay home and, you know, we’re all just watching movies...this is the time, it’s time to do it. (Interviewee 2 @14:06)

Though introjected regulation is a somewhat externally-placed motivation, the pandemic-as-motivation could be characterized as the antithesis of motivation, represented in OIT as nonself-determination (Ryan & Deci, 2000, p. 72). The diminishing influence of the pandemic as stay-at-home orders were lifted, coupled with the internal punishment (shame or embarrassment) as others noticed his decreased academic integration may have contributed to this student's off-pace status by May 19.

These noticeable changes in eight weeks suggest several implications for further (future) exploration:

- Ongoing analysis of student pacing is likely to provide new or extended patterns for analysis;
- Examining the revised pacing status of these four students against their interview transcripts revealed that all four students referenced struggling with a particular class during their first term. Such struggling can decrease motivation and likelihood to productively engage with self-paced online coursework. Even on-pace students addressed their encounters with difficult classes as a "slump" (Interviewee 1 @48:51); "demoralizing" (Interviewee 4 @10:07); and "like a foreign language" (Interviewee 7 @16:46).

The decelerated student mentioned a statistics course: "*I was feeling very successful. But at this point, I'm kind of managing it. Now we're getting into some of the, you know, statistics, that can be a little challenging*" (Interviewee 2 @36:13). All three of the (remaining) off-pace students specifically mentioned a math course. This may suggest mentors pay close attention to pacing associated with specific courses, offering additional support when deceleration occurs.

- "Attempts to foster certain behaviors in others" (Ryan & Deci, 2000, p. 71), such as a mentor encouraging a student

through a difficult class, may result in a range of motivational response by the subject. Tracking the student's locus of self-regulation will be helpful not only in measuring their level of engagement with the material, but also in knowing what type of supportive behavior to exhibit in order to successfully motivate the student to persist. For those individuals in the extrinsically motivated or amotivated ranges, the literature suggests that autonomy-supportive behaviors by encouraging others (i.e., mentors) will "catalyze in their students greater intrinsic motivation, curiosity, and desire for challenge" (Ryan & Deci, 2000, p. 71). The authors go on that the more autonomy the student perceives, the greater the likelihood of "more engagement...better performance...lower dropout...[and] higher quality learning" (2000, p. 73).

These elements have significant implications for UX designing future interventions to motivate its students towards on-time pacing and, ultimately, graduation. To assist future exploration, draft personas were created for each of the students whose pacing changed from March to May (see [Appendix E](#)).

The potential accuracy of each persona may be explored in follow up with this group of interviewees or, more immediately, tested against three additional data points currently or soon-to-be available to UX. The first data point is each student's continued pacing into their second term, to determine if the persona accurately characterized the student's ongoing pacing behavior. The second is an earlier-assessed student composite measurement that includes an individual regulation score (mentioned by UX administrators but not shared during this project). That score will situate students on the self-determination continuum in OIT. Placement on that continuum suggests the degree of motivational leverage an institutional intervention action may have on an individual student. Finally, once the survey created for this project is deployed, not only will Part II of

the survey provide a post-first-term self-regulation score for comparison to the existing UX self-regulation score, but Part III of the survey measures student perception of autonomy support received from their UX mentor. This metric may determine the potential strength of a possible intervention congruous with what their self-determination score suggests may be necessary.

Cross-comparing data and resulting patterns will also contribute more definitive answers to the three research questions posed in this project: *What conditions differentiate successful and unsuccessful students? Among online UX students, what is the level*

(or lack) of localized supportive others in their experience to date? and What role can the institution play to increase positive student outcomes?

Exploring multiple theories as gathered into the evolved model enables a maintained focus on both the student actor and the institution-as-actor, actuated through knowledgeable insiders, inclusive of UX mentors and instructors, professional positions together called out as internal Education Champions in thirteen of the fourteen interviews. Finally, the secondary literature findings and evolved model address all of the field note queries as indicated in Table 1.

Table 1

Field Notes Addressed by the Literature

Field Note(s)	Literature address
For all its supportive services, the constant encouragement intended to motivate students may be contributing to a false sense of academic security for at-risk students.	Critically, the literature contradicts this presupposition, demonstrating that continued encouragement, <i>provided it encourages a sense of autonomy in the student</i> [emphasis added], is necessary and effective to increase desired results (Amorose & Anderson-Butcher, 2007, 2015; Chen & Jang, 2010; Deci & Black, 2000; Demir, Burton, & Dunbar, 2019; Ryan & Deci, 2000).
Struggling students may require proactive outreach by live academic supports.	Here the literature was helpful in making a more granular discernment: the differential is not in live versus recorded academic support services, but those which provide feedback from those that do not (Amorose & Anderson-Butcher, 2007, 2015; Deci & Ryan, 1989; Kolovelonis, Goudas, Hassandra, & Dermitzaki, 2012).

Field Note(s)

Literature address

As three of the [March 15] struggling students have attended three other institutions prior to UX, it suggests that those students in particular likely pose a high transfer or drop risk when confronted with the reality that they are not trending towards a positive outcome as they believe themselves to be per their interview responses.

Per May 19 updated pacing data, three students were able to accelerate their pacing to finish the current term on-pace. Among the four off-pace students (as of May), two, or 50%, attended three institutions prior to UX, suggesting this may persist as an indicator for future monitoring. The level of social integration and institutional commitment expressed by each off-pace student suggests they may not pose as high a risk of attrition as originally thought. It will be useful to explore the student/mentor disposition measurement from the proposed survey for both a larger sample and perhaps to re-gauge level of institutional commitment through an internal Education Champion to establish a true baseline for impact on persistence decision at UX (see Fetzner, 2013; Hong, Lee, & Ye, 2021; and Raedeke & Smith, 2001, who explored online student attrition, procrastination in online self-regulated learning, and athlete burnout, respectively).

Off-pace students appear more tethered to supportive individuals *outside* of the University whereas their on-pace counterparts are more reliant on internal champions through the University.

This data may hint at the potential persistent transiency of struggling students, if Educational Champions remain situated external to the institution.

With the May pacing update, this factor becomes even more pronounced. Among the four off-pace students in May, they reference 20 external Education Champions and only four internal Education Champions. The off-pace group now includes the one interviewee who did not name his mentor (the only one of all the interviews) as an Education Champion. This data suggests further exploration of this phenomenon as a likely institutional leverage point to exert “institutional power relations that structure and govern [student] experiences” (Babbie, 2017, p. 312). This notion is further upheld by the Bauer et al. (2007) adjustment model, that relatedness will contribute to organizational commitment and intentions to remain (p. 708).

Discussion

Overall, the small sample qualitative interviews offered a data source that was replete with rich information and layered patterning revealed by theory elaboration. UX student data, published documents, and University artifacts (i.e., student portal screenshots and information on the disaggregated faculty model) added to the interviews, enabling a triangulated and multiple-means analysis involving qualitative as well as quantitative dissection of the interviews and comparison of March to May pacing data. The evidence-based literature afforded multiple lenses to view potential answers to the three research questions:

RQ1: What differentiates successful from unsuccessful students at UX?

RQ2: What role do supportive others (Education Champions) play in the lives of these online learners?

RQ3: What role can UX play to increase successful outcomes for students, defined as on-time pacing and graduation rates?

While the unconfirmed findings are not to be construed as definitive answers to these questions, they are intentionally-architected pathways toward continued exploration and analysis to confirm or nullify the observations to understand differentiating student behaviors and characteristics; student adjustment within-institution, inclusive of reliance upon knowledgeable insiders as Education Champions; student locus of motivation; and student-mentor disposition to examine the strength of the student-mentor relationship as an intervention point. These observations all stem directly from student voice and experience, providing first person student testimonials that have largely been absent in higher education research.

UX already provides flexibility and affordability. The findings and proposed recommendations from this study will enhance student adjustment within-institution, meeting students philosophically and behaviorally where they *actually* are, not where their matriculation or even their own self-perception presumes or purports them to be.

Recommendations

First, it is recommended that UX deploy the quantitative survey designed for this project to confirm the small-sample interview findings. Survey-verified findings should be prioritized for further exploration; non-durable findings may suggest a return to the original interviewee pool for further probing.

Second, it is recommended that the advanced analytics team compare the findings within this project, inclusive of presented student personas, against the wealth of student information the University already maintains on its students from earlier surveys and assessments. During a May 28, 2021 Zoom meeting, a vice president proposed that additional existing University data might discern specific personas based on student

self-regulation, i.e., “insecure overachievers” or “high-confidence, low knowledge” learners (Vice President A, personal communication, 2021). During the same meeting, another vice president, intricately involved in faculty operations, shared instructors already speak of students in general categories:

1. Say v. Do, who say they’ll do something, but don’t;
2. Slow & Steady, who read every word, make every appointment, and seek all supports;
3. Clutch Procrastinators, who put off the work and then pull it out every time;

4. Hail Mary Procrastinators, who put it off and pull it out about 20% of the time;
5. On-it Students, whose pacing is fine or even slightly accelerated; and
6. Super-Accelerators. (Vice President B, personal communication, 2021)

Given the content expertise, experience, and advanced degrees of the University's assessment faculty, it is likewise recommended that they be involved in this overview assessment and logical matching of available data and applicability to the findings from this research.

Third – acknowledging again that qualitative findings are as-of-yet unconfirmed but appear well-supported by multiple evidence-based theories as presented in the final evolved model, potential interventions may include:

- More robust information gathering and analysis pre-matriculation, inclusive of habits and self-regulation. This data may provide indicators for additional institutional requirements post-matriculation, i.e., tutoring sessions or required online study halls or other academic supports with feedback mechanisms, and/or purposeful assignment of a particular enrollment counselor and/or program mentor to enhance institutional reliance and commitment, thereby impacting goal commitment and persistence towards a UX degree;
- Casting mentors definitively in the role of internal Education Champions and knowledgeable insiders to assist competency, autonomy, and institutional commitment. The UX alumni network

may also pose a potentially influential group of knowledgeable insiders. There were multiple mentions in the interviews about identifying (and in some cases, even enrolling with) friends or co-workers attending or graduating from UX. All of these connected insiders may assist in more sharply focusing students on goal attainment simultaneous with student identity, pride, and institutional commitment; and

- Examining student PAS scores from the qualitative survey results to further explore potential autonomy-supportive behaviors that could be enacted by UX mentors, instructors, and/or alumni to foster motivation towards the intrinsic side of the OIT continuum.

Again, these potential interventions are nothing more than suppositions based on a small sample size until or unless verified by a larger student sample, additional UX data, and/or evidence-based theory not uncovered or addressed by this project.

As with all interventions, pre- and post-testing is strongly encouraged, inclusive of student open-ended feedback to represent and maintain the actual lived experience as a part of the process. Hand-in-hand with evaluative measures to discern traction (or lack thereof) through the intervention it is also strongly recommended to build a complete evaluation plan around these interventions, starting with an input evaluation and graduating, as the interventions may, to process and outcome evaluations. Given the subject matter expertise of the University's evaluator faculty members, it would be important to involve those professionals from the outset in this process.

Limitations

A lasting limitation, endemic to all studies of student behaviors in higher education, is its lack of generalizability, as student behaviors and decisions to persist or depart an institution are deeply individualized and contextualized not only across institution, but individual student life circumstances as well. Nichols (2010) wrote, "...optimal student and institutional characteristics are no guarantee of retention largely because of the external factors students must often deal with during their studies" (p. 97). This serves as a reminder that there is no perfect solution; rather, the final and perhaps subjective decision remains in the student's locus of control.

Finally, the timing of this study posed two temporal limitations. The first was that the University chose to focus on interview pools of students within their first term at UX. This is a limitation inasmuch as students are still gaining their bearings and adjusting. This can also be seen as a strategic approach, however, given that this particular group of fourteen students, followed across their entire UX journey may present longitudinal patterns for consideration of future intervention design. Also relative to timing, the impact of the COVID pandemic on student behaviors cannot be overlooked for the timeline of this study (see, for example, Hong, Lee, & Ye, 2021).

Particularly as a number of interviewees work within healthcare settings and pharmaceutical production, the time, stress, and mental state of mind undoubtedly impacted commitment to coursework in ways that cannot yet be quantified or retroactively mitigated.

From a personal standpoint, limitations include my own reflexivity and not-infallible bracketing while reviewing and analyzing interviews. A final personal limitation is the time and intellectual constraint of a full-time working doctoral candidate. Even though meticulous timesheets demonstrate more than 3,150 hours spent on this program since August 2018, this research does not represent a lifetime or even a full-time commitment to this exploration. As such, despite efforts to be exhaustive in the literature reviews it is likely that much more theory, linkage, and evidence-based data exists that was neither discovered nor considered. Creswell (2014) reminds us of our individual fallibility in social research: "The researcher may not use appropriate steps to develop a good psychometric instrument" (p. 227). For these limitations, the improvement science adage intoned in our first term in this program at Vanderbilt continues to ring true: namely, that this work is "possibly wrong, and definitely incomplete" (Doctor & Parkerson, 2016).

Conclusion

Despite the limitations revealed and the delayed quantitative survey, this project was intended to – and did – generate four significant outcomes. First, it created initial responses to the University's queries, *what conditions differentiate successful and unsuccessful students; what role do supportive others play in the online learner experience; and what role can UX play to increase successful student outcomes?* The findings lay a pathway to future exploration and testing, inclusive of a survey instrument

whose results will verify or nullify the small-sample findings; provide additional student self-regulation measurements for UX to compare to existing data for verification or evidence of change; and effectively gauge the student-mentor disposition as the basis for intervention design.

Second, the interviews provide UX administrators with a more robust understanding of the online learner lived experience to better-inform current as well as

future institutional support of its online students. The project also contributes to a more granular discernment between type of academic supports (i.e., those with feedback and those without) as well as between supportive others inside the University and those exogenous to it, and the impact of both on the online learner adjusting to his/her/their new or revised role in pursuing their undergraduate degree at UX.

Third, this project contributes to the existing gap in higher education student retention and attrition literature by intentional exploration of the role of supportive others in the online learner's local and virtual environments. Importantly, this work utilized a multiple-theory approach which evolved extant student attrition, retention, and persistence models into the Interactionist Expanded Model of the Student Lived Experience. Identifying motivated and related means by which students make their decision to leave or persist serves to spotlight opportunities for institutional intervention through locus of regulation and trusted within-institution relationships. Lastly, the rites of passage, basic psychological needs, newcomer orientation, and organismic integration theory connectedness between the collective theoretical models has not been made before, suggesting a significant opportunity for future research using these combined theories as has been done in this study.

Finally, the mixed methods highlight the active role the institution – not just the individual actors within and moving through it – plays in the lives of those it employs and impacts. Tinto (2017) observed:

For years, our prevailing view of student retention has been shaped by theories that view student retention through the

lens of institutional action and ask what institutions can do to retain their students. Students, however, do not seek to be retained. They seek to persist. (p. 254)

Both Tinto's point and student perspective are accurate. But it does not mean that institutions should cease their efforts to increase student persistence. At UX, in fact, their student-centric educational model is a direct support to the persistence perspective Tinto raises. Further, the University does not simply view student outcomes as a grind towards publication of impressive statistics. During a research team meeting on May 28, 2021, a vice president, "I don't just want to see our students graduate; I want to see them thrive" (Vice President A, personal communication, 2021).

Here again the importance of linking other theories to evolve student attrition, retention, and persistence models is underscored. Given that students – even online students, working remotely and completely separate from any common physical location – are situated within-institution, the institution itself plays an active role in that experience, and should do what it can to elevate that experience and enhance positive outcomes for its students. Van Maanen and Schein (1977) remind us that "...organizational results are not simply the consequences of the work accomplished by people brought into the organization, rather, they are the consequences of the work these people accomplish after the organization itself has completed its work on them" (p. 71). These are powerful words pointing to the powerful and dynamic role institutions – and in this case, UX specifically – play...and should play to their utmost in order that the individual actors passing through do not simply graduate, but thrive. The students themselves are literally banking on it.

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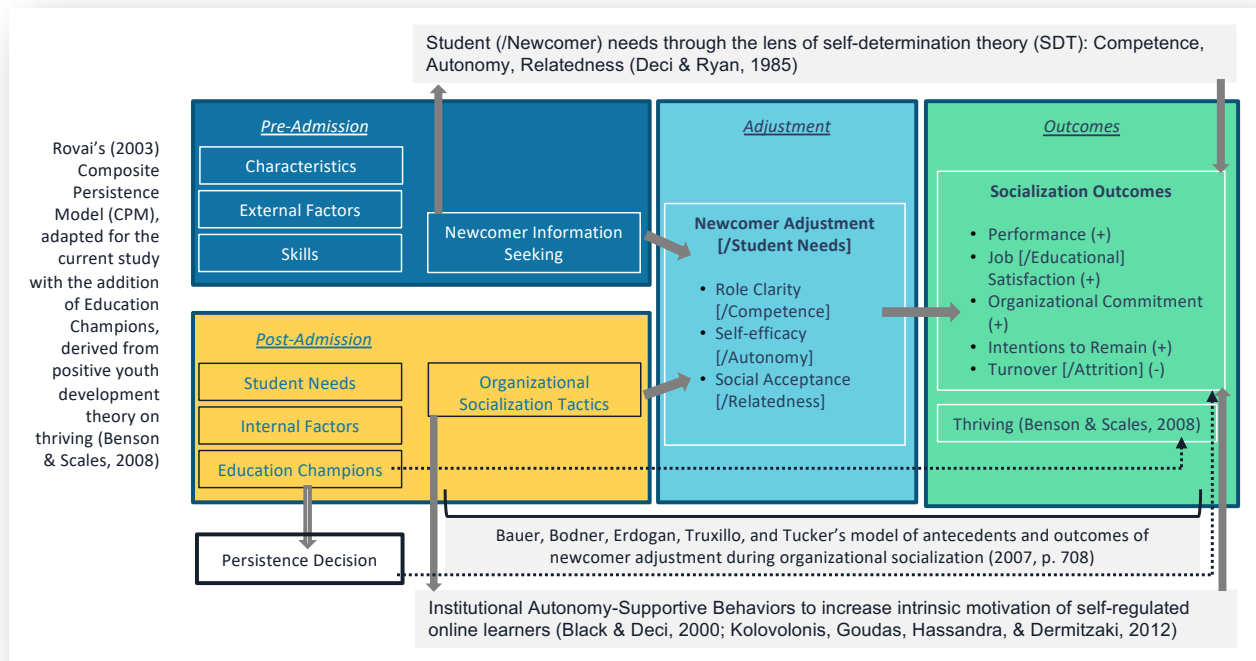
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Appendix A

The Interactionalist Expanded Model of the Student Lived Experience

The complete adapted and evolved conceptual model for quantitative instrument design and survey analysis, inclusive of combined model citations. This model elaborates on student attrition, retention, and persistence models using organizational socialization (OS) theory, self-determination theory (SDT), organismic integration theory (OIT) and autonomy-supportive behaviors to create theoretical linkages along a continuum of the lived student experience contextualized for higher education. As with foundational models within the adapted CPM, the student and the institution both play active roles in the continuum process from pre-entrance to outcomes.



Appendix B

Proposed Quantitative Survey Instrument & Scoring Instructions

The proposed quantitative survey instrument. Parts II and III adapted from The Learning Climate Questionnaire (LCQ) and revised Sport Motivation Scale (SMS-II), respectively.

Sources: *The Learning Climate Questionnaire*, n.d.; Pelletier, Tuson, Fortier, Vallerand, Brière, & Blais, 1995; and Pelletier, Rocchi, Vallerand, Deci, & Ryan, 2013.

Part I		
Q#	Question	Response
1	How many higher education institutions have you attended prior to (and not inclusive of UX) in pursuing your degree	0 1 2 3 4+
2	How many hours/week on average do you spend on UX work currently?	up to 15 15-20 More than 20
3	How often in a month do you utilize academic support services with feedback (i.e., the Writing Center, the Math Center, or outreach to a course instructor)?	0 1 2 3 4 5 6 7 0=not at all; 7 = 7x or more
4	How often in a month do you utilize academic support services without feedback (i.e., Khan Academy, recorded cohorts)?	0 1 2 3 4 5 6 7 0=not at all; 7 = 7x or more
5	How would you categorize yourself as a student: successful, managing, struggling?	Successful, Managing, Struggling
6	Looking at the graduation date listed in your student portal and comparing it to the number of CUs you will complete by the end of the current term, are you currently tracking on-time to your projected graduation date?	Yes/No
7	Were you academically prepared to begin your coursework at UX?	Yes/No
8	I believe my UX mentor will help me successfully attain my goal of graduating from UX.	Yes/No
9	How important is your mentor and your regular check-in for your personal accountability to complete your coursework?	0 1 2 3 4 5 6 7 0=not at all important; 7 = extremely important
10	Could you do this program without the support of your UX Mentor?	Yes/No
11	Could you do this program without the support of your friends and/or family and/or coworkers outside of UX?	Yes/No
12	Do you have a sense of belonging and community through UX?	Yes/No
13	Are you currently employed?	F/T P/T n/a
14	Are you proud to be a UX student?	Yes/No
15	Did UX support your transition to becoming an online student when you began your degree program?	Yes/No
16	Do you have the sense that UX cares about you as an individual?	Yes/No
17	How many competency units will you have completed by the end of your current term?	2 4 6 8 10 12 14 16 18 20 22 24 >24
18	When did you start your program (month/year)?	Oct 2020 Nov 2020 Dec 2020 Jan 2021 Feb 2021
19	What is your currently-projected graduation date (month/year)?	[free form fill or drop down based on UX info]

Part II		
In this section, please indicate to what extent each of the following items corresponds to one of your reasons for taking courses at UX.		
Why do you study to complete your online courses?		
20	Because it gives me pleasure to learn more about course content.	1 2 3 4 5 6 7
21	Because being a student reflects the essence of who I am.	1 2 3 4 5 6 7
22	Because it is one of the best ways I have chosen to develop other aspects of myself.	1 2 3 4 5 6 7
23	Because I would feel bad about myself if I did not take the time to do it.	1 2 3 4 5 6 7
24	Because people I care about would be upset with me if I did not.	1 2 3 4 5 6 7
25	I used to have good reasons for studying, but now I am asking myself if I should continue.	1 2 3 4 5 6 7
26	Because it is very interesting to learn how I can improve my knowledge.	1 2 3 4 5 6 7
27	Because through this program, I am living in line with my deepest principles.	1 2 3 4 5 6 7
28	Because I have chosen this program as a way to develop myself.	1 2 3 4 5 6 7
29	Because I feel better about myself when I complete my coursework	1 2 3 4 5 6 7
30	Because people around me reward me when I do.	1 2 3 4 5 6 7
31	I don't know anymore; I have the impression that I am incapable of succeeding in this program.	1 2 3 4 5 6 7
32	Because I find it enjoyable to discover new learning strategies.	1 2 3 4 5 6 7
33	Because participating in this program is an integral part of my life.	1 2 3 4 5 6 7
34	Because I have found it is a good way to develop aspects of myself that I value.	1 2 3 4 5 6 7
35	Because I would not feel worthwhile if I did not do my coursework.	1 2 3 4 5 6 7
36	Because I think others would disapprove of me if I did not.	1 2 3 4 5 6 7
37	It is not clear to me anymore; I don't really think my place is in this program.	1 2 3 4 5 6 7

Part III		
This section contains items that are related to your experience with your current Program Mentor. We would like to know more about how you have felt about your encounters with your mentor. Your responses are confidential. Please be honest and candid.		
38	I feel that my mentor provides me choices and options.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
39	I feel understood by my mentor.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
40	I am able to be open with my mentor when we speak.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
41	My mentor conveyed confidence in my ability to do well in my coursework.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
42	I feel that my mentor accepts me.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
43	My mentor made sure I really understood the goals of my current courses and what I need to do.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
44	My mentor encouraged me to ask questions.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
45	I feel a lot of trust in my mentor.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
46	My mentor answers my questions fully and carefully.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
47	My mentor listens to how I would like to do things.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
48	My mentor handles people's emotions very well.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
49	I feel that my mentor cares about me as a person.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
50	I don't feel very good about the way my mentor talks to me.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
51	My mentor tries to understand how I see things before suggesting a new way to do things.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
52	I feel able to share my feelings with my mentor.	1 2 3 4 5 6 7 1=strongly disagree 4=neutral 7=strongly agree
Thank you for your time! Just these last three questions...		
53	Did you discover UX on your own or did someone you know recommend the school?	on my own someone recommended it to me
54	How likely are you to recommend UX to others?	0 1 2 3 4 5 6 7 0=not at all 7=extremely likely
55	Please indicate which program you are enrolled in:	Business Program Teachers College

Scoring instructions:

Part I (Q1-19): These are simple comparison questions to verify (or nullify) the findings from the small sample interview set with a larger sampling.

Part II (Q20-37): This section measures the locus of self-regulation by the respondent. Adapted from the revised Sport Motivation Scale (SMS-II), which has been validated in the literature, score this section as follows:

- Average the scores of questions 20, 26, and 32 to produce an intrinsic regulation score
- Average the scores of questions 21, 27, and 33 to produce an integrated regulation score
- Average the scores of questions 22, 28, and 34 to produce an identified regulation score
- Average the scores of questions 23, 29, and 35 to produce an introjected regulation score
- Average the scores of questions 24, 30, and 36 to produce an external regulation score
- Average the scores of questions 25, 31, and 37 to produce an amotivated regulation score

Sources: Pelletier, Tuson, Fortier, Vallerand, Brière, & Blais, 1995 and Pelletier, Rocchi, Vallerand, Deci, & Ryan, 2013.

Part III (Q38-52): This section is also an adapted instrument from *The Learning Climate Questionnaire* (LCQ) testing perceived autonomy support. To score this section, take the score of question 50 and subtract the student response from the number 8. Then, using that revised score, average all scores for Q38-52. "Higher average scores represent a higher level of perceived autonomy support." Source: <https://selfdeterminationtheory.org/pas-learning-climate/>

Appendix C

Interview Survey Solicitation Email

Sample recruitment email sent to prospective interviewees in each prospective interview pool provided by UX. Reference to UX and student email addresses have been blacked out to protect the confidentiality requested by the University.

IRB application #210155, approved January 29, 2021

From: Marty, Diane J diane.j.marty@Vanderbilt.Edu
Subject: [REDACTED] Vanderbilt Study (ref. BU1Ab): \$50 Visa gift card incentive
Date: March 22, 2021 at 7:42 PM
To: Marty, Diane J diane.j.marty@vanderbilt.edu
Bcc: [REDACTED]

DM

Good evening,

As a doctoral student in the Leadership, Learning and Organizations program at Vanderbilt University, I am inviting you to participate in a capstone project about online student persistence in their degree program, exploring improvements that [REDACTED] might make to its system of student supports to increase on-time pacing and graduation rates. You have been identified as a potential interviewee for this study given academic, geographic, and demographic factors prioritized by the school.

Your participation in this study is extremely important to me and to [REDACTED] and will assist in building the capacity of the school to better support its online student body. Should you be willing to participate, please email me at diane.j.marty@vanderbilt.edu and I will contact you to set up a Zoom interview (though note that there are limited spaces available) at a time of your convenience.

I anticipate the interview will take approximately 30-40 minutes, and that it will be scheduled yet in March or early April. Participation is voluntary and your response will be kept confidential. You will have the option to not respond to any question that you choose. Participation or nonparticipation will not impact your relationship with [REDACTED]. Agreement to participate will be interpreted as your informed consent to participate and that you are at least 18 years of age. Further, upon completing the first interview (defined as fully responding to 80% or more of the questions asked in the interview), you will be provided (electronically) with a **\$50 gift card in appreciation for your participation**.

If you have any questions about the project, please contact me (the Principal Investigator) at the email address above or my faculty advisor, Dr. Tracey Armstrong at tracey.m.armstrong@vanderbilt.edu. If you have any questions regarding your rights as a participant, contact the Vanderbilt Institutional Review Board (IRB) at (615) 322-2918. Please print or save a copy of this page for your records.

Please let me hear from you at your soonest convenience if you are willing to participate in the interview portion of this study.

Thank you,

-Diane

Diane Marty, MALS
Doctoral Candidate, Human & Organizational Development
Peabody College of Education
Vanderbilt University



Appendix D

Verbatim Responses to Interview Questions Pertaining to Institutional Support

Source: Interview Transcripts (dating March 26, 2021 through April 10, 2021): *two questions + verbatim responses*

Interview Question: *Do you feel that UX supported your transition to becoming an online student when you began your degree program?*

Verbatim interviewee responses:

Media Title	Excerpt Copy
Interviewee 1	<p>I guess, um, I'm used to taking online coursework from the military, like, all of our training is online, and we have to do it every year. So I think I was expecting it to be like that. And it's not because we always referred to that as "death by PowerPoint." And most of the time, we just click through, you know, to get it over with to get a certificate at the end. UX is not like that. It's very interactive. Does that answer your question?</p>
Interviewee 2	<p>Yeah, I think they're...I think there's a lot of support. Like a lot of support networks in there. I think, you know, having that weekly check in from your mentor is really is something that I really enjoyed to help kind of keep you on track. Luckily, she hasn't had to do, to work too hard with me. I'm doing just fine. I'm on track to be finished my term no problem. Yeah, I think, you know, I think this report is good. I think it's also just I had to do a better job utilizing all the resources available to me through a web portal and things like that.</p>
Interviewee 3	<p>Yeah, they were very helpful. I still remember the enrollment counselor. She was very nice. Yolanda was very, very nice, so everything was good.</p> <p>Diane Marty Great. So beyond being nice, was there anything specific they helped you find out or address, anything like that?</p> <p>So she's the one I, when I first got introduced to UX, I signed up and she she's the one who started actually learning, Yolanda. She told me "it's okay, you'll have enough credits, I would recommend you go to Academy when you're done with Academy call me." Okay. So I did that. And then she told me "These are the steps that you're going to follow. Expect this." Like that. Like, she was in the loop. She kept me in the loop of everything. And then once I got accepted, she was "congratulations." And she was so nice and whatnot. So yeah, the enrolling was very easy.</p>

Media Title Excerpt Copy

Interviewee 4 Yeah I thought they made it really easy and I have, I like I know some people have or I know the program mentors are pretty good but some people have ones that are just like better than others and I think I have one that's better than like most of the others so she's great.

Interviewee 5 Yes. So my enrollment counselor was amazing. Her name was Abby, and she just, she really helped me kind of get into the realization that this is happening. Like, I'm actually doing this. I'm a real student. Oh, my God, I'm a real student. And once I started the classes, and that first, I think like, your initial orientation that you have to do is almost like a class that you have to go through. And that was where the realization hit me like, Okay, I'm doing this. I'm right now in a portal, taking actual credits for actual degrees. And this is great. This isn't just some bs class that I'm doing on LinkedIn from my own. So everywhere I've gone with UX has been helpful. I actually even had a situation. After my first away, I got really nervous. And I kind of freaked out and had a bit of a breakdown during the first test. Didn't expect to, I've never thought of myself as a nervous person or a bad test taker. And I remember once, I was talking to the doctor, and I was on, my hands were sweating, my heart was racing, I couldn't concentrate, it was hell. So I talked to my mentor. Within a week, I had a counselor on the phone telling me how to deal with stress. And I was like, wow, this is pretty awesome. So I have to say, yes, from day one, every little hiccup that I came across when it came to school, there is someone you can talk to...

Diane Marty
And can you name specific ways that the university has supported you since you became a student?

Interviewee 6 They send reminders almost daily about different stuff going on at the school. The teachers like the course instructors that I've had have reached out even like I've taken an assessment, post assessment exam. They email me even though they're done with me, they email me congratulations, and "if you ever need anything, let me know." So they stay real supportive.

Yeah they did. Like I said, a lot of good just in terms of even when I did my orientation it really one of the things that I really enjoyed was just how much focus they put into what the responsibility of the student is right in terms of what will help us be successful. So one of the things that I did was – actually they had me do – and I have it saved in my computer – was how much time was I going to set for school, right? From this time to this time. And so it actually it was from what time to what time are you at work and to the to the family time to the dinner time, right? And I think when I was doing that I was like “I couldn't make this work.” And then it almost kind of surprised me, too, because I'm like “okay – so if I'm saying that I'm going to dedicate two to three hours for school at that point, what am I doing now?” Like what am I doing now it's almost like “Oh my God I waste like three four hours out of my day and what?”

Interviewee 7 So it actually kind of surprises you but it was one thing that I really did appreciate. And really just like I said, emphasize for me was a big emphasis as to “Okay this is a – it's a huge commitment from the student's part right as far as how much time we put into it.” And because it is online so essentially we are working ultimately independently unless we reach out for help. But the amount of time that we dedicate, the structure that we set for ourselves, is really ultimately what is going to set that goal for success in the long run for us. And I always – I'm a true believer that the resources are there, the help is there, but it's up to us how we use it, right? The teachers even tell my kids “Well yeah – you go to school, the teachers are there but where's your accountability? Where's your part in all of this?” So I think the same thing for me because again you'll be new to online and I've gone through my fourth class now and that I could do better – I think we all can do better. I think there's certain things that I would...every class with every course I've learned differently, right? Like “Oh, I should have done this this time and it would have been made so much easier for me.” But so it's something that I just gradually with every course I'm learning just everything as I'm doing. I'm learning a lot as well.

Diane Marty

And so can you kind of talk about some specific ways that UX institutionally, or Steve specifically, have supported you?

Interviewee 8 Well, whenever I have trouble with some of my classes, he'll just let me vent. Like this week, this week has been really bad. The class I'm on right now. All I need to do is take my objective assessment, and I'm done with this class, and I've had so much stuff going on this week. I was talking with him last night. And I said, “I know, I said I was gonna do it but I really don't think I'm going to get down to it until after this move.” So you know, he was just very supportive, and told me what, what options I had. And we kind of discussed it, so yeah. And he's just, he's very easy to talk to. And he doesn't tell you what you should do. He will give you options and how it would affect everything else. I appreciate the honesty like that.

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Interviewee 9	Um, I suppose so. I have done online courses before. So I guess it wasn't really a new thing for me. You know, I feel like, again, I'm a very tech savvy, so I don't really feel like there was that much of a transition for me. But I also do know that there were some teachers who were like, "Hey, you know, if you want to print this stuff out, here's the thing, you should probably print this out, you can put it down, you can write on it." I know, some of my counselors were like that, too. You know, they're like, "Hey, I recommend printing out, you know, what your goal is for this week," and you know, they would give you templates and stuff like that, so you can fill out. So they did give me options to actually bring stuff from online and bring it into the physical world. But as far as transitioning or anything, I think I was pretty well prepared for all of that.
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Interviewee 10	Yeah, I mean, I think they were really helpful. I would not say that I am the most tech savvy person in the world. I work on computers all the time. I certainly know if they don't work, I can turn them off and turn them back on. But maneuvering the environment, the first few things, whatever they were that I did, were all new. And so there were some stress factors involved with that. I had to call tech support a couple of times, I've had my fair share of issues with the proctoring environment, that would probably be my one feedback for them of opportunity. And that's not them. That's another entity that they contract with. But everybody's super helpful and are they're able to walk through things with me. And so after I got through really kind of my first class felt like it was old hat and I'm very comfortable.
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Interviewee 11	Yeah I think they helped me prepare like "okay, it's going to require this many hours of time devoted to your classes" and that "it's going to take work"...
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Yes, for sure.

Interviewee 12	Diane Marty Did you need any support to make that transition, or was it something, you indicated that you've been working remotely on for a while now...so was that something you were already doing, an old habit?
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Yeah, I mean, they're, they use a few different programs and stuff. But other than that, it was fairly easy for me to do and I didn't need a lot of assistance.

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Interviewee 13	Yes. I have to completely say yes. My mentor contacted me, my first course instructor actually walked me through everything. They made me feel extremely comfortable. And they also understood that I haven't been in school for a while, so "we know you're gonna mess up." So they have been extremely supportive. They've been there whenever I need it, though.
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Interviewee 14	Yes, I feel like all of the resources that they provide, especially with the course instructors, they always, like once you start the course you get an email, kind of like introducing you to that, that course. And a lot of the course instructors tend to send advice and tips on how to start the course, which I find very helpful. Because when you start a class, you know, they have that little orientation, like, "Oh, this is what's gonna happen, blah, blah." But with us online it's an email and just, you know, I like it just short, concise, and what I need to know, straightforward.
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Interview Question: *Thinking about UX as compared to other institution(s) you have attended, is the level of support you have been offered at UX more, less, or about the same as elsewhere?*

Verbatim interviewee responses:

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Interviewee 1	More. I'm more aware of it. I also had that, you know, that weekly reminder from my mentor, like, "Okay, this is what you're struggling with this, like, these are the resources that you can use." You know, when I was having trouble with probability and statistics, she was like, "Okay, well, why don't you reach out to your professor for help?" And to me, like, I, I've never done that I've never gone to a teacher for help. I've always just figured it out on my own. So having somebody there to remind me that, you know, because most schools really, okay, here's your pamphlet, and here's all the things that you have as options to you. But if you're someone like me, [who] just does not like asking for help or feels insecure about asking for help, you're not going to go do it. And that was the problem. That was my problem. But with UX, I had that weekly reminder. And it's a lot easier to get help. Because everything's on my...my student support center. Or if I if I need something, I usually just scroll around. And there it is.
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*Interviewee 3	More - way more! Over there, earlier you brought up do they treat you just as a student or like something more, you know? Over there is just a student, that's it. You know that's you just check in and you check out. UX, it's more like a relationship. I feel like some kind of relationship with them so yeah that's what I feel with Natalie, at least. She's very kind and helpful.
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Um, it depends on how you quantify like, there are more resources at the community college. But I think they're easier to access at UX. Because they're, everything's online, and they call you, okay?

Interviewee 4 Diane Marty

So it's a difference between their proactive outreach to you versus you having to reactively or you proactively having to reach out?

Yeah, which works better for me. So I think it's better.

Interviewee 5

[I]t was nothing like this...it was just your number, like you were just one of many, none of the teachers knew your names. None of the students were the same. Like, I had no sense of community with the people around me. Between classes, you would just kind of walk around and like "okay, I don't know any of these people." And also the just the whole timing of it, you know, feeling under pressure, working a full day and then going into school. I just, I didn't feel like I was really getting a lot out of it. I was just so tired, not really able to pay attention. And also very proud. I didn't want to stop; I could do this. I'm young, I can do this. And I was wrong...You know, I actually feel like I'm getting something out of UX. I feel like I'm a part of it. And I feel like if I have a problem, I'll get help. I couldn't tell you who to talk to. I think the one time I went to an office at [my other school] for financial health, I had to wait like two hours and ended up leaving. So I just, yeah, there's something to be said, for the fact that everyone is virtual. And you can get ahold of anybody that you have to. I also had a really good experience. When I was dealing with the enrollment counselor, Abby, she connected me to the finance department cuz I had some questions. And there was a guy there. I don't remember his name. But he was the nicest guy. He answered every question I had about what student loans would entail, how do you pay them back what the rates are? And I did not stop asking questions like, I would follow up to a follow up to a follow up one more question, one more question. I must have kept this guy on the phone for like an hour. And he was so nice, and helped me with everything and made me feel like I could handle it financially. My main concern at the time was I was enrolled in the elementary education class. You know, when you're a teacher, and you have to do the student teaching, there's a few weeks where you basically can't work and you have to, you know, work for free. And that was my main concern. How do people deal with this? You take it alone, and you know, everything under the book, I asked this guy and he was so nice. I really wish I wrote his name now.

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Interviewee 6	At [other institution 1], UX is way more than [other institution 1]. The school is about the same – like I say it's different atmosphere, because it's a class, and a teaching environment, and it's actually like people there. So sometimes that helps to get a different understanding of something. But if I had a chance to pick out of that, [other institution 2] or where I'm at I'd rather be where I'm at.
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Interviewee 7	100% greater. It almost kind of felt like you just being in high school – go in there and here's the material and you have the instructor in the front of the class and it's had very little support. "If you don't pass a test well figure it out." I mean, you don't pass, you don't pass, which has been very just an eye opener for me because I'm thinking "okay, this is an online school, I probably will never see these people physically, just phones or to zoom meetings or whatnot" and yet I feel so much more connected. So to me that was actually, because my mind was set into "no, I have to find a school where I'll be there face to face and for four hours," however long the classes were. Now I'm like "no, I don't want to go to" – I mean, if I have this option and it works best with my schedule, because obviously it makes a huge difference if I have to do four hours of schoolwork, then it makes a huge difference than to out, leave my daughter home alone, maybe because nobody's there to watch her, then just to be in the room next door to her. So it makes a huge difference. 100 times greater support than being in an actual classroom environment.
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Interviewee 8	I would say more. And it's that's kind of funny because they're online. You know, they're, they're based in [State]. [other institution], I physically went to college and did my classes there. And getting people to respond to you on that campus was like pulling teeth. So yeah – UX shows a lot more support than a traditional campus.
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Interviewee 9	<p>Better? Totally different. I mean, especially because I was still a teenager, you know, at the time. I mean, I was in high school, and I was going to college and everything. I mean, not even my high school counselor was there really to support me or do anything, I had to go in, and get all of my paperwork situated by myself, I had to go in and do everything by myself. I mean, I felt like I was being treated like an adult in that sense, because it was literally like, hands off, like, you need to figure it out. Here you go, this is college, this is what it's like.</p> <p>And even my husband ended up going back to college, because he went to a technical school. And his college experience, it was a community college in Washington, it was the exact same thing. He had to take care of everything. He had to walk himself through all of it, you know, everything like that. And he signed up for an orientation class, which I didn't even have access to at the time when I was going. I don't know all of his experience, but from what I could tell what he was involved in, it wasn't very helpful. But with UX, I'm very serious, they are so helpful and willing to take you step by step at anything that you have questions with anything like that. I mean, I again, I, I was a little more ahead of the game, because I'm familiar with online and everything like that. And so there were a couple times where they're like, "Oh, you already understand this. Cool. Let's get going," you know, because I could tell that they were used to people who didn't have any idea what was going on. And I think they were excellent at helping with everything. And I did have some more complex questions. They're like, "a gotcha!" So that was really awesome. And yes, I think I think they were very welcoming and very helpful with everything and supportive, you know, I felt like I could ask them for any stupid question I had or anything if I had.</p>
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*Interviewee 11	<p>I would have to say at UX is higher, because the instructors are able to focus on you at that specific time. And prior coursework, our prior colleges that I've been, you have, like 50 kids in just that shorter period of time, and then they don't have, they don't have the availability of the variety of Office Hours like UX has.</p>
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Interviewee 12	<p>Oh, it's more.</p> <p>Diane Marty</p> <p>And you do attribute that heightened level of support, again, to that pro activity of them coming to you rather than the opposite?</p> <p>Yeah, I feel like they're very accessible. And I don't feel that way about, you know, Utah State. I wouldn't have said they were accessible.</p>
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Interviewee 13	For Lane more. For UMSL I would say it was about the same. But at UMSL I was able to actually talk to my instructor face to face. So that's the difference.
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Interviewee 14	Yeah, no, I feel like UX is very supportive. I think it's just a different dynamic because at Yuba College, it was in person. So everything was in person, teachers were right there. And with UX, it's online but still the same. It's just a different, you know, it's different. But it's very similar in the aspect of everyone's there to help no matter what.
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**Note: Interviewees 2 and 10 are not represented here. Interviewee 2 did not answer this question; Interviewee 10 attended another institution prior to UX, successfully obtaining an associate degree.*

Appendix E

Student Personas Derived for “Flipped” Student Status March 15 – May 19, 2021

Flipped student personas by student (representing Interviewees 12, 5, and 14 who accelerated from off- to on-pace; and Interviewee 2, who decelerated from on- to off-pace), derived from re-analysis of interview transcripts. These personas are proposed as potential characterizations of students based on observable behaviors and communications.

These and other personas developed or emerged through continued exploration are proposed for confirmation and adjustment based on comparative and/or confirmatory data points available to UX presently or in the future.



Detailed statements from the interviews contributing to persona development for each interviewee follow.

“Flipped” personas from May data

Interviewee 2



Proving Something to Others

Dropped from on-pace to off; seeking external validation of capacity and ability; likely to respond to autonomy-supportive coaching

- “I like to talk about it. Like, ‘this is what I learned’ or ‘this is how far I got’ or ‘I’ve already passed this class’...” (@13:40) ...So he was excited to hear that I was going back so he’s like now, ‘I always thought you were, like, a very smart guy’... (@15:48)
- “I would almost like to see, not that this happened to me, but I’m just thinking in the future, right? Like a trigger to happen...where a professor reaches out to you...[when] others who have taken this class have done it in six weeks, and here you are seven or eight, not necessarily like, ‘hey, dum-dum, are you getting this?’ but like, ‘Hey, what’s going on? Are you okay? Is there anything that you’re not getting that like, get in the way?’” (@31:55) ...No one wants to admit when they don’t necessarily know something, a lot of pride around that thing as the older we get, the harder it is to admit that at times.” (@33:55)
- “I do think you need to tell everybody around you that you’re going to school. It’s super important that your peers tell your family. And if you are working, that you’re a working professional, make sure your boss knows, like, “Hey, I’m going to school’...” (@39:12)

“Flipped” personas from May data

Interviewee 12



Disciplined Labor Force Perspective

Pulled up from off-pace to on; will likely fluctuate but self-direct in order to stay the course

- “I really would like to move into a little bit more managerial position at my work...but I feel the pressure that I need a piece of paper to do that.” (@10:58)
- I, first and foremost, I’m a mom and a wife. And then I’m an employee. Those are probably the top three. (@13:26)
- “So, if my work schedule allows, I try to do an hour or two every day. If it doesn’t, then I will do like a full day Saturday and maybe part of Sunday to get my 10 hours in (@5:30)...I just feel like if I don’t spend my time doing the, you know, meeting my time commitments to spend on school, that, you know, I’m not going to meet my goals. And so it is part of my daily life to make sure I get my hours in.” (@17:57)

“Flipped” personas from May data

Interviewee 14



Emerging Adult, Future-Focused Commitment

Pulled up from off-pace to on; recognizes prior lack of commitment, now creating routines amidst flexibility; likely to seek accountability assistance

- “I’m more of an adult than I was when I was out of high school. And I have more things that I have to worry about, you know, living outside of my mom’s, more responsibilities.” (@13:52)
- I know I can get this degree for my future family. (@33:49)
- I feel like his support and his push for me to like do better. And to set a goal for myself, has been very, very helpful. Especially since it’s accountability as well.” (@25:44)
- “...no matter how hard it is to stick to your schedule, so it’s a routine. You don’t skip that routine.” (@38:00)

“Flipped” personas from May data

Interviewee 5



Proud Institutional Affiliation & Purpose

Pulled up from off-pace to on; committed to the institution and the degree; likely responsive to praise and encouragement

- “You know, I’m 38 years old, and I’m just starting my college degree now. And I said, “Yes, this is something I just want to, you know, I want to do it for me.” (@4:57)
- “I don’t think it’s possible, unless you’re just not interacting to feel like you’re not a part of a group here at UX. So I like it, it makes me feel like I’m part of a group.” (@10:12)
- And what really is cool for me joining groups on Facebook and LinkedIn, you know, you see all these people posting their, their wins. So a lot of people will post, “here’s a screenshot of the class I just passed,” “I got exemplary” or “my wife just graduated...at 40 years old with her degree.” And those kinds of things keep you going because I want to be able to be proud of that. I want to be able to in a few years, say hey, I did this. And I did it on my own, kind of on my own. (@13:45)
- “I feel like I’ve got a purpose.” (@55:34)

Diane Marty, MALS, CFRE
Leawood, KS

*Special thanks to Pat Balius, for sharing your love of research, and Jason Penrod,
for your inspirational creativity; both enriched this final product.*

