



Institute for Completion  
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## Citrus College Student Retention

Student attrition has been a critical concern of institutions of higher education for decades (Burke, 2019). The focus on retaining students has multiple layers. Importantly, institutions want students to have a positive post-secondary experience, complete their academic goals, and transfer or enter the workforce with increased earning power. In an era of greater accountability, retention data serve as one measure of institutional effectiveness. Moreover, there are considerable economic ramifications to student attrition. The literature consistently highlights a correlation between student retention and campus net revenue and, by extension, the ability for schools to sustain academic and student support programs and institutional financial stability (see, for example, Brown & Kurzweil, 2018). Moreover, the literature makes clear that recruiting new students is typically a more costly option than retaining current students (Astin, 1993; Pascarella & Terenzini, 1991; Tinto, 1993).

According to research from the Community College Research Center, however, just 62% of first-time community college students persist through to the fall term of their second year (fall-to-fall retention) (Barnett & Kopko, 2020).

At Citrus College, Institutional Research separates first-time students into two distinct groups— those coming **directly from high school** (for the sake of this paper we'll call them Group A) and those who enroll at Citrus College **not directly from high school** (we'll refer to them as Group B).

Data from fall 2018 show that among first-time freshmen students who came directly from high school (Group A, n=2,010), 63% persisted to the fall 2019 term—a percentage consistent with nationwide data. Among students who came to Citrus College for the first time in fall 2018 after one or more years away from high school,

however, (Group B, n=1,824) fall-to-fall retention was just 38%. Descriptive statistics, including age, college goal, major and program participation, allow us to identify some of the general differences, as well as the similarities, between these two groups (Table 1).

Table 1: Overview of 2018 Citrus College Cohort

General Group Data		
Fall18 cohort	Group A: Directly from high school (n=2010)	Group B: Not directly from high school (n=1824)
Fall 2018 to Fall 2019 Retention	63%	38%
Average Age	18	25
Average Units attempted in fall 18	12.2	9.9
Enrolled full-time in fall 18	71%	38%
Educational Goal		
Transfer	86%	58%
Associate degree only	7%	11%
CTE (e.g., vocational certificate, update job skills, etc.)	4%	15%
Undecided	2%	10%
Other (e.g., educational development, improve basic skills, GED, etc.)	1%	6%
Major by Career & Academic Pathway (CAP)		
Business & Information Technology	14%	18%
Career & Technical Education	6%	9%
Communication, Literature & Languages	4%	5%
Exercise & Health Sciences	18%	19%
Social & Behavioral Studies	24%	19%
STEM	13%	11%
Visual Arts, Performing Arts & Design	18%	11%
Undecided	3%	6%
Other	1%	2%
Special Program Participation		
IWCC	31%	0%
EOPS	10%	1%



## Institute for Completion

October 2021

The descriptive statistics, above, tell us something about first time students at the college but are insufficiently nuanced for the college to thoroughly understand who is persisting, who is not, and why.

Digging a bit deeper, data from the Fall 2018 Cohort of students who enrolled at the college directly from high school (Group A) show the following:

- 37% completed 24 or more units in their first year;
- **Students who did not persist were more likely to receive one or more failing grades in the first year.** The data show that 65% of the grades posted for students in Group A that departed before fall 2019 were non-passing grades versus only 20% of the grades earned by students in Group A who persisted;
- Among the 2,010 students in Group A, **31% or 618 were members of the I Will Complete College (IWCC).** 71% of Group A students in IWCC persisted to fall 2019;
- The 1,392 students in Group A who **did not participate in IWCC** had an overall 59% persistence rate (818 students persisted versus 574 who departed);
- Within Group A, data from both the IWCC cluster and the non-IWCC cluster show that **women persisted at higher percentages than men;**
- Within Group A, data from both the IWCC cluster and the non-IWCC cluster show that just **50% of African-American students persisted;**<sup>1</sup>
- 204 students from Group A participated in EOPS. Data indicate that women and men persisted at similar rates (77% and 74%, respectively) and **students of all ethnicities**

**persisted at higher rates than students in the fall 2018 cohort not served by EOPS;**

- By CAP, the **lowest persistence rates** for the 2018 Group A cohort are seen in Communication and Literature, and Languages (50%). Data show CTE fall-to-fall persistence at 49% though that is likely related to the short-term nature of many of our vocational programs.
- By CAP, the **highest persistence rates** are seen in: STEM (72%), VPA (66%), and Social and Behavioral Sciences (65%)
- **Within STEM**, the CAP with the most robust persistence rates, data show the percentage of women who are retained (75%) exceeds the percentage of men (69%). Viewed by ethnicity, Asian students in the STEM CAP persist at the highest rate (92%) followed by Hispanic students (70%), White students (67%), and African American students (43%).

### Understanding Student Departure and Retention: Theoretical Perspectives

Scholars have been formally focused on the study of retention since the 1960s and, as a result, a number of prominent theories have emerged and dominated the literature. The **Student Integration Model** attributed to Tinto (1993) suggests that students' progress through stages as they make the transition from being a first time in college student (FTIC) to being a mature student. The stages are influenced by levels of academic and social integration. Working together, the levels of social interaction (measured by interaction with peers and members of the college community) and academic integration (measured by GPA and intellectual development) shape students' goals and commitments to the institution and their decision to remain in or to leave college.<sup>2</sup>

<sup>1</sup> Note: African American students are underrepresented in IWCC.

<sup>2</sup> Tinto's model built upon Spady's (1970/1971) views of interaction between students and the academic and social

systems of their institutions. Spady's work (*Dropouts from Higher Education*) links the process of student attrition to Durkheim's Suicide Theory (1951).



## Institute for Completion

October 2021

John Bean's (1980, 1982) **Student Attrition Model (SAM)** shares similarities with Tinto's work, particularly the focus on individual level explanations. Bean built upon research on employee turnover (Price, 1977) for the SAM and, he argues that student satisfaction with the institution---students' ability to move across the "membership boundary of the [college] social system"—powerfully influences student intent (Price, 1977, p.4). Variables that impact student satisfaction, according to Bean (1982), include student GPA, development, institutional quality, and the perceived practical value of education.

While Tinto and Bean's theories have been the most prominent, they are not consistently relevant for community college students whose attendance does not always conform to culturally normative expectations: enrollment directly from high school, full-time attendance, etc. Important omissions from Tinto and Bean's work include the assumption that students' college experience is uniformly immersive and, that students' home, K-12, and community engagement is only pertinent to how it has shaped students prior to college enrollment (Monaghan & Sommers, 2021). These limitations have led others to develop alternative as well as complementary models that help advance understanding of retention among contemporary colleges and students.

The **Student-Faculty Informal Contact Model** (Pascarella, 1980), posits that informal interaction with faculty members, particularly interaction that extends the intellectual content of coursework beyond the mere transmission of facts, increases students' level of integration as well as their commitment to the institution.

Bean and Metzner's (1985) **Non-traditional Undergraduate Student Attrition Model** includes background variables (age, educational goals, high school performance, ethnicity, gender), academic variables (study habits, use of advising, attendance, clarity about major, and course availability) and environmental variables

(employment, finances, level of family support, opportunity to transfer, external encouragement). Bean and Metzner postulate that non-traditional students' attrition is most directly affected by environmental variables.

Cabrera, Nora and Castaneda (1993) integrated the Tinto and Bean models in the development of the **Integrated Model of Student Retention**. Their findings support the convergence of the two models and confirm that environmental variables play a more complex and explanatory role in student retention than articulated by either Tinto or Bean (Aljohani, 2016).

Additional theories, theory elaborations, and perspectives can help institutions better understand student retention (i.e. Berger and Braxton's (1998) elaboration of Tinto's model; Astin's (1984) **Student Involvement Theory**; **Critical Race Theory** as outlined by Mertes (2013), Deci and Ryan's (2002) **Self-Determination Theory**, etc.). Wolf-Wendel, Ward and Kinzie (2009) link the idea of engagement to involvement and integration. They assert that the two facets of student engagement—the extent to which the student engages and the efforts made by the institution to engage them—are strong contributors to student retention.

While some of the theories may lack generalizability as they have often been developed in traditional academic institutions with traditional types of students (Aljohani, 2016), they provide a foundation upon which community colleges can build greater understanding.

### Improving Retention Rates

According to Burrus et al, (2013), the continuously expanding body of knowledge on the variables that influence student retention has not resulted in significantly higher community college completion rates. Therefore, colleges must **“critically evaluate student retention strategies to**



## Institute for Completion

October 2021

**determine which factors may help to improve their institution's completion rates"** (Hafer et. al., 2021, p553).

Despite the introduction of new Citrus College student support strategies including the Promise Program and I Will Complete College, **overall retention rates at the college have remained relatively stagnant for the past decade.**<sup>3</sup> Local data do show exciting areas of improved outcomes in areas that lead to retention such as increased completion of transfer-level math and English. Niche support programs (e.g., EOPS, TRiO) also show above average retention rates on the Citrus College campus.

### Utilizing Data to Guide Action

Collecting and studying data related to the efficacy of college student support and retention interventions will allow the college to ensure strategies are tailored to the institution and meet the unique needs of students enrolling in campus courses and programs (Fike & Fike, 2008; Hossler, 2005). Mining student-level data has the potential to help the campus identify individual students who are likely to need additional support as soon as they arrive on campus (Cardona, Cudney, & Snyder, 2019).

While the college continues to ask clarifying questions and review the associated data, there are many research-based opportunities to advance the goal of increasing student retention, close gaps identified in the Student Equity and Achievement (SEAP) Plan, and meet related Strategic Plan objectives.

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<sup>3</sup> Although fall-to-fall persistence is higher than average among the IWCC cohort, it is unclear if these rates can be attributed to program services or if the nature of the students who have self-selected into the program through early decision is more strongly correlated with the higher retention rates. Further investigation of these data will be important.

### Opportunities for Action

**Thoroughly evaluate the allocation of and outcomes for all student support services.** For example, the low retention rates for African American students may suggest the college ensures all first-time African American students have an opportunity to participate in EOPS, IWCC and/or TRiO where higher than average retention outcomes have been documented. Provide authentic, culturally responsive mentoring through these and other campus support programs.

**Adopt strategies that nudge students towards completing 30 college-level credits** in the first year of enrollment.<sup>4</sup> Such campaigns in other systems have resulted in significant increases in students enrolling full-time and in student retention (Nietzel, 2019). Data modeling has shown that unit completion explains a higher variance on student retention than many other variables under consideration (Hafer et al, 2021).

**Ensure students have access to and participate in high-impact practices (HIP) in their first year.** According to Kuh (2008), "student engagement in educationally purposeful activities is positively related to academic outcomes and persistence" (p. 555).

**Utilize data analytics<sup>5</sup> to identify which students may be at-risk of departure** and proactively support these students with research-based strategies and resources. By identifying students early in the matriculation process, the college has the opportunity to provide early intervention and outreach that can help students successfully complete coursework and remain in good standing (Taylor & McAleese, 2012).

<sup>4</sup> Referred to as a *15 to Finish* initiative which may include provisions for 15 units per term, using math co-requisite support, academic program maps, and proactive advising.

<sup>5</sup> Several recent studies shed light on the variables of most interest in this area (see, for example, Fike & Fike, 2008; Cardona, Cudney & Snyder, 2019).



## Institute for Completion

October 2021

**Employ low-touch interventions sparingly and where they will realistically achieve the anticipated outcome.** Evidence suggests that low-touch programs (e.g., scheduling assistance, encouraging emails and reminders; phone messages, BOTS, brief workshops, etc.) lack the required scope to significantly affect academic outcomes (Oreopoulos et al, 2019; Hyman, 2019).

**Continue to strengthen organizational and pedagogical practices that lead to improved retention.** Reforms from AB705 and the full implementation of Guided Pathways as well as ongoing equity-focused professional development have promise. Developing cross-campus strategies to ensure teaching and learning and student services are contextually and culturally relevant and foster students' identity and sense of belonging will be important for progress (Dadgar, Buck, & Burdman, 2021; Rosenberg, Newell, Sawabi, & Chow, 2020; Smith, Voigt, Ström, Webb, & Martin, 2021).

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## Institute for Completion

October 2021

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