

Engagement Pathways to Transfer Student Success



Becky Croxton, Head of Assessment
Anne Cooper Moore, Dean of J. Murrey Atkins Library

Project Impetus



In the U.S., transfer student enrollment is increasing at a faster rate than first time in college (FTIC) freshmen. From 2016 to 2018 there was a ...



0.2% decline in FTIC freshmen enrollment in post-secondary institutions.



1.5% increase in transfer student enrollment in post-secondary institutions.

However, transfer students, on average, drop out before completing their degree at higher rates than FTIC freshmen.




<https://nces.ed.gov/ipeds/TrendGenerator>
https://nces.ed.gov/programs/coe/indicator_ctr.asp





The purpose of the study is ...

Understand the role of out-of-the-classroom engagements in transfer student success in comparison to first-time freshmen ...




In order to ...

... develop a deeper understanding of the factors that contribute to transfer student retention and success.



So that ...

libraries and universities can structure support systems and services to help this important population succeed and graduate.



UNC Charlotte

Urban, Research
Institution

30,146 Students
(24,175 undergraduates)

Doctoral University,
Higher Research
Activity

2nd largest
undergraduate
enrollment in UNC
System

60% FTIC freshmen
(3,999)
40% Transfers
(2,632)

65% Acceptance
&
82% Persistence
Rates

UNC Charlotte Factbook, 2021; University of North Carolina
Undergraduate Retention & Graduation Report, 2014-15





Project Partners

Co-Curricular Partners

- Library
- Career Center
- UCAE (Tutoring)
- Writing Center
- Speaking Center
- Education Abroad
- Undergraduate Research

Other Departments & Programs

- Undergraduate Learning Communities
- 1st Year Writing Program
- Center for Teaching & Learning
- Registrar
- Niner Central (Student Services Help Desk)
- ITS (Technology) Help Desk

Student Affairs

- Greek Life
- University Recreation Center
- Venture Outdoor Education & Leadership

Institutional Research

- Demographics
- Pre-College
- Success Measures



Student Engagement Data Set

A comprehensive, longitudinal dataset at the individual student level of all undergraduate students who matriculated into the university from 2012-2013 to the present.

Data include:

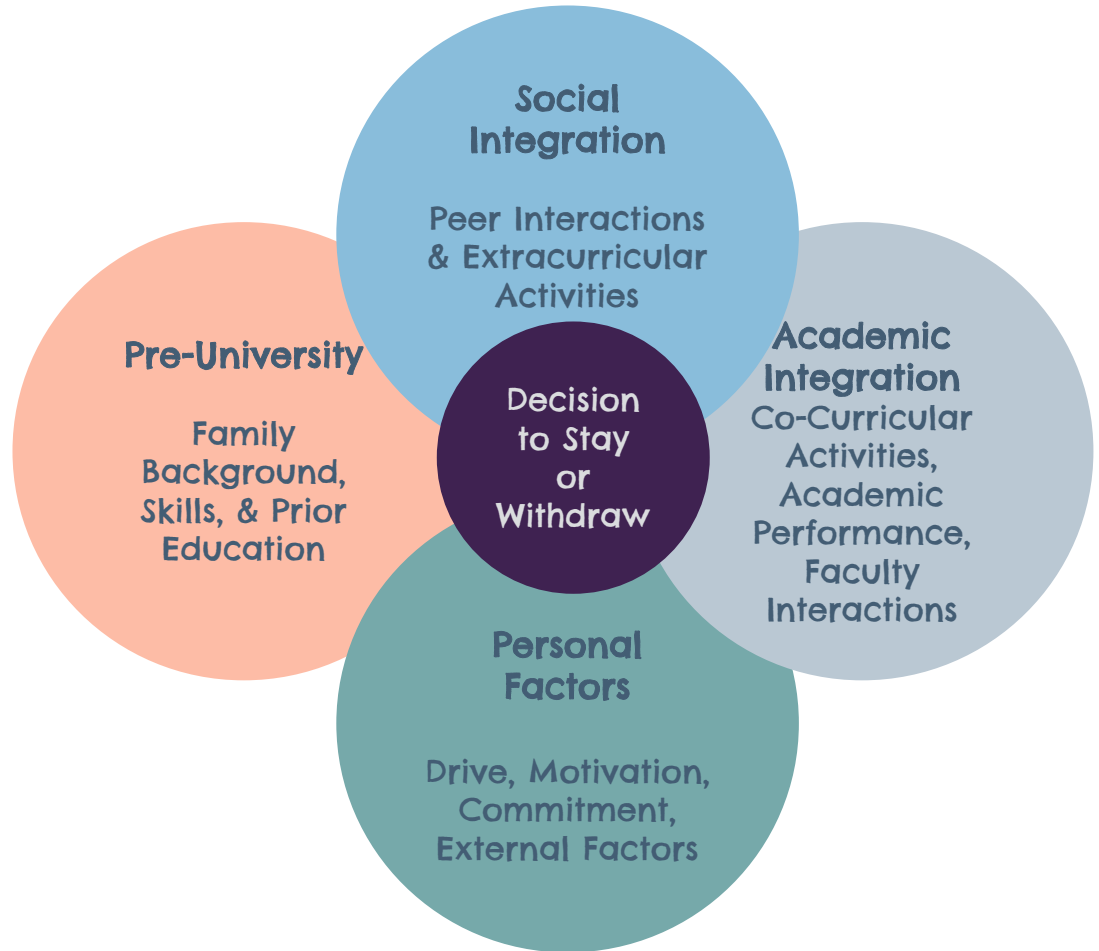
1. Yearly student engagements with each co-curricular and extracurricular partner, at the "type of activity" level of specificity.
2. Pre-College data (EX: HS GPA, ACT/SAT Scores, # of Incoming Credits)
3. Demographic data (EX: Race, Ethnicity, Pell Status, College of Enrollment, On/Off Campus Residence, Learning Communities)
4. Measure of Success Data (EX: Year-to-Year Retention, GPA, and Graduation Rates)



Tinto's Model of Student Integration

All of these factors play a role in a student's decision to stay or withdraw.

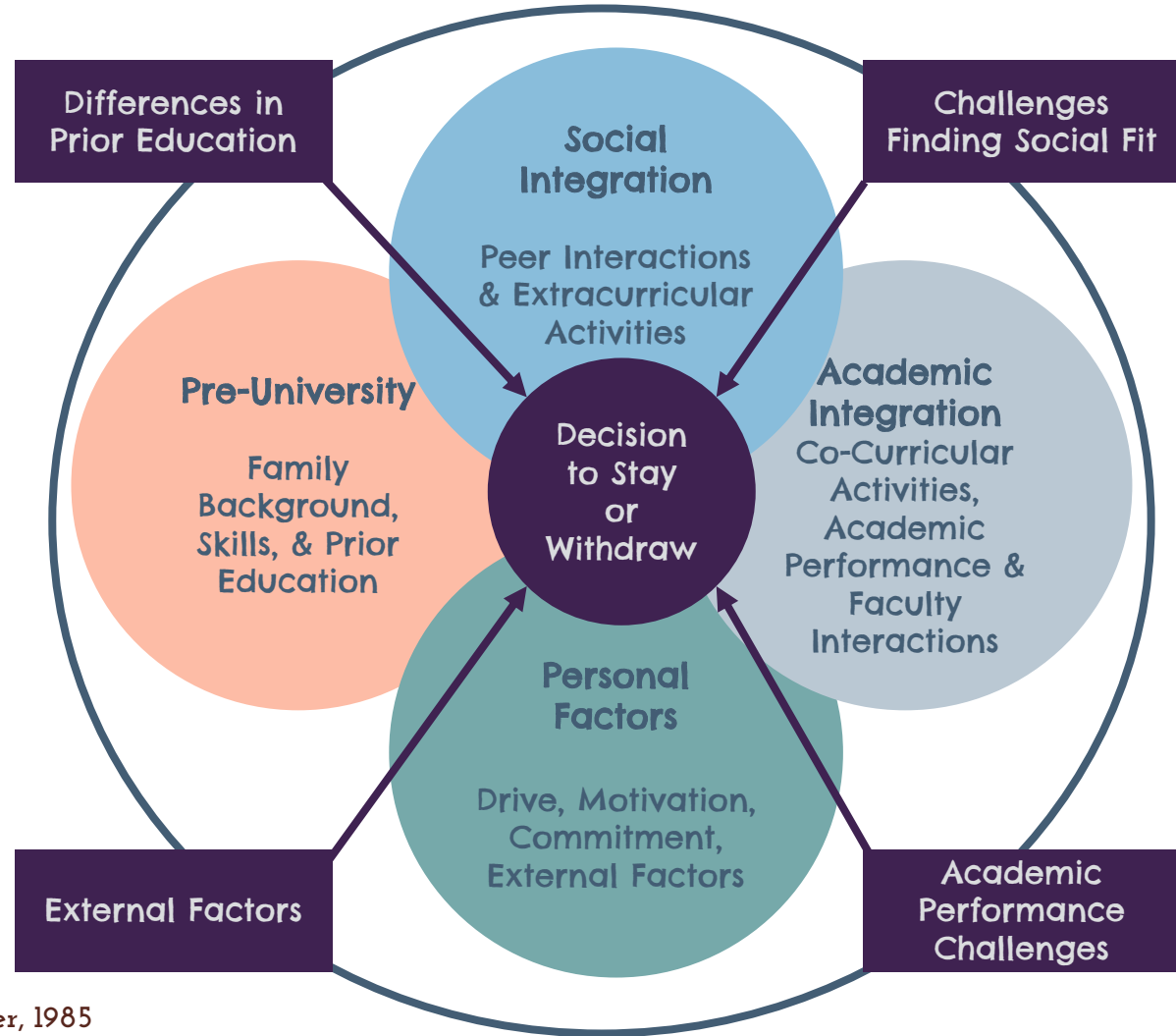
Spheres of influence at the university are Social Integration & Academic Integration.



Student Integration & Transfer Shock

The models of "Transfer Shock" and "Student Attrition" explain decisions to stay or withdraw by affecting any of the four spheres in Tinto's Model.

Engagement with key co-curricular & extracurricular activities can help minimize transfer shock.



In previous iterations of this research, we learned that ...

There are particular co-curricular and extracurricular engagements that help to explain significant and noteworthy percentages of variance in retention, GPA, and time to graduation for undergraduate students, but ...

Findings in this study differed based on ...

- Measure of success being studied,
- Admission status (FTIC freshman vs Transfer),
- Number of incoming credits, and
- Pre-college and demographic variables.





In this study, we dug a little deeper and conducted more sophisticated analyses in which we ...



1. Controlled for confounding variables using propensity score matching,
2. Disaggregated the data based on FTIC freshmen and Transfer students and the number of incoming credits, and
3. Used binary logistic regression to calculate the degree to which each type of engagement increased chances for student success based on admission/incoming credits and measure of student success.



Using Propensity Score Matching, we controlled for ...

Pre-Entry
Academic
Readiness
(ACT/SAT)

Socioeconomic
Status
(Pell Grant Status)

College of
Enrollment
(ART/ARCH, BUS,
CCI, EDUC, ENGR,
CLAS, CHHS, UCOL)

Under-
represented
Minority Status
(URM - not white,
not Asian)

High Impact
Practices
(Experiential
Education, Education
Abroad, Learning
Community,
Undergrad Research,
Freshman Writing
Course)



We also controlled for admission status and incoming credits by creating population Subgroups.



First Time in
College
(FTIC)
Freshmen

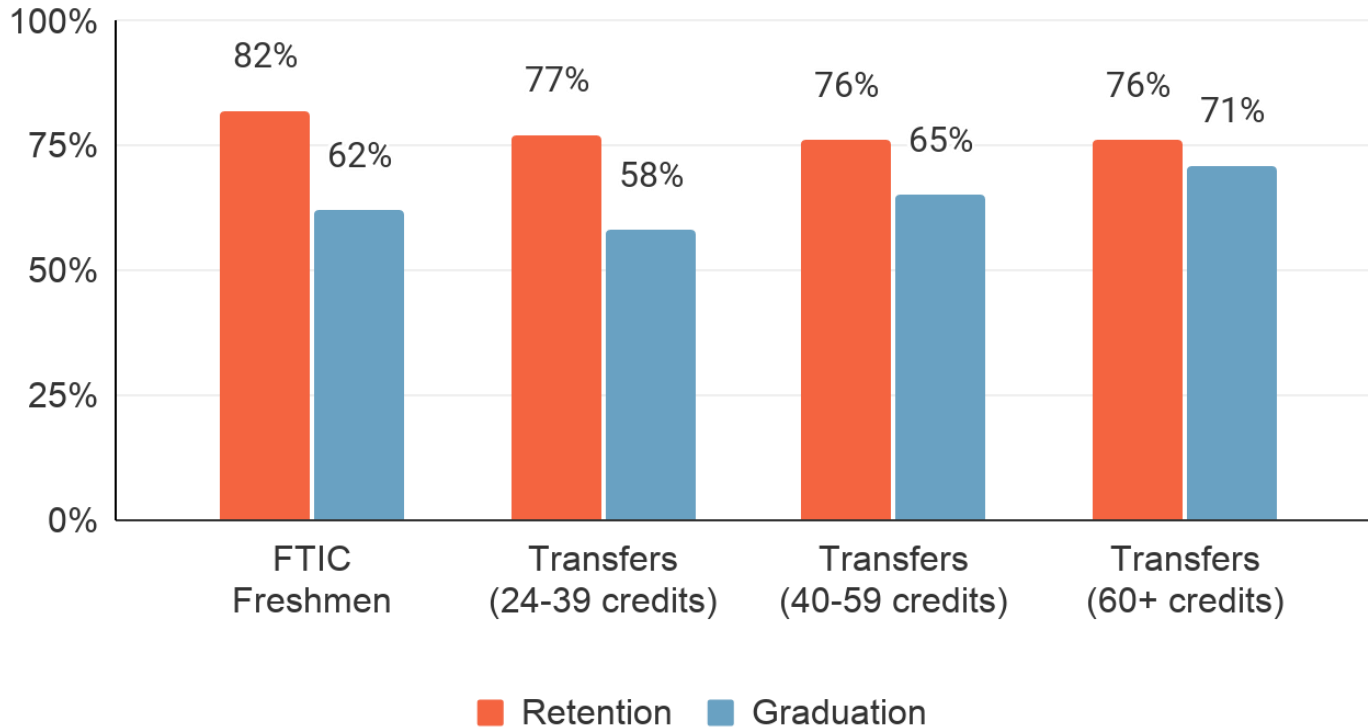
Transfer
Students
with 40-59
incoming
credits

Transfer
Students
with 24-39
incoming
credits

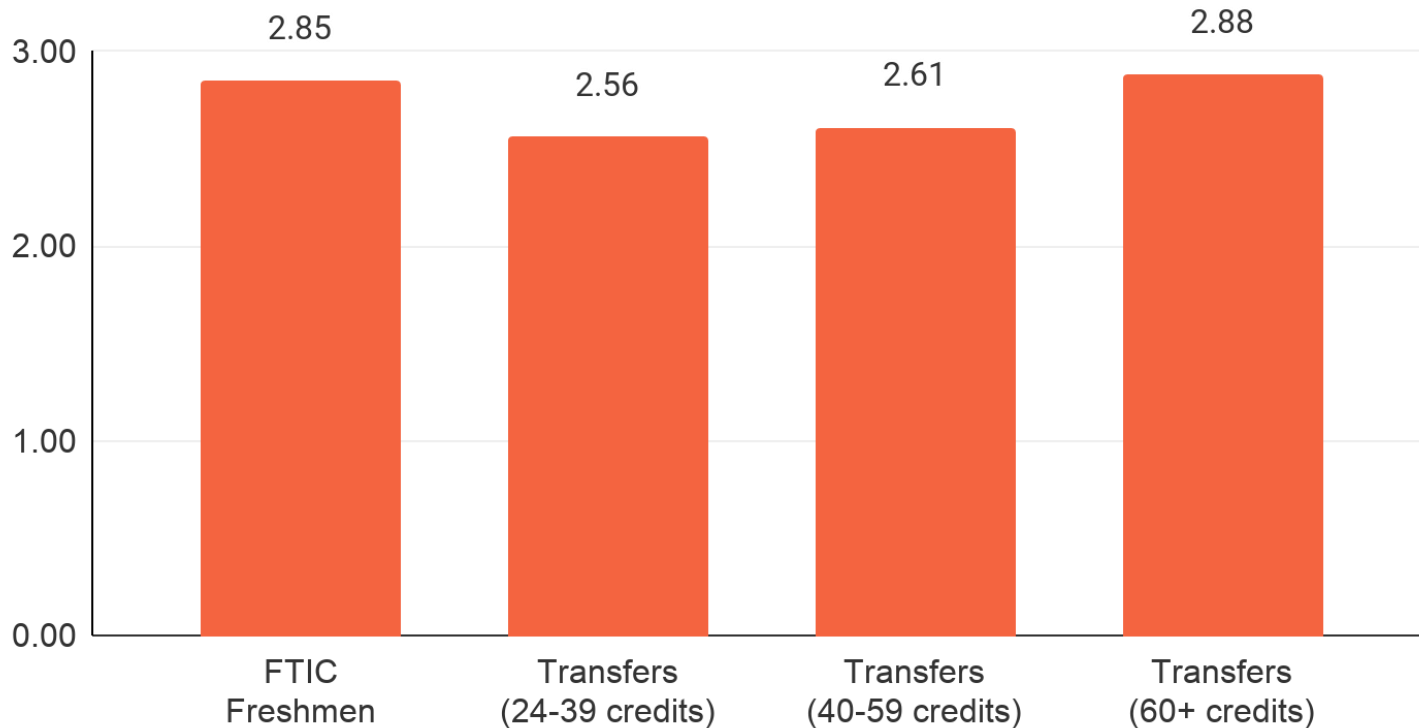
Transfer
Students
with 60+
incoming
credits



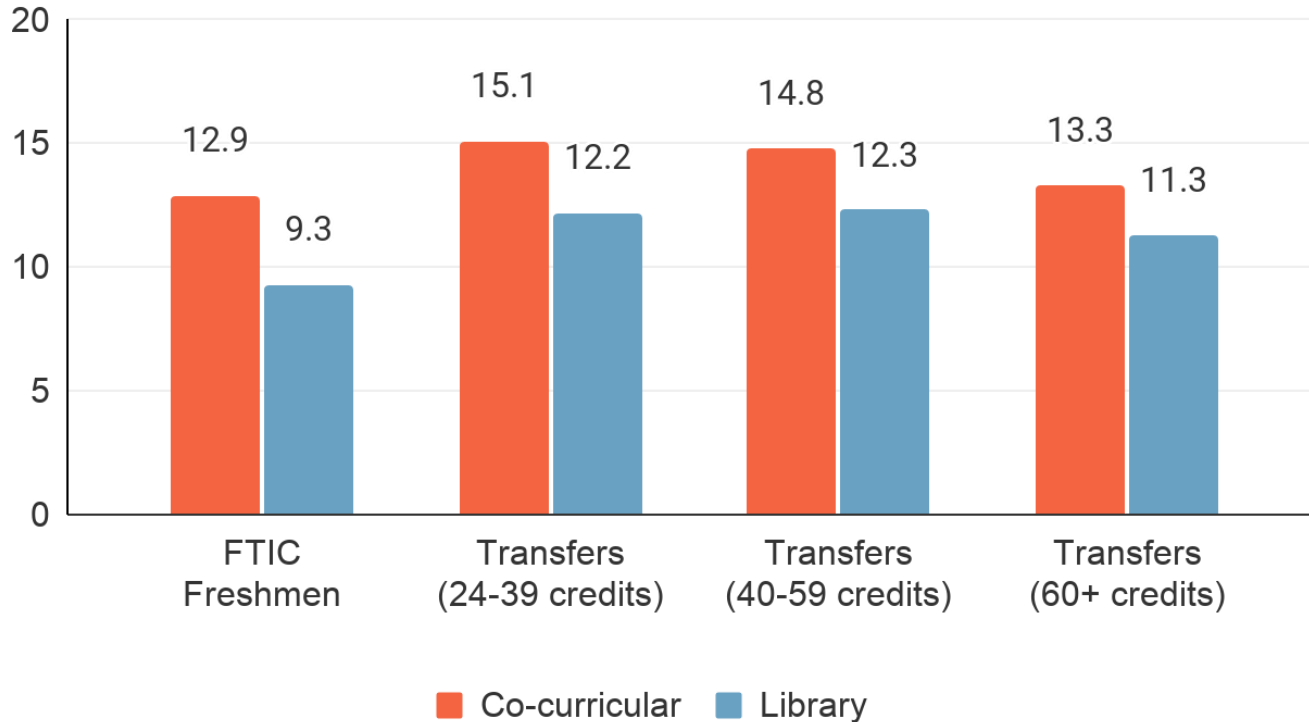
Year-1 to Year-2 Retention Rates & 6-Year Graduation Rates



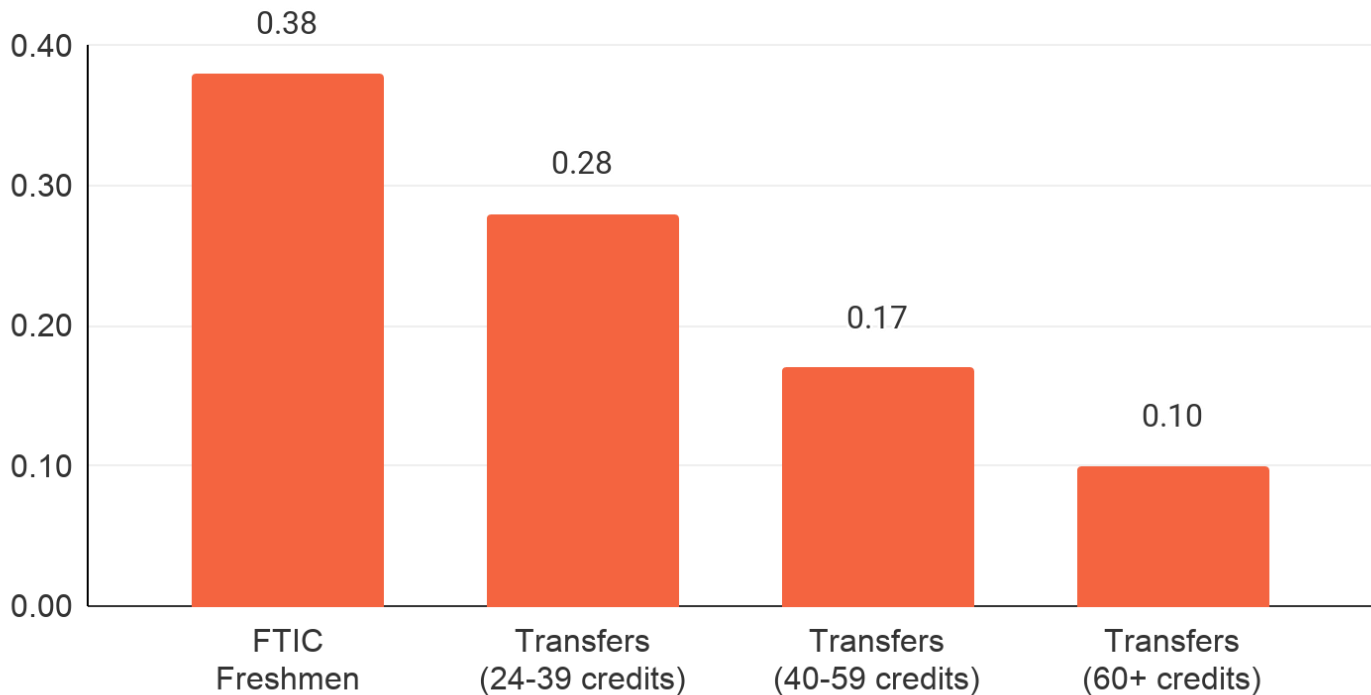
4-Year GPA Trends Mirror 6-Year Graduation Rates



Average Number of First Year Engagement in Co-Curricular Activities and Library Activities



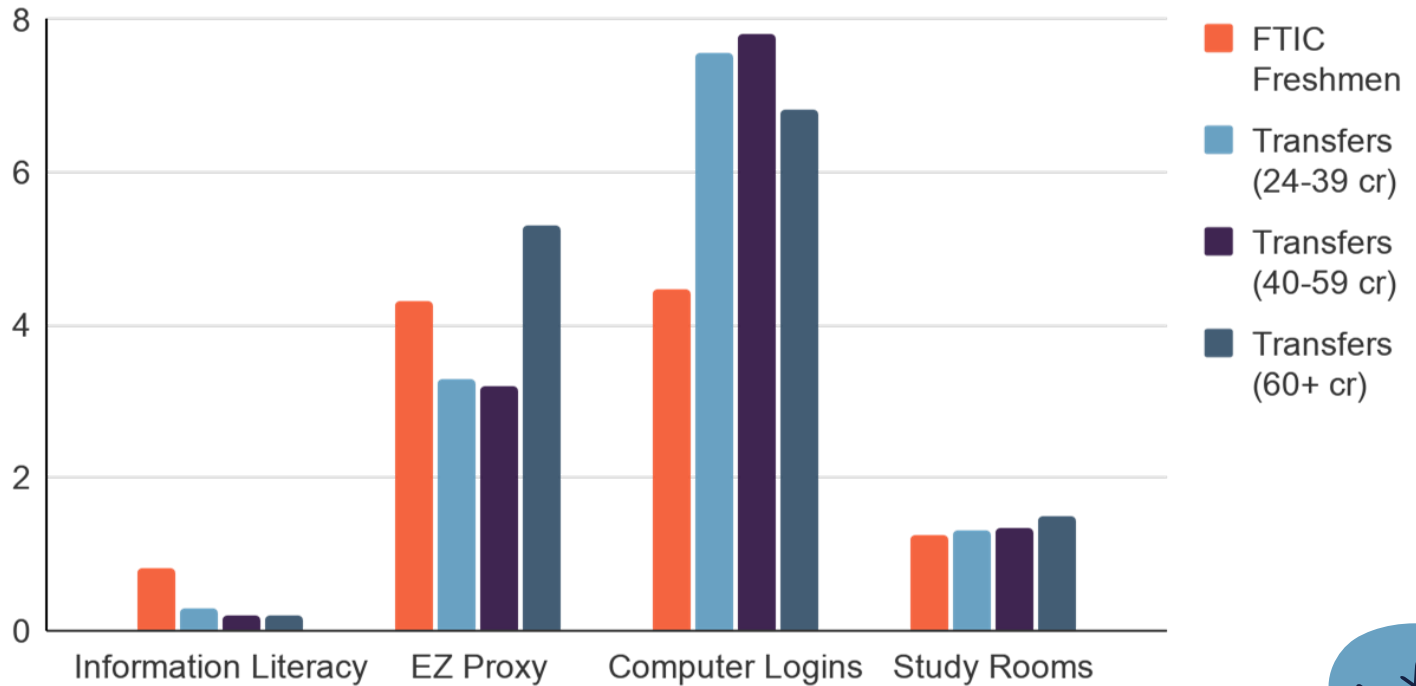
Average Number of First Year Extracurricular Memberships*



*Memberships included in study are Greek Life, Intramural Sports Teams, and Sports Clubs



Library Engagement Trends Differ Based on Type of Activity & Population Subgroup



Year 1 Engagement Pathways that Increase the Odds of Returning for a Second Year of Study (Top 5 Activities)



Created by Mike by Mike
from Noun Project



Created by Sami Saarengi
from Noun Project



Created by Sami Saarengi
from Noun Project



Created by Gregor
from Noun Project



Created by Sam Wilson Lay
from Noun Project



Created by Sam Wilson Lay
from Noun Project

	Co-curricular (any)	UCAE (any)	Extracurricular (any)	Library (any)	Library EZ Proxy	Library Computer Login	Library Book Checkout
FTIC Freshmen	X		X	X	X	X	
Transfers with 24-39 incoming credits	X		X	X	X	X	
Transfers with 40-59 incoming credits	X	X		X	X		X
Transfers with 60+ incoming credits	X			X	X	X	X

Engagement Pathways that Increase the Odds of Earning an Above-Average 4 Yr GPA* (Top 5 Activities)



Created by Robert Armstrong
from iStock Project

Created by Creative Commons
from iStock Project

Created by Robert Armstrong
from iStock Project

	Career Center (any)	UCAE (any)	Writing Center (any)	Extracurricular (any)	Library Information Literacy Instruction	Library Study Room Reservations
FTIC Freshmen	X	X	X	X	X	
Transfers with 24-39 incoming credits	X	X	X	X	X	
Transfers with 40-59 incoming credits	X	X	X		X	X
Transfers with 60+ incoming credits	X		X	X	X	X

*For this study, an above-average GPA is 2.50 or higher.

Engagement Pathways that Increase the Odds of Graduating in 6 Years or Less (Top 5 Activities)



Illustration by Michael Wang from Shutterstock



Illustration by Michael Wang from Shutterstock



Illustration by Michael Wang from Shutterstock



Illustration by Michael Wang from Shutterstock



Illustration by Michael Wang from Shutterstock

	Co-curricular (any)	Career Center (any)	Writing Center (any)	Extracurricular (any)	Library Info. Literacy Instruction	Library Study Room Reservations	Library Book Checkout
FTIC Freshmen	X	X	X	X	X		
Transfers with 24-39 incoming credits	X	X	X	X	X		
Transfers with 40-59 incoming credits	X	X	X		X	X	
Transfers with 60+ incoming credits	X	X	X		X		X

Key Takeaways in the Context of Theory

Tinto's Social Integration Theory suggests ...

... a student's pre-university background, external factors, social integration, and academic integration all play a role in a student's decision to stay or withdraw (Tinto, 1975 1993).

Our findings support Tinto's theory ...

... engagement in specific co-curricular and extracurricular activities significantly increases the odds for success.

We learned ...

... that the engagement pathways for success differ significantly depending on admission status and number of incoming credits. Controlling for pre-college, demographic, and other variables helped pinpoint which key engagement activities increase the odds for success.

Key Takeaways in the Context of Theory

Hills' Transfer Shock and Bean & Metzner's Student Attrition theories suggest ...

... several factors may impede a transfer student's ability to academically and socially integrate, thereby adversely affecting their chances for success. (Hill, 1965; Bean & Metzner, 1985)

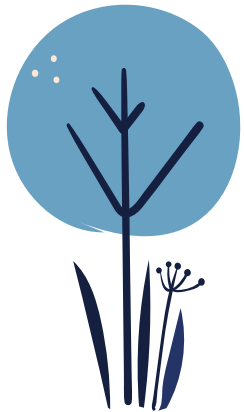
Our findings support Hill's & Bean & Metzner's theories and indicate that, on average, transfer students coming in with less than junior status (< 60 credits) ...

... are less likely to persist than FTIC freshmen, and ... have lower GPAs and 6-year graduation rates than FTIC freshmen and transfer students with 60+ incoming credits.

Universities can help transfer students overcome their "first year" shock and succeed by structuring support systems and services to help them engage academically.

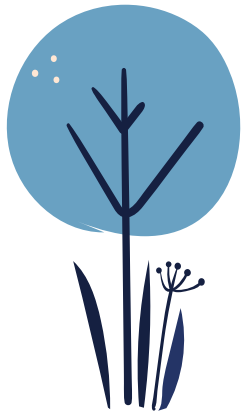
Impact

- First study of its kind to compare out-of-classroom engagement of transfers with 3 ranges of numbers of credits and FTIC freshmen students.
- Two-fold model:
 - a. Analyzed typical engagement behaviors (library, other co-curricular, and extracurricular activities) of students based on their enrollment (FTIC vs. transfer) and credit status.
 - b. Identified the key engagement activities that significantly increase each group's odds for success.

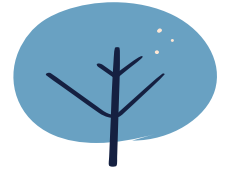


What's Next?

We will continue investigating the precursor characteristics and co-curricular and extracurricular activities that relate to transfer student success hopefully uncovering further pathways libraries and universities can emphasize to help transfers succeed.



Q & A



Becky Croxton, Head of Assessment
(becky.croxton@uncc.edu)

Anne Cooper Moore, Dean
(anne.moore@uncc.edu)



References

- Bean, J. P., & Metzner, B. S. (1985). Conceptual Model of Nontraditional Undergraduate Student Attrition. *Review of Educational Research*, 55(4), 485-540.
<https://doi.org/https://doi.org/10.3102/00346543055004485>
- Hills, J. R. (1965). Transfer Shock: The Academic Performance of the Junior College Transfer. *The Journal of Experimental Education*, 33(3), 201-215. <http://www.jstor.org/stable/20156766>
- National Center for Education Statistics. (2020, April). The condition of education: undergraduate and retention rates. Retrieved from https://nces.ed.gov/programs/coe/indicator_ctr.asp
- National Center for Education Statistics. <https://nces.ed.gov/ipeds/TrendGenerator>
- Tinto, V. (1993). *Leaving college : rethinking the causes and cures of student attrition* (2nd ed. ed.). University of Chicago Press.
- UNC Charlotte, A. A. (2021). *Institutional Research Analytics, Fact Book: Admissions Dashboard*. <https://ir-analytics.uncc.edu/tableau/fact-book-enrollment-summary-dashboard>
- University of North Carolina General, A. (2016). *The University of North Carolina Undergraduate Retention & Graduation Report, 2014-15*.
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED586197&authtype=shipl&site=ehost-live&scope=site&custid=s5822979>

