An Enrollment Power Formula

Understanding the Math and Science of Sustainable Enrollment Success

Jane Dané
Associate Vice President for Enrollment Management
Old Dominion University

Garrett Sublette
Director of Enrollment Operations
Abilene Christian University
1. An Enrollment Power Formula

2. Old Dominion University’s Experience

3. Abilene Christian University’s Experience
Most-Recent Demographic Estimates Paint a Troubling Picture

The Challenge We All Face

Demographic Shifts Selectively Winnowing College Demographics

College-Age Population, 2018

College-Age Population, 2026

Decline in relevant age group + decline in college-going demographics

Likely Declines Larger than Previously Imagined

Change in Number of College-Bound High School Graduates by 2026, Northeast and Midwest

Conventional Estimates

HEDI Estimates

-5.0%

-15.0%

Source: Scott Jaschik, "Are Prospective Students About to Disappear?" Inside Higher Ed, January 8, 2018.
Beyond Efficiency
Understanding the Power of Volume in Student Recruitment

Efficiency-Based Versus Volume-Based Enrollment Strategy

Boosting yield rate enough to make up for attendant admit shortfalls is difficult for many schools and often relies on unproven, unscalable, or unsustainable approaches (e.g., heavy discounting).

Increased application growth via improved recruitment marketing can outpace associated decreases in yield rate and is a highly flexible approach within the reach of most schools.
New Enrollment Is Built, Not Found
Appreciating How You Can Inflect the Simple Math Underlying Enrollment

What Drives Your Enrollment Numbers

Enrollment = Outreach Volume x Conversion Rate

Expert list sourcing and targeting, supported by appropriate budget, ensure that all viable candidates are included in outreach.

Expert recruitment-marketing communications, financial aid optimization, and yield analytics cause students in your recruitment pipeline to convert at higher rates.
Ensuring Appropriately Expansive Outreach
Optimized List Sourcing and Targeting Greatly Increase Prospect Pool

Outreach Volume

Enrollment = Outreach Volume x Conversion Rate

Percentage of Desirable Prospects Captured, by List-Sourcing Scenario

- Common Practice
  - 50% Capture all name releases across the year
  - +20% Use all appropriate list sources
  - +15% Avoid incorrect or overly aggressive filtering
  - 70% Overall

- Optimal Practice
  - 100% Capture all name releases across the year
  - 85% Use all appropriate list sources
  - 100% Avoid incorrect or overly aggressive filtering
  - 2x increase

2x increase in percentage of desirable prospects captured.

Capture all name releases across the year. Use all appropriate list sources. Avoid incorrect or overly aggressive filtering.
Maximizing Conversions
The Science of Influencing Student Behaviors and Decisions

Conversion Rate

Enrollment = Outreach Volume x Conversion Rate

3 Key Conversion Levers

1. Recruitment Marketing
2. Financial Aid Optimization
3. Admitted-Student Engagement

Broadly scoped, continuous testing of marketing approaches reveals what works and what doesn’t. Marketing spend is channeled selectively to approaches with highest demonstrated impact per dollar invested.
Why Application Volume Matters
Application Volume Creates ‘Altitude’ for Progress on Enrollment Goals

Application Volume
- Higher
- Lower

Enrollment Goals
- Lower
- Higher

Yield Rate
- Higher
- Lower

Desired Headcount

Applications/Enrollment

Higher
Lower

Application Volume Creates ‘Altitude’ for Progress on Enrollment Goals
Why Application Volume Matters

Application Volume Creates ‘Altitude’ for Progress on Enrollment Goals

Tuition revenue, average test score, demographic mix...

- Higher Enrollment Goals
- Higher Yield Rate
- Lower Desired Headcount

Applications/Enrollment

Application Volume

- Higher
- Lower
Why Application Volume Matters

Application Volume Creates ‘Altitude’ for Progress on Enrollment Goals

Applications/Enrollment

Unavoidable trade-off between goals and yield rate

Applications/Enrollment

Desired Headcount

Enrollment Goals

Yield Rate

Higher

Lower

Higher

Lower

Higher

Lower

Application Volume

Higher

Lower
Why Application Volume Matters

Application Volume Creates ‘Altitude’ for Progress on Enrollment Goals

Higher application volume enables progress on goals while still delivering needed headcount.
1. An Enrollment Power Formula
2. Old Dominion University’s Experience
3. Abilene Christian University’s Experience
Old Dominion University in Brief
A Large Public Institution Serving Diverse Student Segments

- A large public university in Virginia
- Primarily nonresidential
- Access-focused
- Large transfer population
- Extensive online enrollment
- Extensive military enrollment

Norfolk, VA
A Shifting Landscape
Large, Rapid Transformation in Profile of Incoming Students

ODU Undergraduates by Ethnicity
12-Month Unduplicated Headcount

% of ODU Students Receiving Pell Grants

-12%  +31%  +63%

+11%
+34% proportional increase
An All-Points Strategy
Ensuring Sustained Student Progress from High School to Career

ODU Maximizes Student Conversion at Every Step

Conversion Levers

- Career planning integrated into undergraduate curriculum
- Student success information systems, personnel, and best practices
- Financial aid optimization and intensive management of admit pool
- Recruitment marketing
- List sourcing and targeting

High School Students
Prospects
Inquiries
Applicants
Admits
Enrolls
Graduates
Workforce
An All-Points Strategy
Ensuring Sustained Student Progress from High School to Career

**ODU Maximizes Student Conversion at Every Step**

*Conversion Levers*

- Workforce
  - Career planning integrated into undergraduate curriculum
- Graduates
  - Student success information systems, personnel, and best practices
- Enrolls
- Admits
  - Financial aid optimization and intensive management of admit pool
- Applicants
  - Recruitment marketing
- Inquiries
- Prospects
  - List sourcing and targeting
- High School Students
A Two-Pronged Approach
Volume and Conversion at the Heart of ODU’s Recruitment Strategy

Prospect Pool and Downstream Funnel Metrics
High School Seniors Recruited for ODU’s 2018 Freshman Class

1. Legacy prospect pool supplemented with additional names acquired via advanced list-sourcing techniques

2. Prospects engaged via revised recruitment marketing approach

- Inquiry pool: 10,000 students
- New names: 28,000 students

Applicants:
- Total: 6,875
- 37% applied: 3,726
- 15% applied: 4,193

Accounted for 56% of enrollment
Immediate Impact
Our Revised Recruitment Approach Delivered Results

Applications and Full-Time, First-Time Enrollment
ODU, 2014-2018 Freshman Classes

New recruitment-marketing approach initiated

+19% applications 2017-2018
+8% enrollment 2017-2018
+11% total net tuition revenue 2017-2018
Balancing In-State and Out-of-State Efforts

Flexibly Pursuing Two Complementary Objectives

ODU’s Primary, Secondary, and Tertiary Markets

A logical first priority—students closer to home apply, enroll, and persist at higher rates

Search saturation

Carefully calibrated expansion

An unavoidable next order of business but challenging due to lower recruitment-marketing response and persistence rates
Unlocking Reach Markets
ODU’s Capabilities Make a Broader Range of Geographies Viable

How ODU Unlocks Out-of-State Enrollment

Pros and Cons of Out-of-State Recruitment

- Higher per-student net tuition revenue
- Higher recruitment cost
- Lower yield rate
- Lower persistence

These factors put remote markets beyond the reach of many institutions.

ODU Capabilities

- Expert audience definition and recruitment-marketing outreach minimize overall recruitment cost by elevating response rate
- FAO and intensive management of admit pool ensure maximum proportion of students enroll
- Highly developed student success infrastructure mitigates persistence penalty for students from remote markets
An All-Points Strategy
Ensuring Sustained Student Progress from High School to Career

ODU Maximizes Student Conversion at Every Step

Conversion Levers

- Career planning integrated into undergraduate curriculum
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- List sourcing and targeting
Three Core Components of Our Approach

1. **Set Enrollment Goals**
   - Goals must be clear and specific, guide tradeoffs, and come with associated timelines.

   "What enrollment outcomes do we want?"
   - Examples: headcount growth, class mix changes
   - Commits to specific enrollment priorities
   - Guides tradeoffs in aid allocation
   - Sets time frame for realization of goals

2. **Develop Aid Policy**
   - Aid policy must be grounded in the institution’s enrollment goals and should delineate criteria for need and merit aid.

   "How much aid will each student receive?"
   - Ties qualifying criteria for aid to award amounts
   - Based on EFC, academic ability, and residency
   - Tested against the statistical model to project hypothetical enrollment outcomes

3. **Use a Statistical Model**
   - Statistical modeling helps the university to project enrollment outcomes for aid policies under consideration.

   "How will this policy shape our incoming class?"
   - Analysis of admitted-student data to predict yield
   - Based on historical yield data
   - Covers hundreds of variables that impact yield
   - Used to project outcomes of policy, not package aid
### Deposit Rate by Survey Response

<table>
<thead>
<tr>
<th>Student response</th>
<th>Proportion of total students</th>
<th>Likelihood to enroll</th>
<th>Intensity of follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>“yes”</td>
<td>23%</td>
<td>79%</td>
<td>Standard</td>
</tr>
<tr>
<td>“maybe”</td>
<td>28%</td>
<td>30%</td>
<td>Intensive</td>
</tr>
<tr>
<td>“no”</td>
<td>49%</td>
<td>1%</td>
<td>Low</td>
</tr>
</tbody>
</table>

Almost half of students can be safely removed from intensive follow-up, freeing up capacity for more focused pursuit of others.
Yield Coaching
Ensuring Consistent Adoption of Best Practices Across the Admissions Team

ODU Does Formal Training of Counselors in Yield Coaching

Receive six one-on-one training sessions with a yield-coaching expert across the month of December

New Counselors

Experienced Counselors

Attend three full-day training sessions in November of each year to reinforce existing skills

Representative Topics Covered
- Your first meeting with a student
- Texting with admitted students
- Talking finances
- Engaging high-achieving students
- Roster management

Methods of instruction
- Role play
- Didactic instruction
- Review of recorded interactions
- Before-and-after performance evaluation
- Live observation
## Positive Impact
Successfully Sustaining Yield in the Face of Large Admit Growth

### Funnel Statistics
*ODU, 2017 and 2018 Freshman Classes*

<table>
<thead>
<tr>
<th></th>
<th>Applicants</th>
<th>Admit rate</th>
<th>Admits</th>
<th>Yield rate</th>
<th>Enrolls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2017</strong></td>
<td>11,328</td>
<td>85.8%</td>
<td>9,724</td>
<td>30.0%</td>
<td>2,916</td>
</tr>
<tr>
<td><strong>2018</strong></td>
<td>13,512</td>
<td>87.0%</td>
<td>11,761</td>
<td>26.8%</td>
<td>3,150</td>
</tr>
</tbody>
</table>

* +19% * +21% * +8%

Drop in yield rate minimized via yield-management efforts
An All-Points Strategy
Ensuring Sustained Student Progress from High School to Career

ODU Maximizes Student Conversion at Every Step

Conversion Levers

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- List sourcing and targeting

High School Students
Prospects
Inquiries
Applicants
Admits
Enrolls
Graduates
Workforce
Boosting Persistence

Key Aspects of Our Approach to Student Success

Level and Type of Support Tailored to Risk

- **Risk Level**
  - High
  - Medium
  - Low

- **Support Approach**
  - Manage risk factors with high-touch support
  - Resolve minor issues before they escalate
  - Prevent problems before they happen

Advanced statistical methods used to segment students by risk level

- **Coordinated care network** facilitates case management between support offices
- **Communication and tracking tools** manage risk behaviors in real time
- **Student-facing applications** scale and extend support by automating guidance

Advanced statistical methods used to segment students by risk level
A Solid Foundation
Highly Structured Communication with Students Enables the Broader Effort

ODU Maximizes Student Conversion at Every Step

Conversion Levers

- Career planning integrated into undergraduate curriculum
- Student success information-systems, personnel, and best practices
- Financial aid optimization and intensive management of admit pool
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Student-communications infrastructure

High School Students
Prospects
Inquiries
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Admits
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Workforce
A Focus on Communications
Ensuring a Highly Organized Framework for Student Engagement

A Unified Structure that Governs All Contact with Students from Recruitment through to Graduation and Beyond

University departments

- admissions
- student accounts
- registrar
- advising
- career development
- student engagement

Stages of the student lifecycle

- prospect
- applicant
- admit
- undergraduate
- graduate
- alum

Centralized coordination of communications

**Systems**
- CRM
- Marketing automation
- Student-success management system

**Personnel**
- Director of CRM and Integrated Systems
- Student Engagement and Enrollment Services
- Enrollment Management
- Advisors
- Success coaches

Students
1. An Enrollment Power Formula

2. Old Dominion University’s Experience

3. Abilene Christian University’s Experience
Abilene Christian University in Brief
A Beacon of Progressive Christian Education in the West

- A medium-size, private university
- Primarily residential
- High undergraduate enrollment
- Selective admissions
- Ranked 21 among regional universities in the West by US News
- A military-friendly school
- Member of NCAA Division I Southland conference
Baseline Challenge
A Persistently Flat Enrollment Trajectory

Full-Time, First-Time Enrollment
Entering Classes 2005 to 2010

Median FTFT enrollment growth for Texas colleges across this timeframe was 10%. Two of our main competitors grew by 7% and 8% respectively during this same period.
Profile of a Performance Turnaround
How Revised Recruitment Strategy Transformed Our Enrollment Outcomes

1. A Change in Approach
2. Search Strategy
3. Application Strategy
4. Yield Strategy
5. Post-Matriculation Strategy
A Change in Approach
Revised Recruitment-Marketing Approach Adopted for Entering Class 2012

Application Volume and FTFT Enrollment

Entering Classes 2011-2012

Revised recruitment-marketing approach initiated

Application Volume:
+144%

FTFT Enrollment:
+11%
EC 2013 Impact
Building on a Strong Baseline

Application Volume and FTFT Enrollment
Entering Classes 2011-2013

- Application Volume: +144% to +17%
- FTFT Enrollment: +11% to +8%
- Average Enrolled Core GPA: 3.39 to 3.38

19% enrollment growth across first two years of revised strategy
EC 2014 Impact
Pivoting to Class Shaping and Discount-Rate Aims

Application Volume and FTFT Enrollment

*Entering Classes 2011-2014*

<table>
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<tr>
<th>Year</th>
<th>Application Volume</th>
<th>FTFT Enrollment</th>
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</thead>
<tbody>
<tr>
<td>2011</td>
<td>860</td>
<td>3,438</td>
</tr>
<tr>
<td>2012</td>
<td>957</td>
<td>8,407</td>
</tr>
<tr>
<td>2013</td>
<td>1031</td>
<td>9,833</td>
</tr>
<tr>
<td>2014</td>
<td>971</td>
<td>9,248</td>
</tr>
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</table>

NACUBO Discount Rate:
- 2011: 45.7%
- 2012: 53.2%
- 2013: 52.7%

NTR:
- 2011: $12.3M
- 2012: $11.9M
- 2013: $11.8M

Average Enrolled Core GPA:
- 2011: 3.39
- 2012: 3.38
- 2013: 3.41

Increasing core GPA
Profile of a Performance Turnaround
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Optimized Recruitment
Evidence-Based Marketing Outreach Ensured a Steady Upward Trajectory

Recruitment-Marketing Response Rate
Percentage of Contacted Students, 2013-2016

Broadly scoped, continuous testing and refinement of our recruitment-marketing outreach

Industry average: 10.6%

+47
More students responded per 1,000 contacts in 2016 relative to 2013
A Class-Shaping Tool
Early Outreach Engages Especially Capable Prospects

Average Depositing-Student ACT Score
By Recruitment Channel and High School Year of First Contact, ACU Entering Class 2014

- Other sources: 23.3
- Seniors: 23.3
- Juniors: 24.9
- Sophomores: 25.7

Depositing students who were first engaged in Sophomore year have significantly higher test scores.
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Optimized Communication with Prospects Boosts Application Rate

Case in Point: Application Rate by Recruitment-Marketing Channel Mix

Indexed to Control (No Application Marketing), Entering Class 2014

3.8x
Higher rate of application submission relative to control group

No Application Marketing  Electronic Only  Electronic + Paper

Application Submission

Application Completion

1 2.3 3.8
1 2.4 2.9

Indexed to Control (No Application Marketing), Entering Class 2014
Maximizing Application Completion
We Enabled Students to Self-Report Key Credentials

Self-reporting means that admit decisions are made on the basis of students’ self-reported high school transcript and/or test score information.

Benefits
1. Eliminates the most common drivers of non-completion
2. Expedites application processing
3. Minimizes completion follow-up
4. Gets aid offers in front of students ASAP

Challenges
1. Stakeholder resistance
2. Technical challenges

Despite ample research demonstrating reliability of self-reporting, faculty and administration sometimes resist adoption of self-reporting because they’re worried that applicants will misrepresent credentials.
Self-Reporting Project Phases, by Entering-Class Year

Abilene Christian University

<table>
<thead>
<tr>
<th>Infrastructure Setup</th>
<th>Data Collection and Analysis</th>
<th>Self-Reported Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online application and data systems modified to enable student self-reporting</td>
<td>Applicants self-report GPA and test scores but admit decision is based on official documentation</td>
<td>Admit decisions made based on students’ self-reported credentials</td>
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</table>

- 2014
- 2015
- 2016
- 2017

Analysis of ACU applicants’ self-reported data shared with key stakeholders
Demonstrated Accuracy

Analysis Shows Reliability of ACU Applicants’ Self-Reporting

Results from Local Validation Study of Self-Reported Student Credentials

*Abilene Christian University*

- **0.98**
  - correlation between self-reported ACT score and official score

- **0.99**
  - correlation between self-reported SAT score and official score

- **0.84**
  - correlation between self-reported GPA and transcript GPA

- **0**
  - admit offers rescinded due to self-reporting inaccuracies (EC 2017)

Exactly in line with national norms and more than sufficient for accurate admit decisions.
Core Recruitment Metrics

*Abilene Christian University, Before and After Adoption of Self-Reporting*

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<th>Metric</th>
<th>Before</th>
<th>After</th>
<th>% Change</th>
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<tbody>
<tr>
<td>Submitted Applications</td>
<td>10,000</td>
<td>9,600</td>
<td>-4%</td>
</tr>
<tr>
<td>Completed Applications</td>
<td>5,000</td>
<td>5,300</td>
<td>+7%</td>
</tr>
<tr>
<td>Admits</td>
<td>2,500</td>
<td>2,750</td>
<td>+13%</td>
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Rethinking Aid Optimization
We Suspected We Could Do Better on Revenue Performance

Application Volume and FTFT Enrollment

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Room for improvement?
### Enrollment Volume and Net Tuition Revenue

*Entering Classes 2012-2015*

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</tr>
<tr>
<td>2015</td>
<td>1,063</td>
<td>$15.2</td>
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+29% Increase versus 2014

More sophisticated statistical methods, real-time scenario modeling of aid policy, closer integration of enrollment and analytics experts, continuous monitoring of outcomes during yield season.
Profile of a Performance Turnaround
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5. Post-Matriculation Strategy
Broad-Spectrum Analytics

ACU’s Application-to-Success Model Creates More-Equitable Admissions

Acting on Our Improved Ability to Predict Which Applicants Will Thrive

New predictive model built

Key predictors of student success identified

Financial aid and admissions policy modified

Model predicts first-term retention and likelihood to persist

Predictors differ from those previously believed to be most important

Decisions now based on newly identified success drivers

Variables evaluated

- Recalculated HS GPA
- HS class rank
- Strength of HS
- HS activities
- Faith-based activities
- Interview score
- HS coursework rigor
- Application timing
- Test scores

Strongest predictors

- Recalculated HS GPA
- HS class rank
- Strength of HS
- HS activities
- Faith-based activities
- Interview score
- HS coursework rigor
- Application timing
- Test scores

Impact on admissions

Students divided into six groups by success score, each group assigned a default admission status

Impact on financial aid

Merit aid index revised to give more weight to strongest predictors of persistence
Measurable Impact
Modified Admissions and Aid Approach Boosted Diversity and Retention

Core Measures of Diversity and Persistence
Entering Class 2008 versus 2018

<table>
<thead>
<tr>
<th>Percentage-Point Increase</th>
<th>2008</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage Underrepresented Minorities</td>
<td>20%</td>
<td>42%</td>
</tr>
<tr>
<td>Retention Across all Student Populations</td>
<td>75%</td>
<td>77%</td>
</tr>
<tr>
<td>Retention for Underrepresented Minorities</td>
<td>66%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Percentage-point increase: 22%, 2%, 6%
Proportional increase: 110%, 3%, 9%
Recap

Four Takeaways on the Recruitment-Marketing Power Formula

1. **Enrollment is built, not found**
   Given the demographic challenges facing higher education, schools that continue to thrive will be those that succeed in building demand across an expanded prospect pool.

2. **Ability to convert prospects more crucial than ever**
   Merely growing the top of your funnel is not enough; success depends on converting prospects into inquiries and applications, an undertaking that depends on effective recruitment marketing.

3. **Equip yourself with a comprehensive yield-management toolkit**
   Enrollment leaders have access to a growing and increasingly sophisticated set of tools for managing yield rate; moving forward, enrollment success will depend on mastery of those tools.

4. **Look beyond matriculation**
   Recent developments in data, analytics, and digital communications have created unprecedented opportunities for enrollment leaders to inflect student success—an effort that helps students and schools in equal measure.