ADMISSION PREDICTIVE ANALYTICS
Shaping the Incoming Class

The Office of Institutional Analytics (OIA-formerly UIRR) staff have created campus specific predictive models to assist campus personnel to forecast the students in their respective applicant pools who will be part of the new beginner cohort. The individual scores for each student along with specific variables that are most responsible for predicting enrollment is ported weekly to the Salesforce CRM platform to enable Admissions staff to undertake tailored communications in an effort to nudge students to enroll. Enrollment models are based on the Salesforce CRM behavioral indicators such as students’ response to a survey about their intent to enroll, attendance at high school visits, virtual and in-person campus visits, advising appointments, and orientations, as well as pre-collegiate attributes, student demographics, and the interplay among all these variables. One by-product of the Predictive Analytics project is an intensive mining of sentinel data sources that record students’ post admit behaviors and weighting them in a decision tree to derive an intent to enroll indicator. These data points will be updated daily and USSS and the Northwest campus will be piloting a project to use these markers in individualized student journeys.
NON-ENROLLED TRANSFER APPLICANT SURVEY
The top reasons students chose not to transfer to IU

The yield rate for transfer students has steadily declined from a high of 62.7% in Fall 2013 to a low of 53.2% in Fall 2021 across the IU system. Three recent cohorts (Fall 2018-20) were polled to try and ascertain the main reasons they opted not to enroll at IU. The combined response rate for all regional campuses was 18.9%. The top reasons students provided for not enrolling include but are not limited to lack of scholarships, not enough credits being accepted, length of time for credits to be articulated, life circumstances, and cost/financial concerns. You are able to get campus specific results disaggregated by several demographic variables on the UIRR Internal Survey site.

FINANCIAL AID OPTIMIZATION
Strategic management of financial resources to maximize ROI and retention rates

Cost and financial concerns are not confined to just the transfer student population. As a driver to retention, UIRR embarked on a Financial Aid Optimization (FAO) project with the financial aid and enrollment management teams on all the regional campuses. The FAO tool predicts a baseline retention score for each full-time, first-time beginner in the Fall 2020 cohort, then models how that score is likely to change given hypothetical awards ranging from $100 to $2000. In addition to identifying the students who are most likely to be “flipped”, that is move from a state of not retained to being retained, the FAO tool provided an anticipated return on investment based on the net of the cost of the awards and the tuition revenues that would accrue based on the improved retention of additional students. The executive leadership on each regional campus approved the use of institutional aid funds in the amount of $75,000 towards this initiative. In the spirit of experimentation, campuses were expected to award different student populations, in different aid amounts, with an emphasis on need and equity as guideposts in how awards were disbursed. Theoretically, by adopting such an approach of awarding different aid amounts across a wide cross-section of the student population, the predictive power of the models would improve when the model is applied to other student groups in future iterations (e.g. First Time Beginners).
FINANCIAL AID OPTIMIZATION
Continued from Page 2

Approximately 420 students received the Persistence Pays Award. However, almost all of the campuses provided the majority (see graph below) of their awards to students who were already enrolled for the fall semester prior to receiving the award. After the Spring Census snapshots are finalized, we will continue to monitor student outcomes and report out to campus leadership and Financial Aid Directors. The main lessons learned from the initial implementation are two-fold:

1. Focus less on increasing the accuracy for the award recipients and more on providing awards to students whose enrollment decisions are still malleable
2. Facilitate this approach by making awards prior to financial packaging closer to when fall enrollment registration opens

CREDIT TRANSPARENCY
How was Transfer Credit Articulated?

Consistent with the Non-Enrolled Transfer Applicant Survey, personnel who participated in the inaugural 8-week Transfer Action Caucus (TAC) identified credit transparency as a bottleneck to improving the yield rate of transfer students. Credit transparency in the context of UIRR’s work meant disaggregating posted credits to show when and how articulation rules were used, and the type of IU course credit that resulted (i.e. normal course credit, subject undistributed, or fully undistributed). By looking at this kind of trend data at a campus and system level, IU can begin to yield at a higher rate, be more responsive and timely in credit articulation, minimize credit loss, establish articulation agreements where necessary, and address a myriad of other business questions. To date in 2021, the percentage of credits that transfer fully to a subject/course for all regional campuses combined is 48.2%. This is addressing a downward trend dating back to 2017 when credits accepted to a subject was at a high of 49.0% and declined to 46.5% in 2020. The dashboard on Transfer Credit Evaluation will be studied by the University Transfer Office (UTO) as part of the implementation phase of their TAC work. The reports provide several new views for all regional campuses, and the insights garnered by the UTO’s system-wide self-study, will serve to improve credit transparency for our transfer student population.
GRADUATION RATES

Student Outcomes

While the nominal counts of awarded degrees have declined (from a high of 4,311 degrees in 2016-17 to 4,131 in 2020-21), the 4 and 6 year graduation rates have continued to improve for full-time beginners at all the regional campuses. When the Fall 2017 and Fall 2015 cohorts’ 4 year and 6 year graduation rates are compared to cohorts five years prior (i.e. 2012 and 2010 cohorts), rates have increased by 9.4 and 10.2 percentage points respectively. The sharp decline in 2nd term retention of the Fall 2020 cohort (77%) and the 2nd year retention of the Fall 2019 (59%) forewarns of a potential reversal in this upward trend if major efforts are not made to re-enroll students who may have stopped out due to the COVID-19 pandemic.

### 2020-21 Complections

- Bachelor Completions: 3,403
- All Completions: 4,131

### Retention and Graduation Rates

<table>
<thead>
<tr>
<th>Rate Type</th>
<th>2017 Cohort</th>
<th>2019 Cohort</th>
<th>2020 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall-to-Fall Retention Rate</td>
<td>25.6%</td>
<td></td>
<td>59.0%</td>
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<tr>
<td>4 year Graduation Rate</td>
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<tr>
<td>6 year Graduation Rate</td>
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</table>

<table>
<thead>
<tr>
<th>5-Year % Diff</th>
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</thead>
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<tr>
<td>-5.0%</td>
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<tr>
<td>9.4%</td>
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<tr>
<td>10.2%</td>
</tr>
</tbody>
</table>
The career outcome rate for regional campuses was 92% for students who received an undergraduate degree in fiscal year 2019-20. Of the 2,034 students with known outcomes (knowledge rate is 57%), roughly about 1,912 (74%) accepted employment, and 325 (16%) were continuing their education. Of the graduates who reported that they had accepted employment, 7 (-1 from prior fiscal year) out of every 10 students had full-time positions. The percentage of respondents who were still seeking employment or continuing their studies at the time of data collection went up from 8% in 2018-19 to 8.4% 2019-20. For graduates who were able to secure full-time employment, compared to their counterparts in the 2018-19 graduating class ($43,674), they enjoyed an increase (+$1,600) in their average annual salary of $45,274. You can interact with the dashboard to explore the data and tell your campus’ story.

**POSTSECONDARY EMPLOYMENT OUTCOMES**

IU’s PSEO Data from the US Census Bureau

IU’s Postsecondary Employment Outcomes (PSEO) dashboard utilizes data acquired through a data-sharing agreement between postsecondary institutions and the U.S. Census Bureau. This resource is the most comprehensive in terms of geographic coverage of earnings and industry data. The dashboard provides outcomes for graduates 1 year, 5 years, and 10 years out and provides earnings at the 25th, 50th, and 75th percentiles. The earning data is also accessible by program family. A Sankey diagram visually represents the industries and locations of employment for graduates. Baccalaureate graduates are grouped into three year cohorts (2016-2018), and as such, the most recent earnings for this cohort are the 1 year out based on 2019 earnings. The report is expected to be updated with 1 year out earnings for non-baccalaureate graduates (2016-2020 cohort) in the first quarter of 2022.

**FINISH IN FOUR**

Tracking On-Time Completion

Senior leadership, data providers, and stakeholders can use these data views and visualizations to track students’ progress (i.e. hours completed, GPA, earned ratio of attempted hours to earned hours) over their first four years by term or year. The dashboard also allows the user to determine the percentage of students in the pipeline who are on track to finish in 4 years. These new views were updated based on the requests of personnel across the campuses. The Fall 2019 regional campus cohort, the most recent cohort with a full year of data availability, saw 49.7% of the cohort complete 30 hours or more hours on time, a notable uptick from the Fall 2018 with 46.7%. Thirty-four percent of the Fall 2018 cohort is on target to complete 60 or more credit hours on time. The dashboard will provide detailed metrics for respective based on a multitude of student academic and demographic profiles. These views can also be used to identify less successful target populations (downloadable data set available to those with access) so that outreach and intervention can take place for on-time graduation.
PRE-COLLEGE CREDITS
IU’s Dual Credit Funnel

A suite of pre-college reports aimed at providing deeper insights on the path that dual credit and ACP students take to IU, non-IU universities, and then their outcomes once they enroll at IU were recently added to the repository of UIRR reports. The Dual Credit Funnel to IU Undergraduate report shows that of the high school students who took classes at an IU campus dating back to 2012, 33.1% percent of those prospects enrolled at East, 40.2% at Kokomo, 38.7% at Northwest, 43.0% at South Bend, and Southeast enjoyed a yield of 41.9%. The suite of reports provides a wealth of information including but not limited to providing multi-year trend data on the enrollments and hours brought in, the academic and demographic profile of students taking pre-college credits, courses taken, grades obtained, and geographic maps by service region of high schools.

NSSE 2021
Engagement Indicators, HIPs, and Perceived Gains

The 2021 NSSE results have been added to the 2015 and 2018 NSSE system wide administrations. It is important to place observed trends in the context of the pandemic. For example, some High Impact Practices (HIPs) and Engagement Indicators (EIs) that are based on in-person participation (e.g. study abroad, service learning, discussions with diverse others), on average received lower scores across most institutions that participated in NSSE 2021. An interesting new addition to our NSSE report update allows for an analysis of HIPs and Engagement Indicators (EIs) by student grades.
The Program Review Dashboard is an amalgamation of several data sources leveraged to house enrollment (heads and hours), class enrollment (heads and hours), grades, degree completions, retention by plan, and faculty and staff FTE reporting all in one location. Thanks to all the IR Directors on each regional campus for their ideas and contributions, this platform will aid in a more streamlined and efficient completion of self-studies, program reviews, and external reviews geared towards internal and external reporting. A few noteworthy and new reporting elements that evolved from our regional collaboration are:

- Enrollments: reported on minors, primary plans, and non-primary plans (academic plan 2 and 3)
- Enrollment by Course Subject: mapped student and course orgs to identify majors and non-majors
- Class Fill Rate: identified combined sections when courses with different subject codes and sections were consolidated and taught as a single class
- Degree Completions: in addition to degree count, added average GPA, time to degree, and units-completed-to-taken ratio as lens through which to evaluate attained degrees.