Analysis of Variables to Predict First-Year Persistence Using Logistic Regression Analysis at the University of South Florida

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To enhance student persistence and degree attainment, the University of South Florida supported the development of a model, using logistic regression, which will predict the risk of individual student attrition based upon pre-matriculation characteristics. Students who are most at risk will be personally contacted and interviewed to determine what intervention strategies and support should be implemented.
The project presented in this article was described in a previous edition of *College and University* (Miller 2007). The project is intended to produce a model for predicting the risk of attrition of individual students enrolled at the University of South Florida. When the model is applied to an incoming population of newly enrolled students, university officials will be able to employ a process of intervening with individual students and developing strategies to enhance the chances of persistence of the involved students.

Many higher educational institutions are engaged in activities intended to enhance student retention, but problems exist in identifying students who would benefit from such efforts. Broadly applied efforts, such as targeting all freshmen, can be wasteful in that they almost certainly include many participants who would have remained enrolled at the institution without any treatment. Narrowly-applied efforts, such as targeting students on academic probation, or who show another single risk factor for attrition, fail to take advantage of the fact that multiple characteristics often combine to predict retention. Therefore, they target only some of the students most likely to leave, missing many others, and also students who would have remained anyway, once again wasting resources.

The appeal of the current project is that it is intended to identify individual students who are at risk based upon a variety of factors. When individual students are found to be at risk, and there is confidence in the basis for the discovery, appropriate personnel can contact them and begin the process of developing plans to enhance the chance of persistence by the individual student (Glynn, Sauer, and Miller 2005). The efficiency and cost effectiveness of this approach, especially at large institutions, is appealing to involved administrators and managers.

Another characteristic of this project that may have particular appeal to practitioners is that the model relies entirely on pre-matriculation characteristics of entering new students. This allows for a timely response on behalf of the students identified as at risk and gives the institution an opportunity to craft a legitimate early intervention program that can start even before the individual student gives any signal of disconnecting or disengaging from the university, perhaps even before the student has given thought to dropping out.

The authors will describe the process of developing the predictive model and then present the specific elements of the model. There were several items in the database that were nearly of predictive worth, and they will also be described. Finally, the authors will describe the process of developing interventions on behalf of individual students found to be at risk.

**Methodology**

Data for the study were obtained from university databases and the College Student Expectations Questionnaire (CSXQ) (Gonyea 2003; Kuh and Pace 1998), which was administered to incoming First Time in College (FTIC) freshmen in the fall of 2006. Participants in the study were 3,998 new FTIC students who enrolled at the Tampa Campus of the university in the fall of 2006, and also new FTIC students in the summer 2006 term who returned for the fall. Of these students, 58 percent were women, and 35 percent were minority. More than 90 percent of the new FTIC students were from Florida. Of the overall group, 82.2 percent returned to the university for the fall 2007 term. About half of the incoming freshmen completed the survey, and about half of those provided identifying information that would allow the matching of survey results to information about students available
<table>
<thead>
<tr>
<th>Block</th>
<th>Variable Name</th>
<th>Categorical/Continuous¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>Dummy-2 M,F Reference: Male</td>
</tr>
<tr>
<td>1</td>
<td>Ethnic</td>
<td>Dummy-4 A,B,H,W Reference: White</td>
</tr>
<tr>
<td>1</td>
<td>Distance</td>
<td>Dummy-5 1-local county, 2-surrounding area, 3-south counties, 4-other in-state, 5-out-of-state Reference: Out-of-state</td>
</tr>
<tr>
<td>1</td>
<td>Major_code</td>
<td>Dummy-11 Top 10 majors + “Other” 1-Declared, 2-Pre-Med, 3-Business, 4-Eng, 5-Pre-Education, 6-Psychology, 7-Pre-Nursing, 8-Biology, 9-Architecture, 10-Criminology, 11-Other Reference: “Other”</td>
</tr>
<tr>
<td>1</td>
<td>Honors Program</td>
<td>Dummy-2 yes or no Reference: Yes</td>
</tr>
<tr>
<td>1</td>
<td>Summer Program</td>
<td>Dummy-2 yes or no Reference: Yes (1)</td>
</tr>
<tr>
<td>1</td>
<td>Athlete</td>
<td>Dummy-2 0 or 1 Reference: Yes (1)</td>
</tr>
<tr>
<td>1</td>
<td>Residence status</td>
<td>Dummy-2 R or C Reference: Residential</td>
</tr>
<tr>
<td>1</td>
<td>High School GPA</td>
<td>2.38-4.78</td>
</tr>
<tr>
<td>1</td>
<td>SAT Combined (math &amp; verbal)</td>
<td>910-1530; ACT scores converted</td>
</tr>
<tr>
<td>1</td>
<td>Guests at orientation</td>
<td>Ordinal, 0-3+</td>
</tr>
<tr>
<td>1</td>
<td>Time elapsed between application and enrollment</td>
<td>Days</td>
</tr>
<tr>
<td>1</td>
<td>Time elapsed between orientation and enrollment</td>
<td>Days</td>
</tr>
<tr>
<td>2</td>
<td>Library and Info Tech Scale</td>
<td>13-low, 36-high</td>
</tr>
<tr>
<td>2</td>
<td>Experiences with Faculty Scale</td>
<td>8-low, 28-high</td>
</tr>
<tr>
<td>2</td>
<td>Course Learning Scale</td>
<td>14-low, 36-high</td>
</tr>
<tr>
<td>2</td>
<td>Writing Scale</td>
<td>5-low, 20-high</td>
</tr>
<tr>
<td>2</td>
<td>Campus Facilities Scale</td>
<td>9-low, 36-high</td>
</tr>
<tr>
<td>2</td>
<td>Clubs, Organizations, Service Projects Scale</td>
<td>5-low, 20-high</td>
</tr>
<tr>
<td>2</td>
<td>Student Acquaintances Scale</td>
<td>7-low, 28-high</td>
</tr>
<tr>
<td>2</td>
<td>Scientific &amp; Quant Experiences Scale</td>
<td>5-low, 20-high</td>
</tr>
<tr>
<td>2</td>
<td>Conversation Topics Scale</td>
<td>10-low, 40-high</td>
</tr>
<tr>
<td>2</td>
<td>Information in Conversations Scale</td>
<td>6-low, 24-high</td>
</tr>
<tr>
<td>2</td>
<td>Read non-assigned books</td>
<td>1-low, 5-high</td>
</tr>
<tr>
<td>2</td>
<td>Read textbooks/assigned books</td>
<td>1-low, 5-high</td>
</tr>
<tr>
<td>2</td>
<td>Write term papers</td>
<td>1-low, 5-high</td>
</tr>
<tr>
<td>2</td>
<td>Write essay exams for courses</td>
<td>1-low, 5-high</td>
</tr>
<tr>
<td>2</td>
<td>Will you like college?</td>
<td>1-low, 4-high</td>
</tr>
<tr>
<td>2</td>
<td>Academic, scholarly development</td>
<td>1-weak emphasis, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Aesthetic, expressive, creative dev</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Critical, evaluative dev</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Appreciation of human diversity dev</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Info literacy skills dev</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Vocational competence dev</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Personal relevance/practical value of courses</td>
<td>1-weak, 7-strong</td>
</tr>
<tr>
<td>2</td>
<td>Relationships w other students</td>
<td>1-alienated, 7-friendly</td>
</tr>
<tr>
<td>2</td>
<td>Rel’s with faculty</td>
<td>1-remote 7-approachable</td>
</tr>
<tr>
<td>2</td>
<td>Rel’s with administrators</td>
<td>1-impersonal 7-helpful</td>
</tr>
<tr>
<td>2</td>
<td>Expected grades</td>
<td>5-A, 1-C or lower</td>
</tr>
<tr>
<td>2</td>
<td>Advanced degree plans?</td>
<td>Dummy, 1-yes 2-no</td>
</tr>
<tr>
<td>2</td>
<td>Credit hours planned</td>
<td>1-few, 5-many</td>
</tr>
<tr>
<td>2</td>
<td>Study hours per week</td>
<td>1-low, 7-high</td>
</tr>
<tr>
<td>2</td>
<td>Work on campus</td>
<td>1-none, 6-high</td>
</tr>
<tr>
<td>2</td>
<td>Work off campus</td>
<td>1-none, 6-high</td>
</tr>
<tr>
<td>2</td>
<td>Who will pay expenses?</td>
<td>1-all self, 4-all other</td>
</tr>
</tbody>
</table>

¹Dummy variable values if created, Reference value if categorical
from the university’s standard databases. This reduced the number of cases available with the survey variables present to approximately 900.

It was determined that 98 percent of the entering FTIC freshmen were aged 18 or 19, so the analysis was restricted to this age group. American Indian/Alaskan Natives and people who indicated “other” as their race were excluded from the analysis due to their small numbers. Therefore, it should not be assumed that results from this study will generalize to those groups.

The researchers employed logistic regression to develop the retention model. That form of regression analysis is appropriate because the dependent variable, persistence from fall 2006 to fall 2007, is not continuous but dichotomous. In addition, the independent variables, drawn from the university’s database as well as from the administration of the CSXQ, are of varying types.

Independent variables used in the analysis appear in Table A-1. Several scales based on items from the CSXQ survey were used. Some of the scales were missing one or more variables. In cases where fewer than half of the component variables were missing, imputed values were substituted for the missing data.

Results
The PROC LOGISTIC procedure in SAS was run using stepwise inclusion of variables. Returning for the fall 2007 term was the dependent variable. Two blocks of independent variables were created such that Block One included mainly demographic-type items available from the university’s standard databases. Block Two included all of the variables in Block One along with scales and individual items from the CSXQ survey.

Table A-1 shows the two blocks of variables. Categorical independent variables entered into the analysis as dummy variables were sex, race/ethnic group, location of origin, major status, honors program status, summer program participation, athletic status, residential status, and interest in obtaining an advanced degree.

Step one in the logistic regression analysis was to construct a model and then determine how well the overall model fit the data (Menard 2002). Whereas in linear regression parameters of the model are estimated using the least-squares method, in logistic regression, parameters of the model, including the coefficients associated with the independent variables, are estimated using the maximum-likelihood method (Pampel 2000). How well the model fits the data can be ascertained from the log likelihood value (LL). The change in log likelihood when the independent variables are included in the model compared to a model that excludes them is observed. Differences between the log likelihoods of each model multiplied by -2 (-2LL) can be interpreted as a $X^2$ statistic (Menard 2002). The $X^2$ value can be used along with the chi-square table with degrees of freedom equal to the number of independent variables to test the null hypothesis that all coefficients are equal to zero. This is similar to the use of the F test in least-squares regression.

If a significant model chi-square is observed, the next step is to evaluate the “contribution of each independent variable to the model by testing for its statistical significance and then examining the substantive significance of its effect on the dependent variables” (Menard 2002, p. 41). The Wald statistic, which has a chi-square distribution, can be used to test the null hypothesis that a coefficient is equal to zero. Unstandardized coefficients show the change in the dependent variable (or, rather, its logit) for every unit change in the independent variable. The unstandardized coefficients can also be used in an equation to predict the dependent variable for a new group of cases for which the independent variables are known but the dependent variable is not known.

A problem with the unstandardized coefficients is that they are presented in their natural units of measurement. The importance of one independent variable compared to another may be obscured by the size of the units used to measure each independent variable. Standardized regression coefficients indicate how many standard deviations the logit of the dependent variable changes as a result of a one standard deviation change in the independent variable. Thus, the standardized coefficients show the importance of each variable, controlling for all of the others, on the logit and may be used to compare the strength of the relationship between the dependent variable and different independent variables. Menard (2002) states that standardized coefficients produced in SAS are only partially standardized and recommends a formula to produce completely standardized coefficients (p. 55). This formula was used to produce the standardized coefficients reported here.

Examination of unstandardized and standardized coefficients, because they deal with logits, can still leave doubt about the relative impact of independent variables on the dependent variables in regression analysis. For this reason, the Delta-p statistic has come into use to more clearly display the effect that independent variables have on the outcome variable (Cabrera 1994). “Delta-p is the impact that each significant variable makes on the probability of retention, controlling for all other variables in the model.”
(Ronco and Cahill 2006). Delta-p can be calculated using a formula developed by Petersen (1985). For continuous variables in the model, Delta-p represents an estimate of the change in probability of the dependent variable based on a one-unit change in the independent variable. For categorical variables, Delta-p represents an estimate in the change in probability of the dependent variable compared to the reference value.

Diagnostics performed on the data prior to analysis included checks of tolerances in a regular regression analysis to determine if multicollinearity between variables was present, and the Hosmer and Lemeshow (1989) lack of fit test to confirm linearity in the logit. These procedures were carried out for both blocks of variables. One variable, parent degrees, was eliminated from the Block Two analysis due to high tolerance. Adequate linearity in the logit was present in both analysis blocks.

**ANALYSIS OF BLOCK TWO**  
*(BLOCK ONE AND CSXQ DATA)*

Model indicators for analysis of Block Two variables appear in Table A-2. The overall retention rate for this group (N = 717) from fall 1 to fall 2 was 78.2 percent. The value of -2LL for the analysis including Block Two indicates that there was significantly better prediction of the dependent variable obtained when Block Two variables were included in the model compared to a model that included no independent variables (-2LL = 105,7109 (df = 57), p < 0.0001).

Unstandardized coefficients and standardized coefficients appear in Table A-3. Delta-p values appear only for significant coefficients. The Delta-p values show that retention increased approximately 10 percent based on each one-point increase in high school GPA, and that Black students showed 11 percent higher retention, and Black students showed 11 percent higher retention than White students. Pre-nursing students had an almost 13 percent lower retention rate than "other" majors, and commuters showed a 2.5 percent lower retention rate than resident students. SAT combined scores showed a small negative relationship to retention. Time elapsed since orientation (attending an early orientation) showed a small positive relationship with retention.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Model 1</th>
<th>Model 2</th>
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</thead>
<tbody>
<tr>
<td>Baseline p (%)</td>
<td>82.2</td>
<td>78.2</td>
</tr>
<tr>
<td>Model N</td>
<td>3,836</td>
<td>717</td>
</tr>
<tr>
<td>-2 Log L</td>
<td>3587.622</td>
<td>751.157</td>
</tr>
<tr>
<td>With covariates</td>
<td>3368.085</td>
<td>645.446</td>
</tr>
<tr>
<td>Likelihood Ratio Chi-square (df)</td>
<td>219.5364 (26)</td>
<td>105.7109 (57)</td>
</tr>
<tr>
<td>Adjusted Pseudo R2</td>
<td>0.0916</td>
<td>0.2111</td>
</tr>
<tr>
<td>Correctly Predicted (%)</td>
<td>82.3</td>
<td>78.9</td>
</tr>
</tbody>
</table>

1 p < .0001

**ANALYSIS OF BLOCK ONE**  
*(FROM UNIVERSITY DATABASES)*

Model indicators for analysis of Block One variables appear in Table A-2. The overall retention rate for this group (N = 3,836) from fall 1 to fall 2 was 82.3 percent. The value of -2LL for the analysis including Block One indicates that there was significantly better prediction of the dependent variable obtained when Block One variables were included in the model compared to a model that included no independent variables (-2LL = 219,5364 (df = 26), p < 0.0001).

Unstandardized coefficients and standardized coefficients appear in Table A-3. Delta-p values appear only for significant coefficients and show that retention increased approximately 10 percent based on each one-point increase in high school GPA, and that Black students showed a 14.5 percent higher retention than White students. Expecting to read many assigned books was associated with a 1.7 percent increase in retention per unit as the value of that measure increased, but expecting to read many non-assigned books was associated with a 3.3 percent decline in retention per unit as the value of that measure increased. Working off campus was associated with a 2.9 percent decline in retention per unit increase in that measure. Although expecting to participate in clubs and organizations was significant in predicting retention, the effect was modest, showing less than a 1 percent increase in retention with every unit increase in scores.
<table>
<thead>
<tr>
<th>Effect</th>
<th>Block 1</th>
<th></th>
<th></th>
<th></th>
<th>Block 2</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficient</td>
<td>Standardized Coefficient</td>
<td>Delta P (%)</td>
<td>Unstandardized Coefficient</td>
<td>Standardized Coefficient</td>
<td>Delta P (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.7641</td>
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<td></td>
<td></td>
<td>2.9574</td>
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<tr>
<td>High School GPA</td>
<td>0.9643&lt;sup&gt;1&lt;/sup&gt;</td>
<td>-0.1554</td>
<td>10.40</td>
<td></td>
<td>0.8995&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0.1260</td>
<td>10.10</td>
<td></td>
</tr>
<tr>
<td>Gender F</td>
<td>-0.0602</td>
<td></td>
<td></td>
<td></td>
<td>-0.1466</td>
<td>-0.0239</td>
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<tr>
<td>Ethnic A</td>
<td>0.8158&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.0752</td>
<td>9.30</td>
<td></td>
<td>0.9038</td>
<td>0.0640</td>
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<td></td>
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<tr>
<td>Ethnic B</td>
<td>1.0791&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.1175</td>
<td>11.20</td>
<td></td>
<td>1.5821&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.1440</td>
<td>14.60</td>
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<tr>
<td>Ethnic H</td>
<td>0.0375</td>
<td>0.0048</td>
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<td></td>
<td>-0.0891</td>
<td>-0.0110</td>
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<tr>
<td>Distance1</td>
<td>0.4618</td>
<td>0.0737</td>
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<td>0.7953</td>
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<tr>
<td>Distance2</td>
<td>0.3442</td>
<td>0.0480</td>
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<td></td>
<td>0.2106</td>
<td>0.0276</td>
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<tr>
<td>Distance3</td>
<td>0.4272</td>
<td>0.0398</td>
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<td></td>
<td>0.5063</td>
<td>0.0428</td>
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<tr>
<td>Distance4</td>
<td>0.3347</td>
<td>0.0561</td>
<td></td>
<td></td>
<td>0.4811</td>
<td>0.0753</td>
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<tr>
<td>SAT Combined</td>
<td>-0.00146&lt;sup&gt;3&lt;/sup&gt;</td>
<td>-0.0590</td>
<td>-0.02</td>
<td></td>
<td>-0.0023</td>
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<td>Major code 1</td>
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<td>0.0133</td>
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<td>-0.3054</td>
<td>-0.0390</td>
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<td>Major code 2</td>
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<td>0.0212</td>
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<td>Major code 4</td>
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<td>-0.0062</td>
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<td>0.0010</td>
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<tr>
<td>Major code 5</td>
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<td>-0.0291</td>
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<td></td>
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<td>-0.0258</td>
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<tr>
<td>Major code 6</td>
<td>0.2647</td>
<td>0.0189</td>
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<td></td>
<td>-0.4328</td>
<td>-0.0276</td>
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<td>Major code 7</td>
<td>-0.6976&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-0.0481</td>
<td>-13.00</td>
<td></td>
<td>-0.8220</td>
<td>-0.0514</td>
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<td>Major code 8</td>
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<td></td>
<td>0.8414</td>
<td>0.0487</td>
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<td>Major code 9</td>
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<td>0.0036</td>
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<td></td>
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Table continued on next page...
**DISCUSSION**

**Review of Frequency Distributions**

Before conducting the logistic regression, a review of the descriptive data in the form of frequency distributions showed some tendencies regarding differences between the group of those who persisted and the group of students in the sample who had dropped out. Variables that seemed to have a positive relationship with persistence because students who had persisted were overrepresented included gender (female), enrollment in the University Honors Program, and participation in one of two early enrollment summer programs. It is not clear why female students persist at a higher rate than do males, but this finding is consistent with previous studies at the university. The latter two variables reflect participation in one of several programs that are characterized by high levels of engagement with and support of students, so higher levels of persistence are predictable. Also showing a tendency to be positively correlated with persistence were early attendance at one of the series of summer orientation programs and early application for admission to the university. Both of those variables measure a form of early commitment and affiliation with the university, so, again, higher levels of persistence are understandable.

The preceding variables were all from the university databases. There were several other variables that came from the CSXQ data set that seemed to have positive relationships with persistence. The first was the intention to be employed on campus. That is consistent with other research (Pascarella and Terenzini 2005) and it is also intuitive because on-campus employment is a form of involvement that can enhance a student’s sense of belonging. Other CSXQ variables that showed positive relationships with persistence are the intended effort scales related to course learning and to scientific and quantitative experiences. Again, it makes sense that students who intend to expend higher levels of effort in those areas would be more apt to persist than other students. Finally, also correlated positively with persistence were individual items from the CSXQ survey related to expected interactions with faculty and to hours spent studying.

None of the aforementioned variables were in the predictive model, perhaps indicating that they were accounted for in other ways. However, this analysis provides a foundation for the development of future models that might include these variables.

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**Table A-3**

*Analysis of Effects, Block 1 and Block 2 Variables*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Block 1</th>
<th>Block 2</th>
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<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficient</td>
<td>Standardized Coefficient</td>
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<tr>
<td>Critical, evaluative dev</td>
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<td>0.0773</td>
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<td>Appreciation of human diversity dev</td>
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<td>Relationships with other students</td>
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<td>Rel’s with administrators</td>
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<td>Who will pay expenses</td>
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1 p ≤ 0.0001; 2 p < 0.005; 3 p < 0.01; 4 p < 0.05; * Excluded no cases
for by other variables in the model, but they do show tendencies of predictive worth. As additional data are collected in subsequent years and the predictive model is refined, some of those variables may become part of the predictive measure derived from the logistic regression analysis.

**Contrasting Block One and Block Two Analyses**

Comparing results from Block One and Block Two illustrates some important “real-life” truths in conducting such an analysis. Most universities collect the kind of information from students included in Block One. Colleges and universities that are unable to participate in new student surveys or other special data collection activities could use such an analysis to assist in identifying students who are at higher risk for dropping out. In addition, many more participants were available for the Block One analysis than the Block Two analysis, thus engendering more confidence in the results of the Block One analysis than for Block Two.

The Block Two results are intriguing, at least to the extent that retention was associated with variables that are not available from university records. Unfortunately, the results are obscured by the small number of participants. This was caused by the usual kind of difficulties encountered by an institution seeking to implement a new survey data collection effort. These problems have been resolved and a much larger sample of survey participants (more than 3,000) is expected to be available from the 2007 incoming class of FTIC students. So, for example, two other scales and two individual items from the CSMXQ came close to significantly predicting retention in several different iterations of the model. A larger sample may resolve whether these elements will be helpful in predicting student retention at this institution.

Three variables that were significant in predicting retention without the survey variables (being a Pre-Nursing student, SAT scores, and time elapsed between orientation and enrollment) were not significant in the Block Two analysis. This may be because the additional variables accounted for variance formerly accounted for by these variables in the first analysis, or because the much smaller N of the second analysis affected the results. Comparing the results from the Block One and Block Two analyses makes it clear that quite different results may be obtained when new variables are added to a regression analysis. Nevertheless, the fact that two variables, High School GPA and Race/Ethnic Group Black, were associated with increased retention among students in both analyses is worthy of note. Ronco and Cahill (2006) also found these variables to be predictors of first-year retention in their study of a similar population of metropolitan university FTIC students.

**Predicting New Cases**

Focusing on the second analysis (Block Two variables), the factors identified as of predictive worth (with the direction of predicting persistence provided) that can be used to predict retention in new cases are:

1. High school GPA (+);
2. Being Black vs. being White (+);
3. Expecting to participate in clubs and student organizations in college(+);
4. Expecting to read many textbooks or assigned books in college(+);
5. Expecting to read many non-assigned books in college(+); and
6. Expecting to work off campus while in college(-).

For each new case the probability that the student will be retained can be derived from the following equation:

\[
\text{logit}(Y) = 2.9574 + (0.8995)(\text{High School GPA}) + (0.9038)(\text{EthnicA}) + (1.5821)(\text{EthnicB}) - (0.0891)(\text{ethnich}) + (0.0792)(\text{clubs}) - (0.2548)(\text{books1}) + (0.2858)(\text{books2}) - (0.2496)(\text{workoffcampus})
\]

The coefficients are taken from Table A-3, on page 7. The computer program produces odds from Logit(Y), and then applies a formula to the odds to yield a probability of persistence between 0 and 1 for each new case. The formula can be applied and new students sorted into “at-risk” and “not-at-risk” groups based on their probability of persistence. Groups may receive treatment as needed.

Briefly reviewing those factors that show themselves to have predictive merit, the inclusion of high school grades [(1.) above] makes sense and is consistent with previous analyses at the university. Expecting to participate in student organizations and read textbooks [(3.) and (4.) above] are forms of engagement, with the out of class and in class experience, respectively. Their inclusion is consistent with the expectations of the researchers. Working off campus [(6.) above] is also intuitive. That African-American students are more apt to persist through the first year [(2.)] seems to suggest that further research into this factor would be useful, because it is not fully understood. Finally, the intention of students to engage in out of class reading [(5.)] is negatively related to persistence, and the reasons for that are also not fully understood. More research is called for in this area, also.
INTERVENTIONS

The developers of the prediction model have been in regular contact with appropriate administrators about fashioning strategies for intervening on behalf of individual students at risk of attrition. The leading administrators in student affairs, undergraduate studies, and enrollment planning and management have embraced the idea of targeting individual students to modify their risk of attrition. In the upcoming semester, a series of meetings will take place involving representatives of those three sections of the university, and those responsible for the model.

The model is expected to identify approximately 500–700 FTIC students as at risk of attrition in their first year, of the total of approximately 4,200 enrolled. The formidable challenge of fashioning consistent, helpful, and well-targeted approaches to interact with each of those 700 students will fall to the team assembled by the group holding those meetings. There are dozens of academic advisors at the university who primarily serve first-year students. There are dozens of others in Student Affairs who interact with many of those same students, and there is a similar count of instructors of the University Experience course, which is offered to all first-year students. It is expected that, between those three pools of personnel who serve the students targeted by this project, administrators can identify about 35 persons, each of whom would work with 20 students at risk. The intervention team will be trained on effective strategies to support individual student persistence and they will be introduced to the prediction model, so they understand the basis for their assignments. Strategies employed will include referrals to standard student support services (and follow up), such as academic advising, career services, and learning support. Other interventions might be an on-campus employment possibility or a suggestion to stimulate student engagement, such as student organization membership, sports team support, or community service activity.

The model will predict risk of attrition, and each of the six factors that make up the model has predictive value. However, there is no reason to suggest that the factors have any causal relationship to attrition. The intervention team members will generally not address factors in the model, with the possible exception of off-campus employment. The researchers will track the results of the efforts...
of individual intervention team members, as those who have particular success may provide useful insight regarding their particular strategies. The ambitious undertaking of forging individual interventions and providing support will begin in the fall 2008 semester.

**CONCLUSION AND NEXT STEPS**

This project is premised upon the principle that college student attrition is as highly individual and personal as any other aspect of the college-going experience. Students make decisions about matriculation (to stay or depart) based upon complicated and complex factors that have unique meaning to the individual, and they are impossible to treat in the aggregate. The project attempts to collect a wider range of information associated with student plans, experiences, and characteristics to provide a broader composite of information about persistence and predict risk of attrition based upon that wide range.

The research team expects to have results to report regarding the persistence of the group entering in 2008 by fall 2009. There are no specific targeted goals for improving freshman-to-sophomore retention, but a marked improvement is expected. In the meantime, more studies will be initiated with the same data set, with more subjects added with each entering class.

The model that has been developed is expected to generate accurate predictions of risk of attrition, and the interventions that are planned are expected to modify that risk and enhance persistence as a result. However, the model only predicts freshman-to-sophomore attrition, not attrition that might take place later in a student’s academic career. The research team expects to develop a model to follow the students in the original data set into what would be their junior year and predict sophomore attrition, based upon data collected for the current model, supplemented by data drawn from the real experiences of students, such as academic performance, actual major chosen, residence status, and participation in student organizations.

The research team will also begin developing strategies for collecting data from the population of incoming transfer students, which is a larger and probably more complex group than the FTIC collection. Determining what should be the elements of a database intended to predict attrition of transfer students will be complicated, but, given the size of the collection and the stakes associated with persistence, it is a necessary additional step.

**REFERENCES**


**About the Authors**

**CHARLENE HERREID** is a Coordinator of Statistical Research at the University of South Florida. She previously served as Director of Institutional Research at Saint Leo University for nine years. She received her bachelor’s, master’s, and Ph.D. degrees in Psychology from the University of Miami (Florida).

**THOMAS E. MILLER** is an Associate Professor at the Tampa campus of the University of South Florida, where he has served since 2001. He previously worked in senior student affairs administrative positions at the University of South Florida, Eckerd College, and Canisius College, and he also held positions at Indiana University and at Shippensburg University. Miller holds a bachelor’s degree from Muhlenberg College and master and doctoral degrees from Indiana University.
Editor’s Note: This article is a follow-up to an article that appeared in C&U in fall 2005 (Bontrager, Clemetsen, & Watts 2005) and to a presentation made at the 2007 AACRAO conference in Boston.

INSTITUTIONAL SIDEWALKS VS. STUDENT TRAILS

It is not uncommon to look at a campus and see beautiful grounds with sidewalks guiding traffic and buildings where students are given opportunities to learn. Yet these well-kept campus grounds also have foot paths that attest to the ways people really travel from one place of learning to another. Some have argued that no sidewalks should be put in place until after the foot paths have become evident. Such an approach would ensure that sidewalks were placed to meet the needs of the most people—and, given the current price of cement, also would ensure the best use of fiscal resources. The reality is that we don’t wait to put in sidewalks. Rather, our grounds staff tries to channel people to use the sidewalks, to discourage people’s use of pathways, and to hide heavily worn mud tracks. This dance has gone on for years and likely will continue until it is decided that the mud paths are a permanent reality and are more important than sidewalks that “look right.”

Sidewalks also describe the common approach to facilitating student transfer. Institutions design systems—sidewalks—intended to provide a safe, clean, predictable flow of students from community colleges to universities. Many students use the sidewalks, but many also find the sidewalks to be neither the most efficient nor the most readily navigable path; others blaze along a foot path. Academic and integrated service agreements between community colleges and universities can be established to reflect and support the building of sidewalks on the beaten paths, better serving the growing traffic along these paths, reducing frustration and resources spent trying to keep students on the “sidewalk” and off the “grass.”

In 1998, Linn-Benton Community College (LBCC) and Oregon State University (OSU), only a few miles apart, decided to clear the brush from a trail already being blazed by students. With presidential support, academic and student services areas began, jointly, to explore how to coordinate resources in order to improve students’ educational expe-
Community colleges are strategically positioned to offer many students a pathway to higher education. According to the American Association of Community Colleges, 46 percent of all undergraduates are enrolled in a community college based on January 2007 data from the College Board and the U.S. Department of Education (AACC 2007). Jacobs estimates that one-third of students transfer at some point during their college career (2004). Cohen (2003) indicates that 40 percent of students who receive bachelor’s degrees from four-year institutions each year have some community college credits on their transcripts. Factors such as low tuition, small classes, and a focus on teaching and learning attract many students who previously were uninterested in or unable to gain admission to a four-year college or university (Kim 2001). For many such students, the community college serves as a gateway to their educational goal of obtaining a baccalaureate degree.

Building smoother pathways for students moving from community colleges to four-year institutions has been a long-standing goal for faculty, administrators, and enrollment management specialists.

The negative experiences of students transferring from community colleges to four-year institutions have been documented in numerous research studies (see, for example, Cejda 1994; Diaz 1992; Flaga 2006; Hills 1965; Jacobs 2004; Lanann 1996; Lanann 2001; and Zamani 2001). Transfer students often face academic, psychological, social, and environmental challenges during their transition to four-year institutions. Laanan (2001) reports that barriers to successful transfer include students’ inability to locate appropriate transfer student services,
inadequate preparation for the university environment, and a lack of support programs at the university. More specifically, transfer students often experience a decrease in academic achievement upon transfer to a university (Hills 1965; Diaz 1992; Cejda 1994; Lanaan 1996; and Lanaan 2001). In addition, Davies and Dickmann (1998) found that transfer students’ expectations of what university life would be like were not accurate; many transfer students experienced loneliness and isolation during the transfer process. More recently, Harrison (2002) reported that transfer students felt academically and socially alienated from other students at the four-year institution. Finally, Townsend and Wilson (2006) found that transfer students needed additional assistance to understand the research university culture and community. Flaga (2006) identified five challenging dimensions of transition to the university environment, including learning resources, connecting, familiarity, negotiating, and integrating into the university community.

What is becoming better understood is the fact that students do not necessarily follow a linear attendance pattern in their pursuit of a degree; rather, they “swirl.” Cliff Adelman (1999) found that the number of students attending multiple postsecondary institutions increased significantly during the 1970s and 1980s. In fact, the numbers had increased such that more than half of a substantial sample of 1972 high school graduates matriculated at more than one institution. Alfredo de los Santos and Irene Wright (1990) applied the term “student swirl” and “double-dipping” to describe this multi-institutional enrollment pattern among community college students. McCormick (2003) suggested a taxonomy of student swirl patterns: (1) trial enrollment, (2) special program enrollment, (3) supplemental enrollment, (4) rebounding enrollment, (5) concurrent enrollment, (6) consolidated enrollment, (7) serial transfer, and (8) independent enrollment.

Building on evidence of student swirl and its various patterns, some observers have suggested ways of working with rather than against this phenomenon. Victor Borden (2004) suggests four mechanisms for accommodating swirl: student tracking and research, assimilation programs that quickly engage students in campus academic and student culture, cross-institutional efforts to collaboratively establish common outcomes, and competency-based assessment for placement. Similarly, a joint conference on baccalaureate attainment sponsored by the American Association of Community Colleges and the American Association of State Colleges and Universities (2004) generated a report recommending joint admissions programs and dual financial aid programs; improved student access to accurate, timely, and consistent advising throughout the educational experience; and structures that promote ongoing inter- and intra-institutional communication about advising and transfer issues.

Furthermore, Peter and Carroll (2005) found in a National Center for Educational Statistics study that “students who began in public two-year institutions who had co-enrolled had higher rates of bachelor’s degree attainment and persistence at four-year institutions than their counterparts who did not co-enroll” (p. 19). Co-enrollment at a two-year and a four-year institution for at least one month resulted in persistence and graduation rates similar to those of students who attended a single four-year institution.

The research cited above attests to the need for a new trail: combining academic experience from two institutions can lead to success.

PAVING THE TRAIL: THE LBCC/OSU DEGREE PARTNERSHIP (DPP)

DPP Purpose: Where is the trail going?
The primary goal of the degree partnership program at OSU and partner community colleges is to provide opportunities for students to meet their individual educational goals. The program is designed to expand access, to increase affordability, and to provide a more transparent process for bachelor’s degree attainment. To that end, institutional impacts of the degree partnership program have driven academic and service innovation, flexibility, and efficiencies. (Bontrager, Clemsen, and Watts 2005)

Program Components: Paving the Trail from Beginning to End

In their effort to establish a program that results in a coordinated educational experience, the two institutions developed the following:

- Joint recruitment materials
- A single application and fee
- Financial aid (federal, state, scholarships) that supports combined enrollment
- Coordinated orientation
- Block transfer Associate of Science degree
- Coordinated advising
- Concurrent enrollment
- Transfer and articulation of credit each term
- Free bus transportation between campuses
- Access to cocurricular experiences at both campuses
DPP Initial examination of the graduate class of 2003 revealed that students is double that of non-change. For example, the three-year transfer rate of ness, and engineering.
The most commonly declared majors are liberal arts, busi applicants are admitted under FTE at percent and 5 percent, respectively, of total applications have increased to account for more than 25,000 students were admitted to the program. DPP ap...path." Between fall 1998 and spring 2007, more than 70 percent of applicants are admitted under OSU DPP transfer criteria. The most commonly declared majors are liberal arts, business, and engineering.

Important outcome measures also show positive change. For example, the three-year transfer rate of DPP students is double that of non-DPP students. At OSU, initial examination of the graduate class of 2003 revealed that DPP students graduated with a higher average cumulative GPA and, on average, 18 fewer OSU credits. Fewer university credits means lower cost to students. A comparison of tuition and fees paid indicates that students could be saving $4,000 to $6,000 over a four-year period.

Stories from the Trail
A qualitative research study over two academic terms between January and July 2005 (Balzer 2006) explored the experiences of six students in the Linn Benton Community College and OSU Degree Partnership Program. Participants represented various majors, hometowns and educational experiences. The stories of Amy, Allan, Deb, Jessica, Sarah, and Jerry (pseudonyms) demonstrate the diversity of the DPP student body. Many of the stories exemplify the swirl patterns suggested by McCormick (2003) and reveal the effectiveness of the program in supporting other documented concerns about student transfer.

Amy
Amy dropped out of high school in California at age 15. At age 24 she gave birth to a daughter. At age 30 Amy started to seriously consider the possibility of attending college; she applied to DPP in fall 2000 after a friend at OSU suggested that it might be a good way for her to overcome her fear of attending a university.

My first term was completely at LBCC, and I quickly began to realize, wow, you know, I can really hold my own around here. And it really gave me the confidence... By the next term, I started taking one class at OSU to see what it was like, and I tried to integrate into the campus. I spent the first couple of years kind of doing things I enjoyed to build my confidence....

While participating in DPP, Amy involved herself in student activities at LBCC and at OSU. She received several awards for her academic and personal achievements. Amy described her DPP experience as the “best way” she could attend school. She was very grateful for the momentum and confidence she built during the early terms of her enrollment as a DPP. Amy appreciated being “considered an OSU student” from the very beginning.

Allan
Allan had always intended to attend OSU. He enrolled in DPP after graduating from high school because it allowed him to explore the two schools and save money.

I wanted to be a dual enrolled student since I was a senior in high school and applied earlier because it al-
Allan’s first term in DPP included all LBCC courses though he lived in on-campus housing at OSU.

Living at OSU from the very beginning really helped me to meet people at both schools. I have friends who are dual and friends who are just OSU. Both friends helped me.

While in DPP, Allan participated in numerous student activities, including intramurals, marching band, and a study abroad trip to France. Allan described his experience between the two schools as “blended” because he was able to “make friends” at OSU before attending classes. He perceived living on the OSU campus before attending classes as a “big help,” especially when it came to understanding how to get around campus.

Jessica

Jessica was born and raised in a small Oregon town. She was an excellent student and graduated from high school with honors. As a freshman, she moved into an on-campus residence hall and roomed with someone she did not know. Jessica’s first year at OSU was characterized by large classes, social activities, homesickness, and academic difficulty.

After two years of attending OSU, Jessica described herself as very close to “dropping out.” Jessica decided to talk to her academic advisor, who suggested that she consider switching to DPP. Jessica described herself initially as “not interested,” but when she learned that DPP was “connected” to OSU and that she could still utilize OSU services, she made the switch. She was especially interested in continuing to use OSU’s counseling and recreation services.

I was ready to start over at a new place since things at OSU didn’t go so well. So I started over there and [it was a] totally different atmosphere. Over there, every single one of the instructors knows me by name. They know how long I’ve been there; they know my specific style, a lot of the way that I do things. I needed that since I came from a small town. It was nice starting over. I felt defeated before I changed to dual.

While participating in the degree partnership program, Jessica utilized support services at LBCC and OSU and joined an honor society at LBCC. Jessica described herself as a small-town girl who “failed at the big university.” She felt as though she was “saved” by the degree partnership program. Jessica appreciated the opportunity to “start over” and “regain some confidence” away from the university but without leaving it completely.

Deb

Deb grew up in southern California and was a high school honor student. Instead of attending college, Deb married and raised two children. Deb enrolled in the degree partnership program when she was 45 years old.

I think what I like the most about the dual enrollment program is it really allowed me to save some money, and [it] kind of set a safe path into this really scary university world. I mean, at that point, I was so scared; I didn’t understand: how could I really go to school and support my family... and keep my health? Now I understand it all. I understand how the system works. And it was like that gave me a sense of security that I could do it. It felt safe, and now I feel like I’m confident and I can be here [at OSU], and I can go after the challenges.

While participating in DPP, Deb worked full time and continued to raise her two children.

Sarah

Sarah grew up in Oregon and graduated from high school with honors. She enrolled at OSU and moved into an on-campus residence hall for her first year of college. Sarah’s first-term GPA at OSU was below 2.0. Sarah continued to struggle throughout her first and second years at OSU. She enrolled in DPP in the fall of her junior year. After successfully completing Physics 201 and two study skills courses at LBCC, Sarah completed her remaining courses at OSU.

My advisor at OSU really helped me to see I could make it a different way. It helped me to stay positive and hopeful. When I was working with people at LBCC and OSU, I felt like I was getting help at two schools at once.

Sarah described the degree partnership program as her “second chance” at graduating from OSU. She believed she benefited tremendously from the academic environment and caring faculty at the community college.

Jerry

Jerry dropped out of high school at the age of 17. After completing his GED, he found employment as a construction worker. Jerry “made a few mistakes” and was arrested, convicted, and sentenced to five years in prison. After his
release, Jerry enrolled at a community college and obtained a part-time job. Jerry’s initial goal was to get into a four-year college; however, he had little knowledge of how to achieve this goal. Jerry learned about DPP after taking a course at LBCC.

I needed this type of program if I was ever going to get a degree. I needed to get some momentum, and I really wanted to be a Beaver... And then I learned more about it, how you could take half and half...

While participating in DPP, Jerry attended numerous OSU sporting events, lived in OSU family housing, and participated in several faculty research projects. Jerry explained that he could have “bounced around forever” within the community college system. The DPP set Jerry on a path toward a major and a baccalaureate degree.

WHAT ARE THE IMPLICATIONS OF DPP?
DPP allows a student to move back and forth socially and academically, as needed, changing the traditional community college to university transfer student experience. Rather than an abrupt transfer to the university, the DPP student feels “invited” and even “encouraged” to enter the university world, even before he or she begins taking classes. Balzer (2006) found that DPP students—despite their differences—experience a somewhat similar transition to the university. She identified five phases of DPP student transition: Identifying as a Degree Partnership Program Student; Gaining Momentum at the Community College; Testing Out the University; Moving Thoughtfully between Two Institutions; and Settling into the University. These overlapping phases vary in length for each individual student.

Phase one, Identifying as a Degree Partnership Program Student, is characterized by being admitted into DPP, calling oneself a DPP student, and declaring an intention to transition into and graduate from the university. This identification is important to students, especially at the beginning of their experience. Enrolling in a partnership program between two schools is perceived by the students as a declaration of their intent to obtain a baccalaureate degree from a specific university.

Being a dual student meant I was going to leave the [community college] for OSU, someday. I was sort of an OSU student from the very beginning because I was living on campus and going to activities. —Jerry

I liked calling myself a dual student. I considered it a positive label. It meant I was in both schools and would eventually end up fully at OSU. It also meant that OSU intended to have me as soon as I wanted to take classes. —Allan

Being a dual student meant I was on my way to OSU, but I wasn’t fully here [at OSU] yet. I knew I had some work to do before I could make it at OSU, and I knew Linn Benton was the best way to go about getting things done. I was so happy I could be dual. While I was dual I felt like I was invited to explore OSU. —Amy

Phase two, Gaining Momentum at the Community College, is characterized by enrolling in almost all (if not all) community college classes. During this phase, students overcome their lack of confidence and improve their academic preparedness for the university. Students also utilize academic opportunities and services at the community college to prepare for the university environment.

Being in those CC [LBCC] classes really helped me. The smaller class sizes, I don’t know, I just felt more comfortable because I wasn’t worried about being judged. —Sarah

At LBCC it was basically time and opportunity to help me study better. Kind of learning how to learn, you know. —Allan

I was just trying to learn how to learn in the beginning. I was trying to learn what would help me be a more successful student. The teachers at LB treat you a little differently, a little bit more hands-on, and it just felt safer. —Deb

Phase three, Testing Out the University, is characterized by participation in university activities, use of university services, spending time on the university campus, and enrolling in a small number of university courses. During this phase, students begin to explore the university; they learn how to get around and see what the university has to offer.

That’s the value of the dual enrolled program: ...it allows you to move into the university environment in a comfortable way for you. Test it out with a few classes at a time. It’s sort of a safe way to be a student. —Deb

I started hanging out at OSU before I started to take classes—you know, visiting the library, going to plays. It was a good way to see what things were like before I took classes—testing it out. Then I took one class. —Amy
Living at OSU really helped me to meet people at both schools. I have friends who are dual and friends who are just OSU. Both groups of friends helped me. And doing the marching band at OSU the whole time made me feel like I was a part of the campus from the very beginning.—Allan

Phase four, Moving Thoughtfully between Two Institutions, is characterized by choosing classes and utilizing services at one or both institution(s). DPP students carefully decide on classes at the community college and university based on their perceptions of what is best for them. DPP students frequently utilize academic support services at the community college while they avail themselves of the university’s extracurricular activities, large and diverse facilities, computing resources, library, housing opportunities, faculty scholars, and advising.

I have the advantage of really picking and choosing classes at both schools.—Amy

I like telling people about how I have access to both schools and save more money than they do.—Jerry

I like being able to pick classes at either school. It’s nice to be able to take classes in a smaller setting.—Jessica

Phase five, Settling into the University, is characterized by full integration into the university community. Students in this phase view themselves as university students and former DPP students.

This year, I feel like I’m part of a community at OSU. I’m no longer dual. I’ve moved out of my BAC core and so I’m seeing a lot more of the same students. I’m actually seeing some of the students from Linn-Benton; they’re also dual-enrolled students.—Deb

I’m a senior and I consider myself an OSU student now.—Amy

DPP also allows students to leverage the advantages of the community college. For example, students benefit from smaller class settings, less expensive classes, and community education opportunities. DPP students have many positive things to say about the community college structure and atmosphere:

To be honest, I wanted to be in the dual enrollment program because I was intimidated by the university environment. I needed a way to begin school where I could be successful and confident. It seemed like the community college would be that place. The first terms at the community college allowed me to understand the educational system. I wasn’t afraid to ask questions; I knew that sort of sets me apart from the younger student who just would have known where to go or where to turn.

I was looking to maximize my experience. And of course there is the money part of it. I can go through the community college and take many of these classes that are in my BAC core, and I don’t have to pay the OSU tuition prices. It really did make sense for me and my family financially. I think many more students should consider this route.—Deb

Smaller classes and cheaper: what’s there to think about? You get the best out of it. Instead of being in a classroom with 300 students, you get to start out small. I need that kind of attention.—Allan

The campus out there is so much smaller, and the hands-on that you get with the teachers—the style of teaching, the methods—are just completely different. It was very helpful to learn how to study in that kind of environment. I really utilized the classroom experience at LBCC to gain momentum.—Deb

TRAIL ENHANCEMENT AND MAINTENANCE FOR FUTURE USERS

The LBCC/OSU Degree Partnership constitutes a new, proven pathway for students to achieve a bachelor’s degree in a manner that lets them customize their educational experience. The evidence has convinced administrators, faculty, staff, government leaders, and families that this type of partnership facilitates success as it is developed around student rather than institutional needs. As with any true partnership, its effects are extending into new areas and into new programs that leverage our ability to serve changing student demographics.

We have a robust agenda for the future. Ongoing assessment of students in the program will reveal ways in which we can improve the trail. We have a lengthy research agenda to act upon, including a review of financial aid usage and comparisons to non-DPP students. DPP has inspired institutional changes as well as new academic and service department partnerships. These new relationships will need to be evaluated in light of their impact on student success.

Our institutions and the students who have benefited from DPP thank those individuals who dared to not fol-
low the sidewalks and to expose more effective routes to transfer and academic success.

REFERENCES

About the Authors

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BUILDING A SEM ORGANIZATION

The Internal Consultant Approach

This article was a preconference paper for the 2007 AACRAO Strategic Enrollment Management Conference.
There is little doubt about it: Colleges and universities are reluctant to change. They are large and diffuse organizations with few clear lines of control. Yet the external environment in which colleges and universities operate is changing quickly. The U.S. higher education community is experiencing the most dramatic shifts in student demographics since the post–World War II era (WICHE 2003). States and other organizations are conducting new external evaluations to justify lower amounts of public fiscal support. Public expectations for a wide variety of high-quality student services are rapidly increasing. These changes make it essential for institutions to implement at least some aspects of strategic enrollment management (SEM) in order to develop greater institution-wide understanding of how to best respond to emerging student trends, needs, and markets. As a growing number of institutions encounter this reality, many find themselves grappling with a fundamental question: What is an effective, sustainable approach to implementing SEM that is likely to be embraced by the entire campus?

The complexity of the current environment as well as most administrative structures has fostered an expectation that environmental scans, assessment of strategic needs, development of marketing plans, and other core planning activities are often best accomplished by outside professionals and consultants. Over the past two decades, many institutional leaders have come to highly value the professional SEM consulting field. Demand for help in responding to changing markets and in revising institutional expectations has driven the rapid growth of the support industry. A June 2007 compilation of higher education consultants listed approximately 200 consultants with focuses in 50 different categories (University Business 2007); more than 130 firms were noted for their abilities to assist universities with implementing SEM in terms of change management, marketing, diversity, financial aid, distance education, student market research, strategy, planning and/or communications. Why must institutions look externally for assistance with these critical institutional needs?

This white paper presents a performance concept of the “in-house consultant” model (IHC) as a means to better position the chief enrollment officer and SEM units as a campus-wide support team focused on helping most campus units achieve and sustain core institutional strategic initiatives. Fundamentally embracing the IHC conceptual metaphor would address the mind and skill sets required by enrollment management professionals to help their institutions operate in a more efficient and proactive manner.

**Benefits of Consultants**

The scope of an external consultant’s stature has significantly expanded in our era of high-tech, enterprise-planning workplaces. These temporary, expert employees are expected to provide a client with objective advice and assistance relating to the strategy, structure, management and operations of an organization in pursuit of its long-term purposes and objectives. Such assistance may include the identification of options with recommendations, the provision of an additional resource, and/or the implementation of solutions (Institute of Management Consultancy 2002).
Whereas an institution may find it exhilarating to utilize the resources and knowledge of a field expert, it also may feel frustrated by the loss of energy and competence when a consultant concludes his/her project. Many people are familiar with the scenario: a problem is identified; a consultant is hired; a plan is written; and then the institution is left to develop the structure to implement and sustain the new plan.

This is not to argue that external consultants are either superfluous or ineffective at addressing detailed problems. There is a time and place for colleges and universities to seek outside help. External perspectives are often needed to help institutions reorient or break through bureaucratic obstacles and bring valuable insights from a breadth of experiences. Many schools need a SEM “road map” that only an external agent can help construct. This is true particularly for schools with no prior SEM orientation as well as for institutions facing an emergency enrollment situation. A short-term contract with an experienced firm or individual can prove invaluable.

When a campus does employ the services of an external SEM consultant, the question may be asked, “Where do we go from here?” This scenario provides a “jumping-off point” that can be seized and embraced. By positioning a campus-based SEM professional as an in-house consultant, campus leaders can signal that they are serious about meeting the institution’s enrollment goals and they are willing to take the steps necessary to support a SEM-based organization.

Whether or not an institution starts with an external consultant, SEM professionals can be most effective if the campus community views them in a “consultant” or helping role rather than as just another administrator running a support unit.

THE ROLE OF SEM WITHIN THE ORGANIZATION: STANDARD PROFESSIONAL EXPECTATIONS WITHOUT A STANDARD OPERATIONAL MODEL

There is no one-size-fits-all, cookie-cutter approach to enrollment management, with higher education’s trademark of diversity of mission, purpose, size, and control (Kurz and Scannell 2006, p. 35).

The fundamentals of enrollment management focus on the use of research and cross-unit collaboration to drive student recruitment and retention activities. The best enrollment professionals use analytics and tactical skills to engage the entire campus community in knowledge and activities that spur student success and optimize institutional resources.

Many recent SEM papers provide tremendous insight into operational definitions, organizational models, assessment tools, functions, and tactics required of effective SEM organizations (e.g., Black 2003, Bontrager 2006, Henderson 2004, Hossler 2005, and Kalsbeek 2004). Because of the wide variety of colleges and universities and the environments in which they operate, these and many other authors have concluded that no standard model for SEM can exist, though standard expectations of SEM leaders do exist (Kurz and Scannell 2006).

The parallels between the desired qualifications of a SEM leader and a professional consultant are evident. A cursory content analysis of 200 recent job advertisements for enrollment executives further illustrates institutions’ desire to have enrollment management leaders with consultant-like skills and characteristics (Tuchtenhagen 2007). When aligning the desired qualifications and abilities of SEM leaders with Kibbe and Setterber’s (1992) primary skill-sets of successful consultants in nonprofit organizations, the parallels in expectations of the positions are obvious (see Table C.1, on page 23).

The IHC concept is not new, but seldom is publicly embraced by executive leaders, in spite of the previously noted similarities between consultants and SEM professionals. Michael Hovland’s (2006) “Experts Close to Home: How to Work Like a Consultant on Your Own Campus” presentation illustrated how many traditional consulting tactics can be applied systematically by SEM professionals. Jim Black’s SEM framework paper (2003) and SEM business practices workshop (2002) promote the use of such traditional consulting practices as using diagnostic tools, establishing staff technical competencies and training systems, and using key performance indicators (KPIs) for cross-campus data sharing and outcomes assessment.

Shifting a campus’s perception of SEM professional from “administrator” to “in-house consultant” can be a natural transition. Most SEM professionals already possess the expert knowledge expected of practitioners as well as the characteristics and skills common among successful consultants. The Institute of Management Consultancy’s model for professional managerial consultants further defines this professional role by outlining the professional behaviors of effective consultants (2002). Similar to the chief enrollment management officer advertisements, the Institute’s standard emphasizes that consultants must be individuals who regularly manage complexity and responsibility; seek personal growth; use analytical and proactive thinking; have strong interpersonal interactions; and have delivery effectiveness.
In fact, the number of professionals possessing the skills, knowledge, and leadership abilities to effectively create a SEM organization has increased; many of them now have full-time positions within institutions. These professionals draw on their extensive professional networks in order to aid their institutions. Yet many colleges and universities continue to believe that answers to their SEM problems are best found outside of the institution. The task of supporting the external consultant is often left to the very individuals who possess the training and capacity to write the plan but who are disregarded because of their position within the institution. Such a scenario can be changed.

**EMBRACING CONSULTING EXPECTATIONS**

Noting the similarities between external consultants and current expectations of SEM professionals is only one step in understanding the IHC approach. Creating the role of internal consultant is as much an understanding of needed knowledge and skills as it is an appreciation of how education systems operate and of the role of SEM within those systems. This section seeks to reframe how colleges and universities operate by recasting the way in which campus constituencies view SEM and its leaders.

Over the past two decades, several preeminent SEM thinkers have elaborated on the role and structure of SEM organizations. Hossler (1986), Dolence (1993), Henderson (2004), and Kalsbeek (2006) have discussed the appropriate administrative structures and the orientation of SEM. Both structure and orientation are important aspects of understanding and leading SEM units. The location of a unit in the overall structure can signify its importance and predetermine whose voice will be heard in institutional decision making. Further, philosophical orientation (e.g., administrative, student-focused, academic, or market-centered) can affect the ways in which SEM units operate and interact with other units in the organization (see Kalsbeek 2006). However, neither structure nor orientation fully optimizes the SEM units’ impact on the overall function of the university if the SEM processes and its leaders are not valued.

Universities are complex systems filled with multiple organizations and subsystems. To consider them single organizations that move with cohesion, grace, and unified vision would be inaccurate. In reality, departments and other entities operate as loosely coupled units: even though departments are interdependent, they retain a high level of independence due to their specialization (Weick 1976). When we recognize that universities operate as large systems comprising multiple organizations, the concept of an “internal” consultant who helps bind the institution together begins to make more sense.

Whether a consultant is viewed as “internal” or “external” is purely a matter of perspective. If we view the university as a collection of organizations and subsystems rather than as a singular organization, it quickly becomes apparent that the SEM professional can bring an “external” perspective to other units within the institution. Certainly, each interdependent unit possesses expertise that can be shared among all the units. But such sharing can prove difficult as one purpose of loosely coupled systems is to protect the core units (academic departments) and shield them from the influence of the environment as well as from the actions of other units. For example, changes in the math department typically have little impact on the biology department; similarly, adding student activities does not alter operations in the financial aid office. Simply stated, one unit’s ability to influence the rest of the units is structurally limited without collaboration (Birnbaum 1988). In con-

### Table C.1.

**Comparing Work Roles by Desired Qualifications and Abilities.**

<table>
<thead>
<tr>
<th>Consultants</th>
<th>SEM Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>A track record of presenting workable solutions to clients</td>
<td>Solid foundations in job experience, education and a record of enrollment successes</td>
</tr>
<tr>
<td>Ability to diagnose problems</td>
<td>Strong organizational and analytical skills</td>
</tr>
<tr>
<td>Ability to lead teams and generate consensus</td>
<td>Ability to collaborate with faculty, staff, students and alumni. Provide a team-work philosophy and culture.</td>
</tr>
<tr>
<td>The ability to implement solutions (systems, training, budget distribution, etc.)</td>
<td>Ability to develop and implement the strategic enrollment management plan of integrated strategies to achieve diverse student enrollment goals. Must have strong budgeting and personnel skills</td>
</tr>
<tr>
<td>Facilitate consensus and commitment to the plan of action</td>
<td>Provide high energy and passion for a plan that promotes student success and higher education</td>
</tr>
<tr>
<td>Strong interpersonal and public communication skills</td>
<td>Strong interpersonal communication and public speaking skills</td>
</tr>
</tbody>
</table>
trast, management of student enrollments is one of the few functions that cuts across units at any college or university.

The academy has been highly successful in creating buffers to protect academic units from environmental forces. The problem is that the resulting isolation results in many units continuing to operate on outdated assumptions of past environmental conditions; the units have not kept pace with current realities, such as how to recruit and retain undergraduate students (Birnbaum 1988). Different ways of working within the existing structure can keep departments current in regard to changing student trends and can help them adjust their internal plans as needed.

**CAN INTERNAL CONSULTANTS BE EFFECTIVE?**

Though it is commonly assumed that external consultants are more effective than internal personnel at fostering change, research into organizational operations suggests that this is not necessarily the case. Kurz’s and Scannell (2006) reflection on SEM’s third decade of existence in higher education illustrates the need for successful SEM professionals to act as internal consultants. Kurz and Scannell and (2006) outline three primary contemporary SEM functions:

- Setting and establishing linkages, shared goals, improved communication, and synergy across all institutional units. Rather than functioning as stand-alone systems, unit objectives need to be tied directly to enterprise-wide goals.
- Using an analytical, empirical, data-driven approach to problem solving and decision making. Intuition is important but not sufficient. The “culture of evidence” is a cornerstone of effective enrollment management.
- Providing critical leadership. Enrollment management almost always means changes in structure, reporting lines, communication, goals, etc. The challenges and risks of change should never be underestimated. Effective enrollment leaders are willing to accept risks in areas where they see the need for change.

Lawrence and Lorsch (1967), who have produced several seminal works in the field of organizational theory, discussed similar success traits in their discovery that internal consultants (or “interdepartmental” liaisons) were the most effective mechanisms for coordinating departments and resolving conflict in the business arena. The most successful of these individuals possessed four primary characteristics:

- Ability to bridge goals and build trust among different departments. SEM professionals need to understand and actively work to build relationships among administrative offices, academic units, student affairs departments, and so forth. These areas have different cultures. An effective internal consultant needs to be able to bring key stakeholders together.
- Respect earned through demonstration of an expert knowledge base. One of the primary arguments for having SEM professionals serve as internal consultants is that they possess technical competence that needs to be supported at the executive level and communicated throughout the system.
- Understanding and communicating institutional vision. Enrollments undergird the functions of the university. Without them, the institution would not exist. Those who work in SEM units are more attuned to campus-wide functions than those in other units and thus can more easily communicate the need to maximize the university’s overall performance.
- A high profile throughout the organization. An internal consultant does not deserve a high profile; rather, someone with a high profile is more prone than someone without such a profile to help an organization foster change. Execution of this concept is more in the hands of the president than in the SEM professional, but it does emphasize the importance of having strong support from central administration.

The research suggests that individuals who are familiar to the organization, who have intimate knowledge of the organization, and who are trusted by the organization and its members possess great capacity for initiating and sustaining change.

**LONG-TERM BENEFITS**

Fundamentally, the expectations and stronger working relationships that can result from the IHC model strengthen institutions’ long-term efforts to optimize resources and focus on successful and repeatable business practices. These include:

- Cost savings that result from acknowledging institutional competencies. External consultants can be expensive; depending on the complexity of the project, costs may range from $800 to $3,000 per day, not including travel expenses. Even the most narrowly defined consulting projects can cost in excess of $50,000.
- Greater organizational unity and engagement with regard to core business practices. In order to succeed with SEM, a focus on fundamentals—core business functions—is essential (Black 2002). Organizational complexity and narrow developmental budget margins
create an opportunity for SEM to link campus-wide functions and bridge student service gaps. If accepted, the SEM process and consultant-like activities help bond the various leaders and units around a more centralized vision and around business activities. Stronger linkages and working relationships can help highly specialized departments identify the significance of their role in the institution’s progress and financial standing.

- Increased likelihood for sustainable change. External consultants have been criticized for not understanding the institutional culture—that is, the unique political and structural challenges that exist on any campus. The IHC model positions SEM professionals to use their institutional knowledge to better establish the linkages and trust needed to undergird a stronger and more coordinated strategic plan through regular communication and requests for unit input. In other words, the in-house consultant is expected to regularly “take the plan off the shelf” and put it into action.

**IMPLEMENTING THE IHC MODEL**

The IHC approach must be more than a rhetorical strategy for heightening the SEM organizational culture: It should be a values-based training philosophy; an institutional expectation for collaboration; a push for heightened professionalism.

Typically, a professional consultant will provide change management solutions to a client. The following five-step platform can help an institution develop the IHC paradigm while implementing SEM principles for planning, training, and reporting activities.

**Step 1: Establish a Vision**

The first step in developing the IHC model is to define the conceptual role of SEM within the organization. We refer to the core concepts of SEM, not the office or unit (Bontrager 2004). SEM needs to be viewed as a system of institutional responsibilities that transcends divisional boundaries and other administrative silos. In fact, institutions should adopt a SEM-oriented, thematic goal which is “a single, qualitative focus that is shared by the entire leadership team—and ultimately, by the entire organization—and that applies for only a specified time period” (Lencioni 2006, p.178). (In this context a thematic goal could include “improving the reputation of the institution” or “becoming the college of choice for students in the region or state” [Lencioni 2006, p.178].) The thematic goal can help reorient the institution and help other units better understand the importance of the SEM unit. Typically this goal is part of the strategic plan (e.g., increasing, stabilizing, or diversifying the student enrollment). Ideally it reflects a meeting of the school’s capacity to serve with a descriptive vision of the type of students it seeks to educate. Whatever the goal, and however it is expressed, the president and the executive board should ensure that everyone within their divisions understands the concepts of SEM as well as SEM’s overall importance to the institution in achieving the initiative.

**Step 2: Align Systems**

A critical component of the IHC model is to reorient the ways in which SEM is integrated into an institution’s organizational structure. First, for SEM to work, a clear organizational structure with a champion for all core SEM functions (e.g., research, recruitment, and retention) must be designated. The existence of a clear and comprehensive enrollment management structure or administrative designation continues to be a problem on many campuses. While almost all U.S. institutions have appointed a recruitment officer (Noel Levitz 2007), as of 2004, more than 45 percent of four-year colleges and universities in the United States had not designated a formal retention officer (Habley and McClanahan 2004). There needs to be a formal clustering of units that link the research, recruitment, and retention functions of the institution. Once this is achieved, the chief enrollment officer and the SEM units can offer support through market-based knowledge and technical resources to assist all campus units in setting and achieving their enrollment-related objectives.

Second, the IHC model argues for frequent, regular meetings of the service directors and unit leaders who interact most often with students. Like the cross-unit “sharing meetings” that are called when an external consultant is hired, these regular meetings should include the managers of units responsible for admissions, advising, financial aid, student billing and collections, registration, student housing, food services, student activities, orientation, camps and pre-college programs, alumni, and career services. Appropriate faculty and student representatives must be involved. The SEM team should be encouraged to share unit issues and events and, more important, to discuss campus initiatives that might have an impact on students’ ability to remain and succeed at the institution. The team’s concerns and suggestions should be documented and shared with the president and executive leaders.

**Step 3: Create and Execute Plans**

It is important to create enrollment management plans centrally as well as at the unit level. Objectives should focus
on core SEM measurements, such as establishing the institution’s student service volume and the subsequent admissions, student profile, and retention benchmarks. While academic departments likely will know their enrollments and credit-hour generation, it is unlikely that they understand how their enrollments evolve over students’ tenure in their programs. Such information can be important at the undergraduate as well as graduate levels in regard to optimizing course offerings and advising workloads. Using unit audits, the in-house consultant should work with the academic and student service departments to generate benchmarks and determine how best to track unit progress. To begin, the in-house consultant should determine a department’s capacity to serve students by evaluating measures such as teaching loads, class sizes, and service needs. At this point, he/she can—as appropriate—create a profile of students the department wants to attract, retain, and serve. Then the consultant should work with the department to create benchmarks and desired, measurable outcomes. The same types of research and planning exercises can be performed with most campus support units, including food service, billing and cashiers, counseling, career services, and student activity offices.

**Step 4: Integrate the Vision**

Successful implementation of the IHC model depends on the ability and training of the people employed to execute it. It is important for new hires to have a solid understanding of SEM, to be able to move easily among and to relate to different types of departmental cultures, and to understand and communicate institutional goals. Objectives, deliverables, and reporting activities need to be emphasized in all job descriptions and performance goals. Annual training plans should ensure regular exposure to happenings in specific fields through the sharing of articles and journal readings and the provision of opportunities to attend relevant professional conferences. General training should be based on consulting competency topics, such as effective student learning, analytical and budget skills, market analysis, strategic goal setting, systems management and plan development, and execution methods.

**Step 5: Review the Process**

In addition to creating the objectives and performance indicators for instituting the SEM vision, it is important to create a mechanism through which the SEM professional can report back to the broader collegiate community about the implementation of SEM initiatives and the market changes that may affect it.

A key deliverable for any consultant is a report and assessment of key performance indicators. (A thorough explanation and definition of SEM KPIs is provided in Dolence, Lujan and Rowley 1997). The fundamentals are growth by program, student profile and diversity, student retention and graduation rates, and preferred discount rates. Whatever the objectives, they need to be determined and embraced by the institution’s executive team. Once established, performance on each objective must be communicated through dashboard indicator reports distributed widely across campus. Data and data interpretation must be widely shared if the information is to be used in cross-campus decision making.

The IHC model encourages the preparation and dissemination of annual reports that include updated environmental scans, comparisons of enrollment performance with strategic plan goals and competitors’ performance levels, and student market assessments. Regularly scheduled events that include all internal stakeholders—such as a state of the university address or a mid-year lunch— are logical times to review data and discuss the strategies for continual SEM improvement.

**CONCLUSION**

Not an argument against using external consultants and gaining from their valuable input, the foregoing discussion of an in-house consulting model has to do with establishing an ideal organizational position and performance model for SEM professionals. The IHC model promotes the idea of letting internal, experienced SEM practitioners develop institution-wide partnerships and plans to better ensure that the university lives up to its promises to students, families, faculty, and alumni. Fully embraced, the IHC model can play a uniting role for the typically isolated, silo-focused units of most campuses. The model represents an ideal for strategic levels of performance and professionalism. It can be used to build an organizational culture that better motivates staff and faculty collaboration, demonstrates a dedication to intelligent planning and strategy execution, promotes a stronger passion for academic and student success through shared governance, and embraces the regular use of solid analytical and data-driven skill sets to move an institution in the direction it has chosen.

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About the Authors

JAY W. GOFF is the Dean of Enrollment Management at the Missouri University of Science and Technology, formerly the University of Missouri-Rolla. With more than fifteen years experience in university enrollment and communication programs, Goff believes in building a team-oriented workplace and service driven success plans. His data-focused and student-centric approach has achieved record setting enrollments, retention and graduation rates.

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Joe F. Head, is Dean of University Admissions and Enrollment Services at Kennesaw State University (KSU), and has more than 35 years of experience in admissions and enrollment services. After completing an M.Ed. in higher education at Georgia Southern University, Head immediately landed a position as Director of Admissions and Associate Registrar at Tift, a Baptist women’s college. Previous to his full-time graduate studies, Head had served as an admissions counselor at Tift. While in graduate school, he held a full-time position in the registrar’s office. After five years at Tift, Head took a position as Director of Recruitment at Georgia Southern; in 1982, he moved to KSU. He became the youngest president of GACRAO in his time. Head is a frequent contributor to journals as well as a frequent presenter at professional conferences. In the late 1990s, he chaired an AACRAO task force that resulted in the establishment of the GACRAO Institute for Strategic Enrollment Management, a state model for professional development.

Head has a reputation for excellence and innovation, particularly in the areas of 24x7 interactive-transactional technology and enrollment management techniques. He was a CASE faculty member in the field of collegiate telecounseling for eight years. In 2003, The Board of Regents of the University System of Georgia recognized Head with a Benchmarking Best Practices Award for several innovations: the Freshman Admission Predictor; document imaging; the High School Guidance Counselor Service Center; the electronic push of application and testing data into BANNER and NolijWeb; prospective student information retrieval technology; registration “Tried” report; and the web-based Georgia High School Directory. In 2004, GACRAO presented Head with a Lifetime Achievement Award, and AACRAO awarded him the APEX Innovations in Technology for Admissions Award.
YOU ARE NEARING RETIREMENT AT KSU. WHAT ARE YOUR THOUGHTS ABOUT RETIRING?

I am taking a wait-and-see approach to retirement. On one hand, my wife recently retired; on the other hand, I have a daughter who is a freshman attending a private college. I have not reached the point where I have accomplished everything I want to, either at KSU or in the enrollment services profession. There is always something new and exciting on the horizon.

YOU ARE STILL YOUNG. DO YOU HAVE ANY PLANS FOR AFTER RETIREMENT?

Since I still have a desire to utilize the knowledge I gained in the field, I have given thought to offering consulting services. However, in the past, it has been difficult for me to take an extended vacation, so I intend to take some time off before I take on anything else. This will give me time to travel with my family and to pursue my favorite hobbies of calligraphy and writing about local history.

I NOTICED THAT YOUR EARLY CAREER BEGAN AT A SMALL PRIVATE SCHOOL. HOW DID YOUR EXPERIENCES THERE SHAPE YOUR CAREER?

My start at a small private college proved excellent preparation for an admissions career. It gave me hands-on experience with the broad spectrum of admissions operations. In the long run, I found it a superior experience to that of many of my contemporaries. Managing a budget and supervising field representatives, as well as maintaining good relations with other offices and faculty, were challenging experiences. Of course, in those years, there were many other aspects to stay on top of, such as direct mail and telephone operations. I came from a generation of admissions officers that did home interviews. In many ways, the home interview presents a pure example of matching a student to an institution, of identifying and converting a prospect to—a hopeful applicant who later makes a deposit and enrolls. Early on, I developed an interest in the telephone as a basic tool. There is a natural evolution in progressing from recruiting calls to phone-a-thons, to telecounseling, to today’s collegiate telecenters. All in all, a small private college was an excellent place for me to learn traditional admissions techniques, and then, as times changed, to become adept with 24×7 interactive-transactional technologies.

HOW WAS YOUR TRANSITION TO A LARGE PUBLIC INSTITUTION?

Anytime one moves to a new institution, some sort of adaptation is necessary. I felt I was well-grounded in traditional admissions fundamentals as a result of private college operations. However, admissions is different in a larger institution because of the scale of operations, regulations, and volume, as well as other factors. The importance of technology and back-office digital systems becomes paramount. Manual card systems gave way to computerized prospect record systems and online applications. Word processing made it easier to prepare not only one letter, but thousands of letters. Admissions counselors still would...
call prospects, but so would state-of-the-art telecounseling centers, with a tremendous increase in the numbers of prospects contacted. Additionally, outsourced marketing projects, Web portals, and vendor partnerships were more in character for large, public colleges than for small, private colleges. However, I did not want to give up the personal “high-touch” approach for which small colleges are noted.

With the emerging technology, I saw that a high-tech/high-touch approach could provide a degree of personalized contact to tremendous numbers of prospects.

**WHAT ADVICE WOULD YOU GIVE TO A NEW DIRECTOR OF ADMISSIONS?**

If the office the new director is joining does not have an operational calendar, policy manual, and student marketing plan, make it a priority to develop all three! At KSU, the student marketing plan has sections concerning field representations/travel, direct mail, transactional Web marketing, counseling, internal data entry/document imaging, telecenter operations, research, inventory/supplies, media/literature/printing, budget, and professional development. The plan is maintained and updated annually as a calendar-driven operations and policy manual.

Every officer should develop an office manual and keep it up to date. This tool serves as a living document to guide the office regarding functional operations. Primary contents include personnel, procedures, calendar, best practices for admissions standards, and other informal activities or programs that often become bedrock.

Yet another important tool or manual to have is a strategic enrollment management (SEM) plan. This encompasses the student marketing plan, extending it with sections detailing the mission of admissions, demographic studies, student enrollment research, survey research, and marketing programs and techniques. For maximum benefit, all stakeholders, including the academic side of the institution, must buy in to the SEM plan.

Sooner or later, someone will ask if you have a plan for an emerging issue. If you have a strategic enrollment management plan, you can produce it and say, “This is my plan; where is yours?” The primary value of a strategic enrollment management plan is not seen in terms of reacting to issues but in terms of being proactive in managing the internal operations of an admissions office.

As far as giving advice, a student marketing plan and a strategic enrollment management plan would ensure that a new director gets a good start. I believe that a project-driven office sets the pace. But, to stay on track with professional development, a new director needs to find a good mentor, attend professional conferences, read professional literature, and network. Oh—and also make certain that those in his office do the same!

**THAT IS A DIVERSE LIST OF OPERATIONS. HOW DO YOU STAY ON TOP OF EVERYTHING?**

As I grew in experience, I developed the student marketing calendar, which is at the heart of a student marketing plan. In a nutshell, this master student marketing calendar is organized on Excel spreadsheets. These spreadsheets layer and overlap the operational functions and programs mentioned above and assign specific tasks to specific individuals to be completed by specific dates. This master calendar is driven by campus events and prospect recruiting events; essentially, it is an enrollment management tool—a tool that perhaps is underutilized on many campuses.

Over the 24 years that I have been at KSU, the office has grown and become more complex. When I came, there were five admissions staff and I was the only supervisor; now there are more than 30 staff members, with several directors and assistant directors of admissions as well as an associate dean of enrollment services. As the office has grown, I have been fortunate to have people here grow professionally and be promoted to supervisory positions with responsibility over office divisions and programs.

**WERE YOU ABLE TO PURSUE STRATEGIC ENROLLMENT MANAGEMENT AT KSU WHEN YOU FIRST BECAME AWARE OF THIS APPROACH AT PROFESSIONAL CONFERENCES?**

No. Until 1994, the admissions office was housed in an administrative division that did not include the registrar, financial aid, or counseling, orientation, and testing. Organized within a group of advancement offices, the reporting line handicapped admissions. In addition, the leadership of advancement did not support cooperation with these offices or with other constituencies such as faculty/academic offices. Any interaction/cooperation between offices was incidental to day-to-day operations. A silo mentality pre-
vailed throughout campus. Even though the admissions office was competent and professional in day-to-day operations, without an enrollment management configuration or environment of seasoned administrative leadership, optimal competitive advantages could not realized.

**HOW WERE YOU ABLE TO GET INSTITUTIONAL SUPPORT FOR SEM?**

In 1994, an institutional crisis provided the stimulus for institutional reorganization conducive to the adoption of current SEM strategies. The crisis was the loss of National Council for the Accreditation of Teacher Education (NCATE) accreditation. This was devastating, and local newspapers widely carried this news to the public. University officials initially defined the problem as a media/public relations problem, focusing on the repeated headlines and the public misperception of campus-wide accreditation loss. The university president called an emergency meeting of only university advancement officials from the offices of public relations, publications, alumni, development, and admissions. Key offices not represented included registrar, counseling, financial aid, student activities, and continuing education. No academic stakeholder was present, even though this was a teacher education issue with academic implications. Damage control concerning media and public relations was soon seen as insufficient, and I was able to indicate that “the University is not adequately configured to respond to an enrollment crisis with a central voice.” This captured the attention of the university president, and I was able to present an enrollment management approach. The university president directed the vice president for business to provide what I needed. The result was that the issues were resolved and enrollment management was given a big boost.

**IS THIS WHEN REORGANIZATION TOOK PLACE?**

It occurred quickly, within the following six-month period. The university president hired a SEM-friendly consultant to guide reorganization to a new student success and enrollment services model. The office of admissions transferred from the Advancement Division, the office of financial aid transferred from the Student Services Division, and the

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**How balanced is your approach to Enrollment Management?**

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registrar office transferred from Academic Affairs; all of these offices consolidated into the newly created Division of Student Success and Enrollment Services (SSES).

SEM can operate within several different structural configurations, and this reorganization would provide the primary roadmap for SEM awareness. After the reorganization, the work began to get administrators and faculty on board and to greatly reduce the silo mentality.

GETTING ADMINISTRATIVE AND FACULTY SUPPORT IS NO EASY TASK. HOW HAS THAT GONE?

Getting support for enrollment management is a continuing matter. There were early successes. We demonstrated how we could identify students who tried but could not register for closed courses. This was important as it enabled the faculty to determine course demand and to decide whether more classes should be opened. Later, the teletcounseling center would call these students to notify them of additional class sections.

AS I HAVE RECENTLY FILLED THE POSITION AS REGISTRAR AT KSU, WHAT CAN YOU TELL ME ABOUT INTERACTIONS BETWEEN THE OFFICES? ARE THERE ANY SPECIAL ISSUES? WHAT CHALLENGES REMAIN?

Early on, the registrar and admissions leadership became fast partners. This collaboration resulted in selecting mutual technologies, developing sound operational policies, and establishing a united front to serve students, staff, and faculty. As we have known each other for years and have a compatible professional outlook, I look forward to continuing this professional partnership. We will tackle any issues or challenges (they are certain to emerge). Once again, I welcome your expertise and professionalism.

THIS IS A GOOD TIME TO BRAG ABOUT YOUR ACCOMPLISHMENTS. WHAT ARE THE HIGHLIGHTS OF YOUR CAREER?

I came prepared for that question! Aside from awards, there are some things that stand out. Early in my career, I developed a Phone Power program for college admissions, and later in my career, I developed telecenter technologies for college admissions. During the latter part of my career, I pioneered document imaging and inspired transactional Web strategies. I am particularly proud of introducing variable print electronic brochures or, as these are called, e-brochures. On a local level, I developed a fee-free, two-day professional development workshop which annually updates senior high school counselors and provides state certification renewal credit. Also, I established the Georgia High School Directory. The one item that stands at the pinnacle of my career is the spearheading of the GACRAO Institute of Strategic Enrollment Management (GISEM).

My career philosophy has been simply to “leave things better than I found them.”

GISEM? TELL ME MORE ABOUT THAT.

Over the years, I have been interested in a certified professional development program which would be available to new and veteran enrollment management officers. At the 2005 GACRAO annual state conference, a pilot program was launched. In 2006, the first GACRAO Institute of Strategic Enrollment Management (GISEM) was held at the annual state conference. In 2007, the second conference was held, and the first class received their Registered Enrollment Professional (REP) certificates. This was a proud time for me. The North Carolina association already has started a similar institute. However, I would like to see this program go nationwide. (Editor’s note: For more information, see Susan Blake’s article, “Georgia Implements an Advanced Career Track Endorsement Program for Seasoned Enrollment Officers: GACRAO Institute for Strategic Enrollment Management (GISEM),” in this issue.)

DO YOU HAVE ANY LAST WORDS?

With the rise of enrollment management, the field of collegiate admissions and records has emerged as a new profession. I encourage veteran professionals to continue to set the pace and to bring even greater respect from academic partners. I urge everyone to advance the enrollment management profession to a level of credentialed recognition with full membership on the president’s cabinet.

Thanks for interviewing me.

About the Author

KIM WEST is Registrar at Kennesaw State University. Previously, he was Dean of Enrollment Management and Registrar at Armstrong Atlantic State University.
Wealth, Merit, and Need: Institutional and Individual Concerns and Aspirations

By Jerome C. Weber

In its January 25, 2008, edition, The New York Times reports that the “...Senate Finance Committee, increasingly concerned about the rising cost of higher education, demanded detailed information on Thursday from the nation’s 136 wealthiest colleges and universities on how they raised tuition over the last decade, gave out financial aid, and managed and spent their endowments” (Arenson 2008). As observers of higher education might reasonably predict, much of the concern was directed at the multi-billion dollar endowments of private, highly selective, and prestigious institutions such as Harvard ($34.6 billion) and Yale ($22.5 billion) and their sister institutions with endowments of $1 billion or more. The concern may have been precipitated by reports showing that Harvard’s endowment grew 20 percent last year while Yale’s endowment grew 25 percent.

In the same article, Senator Charles E. Grassley of Iowa, the ranking Republican on the Committee, is quoted as saying, “Tuition has gone up, college presidents’ salaries have gone up, and endowments continue to go up and up. We need to start seeing tuition relief for families go up just as fast.” This is not the first comment on this topic from the Senate Finance Committee, which, as The Times article states, “...in recent months has pressured universities to use more of their wealth for financial aid and threatens to require them to spend a minimum of 5 percent of their endowments each year, as foundations must. The committee pointed out that donations to universities and their endowment earnings were both tax-exempt.” The latter statement is a not-so-thinly-veiled threat designed to pressure colleges and universities with large endowments into “voluntarily” using their endowment resources to help financially needy students.

Predictably, the higher education community is not particularly receptive to the idea of federal regulation of endowment funds. Henry S. Bienen, president of Northwestern University (which has an endowment of nearly $7 billion), pointed out that endowments do not always go up—certainly not in the way they did in the past year—and that “people have got used to the last few years of wonderful endowment growth.” But, he added, “It does not always happen.” Robert J. Birgeneau, chancellor of the University of California, Berkeley (which has an endowment of $3 billion) added that “...understanding university finances is an extremely complex matter, especially in public colleges and universities.” The article points out that an economic downturn likely would reduce endowment income while creating greater pressure for financial aid. The article also points out that the concerns of the Senate Finance Committee are directed specifically toward the 76 (of America’s more than 3,000) colleges and universities with endowments of $1 billion or more.

After reading the article and considering the current state of American higher education, an observer might
reasonably conclude that at every level of our vast, diverse, and envious system of higher education, we are beginning to see economic problems that work against the best interests of individual students, of higher education itself, and of the nation. This is, of course, a broad indictment, but it is one which seems borne out by the facts.

In addition to the question of how wealthy colleges and universities use their endowment funds to enhance access, there is the broader question of how escalating costs are making attending college less and less likely for many students. This is happening at precisely the time when, as Thomas Friedman (2005) so persuasively informed us, the world of knowledge acquisition and knowledge use is becoming increasingly “flat” and technology allows students from any part of the globe to gain access to that world. In other words, the continuing well-being of our knowledge-based society is highly dependent on education in science, engineering, and technology. The well-being of each of us is closely bound up in the access we provide all our citizens to the levels of education that will allow our nation to remain competitive with the rest of the world.

We are in danger of creating a situation in which we limit access—not because of students’ inability to meet the intellectual demands of college but solely because of their inability to meet the financial costs—at the very time that it is increasingly important to expand access to higher education. The College Board reports that the annual cost of education at a private college—including tuition, fees, and room and board—rose from approximately $19,000 in 1987–88 to more than $32,000 in 2007–08. Costs at public institutions rose from approximately $6,800 to more than $12,000 per year during the same period.

At a level of American higher education below that of the most highly selective and most expensive institutions, we find institutions that compete for top academic students as a means of increasing institutional selectivity, gaining recognition, attracting better faculty, and generally being seen as becoming better in the eyes of the higher education community. Whether “becoming better” is measured by the annual U.S. News & World Report rankings or some other index is not the issue. While the desire to raise an institution’s profile within the academy is perfectly reasonable, a consequence of this competition is that more and more institutional financial aid is awarded to students wholly on the basis of merit as opposed to need. The result is that students are being wooed with financial aid packages that sometimes exceed the actual cost of attending a particular college. Of greater concern is the fact that many students who do not score at the highest levels of standardized examinations—the mechanism often used in determining merit—are overlooked in the competition for financial aid and find themselves unable to attend even relatively affordable state schools.

In addition, merit-based financial aid often is awarded to students who are from relatively affluent homes, who attend better-financed schools, and who are more, not less, able to afford college on their own. One of the effects of this shift from need-based to merit-based financial aid is the growth of community college enrollments, largely because of these institutions’ greater affordability. This observation should not be interpreted as an indictment of community colleges; rather, it is a lament regarding the financial context in which these changes are taking place. It also should be noted that in many institutions engaged in the recruitment of students based on merit, the need to also seek scholarship support for students based on need is acknowledged. But there is clearly a limit to the total amount of money that can be raised for financial support. Often, potential donors—and legislators—perceive merit as more desirable than need. What is needed is a better basis for achieving a balance between merit and need in the determination of financial aid.

I grew up in New York City and attended Brooklyn College prior to its becoming part of what is now called the City University of New York. I am the child of immigrant parents, only one of whom went to high school. Brooklyn College offered me—along with thousands of other children of immigrant parents—an opportunity to attend college on an affordable basis. In fact, college was essentially as affordable as high school: I lived at home with my parents, took the bus to Brooklyn College, and paid tuition of $6 per semester. I do not mean $6 per credit hour, I mean $6 per semester. In addition, I paid for my books, and I paid a laboratory fee of $25 for every science course I took. While that might be considered interesting but irrelevant (I also remember gasoline costing about 33 cents per gallon), I believe it is relevant in the sense that what motivated the City of New York to provide access to high-quality, low-cost higher education was a belief that there was a collective good served by colleges and universities that educated young people and that, in the process, allowed them to advance socially, financially, and professionally. In other words, there was a belief in a common good that justified society’s investment in higher education not only for the benefit of the individual student but also for the collective benefit of society. While I do not believe a sound argument for any position can be made by using a “one-shot case study,” I do believe that the
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City of New York’s investment in me has been returned to society many times over, whether that return is measured by my payment in taxes or by my four and a half decades of professional service. This is not a call for a reduction in college fees to the fees of the 1960s; rather, it is a call to recognize that access to higher education is important both to the individual student and to society. This is a call to recognize that we increasingly are bound together in collective economic and social circumstances. This is a call to recognize that we cannot allow some in our society to be educationally disadvantaged based solely on their financial condition without disadvantaging our nation collectively. This is a call to recognize that today’s world requires all of our intellectual resources. This is a call to recognize that a mind really is a terrible thing to waste, not only for the individual, but for all of us. This is a call to recognize that the world has changed, and if we divide ourselves into educational haves and have-nots, then we all are in danger of becoming have-nots.

I offer two final comments on the matter of wealth, merit, need, and our common concerns and aspirations: First, while I have great sympathy for the general idea of seeing wealthy institutions make themselves accessible to students who are less than wealthy, I have real concern about the ability of the federal government to determine the process by which that outcome should be achieved. Harvard has stated that it will increase aid for families earning up to $180,000 a year while Yale has stated that it will increase aid for families earning up to $200,000 a year. Clearly, this will not solve the greater problem to which this paper alludes. But it is also important to remember that the glory of American higher education lies in its diversity. American higher education has been the envy of the world precisely because it does not have a central directorate designed to make all institutions similar, whether in admission requirements, curriculum, or outcomes. From America’s oldest and most highly selective institutions to local junior and community colleges, we have built a system of higher education that has been the envy of the world, the means of scientific and technological advancement, the mechanism for understanding and appreciating our history and culture, and the engine of social mobility for millions. The 2003 decisions of the Supreme Court in the University of Michigan cases reaffirmed the inherent educational desirability of diversity, a term that does not apply only to race, gender, and ethnicity. Second, greater national attention must be paid to the concept of the public good, by which I mean American society’s stake—now and in the future—in maintaining the quality and access that has marked the history of higher education in this country. Those of us engaged in higher education increasingly have allowed the public to see higher education as primarily related to job training, thus allowing the public to conclude that if the individual receives almost all of the benefit, then the individual also should bear almost all of the cost. We must communicate more effectively the importance of combining merit and need in helping students realize the twin goals of access and quality in higher education that provide for each of us and for all of us.

REFERENCES

About the Author

JEROME C. WEBER, PH.D., Regents’ Professor of Education and Human Relations, teaches in the graduate programs in Adult and Higher Education and Human Relations at The University of Oklahoma, where he has been an academic administrator and faculty member since 1964.
Editor’s Note: The following article is also published in Volume 21 of The SACRAO Journal.

As enrollment officers mature in the field, their professional development evolves through education, experience, and conferencing. Experienced enrollment officers spend years honing their skills and developing their careers. The body of knowledge represented by these seasoned admissions and registrar officers provides the foundation for an Enrollment Management/Student Success Model. In fact, the advanced track curriculum in Strategic Enrollment Management was developed by the Georgia Association of Collegiate Registrars and Admissions Officers (GACRAO) on the basis of this body of knowledge.

The modern enrollment officer is moving from the traditional model of silos defined by separation of duties and responsibilities of administrative departments toward a model of related enrollment offices coordinated specifically for enrollment management.

Recognizing the unique challenges faced by seasoned enrollment officers, GACRAO offered an advanced track pilot, separate from other conference sessions, at its October 2005 annual conference. This three-session track focused on the complex issues facing veteran enrollment officers. As a result of this professional development activity, AACRAO presented GACRAO the Elbert Ockerman Award for State and Regional Professional Activities. The concept of the advanced track pilot led to the inaugural GISEM (GACRAO Institute of Strategic Enrollment Management) program the following year. A valuable outcome of advanced track programming was that senior enrollment officers who had stopped attending state conferences attended again, attracted by the enhanced programming. Veteran enrollment officers are valuable mentors to newer GACRAO attendees.

HISTORY

The concept for GISEM—to create a progressive state-to-national certification program called the Certified Enrollment Professionals (CEP)—began as a grassroots movement in Georgia in the mid 1990s. In spring 1995, GACRAO created a taskforce spearheaded by Joe F. Head at Kennesaw State University. AACRAO supported this concept by creating its own taskforce with Joe Head as chair. The taskforce developed a national proposal focusing on the enrollment professional. GACRAO, ACT, and The College Board agreed to support the movement conceptually and/or financially. The AACRAO Executive Board approved the proposal and funded the CEP project (creation of a plan, curriculum, and certification exam) for three years.

The AACRAO taskforce determined that enrollment professionals share core commonalities:

- Enrollment Projections and Forecasting
- Academic Document Assessment
President Stan Henderson introduced the CEP model at the 1996 AACRAO annual conference in Reno, Nevada. Although the plan received strong support, AACRAO confronted a financial situation that forced the suspension of all Special Task Force initiatives, including the CEP project. AACRAO resurrected the idea of an advanced track for seasoned professionals at the 2005 Annual GACRAO conference. The pilot was launched under the leadership of John McElveen (Middle Georgia College) and Donna Findley (Georgia Military College), and Katherine Sweeney (Augusta State University). Joe Head (Kennesaw State University) participated in the program, presenting an updated model based on the CEP initiative. AACRAO granted the program the Elbert Ockerman Award for State and Regional Professional Activities at its 2006 National Conference.

The success of the program led the GACRAO Executive Committee to establish a permanent advanced track program embedded within the annual GACRAO conference. Joe Head became the founding GISEM committee chair, reporting directly to the GACRAO executive committee.

Fifty-nine veteran enrollment officers—including some who had stopped attending the annual conference—attended the first annual GACRAO Institute of Strategic Enrollment Management, held in October 2006.

GISEM MISSION AND PURPOSE
The GISEM mission is stated on the program Web site:

GISEM is a central forum to promote industry expertise in the field of collegiate enrollment management strategies.

The Institute is an intensive strategic enrollment management workshop providing for exchange among veteran enrollment officers. The Institute also serves as a rich environment for networking relating to the sharing of best practices. Meeting the needs of experienced enrollment officers and providing career development for rising professionals are additional goals of the Institute. A valuable “option” of GISEM participation is completion of the Registered Enrollment Professional (REP) program over a period of two years.

QUALIFICATIONS FOR GISEM ATTENDANCE
Attendance at GISEM is open to middle and senior management career veterans who meet the following requirements:

- Position of rank: vice president, dean, registrar, director, associate, assistant, or coordinator
- Five years’ experience in the field(s) of admissions, recruitment, or registrar/records
- Minimum of a B.A. or B.S. from a SACS or other regional accredited institution
- Employment at a GACRAO member institution in good standing regarding dues and accreditation

Exemptions to the stated criteria are permitted only through sponsorship by an enrollment services director, vice president, college president, GACRAO president, or former GACRAO president.

FORMAT
GISEM is a supplemental advanced track option to the GACRAO annual state conference sessions; it is not intended to replace the traditional GACRAO sessions. The annual GACRAO meeting follows a Sunday through Tuesday schedule: GISEM begins on Sunday with an introductory session focusing on Strategic Enrollment Management. This is followed by a keynote address at lunch. Also on Sunday, a full day of sessions is presented by seasoned enrollment officers and consultants. The networking reception that concludes GISEM for the day ends just before the kickoff for the GACRAO conference.

On Monday, the GISEM schedule includes a morning and an afternoon session, with time in between for attendees to participate in other sessions offered by the general GACRAO conference. On Tuesday morning, the final session provides time for attendance at GACRAO sessions.

The embedded schedule was developed to allow GISEM attendees to benefit from the advanced track while also attending and presenting at GACRAO general sessions. Embedding GISEM in the annual conference also reduces travel costs. Veteran enrollment officers benefit from the array of topics addressed even as they serve as mentors to newer GACRAO attendees.

STRATEGY TO RE-ATTRACTION VETERANS
GISEM is designed to offer an advanced track and career path for rising professionals as well as to attract experi-
enced leaders to the GACRAO annual conference. Inviting the most capable veterans to participate as primary faculty is an obvious strategy.

**FACULTY AND CONSULTANTS**

Sessions are led primarily by in-service GACRAO faculty, with one or two sessions featuring industry consultant speakers addressing national trends in the enrollment field. GISEM faculty possess a minimum of 15 years of career experience in enrollment services and must have achieved recognition within their fields. Rank, as well as experience and accomplishments, is also considered.

Highly regarded consultants from the field of professional enrollment services include corporate consultants. Consultant sessions serve to identify trends and resources available to GISEM participants. Consultant sessions are designed to expose GISEM attendees (who otherwise may not be able to access such expertise) to nationally recognized SEM leaders and resources.

**CURRICULUM**

The curriculum is focused on those Strategic Enrollment Management issues that are common to admissions, recruitment, and registration/records. These are topics that have central overlap responsibilities, practices, and concerns of enrollment services areas.

Topics focus on global issues of strategic enrollment management practices, encompassing student success in recruitment, retention, progression, and graduation. Sessions help move participants toward holistic operations of efficient enrollment management.

**REGISTERED ENROLLMENT PROFESSIONAL ENDORSEMENT**

GISEM attendees have the option to earn the distinction of Registered Enrollment Professional (REP). REP standing is granted after attendance at two annual GISEM advanced tracks at the GACRAO conference. This includes a minimum of twelve sessions over two conferences. In addition, the participant must conduct three six-hour operational field reviews at approved GACRAO member institution campuses, spending equal time visiting admissions and registrar operations. Participating institutions include large and small, public and private, two- and four-year institutions. Requirements must be completed within three years.

Knowledge gained during field visits is essential to the professional development of the REP. The field visit has a prescribed agenda that supplies a comparative view of operations, best practices, technology, budget, human resources, management styles, political structure, academic forces, and other personal observations. The visit strengthens relationships within the profession and enables a stronger network among practitioners.

Candidates for REP distinction must make application, submit field visit verification and typed summaries, and be current on registration fees for the GISEM conferences they have attended. Field visit summaries are also sent to the host institutions for each field visit, providing valuable peer review feedback to those schools. (Participants may choose to attend GISEM without seeking REP recognition.)

**BENEFITS OF THE REP DESIGNATION**

GACRAO recognizes REPs as participating in and completing an advanced track sequence of sessions regarding complex enrollment management issues. In addition, the institute provides a means of gaining awareness of diverse institutions through firsthand field visits.

REP benefits include the establishment of credentialing and an acknowledgment of expertise. Tangible benefits include a certificate, associational endorsement, GISEM/GACRAO Web site listing, conference recognition of completion, a letter of REP completion sent to the participant’s institution’s president, and an online resume.

**ADMINISTRATION OF GISEM**

The GISEM steering committee chair reports directly to the GACRAO executive committee. The steering committee is responsible for maintenance of the GISEM Web site, which is linked from the GACRAO Web site (www.gacrao.org) and includes detailed information on the program. The committee determines the agenda; selects faculty and consultants; and processes applications for GISEM attendance.

The committee also will review submissions from participants seeking the REP. Registration is handled as an add-on to GACRAO registration and requires application to the program and payment of the GISEM registration fee of $50 for each of two conferences. (The inaugural year review indicates that the $50 registration fee is sufficient to cover expenses and create a surplus for further development of the program.

Kicking off the inaugural GISEM required multiple communications with the membership. An initial GACRAO listserv/e-mail blast announced GISEM to the membership. Soon afterward, a letter from the GACRAO president was sent to members who were chief enrollment officers. The letter introduced the concept of the institute and invited participation. A second letter (sent as a reminder)
included a copy of the application. Additional e-mails informed registrants of the itinerary and syllabus.

All messages directed the membership to the GISEM Web site for detailed information. The Web site remains the official source of information regarding the program and ultimately will showcase the REP listing.

ENDORSEMENTS

GISEM has been endorsed by prominent educators. John N. Gardner, Executive Director of the Policy Center on the First Year of College, states:

“GACRAO is to be commended for organizing this Institute. This is exactly the kind of initiative we need to see spreading to other states. Surely this Institute will both help improve practice in Georgia and blaze the way for other states to follow.”

Don Hossler, Professor of Educational Leadership and Policy Studies and Director of Projects on Academic Success at Indiana University, adds his support:

“Over the years I have seen several efforts to provide professional development and training for emergent and seasoned enrollment managers. GISEM is perhaps the most systematic and comprehensive effort that I have seen offered by professional organizations. The curriculum is right on target for the needs of aspiring and experienced enrollment managers.”

ASSESSMENT OF GISEM

The inaugural GACRAO Strategic Enrollment Institute was determined by all measures to be a success. Enrollment was strong, the program was financially viable, and attendee evaluations were enthusiastic and strongly supportive of the experience. Forty-six enrollees (78%) from the 2006-07 class began actively pursuing the REP. The 2007 conference included the graduation ceremony for the inaugural REP cohort of 27.

GISEM will be enhanced. Preparation for the 2008 conference is already under way. Other state associations have expressed interest in the success of the program. Already, Carolina ACRAO is set to offer its inaugural version—the CACRAO Enrollment Management Institute (EMI)—at its December 2007 conference. Florida ACRAO’s executive committee hopes to launch an institute in 2008.

CONCLUSION

The collegiate enrollment profession continues to change as services provided and methods of delivery evolve in response to student demands and technological capabilities. Lines between enrollment services offices continue to blur as the recruitment-to-graduation enrollment management philosophy becomes more pervasive.

As the challenges faced by enrollment professionals continue to become more complex, the value of an advanced track curriculum increases. Professional development that offers an exchange among veteran professionals; networking; best practices; and trend awareness continues to be necessary. GACRAO is excited about the future of GISEM and expects the Institute to be an integral part of the annual conference in Georgia. GACRAO hopes that a reciprocal movement among state associations desiring to offer an advanced track for seasoned professionals is on the horizon.

About the Author

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Striving to equip their students with the skills necessary to compete in today’s job market, more institutions are offering students service-learning opportunities. Also called work-study or internships, service-learning enables students to apply their skills and test their knowledge in real-world work settings. The gained experiences allow students to determine whether the career fields they are pursuing are right for them. Service-learning experiences enhance college students’ resumes as they show potential employers that the students are motivated, can manage classes and work, and have gained on-the-job experience.

Although service-learning dates back to the late 1880s (the term itself having been in use only since 1967), it is a concept that is still evolving and that has many different definitions. This makes it difficult to determine exactly how many higher education institutions offer service-learning opportunities or require students to complete a service-learning experience to graduate, and how many college students engage in service-learning. Nevertheless, Campus Compact, a coalition of more than 1,000 college and university presidents representing some six million students, has been conducting an annual member survey since 1987. Data obtained in its 2006 survey of more than 500 member institutions provides a broad picture of the service-learning landscape.

- Ninety-one percent of respondents reported that their campus offered courses that incorporate service-learning. A total of 17,747 service-learning courses were offered during the 2005–06 academic year.
- Approximately 32 percent of students enrolled at member institutions were involved in service-learning, with each student spending an average of 5.6 hours per week on service-learning activities.
- The most common service-learning activities were mentoring (91%) and tutoring (91%).

Neighborhood Networks is one of many programs seeing success through its partnership with educational institutions. Created in 1995 by the U.S. Department of Housing and Urban Development (HUD), Neighborhood Networks was one of the first federal initiatives to promote self-sufficiency by delivering computer access to low-income housing communities. Neighborhood Networks encourages owners and managers of HUD-insured and -assisted properties to establish on-site multi-service community learning centers. Today, more than 1,300 Neighborhood Networks centers are located across the United States, Puerto Rico, and the U.S. Virgin Islands. Neighborhood Networks centers provide programs tailored to meet the needs of local community residents. Programs and services include computer training, job skills, and support services that help families move toward economic independence.

These types of programs and services provide college students with the opportunity to make practical use of
lessons learned in the classroom. For example, students majoring in computer technology or health—two of the fastest-growing career fields, according to the U.S. Bureau of Labor Statistics—may enrich their learning by teaching computer classes, sharing health information, or conducting health screenings at a local Neighborhood Networks center. Students majoring in educational disciplines may help with a center’s after-school or summer program, offering much-needed tutoring and mentoring.

Across the country, college interns are working with Neighborhood Networks centers to configure computers, teach classes, and tutor and mentor youths. In Grand Forks, North Dakota, the LaGrave Learning Center serves as a real-life learning laboratory for three interns from the University of North Dakota (UND). The interns, all majoring in social work, are required by UND to complete an internship to graduate. The interns perform the same tasks as full-time staff members but are provided guidance by veteran staff members. The interns work with youths, research resources regarding child support and public assistance, and help residents develop life skills. Interns also may provide homework assistance and mentoring to students attending the center’s after-school program.

At the Fort Vancouver Terrace Neighborhood Networks Center in Vancouver, Washington, an intern from nearby Clark College helped set up the center’s four computers. Working toward his Associate Degree in Applied Science (AAS) in data networking and telecommunications, the intern also assessed the Center’s networking needs and provided recommendations for additional hardware.

At the Pelham Apartments Computer Networks Center in Framingham, Massachusetts, interns from Massachusetts Bay Community College complemented lessons learned in the classroom with hands-on experience through service as tutors and mentors. In addition to providing homework assistance, the interns helped the Center’s youths develop career goals and provided them with information and guidance on college admissions.

Service-learning is much more than just serving. A true service-learning program is equal parts service and learning. A service-learning program should provide students with the opportunity to experience challenges and then to use their academic skills to meet the challenges in a safe and structured environment. For a student to reap the greatest benefit from a service-learning experience, the sponsoring organization must recognize that the student brings to the partnership valuable knowledge and a fresh perspective. The organization must be willing to view the student as an entry-level employee and to grant the student the same level of respect and responsibility as other employees.

About the Author

DELORES PRUDEN has served as Director of the U.S. Department of Housing and Urban Development’s Neighborhood Networks Initiative since 2001. For a complete list of Neighborhood Networks centers and for more information about the Neighborhood Networks Initiative, visit www.NeighborhoodNetworks.org, or call the Neighborhood Networks Information Center toll free at (888) 312-2743.
Still Staying Fit While on the Road: A Letter to Fellow Administrators

By Kimberley Buster-Williams

In 2003, I wrote a letter to fellow recruiters entitled “Staying Fit While on the Road” (Buster-Williams 2003). The target audience was rookie admissions counselors scheduled to spend six to eight weeks on the road recruiting students to their respective institutions. The main recommendations in the article were to exercise, to rest, to eat well, to drink well, and to establish good habits before hitting the road.

Fast forward four years: I now am a director of admissions and have traded in my “office on wheels” for a high-stakes desk job. My days are spent in executive sessions, tracking enrollment and other trends, and meeting various constituent groups. When I do travel, I use the same tried and true methods of staying fit that I used as a veteran recruiter—but with a few modern-day tricks.

In the late 1990s and at the dawn of the 21st century, technology was less pervasive than it is today. The fast food industry had not “seen the light” insofar as that light pertains to healthy alternatives (e.g., fruit instead of french fries, milk instead of soda). Today, health-conscience travelers can take advantage of 100-calorie snacks and low-calorie juices. Reduced-calorie versions of most staples—from coffee drinks to bread—are available in most stores. In fact, stores are chock-full of low-calorie alternatives.

In light of recent technological and culinary advancements, and in spite of post-9/11 restrictions, I offer the following recommendations to ensure that you remain fit while on the road. Let’s start with the disciplined traveler’s “To Do” list (disciplined being the operative word):

- **Plan ahead**: Book direct flights (thereby escaping the two-hour layover and accompanying mindless eating), and arrange to stay at hotels that have workout facilities (preferably without any additional fee).
- **Research** hotel amenities as they pertain to fitness (bands, weights, exercise videos, coupons redeemable at local health clubs, etc.). (Most of this information is available online.)
- **Program your workout** in your Blackberry, Palm, etc. (or download a workout).
- **Keep the same routine.** For example:
  - Get up at the same time whether you are at home or on the road (no matter how comfortable the deluxe mattress or how dark the curtains make the room).
  - Set the coffee to brew automatically—just like at home (the perfect talisman to oversleeping!).
  - Watch the news until the same time whether you are on the road or at home (for example, until 6:11 AM sharp—not 6:12, not 6:15). Be a creature of habit!
  - The only exception to the routine may be not having to walk the dog!
- **Schedule wake-up calls** (in case the coffee machine malfunctions).
- **Bring your iPod** and any other workout accoutrements, including a jump rope (see below).
Schedule at least 30 minutes of physical activity every day (even while on the road)—no excuses!

- If your meeting schedule does not permit a morning workout, plan accordingly (that is, schedule your 30-minute workout between your morning meeting and dinner).
- If your hotel does not have a fitness facility, then improvise. Use your jump rope; do some deep stretches and breathing exercises; or do yoga for 30 minutes. Any of these activities can be done in the privacy of your hotel room.
- Bring fruit, nuts, and other healthy snacks such as:
  - Quaker 90-calorie snack pack rice cakes and green apples
  - Fruit from the hotel breakfast bar (save it for later).
- Beware of airport calorie traps—that is, the dangerous combination of unexpected layovers and restaurants that serve high-fat foods.
- Travel with sufficient snacks to last awhile. My most recent trip was replete with delays coming and going.
- Don’t have an outer body experience. “Everything in moderation” is a good aphorism to remember. Others are:
  - “Eat it today, wear it tomorrow” (my grandmother’s favorite saying).
  - “Eat breakfast like a king, lunch like a queen, and dinner like a pauper.”
  - “Pay me now or pay me later.”
- Coordinate group activity—(or, misery loves company).
  - When attending regional meetings, a group of us walk whenever and wherever we meet. The question is not if we’ll walk but rather what time we’ll walk.

Keep a food journal (even if you don’t when you’re at home). This will help more than anything else. After all, you can’t exercise enough to make up for overeating!

- Drink a lot of water. Doing so will stave off hunger and keep you hydrated.
- Use an online support group (e.g., Weight Watchers).

Here are some pretty good “Don’ts:”

- Leave your workout gear at home.
- Adopt an “I’ll make it up when I get back” mentality (disaster in the making!).
- Be enticed to eat more either because the food costs more (e.g., the $20 hotel breakfast buffet) or because it’s free.
- Take a vacation from your good habits.
- Overindulge (e.g., three large caramel mochas in one day).

According to Benjamin Franklin, “Wise men don’t need advice. Fools won’t take it.” It is my hope that the information shared in this article will be accepted in the collegial spirit given, and that we will all try to stay healthy (even while on the road).

REFERENCES

About the Author
KIMBERLEY BUSTER-WILLIAMS is director of admissions at the University of Michigan-Flint (MI). She has nearly 13 years admissions experience having worked at both a public and private university. Ms. Williams holds a master’s degree in education administration and an Ed.S. degree in higher education from Old Dominion University.
The last quarter of the 20th century saw much attention, significant resources, and considerable efforts focused on improving students’ first year of college. But students who were the beneficiaries of such targeted efforts found upon their return for their second year of college that many of the support programs that had helped them transition to college were no longer available to them now that they were sophomores. Educators who took time to examine these concerns soon learned that an unacceptably high number of second-year students do not return for their junior year. Nascent interest in the sophomore year has gained momentum during the past several years; it behooves admissions officers and registrars to understand the overarching issues regarding students’ sophomore-year experience. This article seeks to raise consciousness of this important topic by defining the sophomore year, summarizing current research, providing a rationale for campus-based initiatives, identifying current practices, suggesting strategies for enhancing the second year, and describing the challenges and opportunities inherent in sophomore initiatives. Educators who work to improve undergraduate satisfaction and success on their campuses must consider the special needs and characteristics of all students, including “the academy’s middle children” (Gahagan and Hunter 2006).

Any attempt to conduct campus-based research on the sophomore year must begin with a definition: what is “sophomore year?” This is no easy task. Categorizing any undergraduate these days is difficult. It is possible to define sophomores as students who have completed a certain number of credit hours. However, sophomores thus defined are likely to comprise a wide variety of students, including first-year students who matriculate with substantial advanced placement credits, students in their third year of study who have struggled academically and so have not earned enough credits to achieve junior status, and transfer students in their first semester on a given campus. Also problematic is the fact that the term “sophomore” is not commonly used on many community college campuses. After struggling with the definition on our own campus, a University of South Carolina Task Force defined sophomores as “first-time, full-time students who have progressed into their second year on campus.” Although perhaps not an inclusive definition, it met the needs for our research. (Each campus must purposefully and intentionally consider how to define “sophomore” before engaging in any assessment or research relating to this group.)

RATIONALE FOR DEVELOPING SOPHOMORE-YEAR INITIATIVES

Institutions develop second-year programs for a variety of reasons, including addressing concerns about student persistence, increasing student satisfaction, and encouraging student learning. According to data from the Consor-
A Quest for Purpose

“As a freshman you think you have all this time to plan and you hit sophomore year and you’re [sic] like whoa I really do need to have some kind of direction” (USC sophomore 2004).

Researchers have found over the last three decades that many students struggle as sophomores to find a purpose. Lemons and Richmond (1985) describe sophomores as “stranded in no-man’s land; the novelty of college associated with being a freshman has worn off, and often sophomores are not far enough along in their academic program to assess accurately or feel a part of their major field” (p.176). Lemons and Richmond (1987) later applied Chickering’s (1969) seven vectors of college student development and found that sophomores struggle with developing a purpose. This makes sense given that most institutions require students, at the end of their second year to declare a major and to begin to think about an internship or co-op experience as preparation for a career.

Marcia Baxter Magolda and Patricia King (2004) describe this quest for purpose as a journey toward “self-authorship,” “the capacity to internally define a coherent belief system and identity that coordinates engagement in mutual relations with the larger world” (Baxter Magolda and King 2004, p.xxii). Upon entering college, many students look to external authorities—including professors, advisors, and parents—to help define their sense of self; however, during their college experience, and especially in their sophomore year, many students exhibit signs of “transitional knowing,” which marks a shift in how they view themselves and others (Baxter Magolda 1992).

Molly Schaller’s 2005 research summarized the importance of developing purpose in the second-year experience. In her qualitative study, Schaller (2005) identified four stages of development in the sophomore year. Students begin in a stage of random exploration in which they still have the sense of exuberance carried with them from the first year. As Schaller (2005) describes it, students in this stage “seemed very aware of the choices pending in their lives, especially in regard to majors and careers. However, they made choices that allowed them to delay deciding until later” (p.18). Sophomores progress to a stage of focused exploration in which they begin to express more frustration with their lives and some of the decisions they have made. This stage can be characterized by feelings of uncertainty and confusion which can result in students’ beginning to feel the challenge of the sophomore year (p.19). Many students begin to make choices in the sophomore year that influence the rest of their college career. These decisions—however big or small—begin to move students to a period of tentative choices. Students in this
stage “described a new level of responsibility that came with seeing their future more clearly” (p. 20). At the commitment stage, Schaller (2005) found sophomores taking more ownership for their actions and experiencing less uncertainty about their future.

Schaller’s (2005) framework highlights the need to support second-year students in their movement toward decisions such as selection of a major and career. It also emphasizes the importance of educators’ providing appropriate levels of change and support for second-year students. Tobolowsky and Cox (2007) found that more than two-thirds of institutions with second-year programs emphasize career planning and provide programs to assist students in selecting a major. It is important for us to ask how we—as educators who are responsible for many of the enrollment management functions at our institutions—can better support students in their quest for purpose during the sophomore year.

ACADEMIC DEVELOPMENT IN THE SOPHOMORE YEAR

“It’s a lot more difficult than freshman year; there is more of a workload, harder classes, that’s why I’m switching majors.”

“Freshmen year I was just getting used to being in college, and now I can focus more on academics. I know that I need to study to get where I want to get, and that’s my purpose for being here” (USC sophomores 2006).

These quotes highlight another major theme in the sophomore year: academic life becomes more rigorous. Friedman (1956) described sophomore year as a time when students’ chief energies are focused on “academic work and in associations with fellow students” (p. 21). However, even though many students are fully engaged in their academic work by their second college year, many face increased difficulty as they enroll in gateway or “weed-out” courses for their major. These and other academic factors affect sophomores’ persistence to graduation. Wilder (1993) found that “variables such as lack of commitment to school, absenteeism, educational goals, extra-curricular activities, and perceptions of faculty-staff interactions contributed most to the ability to discriminate between decliners and maintainers” (p. 23). Graunke and Woosley (2005) identified “certainty in the choice of a major and... the extent to which sophomores felt faculty were concerned with their academic success” (p. 174) as significant predictors of students’ academic performance.

Delivering specialized academic initiatives is another common approach to improving students’ second college year. Such initiatives should be developed to support the academic experience. According to the 2005 national survey, 20 percent of respondents indicated that sophomore initiatives included curricular efforts (Tobolowsky and Cox 2007) including credit-bearing courses (21.1%) and curricular learning communities (17%).

Academic advising is another means of delivering sophomore-specific initiatives. It is during the second year that students typically must declare an academic major (if they have not already done so). Students who already have declared a major confirm their choices during the second year. Some begin to take courses in the major while others enroll in “gateway” courses. Despite variations in curriculum from major to major and from campus to campus, the fact remains that the second college year is significant in terms of students’ academic decision making; delaying decisions or changing majors beyond the second year frequently impedes students’ progress toward a degree. Academic and career advising specifically for sophomores is crucial.

INSTITUTIONAL INITIATIVES

Institutions approach improvement of students’ second year in a variety of ways. Many start by gathering information about what already exists on campus. Some begin by targeting existing programs and resources, adapting content to focus on sophomores’ needs and interests, and then marketing them to sophomores. Others develop programs and initiatives in response to parental requests and communications.

Academic initiatives for sophomores are common. Academic advising, major selection, study abroad, undergraduate research, and service-learning often serve as the focus of campus strategies, as they are areas of interest to many second-year students. Many campuses also develop linked courses and learning communities that provide an enriched educational experience for second-year students.

Residentially based efforts are common on those campuses where second-year students live on campus. The role of the resident assistant may need to be restructured in those facilities that house second-year students. Campuses must determine whether it is preferable to house second-year students together or to distribute them across campus. Residential learning communities are increasingly common.

On some campuses, second-year students become involved in leadership and mentoring programs. Sophomores mentor first-year students, and junior- and senior-level students mentor sophomores in particular academic majors.

Finally, many institutions have created an institutional culture that communicates care and concern for sophomores through specifically targeted activities and events.
such as retreats, trips, projects, ring ceremonies, convocations, and other special events. “Sophomore-only” events promote class identity and communicate the institution’s care for second-year students.

**EDUCATIONAL REFORM**

Although it never is easy to change institutional culture, several strategies may prove helpful as new efforts in support of sophomore success are implemented and then sustained:

- **Develop a task force or committee.** A working group of representatives from across campus—including student affairs and academic affairs functional areas, faculty, and students—can broaden conversation about and understanding of the second-year student experience. Seek wide-ranging representation.

- **Visionary leadership.** A clearly articulated vision of desired results and goals will support the securing of institutional commitment. It also is critical to effectively communicate the vision. Ensuring that those involved in the initiative have a clear understanding of the purposes, rationale, and ultimate outcomes will strengthen the initiatives and increase the likelihood that they will be institutionalized.

- **Understand sophomores.** Get to know the sophomores on your campus. Begin to do so by mining existing data. Offices of institutional research usually have extensive data relating to undergraduates. In the unlikely event that no data exist—or that they are not available—determine how to obtain reliable information. Commercially available national surveys, locally developed questionnaires, and focus group research all can be utilized to learn about your students.

- **Understand first-year students as they begin to plan for their sophomore year.** Students’ experiences leading up to the second year form the basis of their subsequent experiences.

- **Tie efforts to institutional mission.** To be successful, new initiatives must be consistent with the institutional mission. Articulating how a new program will support institutional goals will enhance the chances of its acceptance and success. Describe how what is planned will support the institutional mission and goals, and connect funding requests to that tie-in.

- **Be intentional.** Develop initiatives to intentionally support the needs of sophomores. Build programs in response to research data and information.

- **Restructure existing resources.** Many excellent programs already may exist on campus, but they may not be directed toward sophomores. Capitalize on existing programs, and tweak them for sophomores. Focus additional efforts on meeting needs not met by existing programs.

- **Start small.** Too often, well-meaning educators hastily create a massive and unwieldy program in response to an excellent idea. Long-term results are most likely when an institution starts small, for example, with a pilot program. Communicate that early efforts will be assessed rigorously. As evidence of the pilot’s success accrues, expand the size of the program.

- **Begin and end with good assessment.** In today’s environment of accountability, building good assessment into any program is critical; it is particularly important for new initiatives. Develop learning outcomes and methods for measurement in the early stages. Beginning with the end in mind will help to focus efforts.

- **Funding.** Funding new programs is frequently a challenge. Be creative, and seek counsel from many corners of the institution. Does funding exist internally for new initiatives? Is external funding available locally, regionally, or nationally? Can a collaborative effort be arranged so that many departments contribute proportional funds to total a significant investment? Institutional funding processes vary tremendously from campus to campus. Finding creative and novel ways to fund new initiatives can prove both difficult and rewarding.

- **Include research.** Don’t fail to consider scholarship opportunities. The national literature base on sophomore programs, though slim at present, is an emerging area of scholarship. There are many opportunities to publish on this topic. Related research will assist other institutions as they, too, work to improve the sophomore experience. Develop the research questions, and invite graduate students on your campus or at nearby institutions to join in your work. Multiple benefits will accrue to the institution, to the graduate students, and, most important, to future sophomores.

- **Become an advocate.** Believe in the value of your work. Take every opportunity to be an advocate for second-year students.

- **Communicate with campus stakeholders.** Throughout the process of envisioning, developing, creating, and implementing initiatives for sophomores, communicate with stakeholders. Doing so will build a wide base of support. Be aware that such communication likely will also bring out any resistance. Presenting challenging questions and concerns early in the process can have the effect of strengthening the program as it is being developed. Communicating throughout the develop-
ment process can build anticipation of and enthusiasm for new programs.

RESOURCES
More resources are becoming available with each passing academic year. The National Resource Center for The First-Year Experience and Students in Transition has made a special effort to provide resources on the sophomore year on its Web site (see www.sc.edu/fye); these include lists of sophomore-specific research and publications, information on contributing to the international educational community by embarking on research related to the sophomore year, and lists of institutions that already have programs specifically addressing the unique needs and interests of sophomores. A national listserv sponsored by the Center serves as a mechanism for sharing ideas and posing questions and connects practitioners dedicated to improving the sophomore year of college.

Sessions on sophomores also are now integrated into many national and regional conferences. For example, the annual National Conference on Students in Transition includes a special theme track on sophomores and extended pre-conference workshops and serves as the unofficial gathering place for researchers and practitioners focusing on sophomore initiatives.

CONCLUSION
Increasing attention is being paid to the second year of college. No longer is it sufficient for institutions to attend to the first-year transition alone. Students’ transition needs do not magically disappear once they earn a certain number of credit hours. In fact, some suggest that the first and second years should be considered together as a unit of study and resource focus. At the very least, responsible campus decision makers must seriously consider the needs, characteristics, behavior patterns, and academic experiences of second-year students. Our campuses will be better places and our students will be better served and more successful if we do.

REFERENCES


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PROFESSIONALIZING GRADUATE EDUCATION: THE MASTER’S DEGREE IN THE MARKETPLACE

BY: JUDITH GLAZER-RAYMO
JOSSEY-BASS. SAN FRANCISCO (2005). 137 PP.
Reviewed by Sam J. Fugazzotto

In the first two sections of the study, “Conceptualizing the Master’s Degree” and “The Evolution of the Master’s Degree,” Glazer-Raymo discusses what the master’s degree is today and its relatively recent origins. The master’s degree is a relatively new phenomenon in American higher education. For about 200 years, students only earned a baccalaureate degree after a classical course of university study. Students could opt for a master’s degree if they stayed on and paid fees for three years following completion of the baccalaureate. Master’s degrees first began to take a more recognizable form in the mid to late 1800s. In 1851, Henry Tappan, president of the University of Michigan, began working to institute the Master of Arts and Master of Science as earned degrees, like the baccalaureate and doctor of philosophy. The University of Michigan awarded its first M.A. in 1859, which Glazer-Raymo describes as more of a liberal arts degree than a professional or discipline-specific master’s.

From its beginnings as a general liberal arts degree, the master’s proliferated quickly in the late 1800s. As early as 1909, the Association of American Universities commissioned a study of the master’s degree to define its purpose. The use of titles for master’s degrees, such as M.A., M.S., and M.Phil., came with little standardization among different institutions. The AAU introduced recommended master’s degree standards for its member institutions, which, as Glazer-Raymo writes, had the unintended effect of encouraging credentialism, and ultimately led to the creation of the first professional degree. Therefore, a relatively standardized liberal arts degree quickly became a myriad of more professionalized degrees with no standard curricula.

In the more recent past, the master’s degree has played a number of roles in graduate education: 1) It can precede the doctorate; 2) It can serve as a “consolation prize” for those not admitted to doctoral study or who do not finish the doctorate; and 3) It can be a terminal professional degree in itself. Recent decades have seen greater emphasis on number 3. Concurrent with increasing professionalization are the changing demographics of master’s students. Master’s students in the 1999–2000 academic year (the most recent year for which Glazer-Raymo could obtain data) were older, more diverse, and more likely to be employed full-time than their counterparts in the 1980s.

In the third section of the study, “Curricular Models of Master’s Education,” Glazer-Raymo describes how the master’s degree has evolved into “a highly adaptable and affordable credential (p. 23).” Curricular innovation has increased interdisciplinarity in an effort to make the master’s degree more marketable to students seeking a return on their investment. Newer fields of study at the master’s
level—including biotechnology and information technology—reflect this greater interdisciplinarity, as well as a shift towards applied knowledge and an increase in the prestige of applied knowledge. Innovation in delivery format has also occurred as many institutions (and especially their continuing education units) have offered master’s degrees in online and distance education format.

Glazer-Raymo uses the next sections of the study to discuss changes in specific fields of study. Overall, degrees in professional fields have come to dominate the market for master’s degrees. For example, in 2001–02, master’s degrees in business and education together made up 53 percent of all master’s degrees awarded. While not occupying as large a share of the market, master’s degrees in engineering and health professions have significantly increased their market share between 1980–81 and 2001–02. Master’s degrees in business and education have had more obvious connections to professional practice, but science and engineering master’s programs have also come to develop stronger connections to practice. These programs have had more dialogue with industry on the proper training for practicing scientists. Finally, some institutions have attempted to make humanities and social science master’s programs more professionally in response to external demand (e.g., the job market). However, faculty in these programs, especially at research institutions, have generally not been enthusiastic about these attempts.

“Redesigning Master’s Degrees for the Marketplace” discusses the forces driving ongoing changes in the master’s degree. Certain factors continually serve to refashion the already-professionalized master’s degree for the marketplace. According to Glazer-Raymo, these factors include “market mechanisms” (including globalization and employer demand), interdisciplinary tendencies among different academic and professional fields, government mandates for accountability and quality control, and developments in technology.

A central conclusion of Glazer-Raymo’s study emerges as the increasing professionalization of the master’s degree and how traditional boundaries between disciplines have come to mean less. The master’s degree has become a product of sorts: It can generate substantial revenue for an institution, and it is in demand as a professional credential for a number of fields. The study is admirably thorough in its summary of the historical development of the master’s degree and of the issues confronting colleges and universities as the degree is professionalized in response to the marketplace. Therefore, it has great use in arming policymakers and academic and government leaders with information for decision making. Certainly having a sense of the master’s degree’s roots and of its potential for future development can pave the way for strategy making at individual institutions. For example, curricula could be realigned to fashion master’s degree programs in an effort to meet demand. On a more “macro” level, government officials can use Glazer-Raymo’s study to determine what the proliferation of master’s degrees could mean for educational systems and the economy. Are we coming to a point where the master’s degree has become the new baccalaureate degree, and if so, what benefits accrue to those with an increased number of years of formal training and to society as a whole? In other words, is the proliferation of the master’s degree a good thing?

The last question underlies my central critique of Glazer-Raymo’s study. The changes that she describes in the structure and purposes of the master’s degree beg the question of how university and government leaders ought to address these changes. While Glazer-Raymo mentions in her conclusion the types of issues that decision makers must confront (including the potential restructuring of institutions in response to external demands for more professionalized master’s degrees), she seems to stop short of expressing her own views. What steps should postsecondary institutions take to engage with the demands of their external constituents? How much should state or national education policy encourage colleges and universities to engage with market-related demands? As a reviewer, I felt the study never fully comes to a definitive position on any of the issues that it raises. The relationship between higher education and market interests has always come with tension. Besides making Glazer-Raymo’s study itself more engaging, exploring that tension and taking a defined position might have made the study even more useful to institutional and government leaders, because it could lead to a fuller discussion of the risks and benefits of engagement with the marketplace.

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