

## The DIAMOND Program: DePaul's Experience with Noncognitive Assessments in Admission

### **BACKGROUND**

DePaul University has benefited from years of strategic investments and initiatives designed to improve its competitive market position, increase its enrollment and shape its student profile. Demand has increased for freshman admission, with much of the new demand among higher academic profile students and from a wider geographic draw, though the freshman class has also become increasingly diverse in its racial, ethnic and socioeconomic mix. Since 2004, however, there has been little capacity for increasing freshman enrollment at the pace that characterized the prior eight years. As a result, DePaul began facing the inevitable, inescapable and perhaps enviable outcome of its improved market position and prominence, namely an admission process that is more selective, admitting a smaller percentage of applicants.

This situation presented a strategic challenge for DePaul—an institution that affirms the continued relevance and importance of its historical mission to provide college opportunities for students who are from low-income families, who are the first in their families to pursue postsecondary education, and who are from historically underrepresented racial/ethnic groups. The challenge faced was (and continues to be) how to manage this increased selectivity while not losing ground on its mission-based goals for access and diversity. The key clearly was in developing admission strategies for selectively admitting freshman applicants who may not fare as well as others in traditional measures of academic preparedness, such as standardized test scores (ACT/SAT), but who demonstrate evidence of their potential to succeed at DePaul. The additional challenge was to find ways to do so that could be managed at the scale that characterizes one of the ten largest private universities in the United States.

At the direction of Dr. David Kalsbeek, senior vice president of the Division of Enrollment Management and Marketing, the division's leadership turned for guidance to the research of Dr. William E. Sedlacek, author of *Beyond the Big Test, Noncognitive Assessment in Higher Education* (2004), which demonstrates how noncognitive variables can be used as a supplement to standardized quantitative and verbal assessments such as ACT and SAT scores in the college admission process. Dr. Sedlacek, professor emeritus of psychology at the University of Maryland, has conducted decades of research on *noncognitive* variables relating to student success in college; these variables are separate from *cognitive* verbal and quantitative skills measured by standardized tests. Sedlacek's research demonstrates that noncognitive variables are useful for gaining a holistic view of all students, but in particular these tools are critical for students from disadvantaged backgrounds because standardized tests may not provide a full picture of a student's potential.

Experiences from colleges (such as Oregon State) that have integrated Sedlacek's model of noncognitive variables into admission decision making show their value in increasing not only diversity but, more importantly, student retention and success. These noncognitive criteria are also used by The Gates Foundation in selecting recipients of the prestigious Gates Millennium Scholarships that fully fund college for talented students. Gates programs for high school students, like the Washington State Achievers Program, have reported positive outcomes with students selected through noncognitive variables: higher academic enhancement, higher community engagement, greater aspirations for and persistence toward a four-year degree.

After consulting directly with Dr. Sedlacek and with colleagues at Oregon State, DePaul's Enrollment Management and Marketing team decided to introduce noncognitive variables into DePaul's admission process in order to gauge noncognitive indicators of success that may be appropriate to our mission and our students.

This initiative is known at DePaul as DIAMOND: **D**eveloping Insights for **A**dmission through the **M**ining of **N**on-traditional **D**ata.

### **IMPLEMENTATION**

For the fall 2009 class, DePaul's admission application included four new essay questions, referred to internally as DIAMOND essays, that required short answers. Appropriate responses to these questions could be as short as 100 words, but students often wrote more. These new DIAMOND essays replaced a previous, open-ended essay on the admission application. However, unlike the prior generic essay, the DIAMOND essays were grounded in the research on noncognitive predictors of student success, explicitly framed in ways to gain insight into the following eight noncognitive dimensions of student potential that Sedlacek's work has shown are related to student success in college:

- Positive self-concept
- Realistic self-appraisal
- Successfully working within a system
- Preference for long-term goals
- Availability of a strong support person
- Leadership experience
- Community involvement
- Knowledge acquired in a field

Two sample DIAMOND essay questions are:

1. Describe a goal you have set for yourself and how you plan to accomplish it. How would you compare your educational interests and goals with other students in your high school?
2. Describe a personal challenge you have faced, or a situation in which you or others were treated unfairly. How did you react to the situation and what conclusions did you draw from the experience? Were you able to turn to others for support?

The assessment approach was to evaluate each essay by rating the extent to which the applicant's essay responses provided evidence of each of the eight noncognitive variables.

### **TECHNOLOGICAL RESOURCES**

Bringing this innovation to scale required the rapid development of systems to efficiently and effectively manage the collection, review and rating of the DIAMOND essays. Members of the DIAMOND implementation committee collaborated with Information Systems staff to build a totally online tool for the collection and review process. This new online tool was designed and built in spring/summer 2008 and was operational by fall 2008 for students to submit their essays online as part of their online application for admission to the fall 2009 class.

The system designed for the DIAMOND program is incredibly complex and sophisticated. Essay questions are viewable to the student as a section within the application for freshman admission. Students can insert responses into text boxes within the application and submit the entire application with one click. At this point, the essay and application submission process is complete for the student, but the process for the essay responses is only beginning.

Once the essay responses are submitted, they are automatically available to view through a link within Campus Connection (DePaul's secure portal), which is accessible by approved readers and administrative staff. Essays are also captured within PeopleSoft, so that future queries or exporting is possible for research purposes. This reading tool is designed with two components: a reader view and an administrator view. The reader view provides a blind process, by which the readers are permitted to access essay responses through a secure and virtual process housed within Campus Connection without viewing any identifying information about the student. This blind reading process prevents additional bias or assumptions being made regarding the student's experience based on personal factors or biodemographic data. Once logged in, the online tool gives readers the option to read a set of essays and provides a constant tally to help them self-monitor their progress. The system automatically assesses which essay is next in line to be reviewed and loads that essay into the reader view. While reading a set of essays, the reader has the opportunity to evaluate, skip if they feel they are not able to effectively or fairly evaluate, or flag if they see something of concern and want to alert the administrator. This flag option pulls the set of essays out of the reading queue until it can be reviewed by the administrator. Each set of essays is read a minimum of two times. If the two evaluations of a set of essays differ by more than four points, then the essay responses are read by a third reader; this logic is built into the online tool. Once a set of essays is evaluated by the readers, the quantitative information is saved and stored within PeopleSoft to be viewed by the Admission staff as part of their review of the entire application.

The administrator function of the tool allows the administrator to track the progress of a student's responses through the reading process; note how many readers have viewed, skipped or flagged the essay; and reestablish the priority of a set of essays in the tool. The administrator also has the ability to monitor reader performance, such as average time per essay, average rating per reader, number of logins and latest login. Having this information is extremely important to ensure DePaul is able to manage the volume of essays moving through the tool and, more importantly, to ensure the reading process keeps pace with the application review process. Having all of these features built into the tool is also incredibly important from a research component in that we are able to use the reader rating information to see if particular noncognitive variables are being rated differently, in order to avoid rating trends that could be misleading or impact the inter-reader reliability.

This entire systems development process was accomplished in less than six months, a reflection not only of the talent of DePaul's systems developers and their responsiveness to meeting the systems specifications of the Admission staff, but also their enthusiasm for the significance of this particular innovation. Since the initial implementation, there have been two major update cycles to the tool and we are now entering the third major update cycle.

### **HUMAN RESOURCES**

In addition to the technological development required to bring the DIAMOND innovation to scale, a significant component of implementation was enlisting the help of volunteer essay readers from across the DePaul community. The recruitment of DIAMOND readers began in fall 2008, and focused on staff from offices beyond Admission; staff from across multiple administrative divisions of the university were quick to volunteer (e.g., the Division of Enrollment Management and Marketing, the Division of Student Affairs, University Ministry, the Office of University Mission and Values and the Office of the General Counsel). In the first year, more than 80 faculty and staff signed up to serve as volunteer readers. From January to February 2009, every prospective reader participated in a four-hour training session and was immediately granted access to the online tool to begin reading. In January 2009, all essays received to date were loaded into the reading tool as an initial batch, and the reviews began. Readers reviewed essays from 50 applicants per month; debriefing sessions for readers were also held monthly to provide the opportunity to ask questions, discuss relevant issues as related to the reading experience, and continuously improve the consistency of the review and rating process.

As of 2009/10, DIAMOND evaluations were obtained for more than 19,000 applicants. Since each essay is read up to three times, these totals represent more than 40,000 times that a reader has reviewed and evaluated a student essay, equating to more than 3,300 hours of staff and volunteer time and effort.

The involvement of faculty and staff volunteers as essay readers has been one of the most exciting components of the DIAMOND program; the inclusion of DePaul faculty and staff in the admission process has served to unify the entire community as everyone plays an important part in selecting the future DePaul student community.

### **QUANTITATIVE RESULTS**

DePaul's enrollment management approach is a research-driven enterprise and has a national reputation for effectively using research and data analysis in strategy development and evaluation; therefore, the DIAMOND program is naturally the focus of considerable quantitative evaluation. After two years of collecting and analyzing DIAMOND essays, our institutional researchers have found that the DIAMOND essays and their ratings do enhance the admission process in ways that avoid some of the persistent difficulties of other selection criteria; some of the initial findings are noted here:

- DIAMOND scores are not related to family income, in contrast with standardized test scores which highly correlate with family income.
- DIAMOND scores are race/ethnicity neutral, again in contrast to what some research reveals about standardized test scores.
- DIAMOND scores are not significantly related to ACT/SAT scores.

These preliminary findings provide confidence that the DIAMOND essays and the rating process can effectively bring additional information into the admission review that is not statistically related to applicants' socioeconomic and racial/ethnic background. These findings were the first prerequisite for moving forward with the DIAMOND program; if the ratings were highly correlated with income, race and standardized test scores, they would be of no value in responding to the enrollment challenges DePaul faced.

The second phase of the DIAMOND research focused on the relationship of the individual DIAMOND ratings and students' success at DePaul.

- Preliminary results show that DIAMOND essays are predictive of first-year success at DePaul—both in GPA and in students' academic progress and retention.
- Preliminary results show that DIAMOND essays are especially predictive of first-year success for minority and low-income students.
- For students who perform well in high school, but receive low ACT scores, DIAMOND essays appear helpful in predicting first-year success. These might be students who would choose a test-optional route to admission at DePaul, and the DIAMOND essays appear to contribute significantly to assessing likelihood of success in the freshman year.

The analytic evaluation of the first years of the DIAMOND program show that these essays are helpful in assessing the potential of students who are underrepresented in four-year colleges and reveal additional information about applicants that is different from what standardized test scores provide. Some specific benefits of the essays are that they: relate to student success, broadly defined; look at the whole person; allow applicants to make their own case; ask straightforward and specific questions based on student experience;

establish a process for more systematic review and assessment of admission essays; and provide additional information on student interests and goals for initial advising and educational planning.

As DePaul becomes more selective in its admission, DIAMOND essays and the noncognitive attributes they are designed to assess, appear to provide valuable additional insight to the admission review.

## **CONCLUSION**

In short, DIAMOND essays help us identify students who can be successful at DePaul when viewed by a lens that is broader than traditional cognitive metrics. *The overarching goal is to improve retention and degree completion outcomes by admitting students who demonstrate qualities and characteristics known to be predictive of student success in college, especially among historically underrepresented groups. Early evaluation suggests that the DIAMOND essays can contribute to an admission review that doesn't give further advantage to the advantaged and does indeed provide a means of assessing likelihood of success in ways that "level the playing field."*

Preliminary analyses show that, in particular, the attributes of leadership, positive self-concept, community service and knowledge in a field help predict first-year grades and progress at DePaul—broader measures of success than what is predicted by standardized test scores. However, we will need more time and research on current cohorts of students to evaluate how these noncognitive variables, as assessed via DIAMOND essays, relate to multi-year retention and graduation outcomes.

DePaul is the only major private university in the United States to make explicit use of these noncognitive factors in a university-wide admission and retention strategy focused on access and attainment. Our experience with noncognitive variables to help predict student performance and success at DePaul has provided us with confidence in offering a test-optional alternative for admission for freshman applicants—that policy was announced in February 2011, to take effect with the 2012 freshman class. We look forward to continuing this work with our dedicated team of faculty and staff readers and engaging our researchers in assessing the outcomes of this exciting new approach at DePaul.