Data Usage and Platforms for College Access and Success: Insight from the Field

The use of data is increasingly critical and common in all facets of the education sector and the world beyond. This is especially true in the college access and success field, where programs and practitioners increasingly collect data points on the students that they serve. These data points include demographics like race and gender, information on the nature and intensity of services received, and outcome data like postsecondary attendance or completion. The rise in the use of data for program improvement and scaling necessitates the creation of more data management options. For college access and success programs considering a more advanced tool or service for tracking student data, the marketplace can be overwhelming because many of these tools and services look and/or function similarly.

This brief aims to answer a number of questions: what data are programs collecting and with whom it is shared? How is that data managed and stored? What should programs consider in a potential data platform? What are the benefits and drawbacks of some available platforms? What are the experiences of NCAN members who actually use these platforms?

NCAN’s Focus on Data: The Common Measures and CMLC

Over the past decade, college access and success practitioners have moved toward collecting data and incorporating it into their programmatic activities. This shift occurred for a number of reasons: easier access to data, faster Internet connections that facilitate data sharing, and policies and funders that are outcomes-focused. Many NCAN members have focused on outcomes-specific data for years, but others are only beginning to do so. NCAN released the Common Measures in October 2012. The Common Measures, developed after extensive literature reviews and conversations with members, articulate the access and success data points that NCAN suggests its members collect and disaggregate. The data that members collect necessarily vary on the basis of their programmatic mission and the nature of their services provided. For example, a member whose services stop at high school graduation may not track second-year college persistence or FAFSA renewals.

This paper and others to follow represent the next phase of NCAN’s work in exploring data use for program improvement and scaling. Reactions to the release of the Common Measures were overwhelmingly positive and motivated the launch of NCAN’s Common Measures Learning Community (CMLC). NCAN members participating in the CMLC, which is funded by the Michael & Susan Dell Foundation, are devoted to exploring topics like better data storage and management, data-driven decision-making, and new metrics that identify students in need of services. The CMLC also drives the creation of new resources around data, including the development of this paper.
These resources will both benefit and educate NCAN members and the college access and success community at large.

**Methodology and Results of NCAN’s Member Survey on Data Platforms and Usage**

The research for this paper was accomplished through site visits, phone and email interviews, and platform demonstrations from both programs and service providers, followed by a member survey. Although the phone and email interviews were unstructured, common themes that developed out of programs’ responses were incorporated into the member survey.

NCAN’s member survey on data software and usage covered a number of areas that included familiarity with NCAN’s Common Measures, platforms used to manage data, and overall effectiveness of data usage. The survey was conducted using SurveyMonkey from May 15-30, 2014. Respondents were limited to one per organization with the exception of organizations operating multiple sites/branches, for which each site/branch was allowed one response. NCAN collected 49 total responses and later removed three duplicate organizational responses. Members of NCAN’s Common Measures Learning Community were strongly encouraged to complete the survey and represent 15 of the final 46 respondents.

The following are findings from this survey:

- In terms of respondents’ feelings on their overall effectiveness in using data for program improvement, 10% reported feeling extremely effective and 20% reported feeling effective while 58% reported being somewhat effective. 12.5% of respondents reported feeling less than somewhat effective.
- 76% of members reported collecting and tracking both student enrollment and completion. Of those who collected neither or only one of these data points, a lack of personnel and/or capacity to track the data and an inability to access needed data were cited as the top barriers to data collection. Lack of software and insufficient time followed as the next two common barriers.
- Of 35 respondents who reported using specific software to maintain their data, 26% used Microsoft Excel, 23% used a client relationship management platform (e.g., Salesforce, Naviance, Efforts-to-Outcomes (ETO), and Hobson’s Intelliiworks), 20% used a proprietary system specifically designed for their program, 14% used two or more programs equally, and 17% used something else, including STATA, Compusol's Blumen Database for TRIO Programs, and Blackbaud - Education Edge.
- Respondent satisfaction with the software used by their programs for tracking and maintaining data was mostly positive. 60% of respondents reported being somewhat or mostly satisfied while just 23% reported being less or not at all satisfied.
- The most common external source of data that respondents integrate into their system comes from the National Student Clearinghouse (77%). The next most common external sources were local school districts (46%) and state data systems and postsecondary institutions (both 29%).
• Program managers (86%), executive directors (80%), and boards of directors/trustees (57%) were the top users of data while access and success advisors (both 51%) followed closely behind.

• Funders (86%) were the group with which respondents most often share data. After that, community members (54%), school administrators (49%), school district personnel (46%), guidance counselors (37%), teachers (23%), and someone else (20%) rounded out the list. Of the other groups, the public and community/organizational partners were most often cited.

• In terms of concrete uses of data, maintaining longitudinal data on program performance (91%) and assessing program strengths and weaknesses (80%) were the top responses. These were followed closely by conveying information to external parties (77%) and fundraising (74%). After this, there was a drop-off to using data for identifying at-risk students (40%).

Now, with a better sense of the status of data usage, this brief turns toward examining some data platforms that can be used to improve data management, tracking, and reporting.

**What Is a Data Platform?**

Broadly, a data platform is any tool, service, or program that is used to store, organize, and manage data. At the most basic level, a data management platform could be pen and paper with rows and columns. The next level of sophistication would be a spreadsheet program like Microsoft Excel, which allows for data management and storage but is limited in its capacities to both manipulate data and store extremely large amounts of data. As noted in the survey results, Excel is one of the most common ways respondents are tracking their data. Database programs (e.g., Microsoft Access, MySQL) are even more complex. These programs have a number of common abilities like managing large amounts of data, defining data points according to the nature of the metric in question, flexibly structuring, connecting, and querying different data in multiple tables using specific filters, and generating reports based on queries and tables.

Among data platforms is a subset used for customer (or client) relationship management (CRMs). These tools allow programs to track individuals that they serve. CRMs have some of the same functions as the database programs mentioned above, but they also tend to include much more robust querying and analytics packages that help users produce reports and charts on subsets of students. CRMs are often cloud-based, meaning that they are accessed via an Internet connection and do not live on a program’s local computer. Some of the platforms discussed in this brief are CRMs.

Note that the platforms considered below do not represent the entire universe of those available in the market. This brief describes some platforms commonly used by the NCAN members who completed the software and data usage survey and those NCAN members contacted via phone calls and site visits. This brief is intended to serve as a starting point to describe some different features of data platforms. Additional platforms may be considered in future papers.
Platform Name: Office 365 with Power BI

What Is It and What Does It Do?: Microsoft Office (including Excel and Access) is well-known. Office 365 is a cloud-based subscription service that incorporates these programs. Office 365 not only includes the Microsoft Office suite but also the Sharepoint (file-sharing and collaboration) and Exchange and Lync (messaging) software packages. Power BI (or “business intelligence”) is an accompanying suite of analytics for Office 365. Power BI increases the analytical capacity of Office 365 and “provides information workers with data analysis and visualization capabilities to identify deeper business insights about their data.”

Power BI adds a number of functions to the traditional Office 365 suite, including the ability to create a cloud-based site where employees can view (and manipulate) the same data dashboard without running the risk of changing any underlying data. Additionally, Power BI adds features like “Power Query” and “Power Pivot,” which make it easier to search among variables and disaggregate data by variables like race/ethnicity, gender, or first-generation status, among other characteristics.

Advantages:

- Office 365 is a great starting point as a data analysis tool.
- The price and learning curve are relatively low barriers to entry.
- This platform has a strong ability to prevent accidental overwriting of data and ensure data is being entered in the right format.
- There is a widespread availability of professional development for Office 365 programs, including tutorials, message boards, and web classes.
- Power BI allows for the visualization of data in complex ways.

Reported Areas for Improvement:

- The platform offers many data visualization choices, but getting charts and graphs to look as intended can take some trial and error.
- Because bar, line, and pie charts and graphs are generally sufficient for college access and success programs, this platform may be unnecessarily powerful.
- Many will be familiar with Excel and Access at a basic level, but setting up more complex reports may not be as easy as with other platforms.
- Preventing overwriting requires a high level of knowledge about Excel’s less commonly used features.
- Power BI seems to lack the online support materials enjoyed by other platforms in this brief.

Testimonials: “One of the most attractive parts of O365…is the ability to provide very advanced, specialized tools to our affiliates without a steep learning curve for either users or IT people because of the almost universal familiarity with the Microsoft Office suite…. It allows us to package all of
One of the most attractive parts of O365...is the ability to provide very advanced, specialized tools to our affiliates without a steep learning curve for either users or IT people because of the almost universal familiarity with the Microsoft Office suite. – Degrees of Change, NCAN member

What is the Transition Like?: “We have a very IT-savvy team, so transitioning to test mode wasn't too difficult. Moving completely to O365 from the traditional Office suite is not something that should be undertaken lightly if you're doing it yourself. Migrating on-premises servers to the cloud can be particularly challenging and is a fairly serious project. It has big potential rewards, but it should never be taken lightly. There are technical and organizational impacts to consider and address.” – Degrees of Change, NCAN member, Tacoma, WA

Pricing: Office 365 Small Business for Nonprofits is free (although donations are suggested) for nonprofit organizations of up to 25 users. A Premium version of Small Business for Nonprofits is $2 per user per month. Office 365 Enterprise E3 is the most robust of the Office 365 packages and costs $4.50 per user per month. Enterprise E3 is the only version that supports Power BI, which costs an additional $20 per user per month. Notable is that approved non-profits may be able to get a fee waiver from Microsoft for using this platform (as Degrees of Change has).
Platform Name: Salesforce

What Is It and What Does It Do?: Salesforce is a cloud-based client-relationship management (CRM) platform. Like other databases, it allows for the storage of data at different levels (e.g., student, high school, college/university, advisor, parent, donor, etc.) and then the sorting, analysis, and reporting of those data in nearly any combination and format imaginable. Forms and tables can be set up with buttons, fields, and dropdown menus to categorize data and set status indicators for students served. In addition to tables and forms where data are stored, Salesforce can also set up processes to run the same reports repeatedly as data are updated; these reports can be updated in real-time. For an example, an organization could set up a report to check the percentage of its seniors who have submitted a FAFSA. Salesforce can be programmed to run this report monthly to update the tally, and this longitudinal data could be charted to show month-to-month gains.

The Salesforce platform does not come out of the box ready to be used by college access programs. A good analogy from Tommy Spann of Kell Partners, a consultancy specializing in helping nonprofit organizations build their Salesforce systems, describes Salesforce as “a house… Consider the Salesforce Enterprise Edition as the foundation for a very large house. It has a very solid base structure with all of the plumbing, electrical wiring, and basic features you will need; however, it’s not ‘move in ready’ for your nonprofit. Before you can begin living inside this house comfortably, you’ll need to install some rooms and fill in the gaps that are important to your needs.”

Advantages:

- With the right expertise, this very flexible platform can be customized to do nearly anything (e.g., building variables out of other variables, setting up queries that sort students by multiple characteristics, and then reporting on specified indicators).
- Many training materials, FAQs, and how-to guides are available on the Internet.
- Many individual consultants and consulting firms are available to assist with implementation and ongoing technical assistance and enhancement.
- Building a system can be time-consuming but rewarding. For example, College Forward spent 12-18 months building its system, but is now in year three of implementation, and they estimate a 25% increase in staff efficiency, resulting in cost-savings and, more important, allowing staff to focus more of their time on serving students.

Reported Areas for Improvement:

- Set-up is seldom intuitive for first-time users, especially those without intensive database experience.
• Salesforce very often requires hiring a consultant to design the system structure and conduct the initial programming.
• Customization can be challenging for novices.
• The platform has a steep learning curve, especially when building and customizing reports.

Testimonials: “Very powerful relational database. Flexible in reports and variables….Customizing requires expertise, time, [and] money. No weaknesses. All issues have to do with our lack of knowledge and time….It has or can be made to have everything you need to manage students, programs, and donor data.” – CollegeTracks, NCAN member, Bethesda, MD

“User-friendly, secure, cloud-based, one-stop shop with a 360 degree view of our students' academic, financial, and social progress through college….probably the best piece, the biggest value-added for Salesforce, was the reporting….Building the report piece was so crucial and such a time saver for us. Instead of relying on Excel filters and template Naviance reports, Salesforce allows College Forward staff to custom-build reports and save them for future queries.” – College Forward, NCAN member, Austin, TX

What is the Transition Like?” “We transitioned from an enormous Excel spreadsheet that we couldn’t easily access in real time. No transition is easy, but the benefits far outweighed the customization and training required.” – CollegeTracks

Pricing: Through the Salesforce Foundation’s Power of Us program, nonprofit organizations are eligible for ten free Salesforce Enterprise Edition licenses and discounts on additional licenses beyond the first ten as well as training and events. After these ten licenses, nonprofits pay $360 per license per year (discounted from $1,500). Note that this license fee does not cover the cost of any external consulting for set-up or system design.
**Platform Name:** Naviance

**What Is It and What Does It Do?:** Naviance is a platform dedicated to college and career readiness. Naviance is a CRM and performs the standard data management, collection, and reporting and analytics with a robust ability to define new fields, construct specific queries, and group students by different organizationally-defined groupings.

Students, parents, and staff can interact with Naviance. Students can take assessments that help them identify their academic strengths and professional interests. Students can use these results to engage in career exploration and search for colleges and universities that have programs that suit their geographic, cost, and selectivity criteria. Naviance also has both test preparation modules that adapt to an individual’s strengths and weaknesses and academic planning that assists students in charting their coursework to meet graduation requirements and professional interests.

Students update their profiles with information like GPA, courses taken, ACT/SAT scores, and postsecondary institutions to which they plan to apply, but programs can track a cohort’s overall progress, flag students who need intensive support or follow-up attention, update students’ profiles with new information and/or the interventions students receive, and turn all of this data into actionable reports and analytics for counselors.

**Advantages:**

- Reporting at multiple levels helps to gauge progress of cohorts, individuals, and groups in between.
- Naviance is user-friendly and designed with the needs of college access programs in mind.
- The system offers a central storage solution for data about students (including demographic, academic, activity and application data), parents, high schools served, colleges applied to, and student surveys and assessments.
- The platform is cloud-based.
- Naviance is responsive to requests for adjusting features when needed.
- Many high schools use Naviance, which could increase student and parent familiarity with the system.
Reported Areas for Improvement:

- Naviance is designed for college access programs at the high school level, so tracking data on students once they are in college (e.g., financial aid information) can be difficult.
- Respondents reported limited functionality for searching for individual students.
- Some of the built-in features like email and campus visit tracking are not as flexible as some users would like.
- Some data category labels are not able to be customized.
- If high schools choose not to collaborate with a college access program, students and parents will need to work in two separate Naviance platforms, one for the high school and one for the program.

Testimonials: “Prior to using Naviance, we were tracking student progress and outcomes in several different locations – multiple spreadsheets, paper files, etc. – and this made it difficult to evaluate a student’s overall progress or performance. Naviance allows us to bring all of this information together into one place and make it very accessible. The reporting features make it easy to gauge progress at a high level, but also to analyze outcomes for specific groups of students….It is difficult to capture historical information (for example, grade history instead of just current cumulative GPA.” – Chris Mitchell, High School Program Manager, College Possible, NCAN member, St. Paul, MN

“It is easy to understand, relatively easy to do mass updates, and runs basic reports quickly and easily. Being able to access it from anywhere is helpful. Also, it allows coaches to easily see students’ progress and exchange information electronically with the student.” – College Bound-St. Louis, NCAN member, St. Louis, MO

“Naviance is pretty user friendly, and offers a centralized environment for housing data on our students. The data manipulation features within Naviance make it easy to organize and group data. We also really value the ability to show students where their academic profile falls in line with admissions information for different schools.” – Collegiate Directions, Inc., NCAN member, Bethesda, MD

“When used to its fullest capacity, this program can enhance the work of counseling teams and college and career readiness staff who work with larger numbers of students. It also provides an accessible way for students to
work on their post-secondary plans and provides a place for them to share this plan with their parents.” – AchieveMPLS, NCAN member, Minneapolis, MN

What is the Transition Like?:

Various Respondents:

- “We were using Microsoft Excel and Access prior to Naviance, and spreadsheets were becoming very unwieldy as we grew. There was a learning curve, but I think that we were excited to have a more intuitive and sustainable student database.”
- “Transitioning our data to Naviance required us to reformat our sheets to coincide with the formatting appropriate for Naviance. Overall, this was fairly painless, with some minor exceptions. We understood how to import information, which made the process much less difficult.”
- “The migration to this platform was not easy as it required significant transition time as there was nothing similar to it in use prior to our working with this platform. For staff who were more technology savvy, they had an easier transition experience than those who were resistant to migrate to a technology based career and college readiness management system.”

Pricing: Pricing depends on the services desired as the system is designed to be modular. Naviance’s core offerings start at $2 per student annually (minimum pricing per program $995) and include college and career planning functionality, associated task management (i.e., the ability to assign tasks to students), communications tools (e.g., delivering surveys to students, emailing students and parents in different languages), and access to the student portal (including a mobile platform). Naviance’s curriculum, which focuses on non-cognitive skills as well as other areas of college knowledge, is available for an additional $2 per student annually. Other modules available for an extra cost include those related to test preparation, course planning, and sending electronic transcripts.11

Naviance can also integrate National Student Clearinghouse data into an organization’s platform. There is no cost for this module from Naviance, but an NSC Student Tracker for High Schools account ($425 per high school) is required; this NSC functionality is only currently available for programs working with individual high schools.
Name: College Greenlight

What Is It and What Does It Do?: College Greenlight is an online platform that lets students set up profiles through which colleges and universities can search for prospective students. Students and parents can search for schools and scholarships. Counselors and advisors can track their students’ application statuses, lists of potential schools, and scholarships. College Greenlight includes a dashboard of a cohort’s aggregate metrics, some of which align with NCAN’s Common Measures. Counselors can query students according to a number of variables and then export their search results to a spreadsheet file. At the time of this writing, students can be disaggregated by graduating class, ethnicity, gender, Hispanic/Latino status, high school, SAT, ACT, and GPA.

Students and their counselors can update the profiles. If a counselor notices a student is not keeping their data current or sees inaccurate information, he or she can make that change easily by logging into the profile of any student to which he or she has access. Students can have multiple counselors from different organizations, each of which can access the students’ profiles as long as that student grants them permission.

Advantages:

- College Greenlight is user-friendly and intuitive to use.
- The platform is aesthetically appealing and unlikely to intimidate student users.
- There is no cost to students, parents, counselors, and nonprofit programs and their staff to use this platform.
- The querying functionality is quite robust and easy to work with for the variables already built into the system.
- There is functionality to export queried data to Excel for further analysis.

Reported Areas for Improvement:

- Counselors can update profiles, but students are primarily responsible for their data, and if they do not keep that data current, it can be a burden on program staff.
- Relying on students to enter data can create more user error than professionals doing so. Incorrect data entry can lead schools to contact students for which they are not a good match academically.
- College Greenlight is not as flexible as a full CRM platform because it does not allow users to define new variables. For example, if a program has a “Tuesday-Thursday mentoring group” that is a subset of a cohort, students in this subset cannot be
grouped together under a label for the purpose of looking at their progress or outcomes.

**Testimonials:** “It has been an effective method of tracking where students apply and get accepted as well as scholarships and best matches….Helpful as well when we or one of our college advisors are trying to do a glance check in with students and where they are at in the application process.” – College Bound, Inc., NCAN member, Washington, DC

**Pricing:** All the search, data management, and profile capacities are free. Postsecondary institutions cover the cost of this service because they must pay a fee for the ability to contact students they are interested in recruiting. Students can then agree to continue to be contacted by institutions from which they want to hear more.
Name: Beyond 12

What Is It and What Does It Do?: Beyond 12 is both a service provider and a data platform. Beyond 12 offers personalized coaching services for students as well as technology tools to engage students, monitor their progress, and track alumni. Beyond 12’s users fall into three groups: high schools, college access and success organizations, and public and private non-profit colleges and universities.15

Beyond 12 was built on the Salesforce platform to be used exclusively and intentionally as a college and career readiness tool. Beyond 12 can manage data at the student, subgroup, and cohort levels. Beyond 12 offers specific tools/modules that are relevant to college access and success programs. These include:

- An alumni tracking tool allows high schools and programs to do more than just manage student data. Notably, “an alumni communication engine allows administrators to create communication campaigns across multiple channels, including cell phones (text messaging), email, Facebook, and Twitter.” This tool is useful for tracking the NCAN’s Common Measures Success metrics like persistence, FAFSA renewal, enrollment status, and completion.16
- An early detection system for flagging students in need of interventions pre-emptively. Beyond 12 writes about this product mostly in the context of colleges and universities using it, but this feature is also useful to college access and success programs. Assuming success programs can get the right data from the IHEs where their students matriculate, advisors could reach out to students who are experiencing academic, social, or financial difficulties and could be in danger of stopping out.17

Advantages:

- Beyond 12 has very well-developed capacities to define new variables, categorize students into custom groups, and define very specific and complex queries as needed.
- In an informational webinar, Beyond 12 demonstrated an extreme ability to modify nearly any pre-existing field or variable.
- The system provides the flexibility to customize fields to the specific needs of a program.
- Beyond 12 includes services that other platforms do not (e.g., early warning systems, alumni tracking).
• Inputting data reported as somewhat easy.

Reported Areas for Improvement:

• There are some limitations in the kinds of custom reports that can be created, which necessitates bringing in Beyond 12 staff for assistance.
• Navigation is not immediately user-friendly, similar to the reported area for improvement for Salesforce.
• This platform may be more useful for success-focused programs than access-focused programs.

Testimonials: “[Beyond 12] staff are very responsive. Some of our students are involved in other programs using Beyond 12 so we can all see shared notes on those students. Some aspects are easier to work with than others.” – West Contra Costa Public Education Fund, NCAN member, Richmond, CA

Pricing: Beyond 12 has an annual subscription fee of $2,625 with an additional annual per student fee of $1.97. This includes access to the student engagement site, alumni tracker, and early warning indicator system. These fees do not include the cost of any training or customization desired by a program.

Conclusions and Moving Forward

Data aren’t going away. NCAN members across the country have chronicled the benefits of having sound empirical evidence of a program’s inputs and outcomes. These members have been able to identify their strengths and weaknesses because of their commitment to collecting, storing, recalling, and analyzing data in an organized fashion. This better understanding of data ultimately helps to improve program outcomes. A data platform that is thoughtfully organized, aligned with the organization’s mission and services, and populated accurately with relevant information is critical to reading the patterns in, and reaping the benefits of, data. Data platforms have a variety nearly equal to NCAN members themselves.

Depending on an organization’s mission, scope, and scale, the right platform might be small or large, simple or complex, economical or expensive, but no matter what some kind of data management solution is necessary. This brief has laid out some preliminary insights into NCAN members’ data usage and also some descriptions of some options available in the market. Future briefs will examine additional platforms and the strategies and techniques that optimize them to better serve students in their quest to get to and through a postsecondary experience.
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<th>Quick Comparison of Various Data Platform Features</th>
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<tr>
<td><strong>Price</strong></td>
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<td><strong>Office 365/ Power BI</strong></td>
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<td>Office 365: Ranges from free to $4.50/user/month.</td>
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<td>Power BI: $20/user/month</td>
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| **Create New Fields/Student Characteristics**     | ✔️ | ✔️ | ✔️ | ✔️ |
| **Create Custom Queries and Reports**            | ✔️ | ✔️ | ✔️ | ✔️ |
| **Good for Beginning Programs**                  | ✔️ | ✔️ | ✔️ | ✔️ |
| **Good for Advanced Programs**                    | ✔️ | ✔️ | ✔️ | ✔️ |
| **Has Student-Facing Functionality**             | ✔️ | ✔️ | ✔️ | ✔️ |
| **Often Requires Consultant/Technical Assistance to Set Up** | ✔️ | ✔️ | ✔️ | ✔️ |
| **For Access, Success, or Both**                 | Both | Access | Both | Mostly Access | Leans Toward Success |
| **User-Friendly/Intuitive**                      | ✔️ | ✔️ | ✔️ | ✔️ |
1 Tim Herron, Degrees of Changes, email correspondence with the author, June 11, 2014.
9 Salesforce representative, in online chat with the author, July 16, 2014.
11 Daniel Obregon, communication with the author, June 16, 2014.
13 College Greenlight, demonstration with the author, March 4, 2014.
14 Ibid.