

Thriving at the Liberal Arts College: Best Practices in Operations and Research

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Abstract - Grinnell College is working to promote a holistic approach to student retention and thriving. This session will highlight findings from a 2016 conference on “Thriving at the Liberal Arts College” held at Grinnell and centered on the following themes: 1) “An Appreciative Inquiry Perspective: Why Most Students Thrive at Small, Private, Residential Campuses,” 2) “The Mental Health Support Challenge for Colleges and Universities,” 3) “Emerging Predictive Modeling in Higher Education,” and 4) “Student Success is Everybody’s Business: Bridging the Work of Academic Affairs and Student Affairs.” Conference participants included faculty and staff from a dozen highly-selective liberal arts colleges, the Associated Colleges of the Midwest (ACM), the University of Iowa, Civitas Learning, and the RAND Corporation. Thriving students are engaged in the learning process, invest effort to reach important educational goals, manage their time and commitments effectively, connect in healthy ways to other people, are optimistic about their future and positive about their present choices, and are committed to making a meaningful difference in the world around them. This session will focus on reasons why many students at liberal arts colleges thrive, the strategies used to identify and support them, and several key challenges we encounter in providing support.

Introduction

Liberal arts colleges are well-known for providing supportive, “high-touch,” environments in which students enjoy small classes, inquiry-led pedagogy, and high-impact educational practices. Student research opportunities with dedicated faculty, residential living and learning communities, internship opportunities, excellent facilities, and a broad array of academic and personal supports characterize their integrated and highly successful approaches to education. While only about five percent of American college students attend a residential liberal arts college, the strongest of these institutions are widely known for high retention and graduation rates. Among the most selective U.S. liberal arts colleges, six-year graduation rates frequently range from 85 to 95 percent (U.S. News & World Report, 2016), illustrative of the way in which a rigorous admissions process coupled with a devoted faculty and an engaging intellectual, co-curricular, and residential setting can help promote excellent rates of retention and degree completion.

Research emerging from such institutions, however, reveals a complex picture. At many American colleges and universities, challenges to retention are often associated primarily with two factors, academic success and financial resources. Students fail to complete degrees because they are unable to handle the heavy academic demands they face. They lack time management and organizational skills, arrive from underfunded secondary school systems that leave them without the writing and quantitative training they need, and find themselves overwhelmed in the classroom. In other cases, students and families borrow to their limits and, faced with escalating tuition costs and competing demands, discover that they are unable to manage the financial load. Such forces can affect outstanding liberal arts colleges as well, but challenges to retention in these institutions often illustrate a series of

other factors that are not so easily identified or confronted. At Grinnell College, for example, sixty percent of the students who do not remain to complete a degree have grade point averages over 3.0, and nearly a third of students who withdraw have grade point averages over 3.45. While even high-achieving students may evaluate themselves negatively in competition with their peers, such data indicates that academic ability alone is frequently not the key issue. Need blind in its admissions policies, Grinnell is also among a group of American institutions that is fortunate enough to be able to meet the full demonstrated need of all students it enrolls, a fact that significantly weakens the financial drivers that are often such powerful factors. The costs of attrition are still significant for these schools, particularly as they invest large amounts of financial aid in students and continue to confront reputational risk driven by public skepticism about the utility of a liberal arts degree.

A Conference on Thriving at the Liberal Arts College

In April of 2016, Grinnell College hosted a conference to explore the promise and the challenge of analyzing the factors that promote thriving at liberal arts colleges. Through panels that moved from theoretical frameworks, to discussions of first-year programs, mental health approaches, predictive analytics, and the integration of academic and student affairs, attendees worked to analyze the multiple factors shaping retention at several different liberal arts institutions. They also moved toward a strategy for continuing, collaborative data sharing and research. Now more than ever before, liberal arts colleges will need to bridge effective data collection, predictive analytics, and interventions to support their students. To do so, moreover, they will need to develop integrated systems for information sharing across campus offices and expand their focus from traditional academic preparation and support to the other powerful forces shaping student outcomes, including social integration, resilience, and mental health. Guided by the aforementioned concerns and challenges, Grinnell College convened a gathering of faculty and staff from twelve highly-selective liberal arts colleges, four universities, the Associated Colleges of the Midwest, Civitas Learning, and the RAND Corporation. The day-long meeting was designed to include five panel presentations as well as areas of particular and current interest that were contributed by several participating institutions.

Thinking of Attrition as a Complex Syndrome

For the institutions that are the subject of this paper, a holistic approach to the analysis of the student experience can be particularly valuable. In the absence of single variable explanations, many liberal arts colleges must begin to explore attrition as a syndrome shaped by multiple, connected and correlated factors. In addition to academic demands or financial needs, they must also explore the impact of social and psychological factors, mental health, substance use and abuse, and the way that a college seeks to sustain a sense of purpose by linking the curriculum to future careers and post-graduate life. Such factors are also in play for many larger institutions, including major public universities with much greater student populations, but liberal arts colleges can provide an ideal laboratory for research centered on the concept of thriving. What are the crucial factors that enable students to become deeply invested in their own educations, develop a strong sense of the link between their studies and their future professional ambitions, remain resilient and optimistic in the face of academic stress and personal challenges, and build healthy relationships with peers? How can colleges gain a stronger sense of the affirmative steps that they can take to create environments in which students from a wide range of racial, cultural, and socio-economic groups are most likely to thrive? Drawing on quantitative data, predictive analytics, and qualitative methods, what strategies and tools can they develop to identify students who are not thriving and determine which interventions are most likely to provide them with the support that they need?

Such a framework is both challenging and potentially transformational. Because it emphasizes a broad, holistic approach, tight causal relationships are difficult to identify. The student populations and cultural settings at different institutions also vary widely, making it difficult to generalize from one case to the next. Yet an emphasis on the concept of thriving enables us to move beyond retention to consider other metrics as well, including the rates of student participation in research, internships, extra-curricular

activities and other key indicators of engagement. It also puts a premium on qualitative approaches and evidence drawn from data that students can provide themselves about their lived experiences and the ways that they encounter and respond to a campus climate.

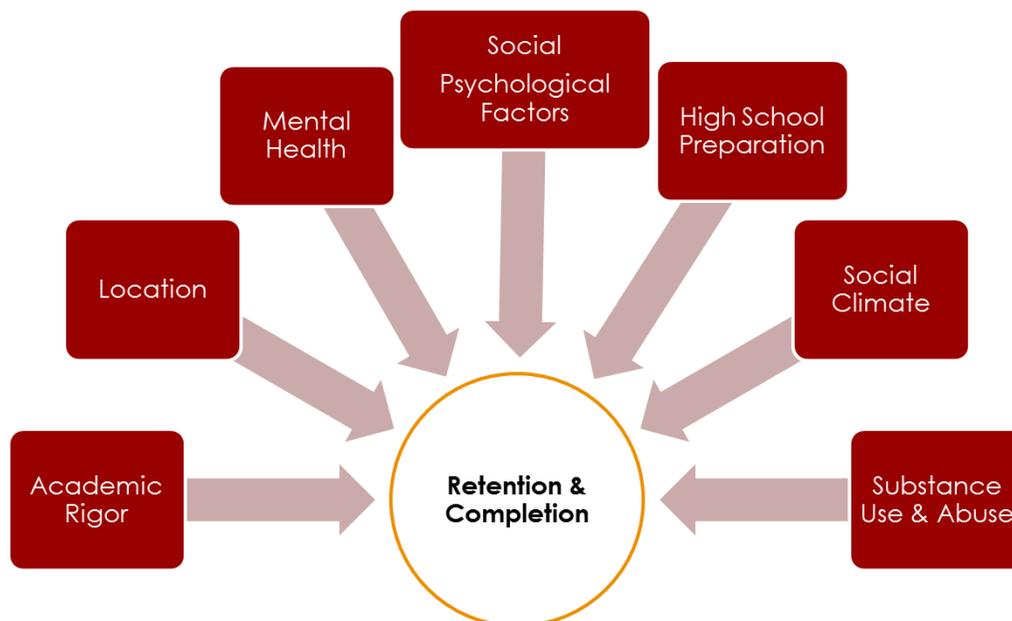


Figure 1. Seeing attrition as a syndrome

The Panel Presentations

In this section, we provide brief synopses of each of the five panel presentations that were used to structure the conference. Additional presentation details and handouts are available at the Grinnell Office of Analytic Support and Institutional Research Web site: <https://www.grinnell.edu/about/offices-services/institutional-research>.

“An Appreciative Inquiry Perspective: Why Most Students Thrive at Liberal Arts Colleges.”

By design, the first panel was intended to start with the positive. Thriving has been defined as being “fully engaged intellectually, socially, and emotionally in the college experience.” (Schreiner, 2013). This view of student success looks beyond academic performance and graduation. Thriving students are those who are engaged in the learning process, invest effort to reach important educational goals, manage their time and commitments effectively, connect in healthy ways to other people, are optimistic about their future and positive about their present choices, and are committed to making a meaningful difference in the world around them. Liberal arts colleges provide students with an opportunity to discover intellectual and personal interests, acquire vital skills, and learn through high-impact pedagogical practices in an intimate, residential setting shaped by close interactions with dedicated, tenure-track faculty. Classes at the nation’s best liberal arts colleges are small and inquiry-driven; students have access to excellent research opportunities, libraries, laboratories, and infrastructure. This session focused on reasons why many students at small, private, residential liberal arts colleges thrive as well as the strategies used to identify and support them and to share their stories.

Eric McIntosh began by providing the theoretical framework he and research colleagues at Azusa Pacific University have used as a basis for research regarding thriving in college (McIntosh, 2016). He presented the merits of an expanded definition of student success, i.e. beyond persistence and completion to thriving because it incorporates psychological well-being and optimal functioning in academic, emotional, and social areas of the student experience. The thriving framework he described included five elements: 1) engaged learning, 2) academic determination, 3) positive perspective, 4) social

connectedness, and 5) diverse citizenship (McIntosh, 2016; Schreiner, 2013). Dr. Kristin Douglas then spoke about the use of this framework in the development of a new First-Year Experience program at Augustana College (Douglas, First year experience, 2016; Douglas, Thriving model, 2016). She shared how the elements of this framework were being implemented in the classroom and beyond in residence life, student life, and advising activities. Dr. Paul Hutchison spoke about the work of the Task Force on Residential Learning at Grinnell College and two detailed lists of the characteristics of thriving students including one list from the students themselves (Hutchison, Douglas, Ngo, Stern, & Latham, 2016).

“The Mental Health Challenge for Colleges and Universities.”

In the past decade the number of students entering college with mental health concerns, specifically anxiety and depression, has climbed dramatically. The National Comorbidity Survey has indicated that about half of all adults will meet the base criteria for at least one mental health disorder in their lifetime (Kessler, et al., 2005). Students with mental illness, specifically depression and anxiety, are more likely to drop out of school and have a lower GPA than their peers (Eisenberg, Golberstein, & Hunt, 2009). Of the 47 percent of college students who have met criteria for a mental health disorder in the last year, only one fifth utilized services (Blanco, et al., 2008). Additionally, a survey conducted in 2010 indicated that over 90 percent of counselling center directors at postsecondary institutions were concerned about the increasing number of students presenting with psychological problems (Gallagher, 2010). The ACHA-NCHA national survey of students also indicates that there has been a 10 to 15 percent increase in students reporting ever being diagnosed with depression as compared to the year 2000 (American College Health Association, 2008). This increase in prevalence rises in parallel with an increase in demand for services of all types including direct mental health support, group therapy, and supportive campus communities. Providing the often intensive support necessary for optimal functioning is difficult in any circumstance, but is made particularly difficult for small institutions with limited health care resources. In the coming years it will be important to understand how small, residential, liberal arts colleges might provide a more comprehensive mental health support network for students and how this provision of services, service utilization, and alternative models of mental health care support on campus impact academic outcomes.

The panel began with Dr. Barry Schreier, Director of University Counseling Services at The University of Iowa. Dr. Schreier and Ms. Andrea Conner both highlighted the increasing prevalence of mental health issues on campus, specifically the increasing rates of depression, anxiety, ADHD, self-harm and disordered eating (Schreier, 2016; Conner, 2016). In addition to the increasing prevalence of these disorders, there has been a large and growing focus on mental illness in popular media and on college campuses nationwide. Throughout his presentation Dr. Schreier identified reasons for increased focus on mental illness (as opposed to wellness) including funding and political considerations. The way current research is funded and produced focuses on issues that represent campus and student vulnerabilities as opposed to strengths. Dr. Schreier suggested that there be equal focus on mental health and ‘mental hurt’, strengths and vulnerabilities, and importantly on empowerment over victimization. The idea that we may choose to focus on the positive attributes of our student populations rather than on their challenges may help to shift the discussion of mental illness towards ‘mental wellness’ and a more holistic research agenda, including protective factors as well as risk factors for mental illness. Students may have increasing awareness of mental health concerns, increased ability to seek treatment through stigma reduction, and an overall increase in mental illness but these same students are incredibly resilient. ‘Grit’ (perseverance and passion for long-term goals) is an area to focus attention moving forward. Andrea Conner added what many in the audience echoed, that we are in need of empirical information to guide campus policy and decision making when it comes to supporting students with mental health concerns at all levels. Dr. Ngo spoke in detail about her experience in mental health research, particularly in instituting a collaborative care model for mental health in underserved nations (Chung, et al., 2014; Ngo, et al., 2014). This work holds particular interest for the college community as it has implications for including a variety of individuals not traditionally considered mental health care providers as part of a larger mental wellness support structure for students. Her previous work in Vietnam specifically has

shown a great benefit through use of this type of model in under-resourced areas of the world and areas where depression care may be integrated into other ongoing activities and contact points.

“Emerging Predictive Modeling in Higher Education.”

The third panel featured the Chief Data Scientist from a commercial provider of predictive modeling services as well as the leaders of the analytics and institutional research offices from two private, residential liberal arts colleges like those described in this paper. Colleges like these have long relied on human intelligence networks made up of faculty, professional advisors, other administrators, and the students themselves to find the right balance of challenge and support for individualized learning and to monitor student progress toward a degree. In fact, such networks are, and will continue to be, a primary source of distinctiveness and strength for these campuses. Nowadays there is growing interest in the ongoing integration of predictive learning analytics at all colleges and universities to complement these networks. Learning analytics has been defined as “the measurement, collection, analysis, and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.” (Society for Learning Analytics Research, 2016). With the advent of new analytics techniques including data mining and machine-learning, liberal arts colleges are in a position to join with other colleges and universities who are developing or enhancing alert systems and predictive models based on these techniques.

Mr. David Kil, Chief Data Scientist at Civitas Learning, Inc. noted the importance of connecting and accelerating the steps of data collection, analysis, and subsequent action. He argued that this can be done in the emerging field of “people analytics” using the benefits of design thinking and science so that greater value can be delivered to the students and, at the same time, respecting their privacy through opt-in and informed consent for passive data collection. Dr. Randy Stiles noted that a deep understanding of student thriving and success occurs at the intersection of campus culture and context; the data and information that is available, shared, and analyzed; and finally the art and science of interventions. Grinnell has made such an understanding the primary focus on its “Quality Initiative” in its current accreditation cycle and as a result has a number of new initiatives underway including the conference that is the subject of this paper. A recent HLC paper provides additional detail on these initiatives (Stiles & Wilcox, 2016). Ms. Ruth Vater highlighted four “pitfalls” noted through her work with others on student success at Beloit College. Those four were: 1) relying too heavily on the national literature in this area because those parameters that are useful for alerts and predictive modeling are indeed dependent on local culture and context, 2) using only data that is available to you rather than working with an existing intellectual framework, 3) assuming campus constituents understand statistical terms, and 4) using quantitative methods without the qualitative (Vater, Anderbyrne, & Walker, 2016).

“Student Success is Everybody’s Business: Bridging the Work of Academic and Student Affairs.”

Most colleges are organized with two major divisions providing direct and frequent contact with students: academic affairs with faculty departments, the library, and academic support centers and student affairs with co-curricular programming, residential life staff, and a host of additional support services. The sharing of information and initiatives across these two divisions is understood to be essential but can also present challenges. The focus of the presentations for this panel was on best practices in the bridging and collaborative work that is done and should be done across these two essential organizational groups on our campuses.

Dr. Andrea Nixon (Nixon, 2016) shared some results of the Student Engagement with Academic Support (SEAS) survey that has been administered at Carleton College repeatedly since 2008 and as a result is providing longitudinal data regarding student preferences for such services. Core findings included useful information about where students studied by class year. The survey has also helped to ensure that curricular support is perceived as a resource for all students, not just those who are struggling. Ms. Joyce Stern shared an “Advising Partners” model based on her student success and academic advising work at Grinnell (Stern, 2016). In this model, each student is assigned not only a faculty member as their academic advisor, but also a residence life coordinator and a careers, life and service

advisor. Beyond this triad, students have access to two more “layers” of advising and support services depending on the likely frequency of contact. For example, in the first layer are course instructors, coaches, chaplains, international student affairs specialists where repeated personal interaction between student and staff/faculty might occur. In the second layer are administrative functions such as the Financial Aid Office, the Registrar, the Student Health and Counseling Center, and more. To conclude this panel, Dr. Mike Latham discussed a recent structural change in the organization at Grinnell wherein he has assumed oversight responsibility for not only academic affairs but also student affairs. This change has led to a number of new opportunities for coordination and information sharing between faculty and student affairs staff.

“Assessment, Accreditation, and Retention”

The final panel presentation of the day featured speakers with accreditation experience in two of the six regional accrediting agencies in the United States, namely the Higher Learning Commission and the Southern Association of Colleges and Schools (SACS). Persistence and completion rates are now not only a prominent component of the many ranking and rating systems for higher education but the associated data collection, analysis, and loop-closing activities are a required element in institutional accreditation processes.

Dr. Claire Robinson provided (Robinson, 2016) background about the Quality Enhancement Plan process and evaluation guidelines used by SACS. She also shared details about “appreciative advising” and “appreciate assessment” work that is underway at the University of South Carolina. Among the notable quotes she shared was the following about reasons student fail to complete their degree program: “Of the 45 percent of students who start college and fail to complete their degree, less than one quarter are dismissed for poor academic performance. Most leave for other reasons.” Dr. Randy Stiles spoke about cost, value, and accountability in higher education today (Stiles R. , 2016) and began by noting the prominence and heavy weight associated with completion rate statistics in the various rating and ranking systems that are now available to the public. The accreditation criteria for the Higher Learning Commission (HLC) includes an explicit requirement to write an assurance argument with supporting evidentiary files related to persistence and completion. HLC also has created a new Persistence and Completion Academy to support member institutions in their work to collect, analyze, and act on relevant data. Finally, Dr. Stiles shared examples of data presentation intended to clearly show the value of education in terms of both lifetime earnings and the probability of employment in contrast with some other examples that are misleading in that regard.

Institution-Specific Issues: Some Common Themes

Prior to the conference institutions were asked to submit short descriptions of challenges they faced related to the topics to be addressed during the day at Grinnell. In reviewing the responses and discussion three themes emerged as areas of specific challenge; collecting and using data, qualitative and quantitative (mixed methods approaches to research), and proactive versus reactive interventions and programming. Following is a summary of those themes with sample questions that arose from group discussions.

Collecting and Using Data

Many institutions have expressed an interest in predictive modeling and analytics to help inform their discussion on retention and student success. With this discussion comes the challenge of knowing about existing sources of data and identifying areas where additional data is needed. Additionally, data quality has come under more intense scrutiny as institutions are engaged in more systematic use. The following questions were distributed to the conference attendees and prompted insightful and interesting discussion.

- Existing data: How are you thinking about your existing data sources? Are they integrated or easy to access? Do you have a ‘data directory’ to help organize your conceptualization and categorization of the data?

- New data: How are you collecting new data? In what areas? Passively or actively?
- Data quality: How are you addressing concerns around data quality at your institution? Is this an issue for you? If not, how have you avoided this problem?

Qualitative and Quantitative Approaches for Research

Some would describe liberal arts colleges as ‘words places’. The campus environment, community, and research question itself may not always lend itself to quantitative methods of analysis; this can certainly be true for all types of institutions. Helpful questions might include:

- Are you considering both qualitative and quantitative approaches to research on the topic of student success? Why or why not? If you are, how are you integrating these types of analyses?
- What has been the reaction to your work from the campus community? How are you generating buy in as it relates to research in this area?

Proactive versus Reactive Interventions and Programming

Many institutions have strong programming for students who are identified as likely to leave prior to graduation and indeed, many of these students are helped immensely by such programming and outreach. In addition, crisis intervention or ‘putting out fires’ is something that will remain an integral part of student retention and success work. Helpful questions might include:

- For students who are **not** identified as at risk of attrition, how are you thinking about proactively engaging students to avoid at-risk classification (where possible)? What barriers do you see to a proactive approach? How can we integrate proactive work in an area where reactive work dominates human resources?
- Are students failing to thrive because of lack of engagement or are they opting out of opportunities due to an existing sub-optimal experience? How does this relate to very early identification of at risk students?

Some Themes for Future Consideration

Data and information sharing

One particular challenge small colleges of the type that participated in this conference face with regard to the use of statistical learning techniques is the “small n” problem and the lack of statistical significance in predictive modeling work for small subgroups of the campus population. This is not only because these institutions have relatively small enrollments, but also because persistence and completion rates at these schools are quite strong, especially when compared to national norms. Because of the similarities in the missions and student profiles among such schools, pooling unit-record data might help with this issue. To ensure FERPA compliance, a data sharing initiative of this nature would likely involve a third party with well-established data transmission and security procedures along with IRB review and approval from each participating campus. Also, “student success” has become a prominent topic at many higher education conferences. While there is continuing discussion and some varied opinions about the meaning of this term, the Higher Learning Commission (HLC), the EDUCAUSE Learning Initiative (ELI), the National Symposium on Student Retention (NSSR), and the Higher Education Data Sharing Consortium (HEDS) annual conferences (just to name a few) have all featured many presentations on student success. Sharing presentations and papers as well as a continuing dialogue about student success, thriving, data sharing, effective interventions, and related topics might be facilitated through a listserv among interested parties. A continuing series of annual conferences specifically designed for small, residential campuses has been envisioned and is described in more detail below.

Mental Wellness Research and Interventions

It was clear from the panel presentation, questions, and conference discussion that the framing of mental health and integration into a wellness framework is of interest to many conference attendees. Although mental health is a critical and serious issue for many colleges and students alike, it seems that a more positive framework would be helpful in generating solutions and consequential discussions on the issue. In considering mental health research on campus there was discussion of alternative models of mental health care delivery including tele-medicine and a collaborative-care model whereby individuals not trained as mental health care providers are trained in specific areas of care, to serve students with mild to moderate depression and/or anxiety. This collaborative care model may have particular relevance for smaller schools with a strong face-to-face support network in the form of advising, student services, or mentors. In addition to a new focus on mental health research, there is a growing interest in sharing generalized data around utilization of healthcare services on campus in a way that would promote discussion among like institutions and the ability to benchmark costs, services, and practice patterns.

Moving Beyond “Autopsy Analytics”

Upon reflection, it seems that the majority of the work we and others have done in institutional research to date with regard to persistence and completion has been focused on students who are either struggling or leaving our institutions. While there is no doubt that developing a deeper understanding of these cases is and will continue to be important, we intend to turn more of our attention to success stories. Using some well-developed techniques such as grade dynamics analysis, we are not only able to identify those students who are struggling but also those who are demonstrating significant improvement and signs of thriving behavior. Also, while quantitative measures and statistics are a large part of the work of any institutional research office, a balance with qualitative information is often necessary and beneficial. Quantitative measures help us understand the “what” of a situation, but not necessarily the “why.” Such qualitative measures as interviews, focus groups and open-ended survey questions are important because they capture the perspective of the people being studied, particularly in terms of how these people make sense of the situations they are in as well as what motivates them to make the choices they do. With our most sophisticated predictive modeling work, we are now adding social-psychological data including Duckworth grit scores and CIRP Freshman Survey “constructs” as potential predictors (Higher Education Research Institute, 2016). These constructs are combinations of individual survey items into one global measure of a complex issue and have been developed using Item Response Theory. Based on our analytical work to-date, we are particularly interested in the potential value of several of these constructs, e.g., academic and social self-concept, to help us identify and support high-performing students who may not persist. We are now in the process of incorporating these as well as other CIRP Freshman Survey Data into our predictive models.

A 2017 Conference

Having noted interest in a continuing conversation among our peer institutions about the topics outlined in this paper, we are now in the early stages of preparing for another conference in the spring of 2017. We plan to continue with the thriving framework as a structure for this event and will also share our latest work and findings regarding the use of data, analytics, and qualitative research in liberal arts college environments. We intend to explore how active learning techniques including undergraduate research, physical spaces that not only enable but also inspire student learning, the growing and creative use technology in the digital liberal arts, and the learning that arises as a consequence of the residential experience all contribute to academic thriving. For intrapersonal thriving and the development of a positive perspective and mental wellness, we have a particular interest in testing collaborative care models that have been developed in under-resourced areas of the world and that might not only enhance existing support for our students but also reduce the need for highly-specialized and expensive staffing. At Grinnell and our peer colleges, we know that there are a number of initiatives intended to support our diverse populations and to enhance social connectedness. We would like to focus additional attention on the assessment of these programs so that we might be in a better position to share our success stories.

Conclusions

Among the conclusions that have developed from the conference the following have risen to the top for future action and importance:

- Those who develop and drive campus policy and initiatives related to student success should consider the multiple and broadly-defined elements of 'success' and thriving. Also, in the absence of single variable explanations, many liberal arts colleges must begin to explore attrition as a syndrome shaped by multiple, connected and correlated factors such as social and psychological factors, mental health, substance use and abuse, and the way that a college seeks to sustain a sense of purpose by linking the curriculum to future careers and post-graduate life.
- Concerns around mental health are growing nationally as is the desire to better understand students with mental illness and support them during their time in college. To do this, data sharing and coordinated research in alternative models of support may be helpful. In addition, how we frame students' struggles as mental health or mental 'hurt' is of primary importance. An increased focus on mental wellness is recommended.
- New initiatives should be informed by empirical information, both quantitative and qualitative, and designed to assist the academic affairs and student affairs constituencies simultaneously. The coordination of information sharing among stakeholders, although complex and challenging, is essential for the support of student thriving. We need to continue to press for the integration of data and information from our human intelligence networks with results from our predictive learning analytics.
- Undergraduate retention and completion rates are clearly the subject of national interest and questions of cost, value, and quality remain the focus of public debate. The quality assurance and improvement programs associated with regional accreditation can be used to create an opportunity for broad campus involvement in the work of understanding and enabling student thriving.

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