Sustainability at Jesuit Institutions:
How are we teaching the next generation to care for our common home?

By

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ABSTRACT. As environmental degradation becomes harder and harder to ignore, institutions are beginning to take notice and put into place specific steps to take action. The Association for the Advancement of Sustainability in Higher Education (AASHE) is offering a way for higher education institutions (HEIs) to promote sustainability through participating in the Sustainability Tracking and Rating System (STARS). This report evaluates the participation in the STARS by the eight Association of Jesuit Colleges and Universities (AJCU) schools that have an unexpired STARS rating and submitted information under STARS version 2 or later. Using publicly-available STARS data, I analyzed the scores of the AJCU institutions in the sample as well as conducted a content analysis on the descriptions of the main programs under each category in which schools are ranked.

The findings are organized by the different categories of the STARS report: Academics, Engagement, Operations, and Planning & Administration. In each section, I provide a data visualization of how each Jesuit institution in my sample compares to the others. Some standouts are Santa Clara University's sustainability research, Loyola Marymount University's campus engagement programs, Gonzaga University's water efficiency, and Boston College's commitment to diversity and affordability. Key recommendations include encouraging more Jesuit institutions to participate in the STARS program to indicate a commitment to sustainability and transparency, as well as investing more into academic programs with a sustainability focus.

INTRODUCTION

The climate crisis is imminent. In order to mediate its effects, individuals, organizations, and governments need to be taking strides towards sustainability as soon as possible. One way to start going in the right direction is to provide measurable goals, rewards for success, and avenues for transparency and accountability. These are the objectives of the Sustainability Tracking and Rating System (STARS) created by the Association for the Advancement of Sustainability in Higher Education's (AASHE).

AASHE is one of the leading organizations in promoting sustainability within higher education. STARS is its central program, offering a self-reporting framework for colleges and universities to assess their sustainability performance. As of November 2021, 1052 institutions have registered to use the STARS Reporting Tool, of which 677 have earned

a STARS rating at some point during the running of the program. This report will focus specifically on colleges that are a part of the Association of Jesuit Colleges and Universities (AJCU) and that have submitted STARS reports. Many Jesuit values and teachings include ecological justice and care for the environment, but how many Jesuit institutions have actually taken action to advance sustainability? This project includes a meta-analysis of available AJCU STARS reports with the purpose to illuminate areas of excellence and difficulty in reaching sustainability goals at the organizational level, as well as make recommendations for these institutions to put their ecological values into practice. The recommendations may also be useful for Jesuit schools that have not yet attempted to obtain a STARS rating.

LITERATURE REVIEW

AASHE and STARS

The STARS system created by AASHE is regarded as one of the best ways for higher education institutions (HEIs) to regularly monitor and report their commitment and initiatives in regards to sustainability. This has been verified by research. A study conducted by the University of Saskatchewan identified five focus areas among campus life to improve a university's sustainability performance (education, research, operations, governance, and community engagement) and then undertook an investigation to determine which sustainability benchmarking tool would be the best to holistically evaluate campus sustainability in all of these areas (Kamal and Asmuss 2013). After investigating four different benchmarking tools, STARS was the highest rated tool. This assessment demonstrates that STARS is the most effective tool for assessing and tracking sustainability across the breadth of campus life.

Kamal and Asmuss (2013) were not alone in their assertion of STARS as a superior tool for those interested in sustainability and higher education. Other researchers have praised STARS for its comprehensiveness (Alghamdi, den Heijer, and de Jonge 2017). Shriberg (2002) outlines the most important attributes of an ideal assessment tool (identifying important issues; emphasizing comprehensibility; and ease of comparability and calculability), and AASHE's STARS meets all of these criteria. STARS also meets a need amongst HEIs for a uniform rating system. According to survey research, STARS is the best-known system amongst stakeholders (88%) and also the most supported as being the ideal system (60%) (Margarakis and van den Dobbelsteen 2013). Perhaps most importantly, participating in STARS' self-reporting system is associated with greater sustainability outcomes. Results from Minutolo, Ivanova, & Cong (2021) suggest that STARS reporting and STARS scores have a positive impact on the reputation,

finances, and environmental performance of the HEIs. All of these reasons demonstrate that STARS reports are a credible and holistic way to evaluate sustainability at HEIs and provide sufficient data to conduct my analysis.

Jesuit Teaching and Care for Our Common Home

The Catholic Church has recently placed an emphasis on the importance of environmental stewardship. Pope Francis, the first Pope to take his name after the patron saint of animals, has made 'caring for our common home' central to his vision for the Church, perhaps most notably in his encyclical *Laudato Si'.* He has aimed to expand the Church's teaching to include the unique place of humans in an interconnected web of life. The climate crisis is affecting humankind and the planet at unprecedented rates, especially threatening those that are most vulnerable. Catholic teachings demand reverence for nature and active sustainable living since creation is a sign of God's presence, and the degradation of ecosystems disproportionately inflicts greater hardships on those that followers of Jesus are called to care most about.

Catholic Jesuit universities have a role to play in the transmission of this ecological vision. A notable example is the Jesuit Superior General, Rev. Arturo Sosa, S.J. 's, announcement of four Universal Apostolic Preferences for the Society of Jesus. The latter two are the most relevant to my study: "to accompany young people in the creation of a hope-filled future" and "to collaborate in the care of our common home" (Sosa 2019). With 193 colleges and universities globally, the Society of Jesus as a religious order has recognized its favorable position for establishing programs and research in sustainability that reach the next generation of global citizens (Polito 2019). Suppose HEIs are able to center ecological concerns now. In that case, the beliefs and ideas of individuals and societies can be changed now to produce social change in favor of our common home. And there is a strong desire of young people to participate in this change -- a survey by Amnesty International (2019) indicates that climate change is the most important issue facing our world today. According to Fr. Sosa, it will be young people who "construct a new narrative of hope," and Jesuit schools can offer them the tools "for opening up a new path" (Roewe 2021). AJCU, the national organization that represents Jesuit higher education, is perfectly situated to facilitate sustainability education among the next generation of leaders and encourage care for our common home among the young people who are going to inherit the planet. My analysis will help to determine how well AJCU HEIs are meeting their Jesuit ecological mission and encourage those that are not currently reporting to AASHE to join the sustainability movement.

METHODS AND ANALYSIS

Sampling

The data used in my sample were gathered from the STARS reports for all AJCU institutions that have an unexpired STARS rating and submitted information under STARS version 2 or later. There are a total of 28 AJCU schools across the United States, but my sample consists of only the eight schools that meet the aforementioned criteria. These schools are Boston College, Creighton University, Gonzaga University, Loyola Marymount University, Loyola University Chicago, Saint Louis University, Santa Clara University, and Seattle University. One potential limitation of this sample is that only 28.5% of AJCU schools are included in my analysis, which is a smaller sample size than desired. Additionally, HEIs that care about sustainability are more likely to submit a STARS report, so the data analyzed here may indicate that AJCU institutions have more sustainability efforts than they really do.

This sample of institutions has representation for the West Coast, East Coast, South, and Midwest regions. There is also substantial diversity in the types of locale, campus area, endowment, and acceptance rate (see Table 1). There is some consistency in the cost of tuition (all ranging between $55,000 and $75,000) and undergraduate enrollment, with all the schools landing in the medium-size category according to AASHE. The information for endowment, total campus area, and locale were submitted to the STARS report. The rest of the data was gathered from each respective institution's website (collected in November 2021).

Table 1. Characteristics of institutions in sample

	Endowment	Total Campus Area (acres)	Locale	Location	Undergraduate Enrollment	Acceptance Rate	Cost (before aid)
Boston College	$2,400,000,000	340	Urban fringe of large city	Newton, MA	9,639	27%	$75,886
Creighton University	$525,582,000	139	Large city	Omaha, NE	4,405	74%	$56,674
Gonzaga University	$294,720,414	192.74	Mid-size city	Spokane, WA	5,237	62%	$62,250
Loyola Marymount University	$480,000,000	142	Large city	Los Angeles, CA	6,557	44%	$70,446

Loyola University Chicago	$800,316,000	52.4	Large city	Chicago, IL	11,727	67%	$63,123
Saint Louis University	$1,146,590,385	281	Large city	Saint Louis, MO	6,917	58%	$62,868
Santa Clara University	$1,019,760,000	118.92	Urban fringe of large city	Santa Clara, CA	5,504	49%	$74,829
Seattle University	$234,341,000	50	Large city	Seattle, WA	4,674	78%	$63,921

STARS Data

In order to conduct the analysis, it was necessary to become familiar with the STARS data of each individual institution and the broader methodology behind calculating STARS scores. When an institution submits a report to STARS for rating, there are five possible ratings they can receive: platinum, gold, silver, bronze, or reporter (Figure 2). The majority of participants land in the silver or gold category, with very few reaching the prestigious platinum-level -- only 10 out of 361. The reporter designation refers to institutions that elected not to publish scoring information and/or pursue a rating.

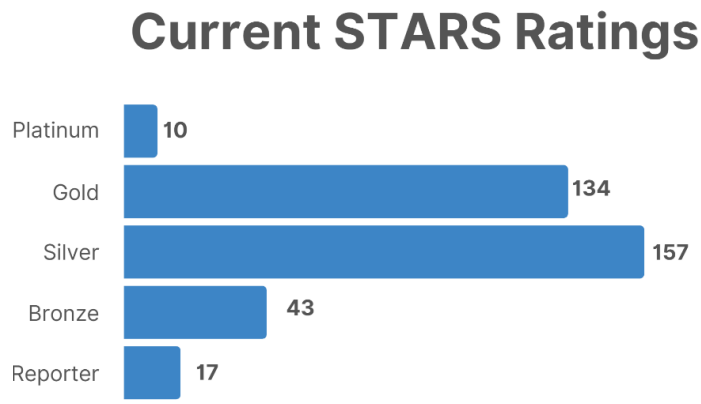

Figure 2. Current STARS ratings of all institutions with a valid STARS report (AASHE 2021).

When an institution submits a report, they provide information for 60-70 credits in five categories: Academics, Engagement, Operations, Planning & Administration, and Innovation & Leadership. For the first four categories, the percentage score is calculated by dividing the number of points received out by the number of points total. This results in the first part of the STARS score. The next component of the score comes from Innovation & Leadership points, which essentially act as “extra credit.” For

example, if an institution has a percentage score of 50, and has received 2 Innovation & Leadership points, their final score would be 52. The final score is used to determine which recognition level an institution will receive (Figure 3).

For the purpose of this report, Innovation & Leadership points will be excluded from individual analysis as there are 50 different credits for which an institution could apply for and it would be unfair and difficult to compare points across different kinds of credits.

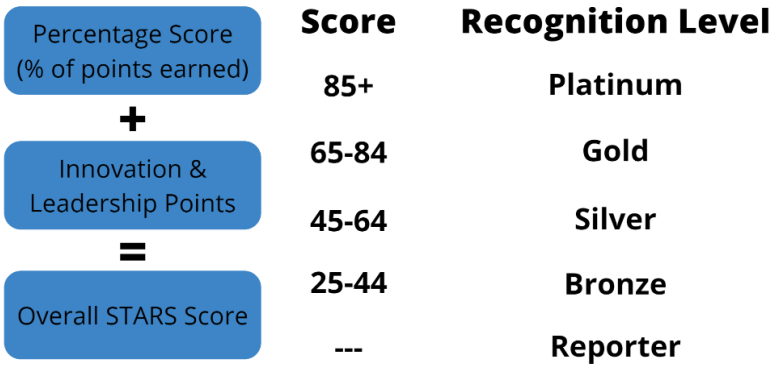

Figure 3. STARS calculation and rating system (AASHE 2020).

To conduct the analysis, I compiled the quantitative data from each institution's STARS report into one spreadsheet. I divided the data into the appropriate categories and subcategories defined by AASHE and created charts in Google Sheets to visually represent the differences in ratings between the HEIs in my sample. All data, quantitative and qualitative, in the findings sections comes from the publicly available data in each institution's STARS report. Citations for these reports can be found in the appendix.

FINDINGS

Total STARS Points

The first analysis compared the sample institutions' scores and ratings listed from highest to lowest. This step was crucial to understanding the general distribution of AJCU institutions.

Table 3. Sample institutions' STARS points and ratings.

School	Score	Rating

Santa Clara University	79.45	Gold
Seattle University	79.39	Gold
Loyola University Chicago	76.81	Gold
Loyola Marymount University	76.17	Gold
Gonzaga University	68.43	Gold
Boston College	54.99	Silver
Creighton University	36.69	Bronze
Saint Louis University	34.71	Bronze
Average	**63.33**	**Silver**

As depicted in Table 3, of the eight institutions in my sample, five have received a gold rating, one has received a silver rating, and two have received a bronze rating. Santa Clara University (SCU) is the highest-rated AJCU institution and Saint Louis University (SLU) is the lowest. The average score across these institutions was 63.33, which receives an overall silver rating. While total STARS points are a good metric of overall sustainability at an HEI, each STARS category will also be assessed to determine areas of strength and weakness among these Jesuit institutions, broadly and also individually.

Academics

The Academics category is divided into two subcategories: Curriculum and Research. The Curriculum subcategory addresses topics like sustainability course offerings, sustainability literacy, and sustainability-focused programs. The Research subcategory assesses the institution's sustainability research, whether it has programs that encourage sustainability research, and if it facilitates open access publishing.

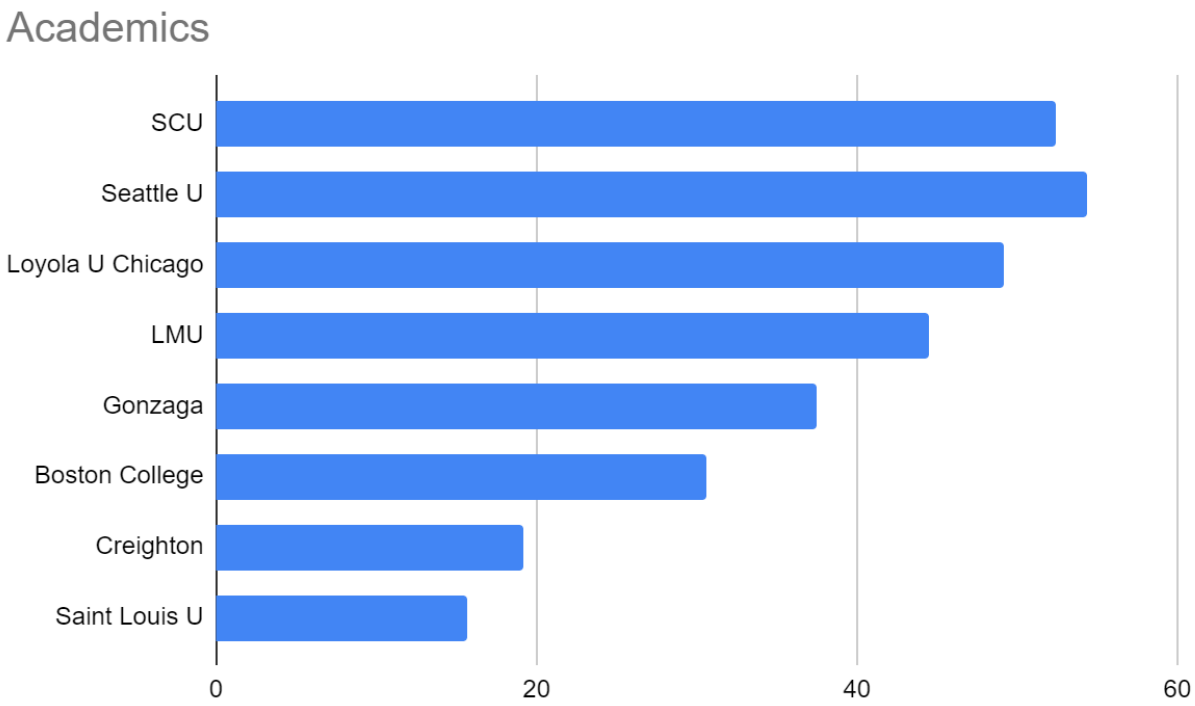

Figure 4. Total points for each institution in the Academics category.

While Seattle University has the greatest amount of Academic points, SCU has a perfect score in the research subcategory (amongst all reports in this sample there are only three instances of a perfect score to a credit). 19.8% of employees that conduct research are engaged in sustainability research, and 82.5% of departments that conduct research are engaged in sustainability research. SCU offers student sustainability research programs, including the Miller Center Fellowship (formerly Global Social Benefit Fellowship) and Environmental Ethics Fellowship, and faculty sustainability research programs, like the Sustainability Grant Fund. The SCU library also houses Scholar commons, which is a service to archive and offer access to intellectual work produced by faculty, students, and staff at Santa Clara University.

Engagement

The Engagement category is divided into two subcategories: Campus Engagement and Public Engagement. Campus Engagement evaluates credits such as peer-to-peer sustainability outreach and education, sustainability outreach campaigns, assessment of campus sustainability culture, and professional development. Public Engagement examines community partnerships to advance sustainability, advocating for public policies that support campus sustainability, and the collaboration with other HEIs to support the campus sustainability community.

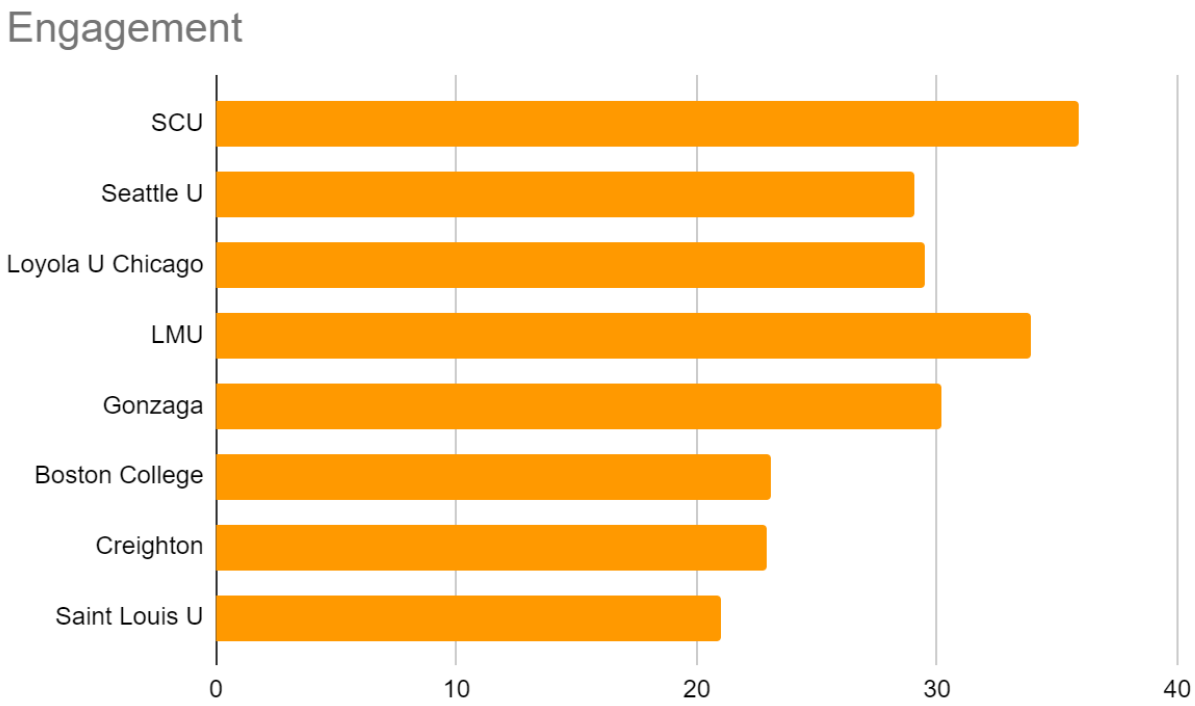

Figure 5. Total points for each institution in the Engagement category.

Though SCU has the highest overall engagement, Loyola Marymount University (LMU) has a near-perfect Campus Engagement score (20.31/21.00). LMU has many opportunities to engage students, from programs like the Green LION which introduces new students to the concept of sustainable living as a means to improve our society, to the national recycling competition Recyclemania. They also keep employees and students informed about the various projects being done on-campus as well as a platform to talk about different issues that the university should examine and potentially implement through their bi-weekly Green LMU Newsletter.

Operations

The Operations category is divided into nine subcategories: Air & Climate, Buildings, Energy, Food & Dining, Grounds, Purchasing, Transportation, Waste, and Water. Operations contains topics like landscape management, food, and beverage purchasing, renewable energy, greenhouse gas emissions, and water use.

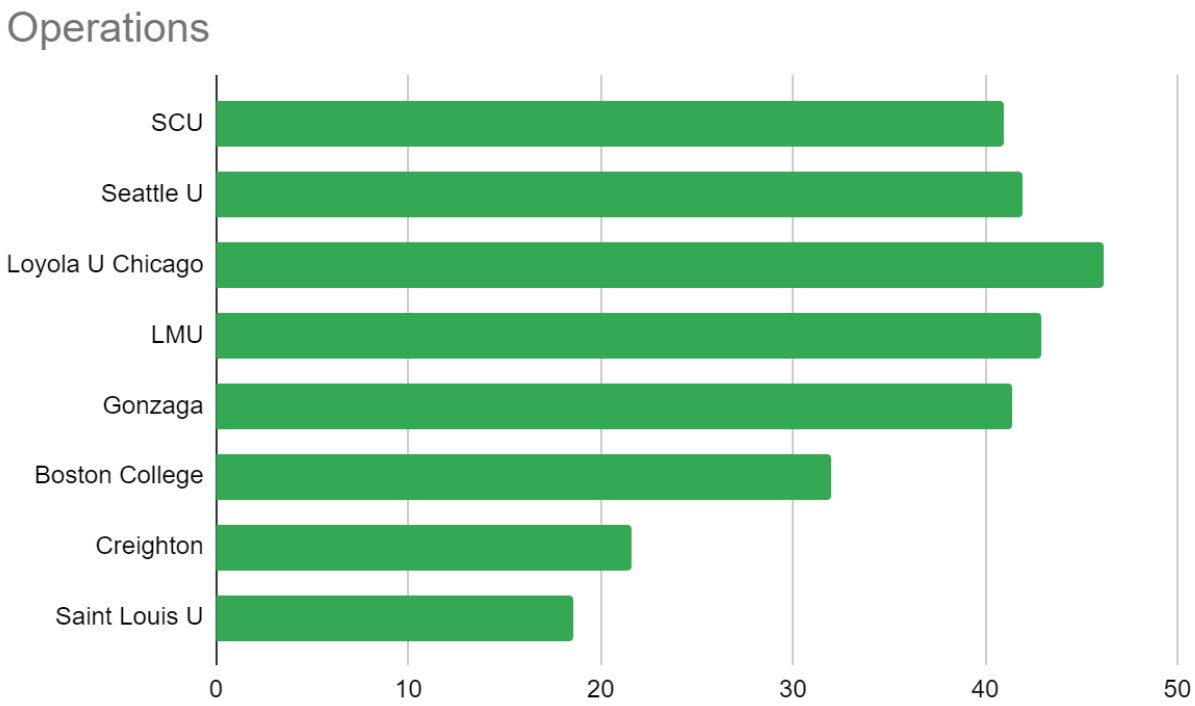

Figure 6. Total points for each institution in the Operations category.

The school with the most points in the Operations category is Loyola University Chicago, though what is important to note about this category is that two institutions have achieved a perfect score in the Water subcategory -- LMU and Gonzaga. The Water subcategory has two credits: Water Use and Rainwater Management. Both schools significantly decreased their potable water use from their established baseline year using a variety of methods. Gonzaga improved their water efficiency by installing low-flow showerheads, low-flow aerators on faucets, and low-flow toilets where applicable. LMU decreased their water usage by removing 210,000 square feet of turf on their campus (which saved an estimated 1 million gallons of water) and having students gather condensate from HVAC equipment on the roof of the Life Sciences Building and use it to irrigate nearby plants.

Planning and Administration

The Planning and Administration category is divided into four subcategories: Coordination & Planning, Diversity & Affordability, Investment & Finance, and Wellbeing & Work. This broad category covers topics from sustainability coordination, support for underrepresented groups, sustainable investment, and wellness programs.

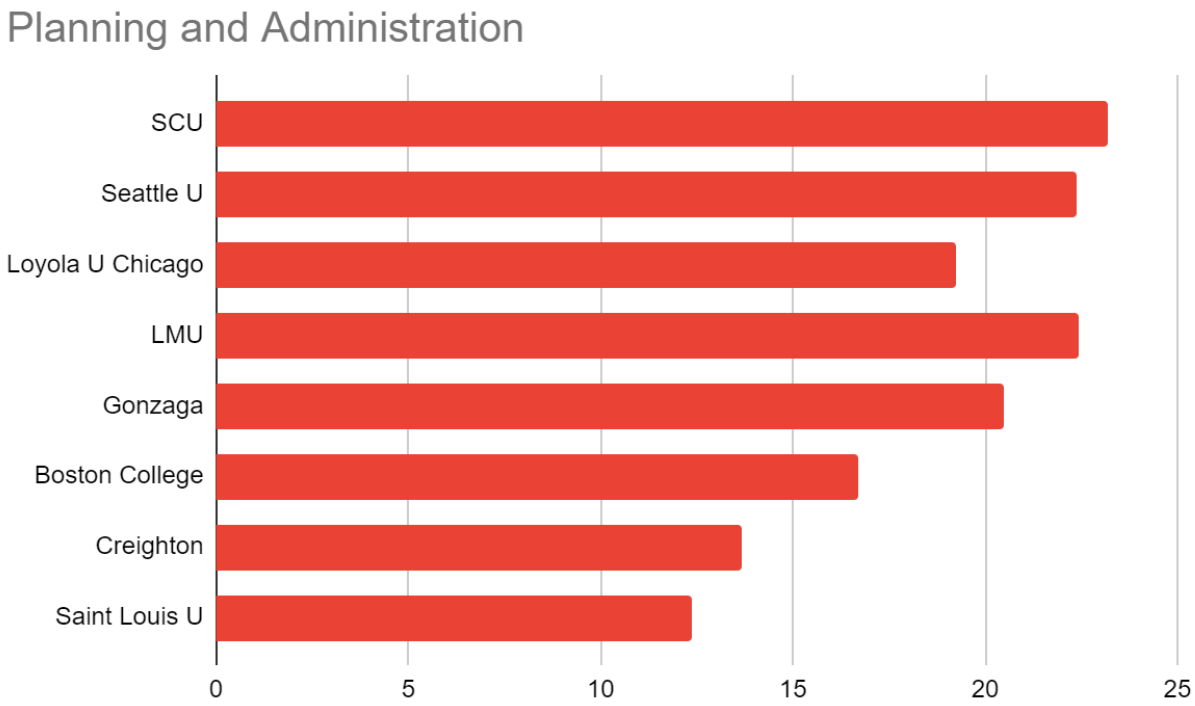

Figure 7. Total points for each institution in the Planning and Administration category.

Though it does not have the highest overall Planning and Administration score, Boston College (BC) has the best Diversity & Affordability score of the sample (9.19/10). One part of the reason for this high score is the fact that all students, faculty, and staff have completed cultural competency training. BC also has policies and programs to make it accessible and affordable to low-income students, such as practicing need-blind admissions and committing to meet full demonstrated need. The Montserrat Program aims to assist students at the highest level of financial need to actively participate in and experience a Jesuit education by offering holistic guidance and support to students.

RECOMMENDATIONS

Because STARS is such a widely recognized sustainability standard, outside organizations have used STARS reports as a way to determine what makes a university more sustainable and the steps students can take to create a sustainable college environment. Some of their broad suggestions include: offsetting carbon dioxide emissions, academic programs centered on sustainability, joining environmentally-minded student groups, and using student government to petition for institutional policy for sustainability initiatives (recycling, energy consumption, ethical food sourcing, etc.) (Best Colleges 2021).

Addressing Academics: Best Practice Research

A particular area that is in need of recommendations according to my analysis is academics. An example of academic excellence in sustainability can be seen by Stanford University, one of the ten schools with a Platinum STARS rating. Stanford University recently announced that it was forming a new school focused on climate and sustainability. The school, which will absorb several of the university's existing units and departments and add others in the future, will begin operations in fall 2022. It will help establish Stanford at the forefront of universities recognized for excellence in the study of global climate challenges and solutions, which President Tessier-Lavigne named as humanity's "top priority" (Nietzel 2021). The establishment of this school is both a symbolic and physical investment in the creation of a more sustainable future and of actively nurturing sustainability in the next generation.

Grant Application Recommendation

To achieve greater academic excellence in sustainability, HEIs can apply to grants, such as the Environmental Education grant from the Environmental Protection Agency. This opportunity is a good funding source because it seeks to "support environmental education projects that promote environmental awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment" (EPA 2021). All of these are in line with the goals of STARS and Jesuit values regarding care for our common home. Colleges and universities are specifically encouraged to apply, so schools that especially need to improve their Academics rating should look into receiving funding.

CONCLUSION

As humans, we have a responsibility to protect this planet that we have been endowed with. This call to action is especially present in Jesuit spirituality, and Jesuit HEIs need to answer.

Through my analysis of AJCU institutions with valid STARS reports, some schools are doing better at meeting this call than others. While many schools in the sample have received a gold rating, there have been great discrepancies in success between the schools in areas such as academics. Additionally, the small number of AJCU institutions that have participated in the STARS program may indicate a lack of prioritizing sustainability initiatives or a faltering in transparency. Investigating the differences between the STARS reports has demonstrated the need for the AJCU to have a more united front in regards to sustainability, which is especially imperative for institutions whose values demand a commitment to both socio-ecological justice and stewardship of the next generation of Jesuit-educated leaders.

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