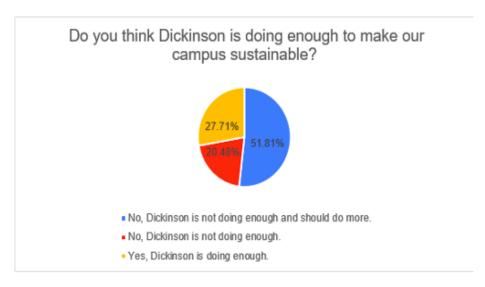
John Dylan Bustillo, Charles Scharf, John Soyka, and Donovan Tubbs 5/13/2021

Green Devil Certified: Measuring Student Attitudes Towards Sustainability

We set out to discover Dickinson students' attitudes toward climate change, sustainability and Dickinson's Center for Sustainability Education (CSE). We wanted to know how Dickinsonians thought of individual, institutional, and social roles in working towards a sustainable future. From our research results we were able to determine that Dickinson students are invested in sustainability, they value Dickinson's commitment to our future, and they are eager to see more green initiatives take hold of our school.

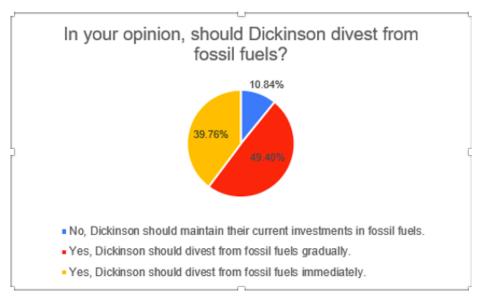
To determine Dickinson students' attitudes towards sustainability, we partnered with CSE and distributed a survey of 25 questions to Dickinson students. All surveys were conducted on google forms via a link and were anonymous. Surveys were distributed to Dickinson students through email links and text links. Students who agreed to fill out the survey answered twenty-two questions relating to Dickinson's involvement in sustainability and to the Center for Sustainability Education (CSE) and their own sustainability habits. The survey was conducted over six days, from March 25th to April 1st of 2021.

How do students view campus sustainability?



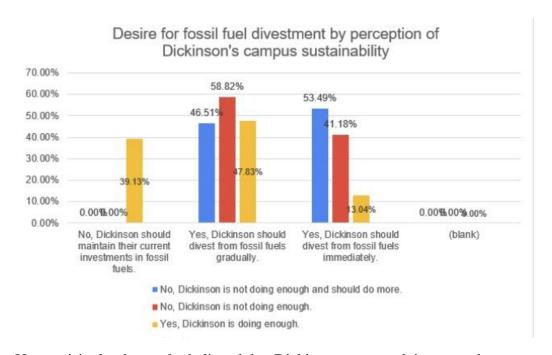
Most respondents held a negative view of the school's performance regarding its sustainable initiatives on campus. Seen by how an overwhelming majority of respondents (72.29%), answered with either variation of no. Of those who responded with no, 51.81% said that "No, Dickinson is not doing enough and should do more", distinguishing them from those 20.48% who only said "No, Dickinson is not doing enough". Revealing a subtle but important distinction in the student population's opinion on what should be done next, namely that a minority of respondents who indicated disappointment in Dickinson's performance were content with merely expressing discontent, without further action. Separating them from respondents who expressed discontent, but also indicated support for further action. Only a minority 27.71% of respondents led on that they were content with Dickinson's campus sustainability.

How do students view divestment?



Regarding divestment, a slim minority of respondents, only 10.84%, indicated that Dickinson should maintain their current investment in fossil fuels. However, it should be mentioned that there was not an option for respondents to indicate if Dickinson should expand upon their investments, making it difficult to further investigate differences within the group of 10.84% of respondents. Nonetheless, an overwhelming majority (89.16%) signaled their support for one of two methods of divestment, breaking on the speed by which Dickinson would relinquish its fossil fuel holdings. The majority 49.40% showed their support for the gradual divestment of fossil fuels, while a still substantial 39.76% indicated a desire for the immediate divestment from fossil fuels. Again, there is a distinction in how proactive respondents were in their support policy change, though distinct from the previous graph by how those more active voices are in the relative minority.

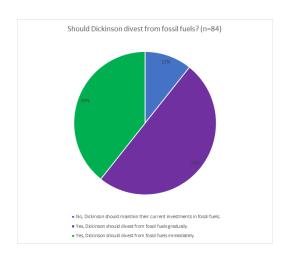
Students' institutional perspective



Unsurprisingly, those who believed that Dickinson was not doing enough on campus did not believe that the school should maintain its investments. What was surprising was how those respondents who gave proactive responses regarding campus sustainability did not heavily favor one plan for divestment over another, with 53.49% opting for immediate divestment, and 46.51% for gradual divestment. However, the difference is still significant as proactive responses indicated a preference for immediate divestment by 6.98%. Yet, it was the difference in those respondents who gave non-proactive answers which had the most profound difference, seen by how 58.82% preferred gradual divestment, in contrast to the 41.18% who favored immediate divestment. With a 17.64% difference in their tendency, it indicates a stronger correlation between non-proactive answers and an aversion to an immediate remedy. Additionally, a significant amount (47.83%) of respondents who were content with Dickinson's campus sustainability also showed support for a gradual divestment, which was like the amount of support shown by those who had proactive responses. Overall, though this graph indicates that there is a weaker than anticipated correlation between proactive responses and preference for

more immediate remedies, compared to those showing favor for gradual divestment, which drew significant support from all three response options. Indicating that students feel strongly about Dickinson's Investments, even more than campus sustainability, compounded with the fact that students have to their credit an understanding for how challenging divestment truly is.

Summary of students' institutional perspective



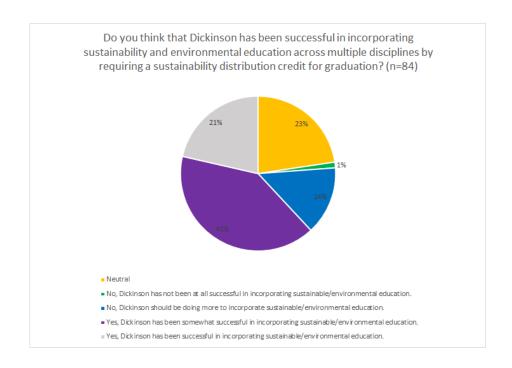
As previously shown, Dickinson students show a clear interest in the environment and the impact their day-to-day activities have on the environment. This individual consideration for the environment contributes to students' outlook on how Dickinson as an institution should be considering its own environmental impact. Currently, Dickinson College maintains investments in the fossil fuel industry because those investments are highly profitable, presumably helping to fund the endowment and general wealth of the school. However, when surveyed, an overwhelming majority of students, 89%, believe Dickinson should divest from fossil fuels. The student body is split on whether to divest immediately, 39%, or to divest gradually, 50%. Additionally, our research showed that a majority of Dickinson students, 72.6%, do not believe the institution is doing enough to be environmentally conscious. While these results are likely to be partially influenced by the increased reliance on single-use plastics by dining facilities during

the pandemic, the data supports the conclusion that, from the perspective of the students, Dickinson is lacking in their commitment to environmental stainability.

Students' suggestions on institutional recourse

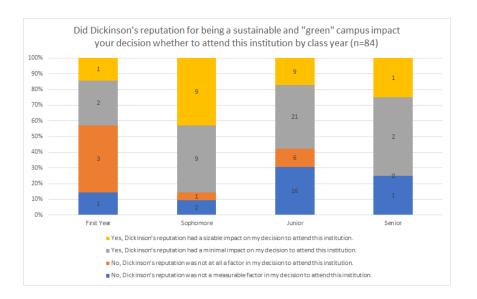
When students were asked how Dickinson could be more sustainable, an equal number of students (11.9% respectively), responded that divestment and utilities should be the main focus of renewed sustainability efforts, followed by recycling and compost at 9.5% and additional education at 5.9%. What this indicates is that Dickinson students are committed to environmental sustainability in their day-to-day lives, they believe Dickinson is not doing enough to be environmentally sustainable, and they believe Dickinson should divest from fossil fuels. What can be inferred is Dickinson as an institution could better maintain its commitment to environmental sustainability from the perspective of students by divesting from fossil fuels. Students have already suggested this as a possibility and the majority of students agree that Dickinson should divest, they only disagree on a timeline.

Students' perspective on the integration of environmental education



Respondents also indicated that a strong environmental education was important to them, with 80.72% reporting that it was very important and 15.66% reporting that it was somewhat important. With 96.38% of students agreeing that a strong environmental education is important to them, it is important to see if students felt that Dickinson as an institution was successful in providing students with a strong environmental education across disciplines. When surveyed, 62% of students responded that Dickinson had been at least somewhat successful in incorporating sustainability/environmental education across department curriculums. In contrast, 38% of students were either neutral or felt that Dickinson was not doing enough to provide a strong environmental education, of which, 14% believed that Dickinson should be doing more. While a majority of students do believe Dickinson has be successful, when 96.38% of students indicated that a strong environmental education was important but only 62% think Dickinson has been successful in this goal, the institution should be asking how they can better incorporate environmental education in across disciplines. One way to do so would be to increase student involvement with CSE.

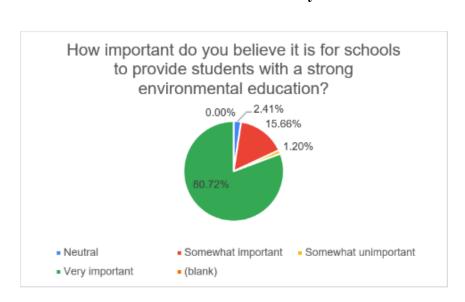
Students' perspectives on sustainability as a factor in enrolling by class year



It is important for Dickinson to maintain its commitment to sustainability and provide students with a strong environmental education because Dickinson's reputation for being a sustainable campus effects students decision on whether to attend the college. When shown in a bivariate relationship comparing a student's current class year and whether Dickinson's reputation impacted their decision, for sophomores, juniors, and seniors, Dickinson's reputation almost always played at least a minimal role in a prospective student's decision to attend this school. For first-year students, Dickinson's reputation seemed to matter less than it had in years prior. Overall, 64% of the time, Dickinson's reputation for being sustainable played a least a minimal role in effecting a student's decision to attend.

What can be inferred from the data in this section is that Dickinson students are concerned about environmental sustainability and believe that a strong environmental education is important. However, they believe that Dickinson has not been successful in its commitment to sustainability goals and students are under served when it comes to receiving a strong environmental education. Additionally, the perception that Dickinson is an institution with a strong commitment to

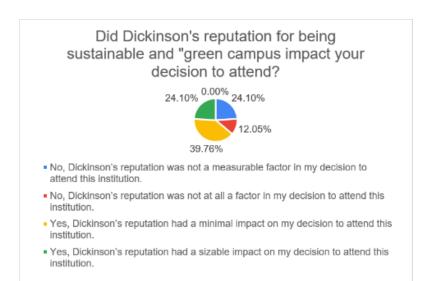
sustainability and environmental education correlates with students' decisions to attend this college. Therefore, to maintain Dickinson's commitment to sustainability, Dickinson should begin to divest from fossil fuels. Additionally, Dickinson should consider how to increase involvement with CSE or reconsider how environmental education is taught across disciplines to better satisfy a student body who desires a strong sustainability education and committed to this school partly on this desire.



Students' attitudes towards sustainability education

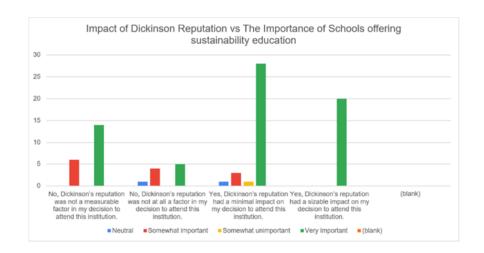
Respondents strongly indicated that they considered a strong environmental education very important seeing how 80.72% of respondents answered very important and 15.66% answering somewhat important. Looking at the pie chart it becomes clear that Dickinson students who do not consider environmental education as important are in the minority with only 3.61% indicating that the feel neutral or less than neutral towards it.

Impact of Dickinson's reputation on Students' decision to apply



The second pie chart shows the impact that Dickinson's reputation as a sustainable school played in their decision to attend Dickinson. Most respondents, at 63.86%, said that Dickinson's reputation did have an impact with 39.76% saying it had a minimal impact on their decision and 24.1% saying that it had a major impact on their decision to attend. 24.1% also said that Dickinson's reputation did not have a measurable effect and the minority of respondents at 12.05% said that it had zero impact on their decision. From this data it can be said that Dickinson's reputation does influence whether prospective students choose to apply to Dickinson.

How students' outlook on the importance of environmental education coupled with Dickinson's reputation impacted their decision to attend



By looking at these two sets of data using a bivariate graph, a correlation can be made between the two sets. Students who believed that sustainability education was important were more likely to have their decision to attend Dickinson impacted by Dickinson's reputation as a sustainable school. The majority of students who thought that sustainability education was important answered that Dickinson's reputation had an impact and those that didn't think sustainability education is important were more likely to not have taken Dickinson's reputation into consideration.

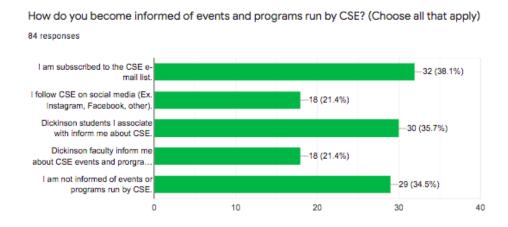
Awareness of CSE by Class Year 90% 80% 70% 60% 50% ■ Not Aware 40% Aware 30% 20% 10% 0% 2021 2022 2023 2024

Students' awareness of the CSE

Most of the issues discussed in our research revolve around CSE as they are the core of Dickinson's sustainability initiative. They host evets which focus on environmental

responsibility and encourage students to engage with sustainability with programs like the Green Bike, the Hive, and Eco-reps. Dickinson's reputation as a sustainable school, which play a significant factor in students' decision to attend this school, is directly linked to CSE. Despite this strong connection, more than 25% of our respondents were unaware of CSE as a resource on campus. We can see the breakdown of awareness by class year in the graph below. It is encouraging to see that a great majority of students are familiar with CSE, but every class has at least some portion which is not. The freshman class of 2024 stands out as the least aware with more than 50% of respondents being unfamiliar with CSE, most likely due to the remote nature of the past academic year. Although more students should be made aware of CSE's role on campus, the population which is aware aligns with the population that finds sustainability as a very important part of a liberal arts education (80.72%). This last portion of students is likely not as interested in sustainability as the rest of the student body and is therefore not interested in CSE.

How CSE can raise its profile on campus



To understand how CSE can better reach students, especially freshmen, we asked participants how they become informed about CSE and its programs and events. The center uses

e-mail and social media to communicate its operations with the student body, but we also measured the impact of word of mouth. We found that 38% of students were subscribed to the e-mail and learn about events through that medium, and 35% learn through their peers. It is no surprise that the e-mail was the most popular method for most students, but a similarly large amount learn through their friends. Peer to peer interactions are one of the strongest outreach methods for CSE. This may explain the low rates of freshman awareness considering that that class has had few opportunities to develop a diverse social sphere at Dickinson thus far. A much lower percentage of respondents (21%) found out about CSE events and programs through social media and through faculty interactions. CSE still has more students to reach, however, because 34% of respondents indicated that they do not get information on CSE events and programs. Considering the findings above which show significant support for Dickinson to expand its sustainable initiatives, at least some portion of the students who are not regularly informed are still interested in environmentalism.

What we discovered about Dickinson students is that they are widely interested in and passionate about sustainability. Many students considered this school's reputation and actions as an environmentally friendly institution when deciding to attend, and there is broad support for the sustainable initiatives Dickinson has embarked on thus far. In fact, a lot of students would like to see our school do even more, namely divest from fossil fuels in at least some capacity and expand the use of Eco-tainers even after the Covid-19 pandemic has ended. CSE is the campus organization charged with making Dickinson a sustainable place to live. Their role on campus, however, is not recognized by all students. The class of 2024 in particular is uniformed about CSE's mission at Dickinson and greater outreach ought to be pursued. It is important to note that this survey was significantly hampered by the Covid-19 pandemic, in that we were unable to

reach core populations of the Dickinson community. Those include the class of 2024, international students, students who chose to take this semester off, and students who were remote. Additionally, the low stakes nature of our survey may have had an influence on some of our answers, but we have done our best to include only the most legitimate responses. Despite these factors, we are confident that the data we collected is accurate and indicative of student's sentiments towards sustainability. CSE has plenty of room to grow, and Dickinson's future looks green.