Updated Draft Concept Study

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Stock and Flow Analysis of International Student Affairs Officers

I plan to conduct a stock and flow analysis of international student affairs officers at major research universities. I will be focusing on the composition of international student advisors, support staff, and departmental directors within an international student affairs department. I aim to analyze compositional traits and progression through the departmental "career ladder" (Penn State World Campus, n.d.b, para.1). Compositional traits of interest include citizenship, ethnicity, highest degree attained, and gender. Evaluating these traits should provide sufficient supporting insight to address institutional aims of employee diversity inclusion and support future studies for equity analysis. Career progression indicators include hiring frequency, retention duration, and retirement from the department (Penn State World Campus, n.d.a). Institutions of interest will be North Carolina State Institution and its sixteen constituent peer universities which were chosen following "a cluster analysis and based on IPEDs data from the 2018-2019 reporting year" (NC State, n.d., para. 2).

Discussion

Supporting Data

I will find supporting data through the Integrated Postsecondary Education Data System (IPEDS), university websites, institutional benchmark reports, and the Institute of International Education (IIE). Likely, IPEDS will provide general support staff and faculty members employed at an institution while institutional websites will provide insight into compositional traits specific to the international student affairs department. I have chosen to analyze major research universities because they often make benchmark data and faculty composition data publicly available. IIE publishes a yearly report from 1919 to 2021 which evaluates many aspects of international higher education available in America. Although I will not have access to

the entirety of the Open Doors report, I should be able to access relevant data about international student support that is not accessible directly through the institutional websites.

Caveats

Most stock analysis data points should be available through IPEDS, but missing data will likely need to be subsidized with benchmark or yearly reports from the institutional websites. In these cases, gathering and comparing data from individual institutions will require substantial effort. One concern is that international student affairs staff members will not be evaluated as a separate department from general student affairs staff members. In this case, the role group of interest will need to be altered. Additionally, if institutions do report international student affairs staff members as a unique department, it is possible that titles or positions will vary among institutions making direct comparisons difficult. Finally, I am not an employee at any of the institutions of interest, so I will not have access to internal administrative data systems.

External Forces

Stock and flow analysis seems to be an analysis of quantifiable data rather than qualitative or self-reported data necessary for measuring faculty happiness and fulfillment or workload studies There may be slight self-reporting bias regarding citizenship and nationality for dual-citizens.

Previous Conditions that Could Affect Findings

A major previous condition that could affect the stock and flow analysis of international student affairs advisors is the ongoing COVID pandemic. The pandemic has drastically altered the accessibility and desirability of studying internationally, meaning departments may have downsized in response. It is also possible that institutions that value strategic planning and program prioritization have re-evaluated the value placed on international education in either

their short- or long-term goals. Either of these conditions could drastically affect the findings of this investigation.

Levels of Influence

Most data for this study will be departmental data that is specific to the student affairs office. These professionals will also share a disciplinary focus of international student support services. A university's goals and priorities are an influential force on this study that must be accounted for. For example, an instituion may state that they prioritize their international students and growing international departments. However, this report could find that the stock and flow data gathered reflect that the international student affairs staff have failed to increase the number of employees in a way that would reflect a determined effort for international student support. If university goals are not considered, my analysis might identify areas of concern that should be expected and ignored. For example, if one of the peer institutions is found to have a high turnover of international student affairs staff who only hold basic qualifications, but the institutional strategic plan is shifting to prioritize local students and goals, then turnover should be expected and ignored. If on the other hand, the institutional strategic plan aims to increase international student enrollment and experience, then a high level of turnover would be an area that demands immediate focus and attention.

Statistical Analyses

Gathering trends in the number of support staff compared to the number of international students at NC State and at its peer institutions could show a faculty to student ratio specific to international students. The purpose would be to identify how the faculty to student ratio of NC State and its peers has changed over a set period of time. For example, it is well documented that there has been a substantial increase in international students from 2010 to 2020 (IIE, 2020).

However, it would be helpful to identify if the student faculty ratio has kept up with these changes. To answer this question, we could just provide simple bar charts reflecting student faculty ratio over time at NC State and its peer institutions.

For a more detailed analysis of institutional employment demographics, we may need to use different methods. For example, we might want to investigate whether the distribution of age of NC State's employees is similar with that of their peer institutions. To do this, we can first calculate the overall proportions of employees at specified age ranges, and test whether NC State has a similar distribution. A Chi-Squared goodness of fit test can determine if NC State's distribution of ages is different than the peers. The idea of the Chi-Squared test is to check whether NC State has an uneven, overaged, or underaged, distribution of staff when compared to its peers. For example, it is possible that a disproportional number of senior staff members could lead to issues with future retirements, or a disproportional number of junior staff could lead to unexpected year-by-year turnover.

Besides age, other variables such as gender, ethnicity, degree status, and many other could all be interrelated in the ways people move up, down, and out of the company ladder. Similar studies could be done to address the distributions of these in comparison to the peer group. These suggestions for statistical analysis should support the broad purpose of stock-and-flow analyses to determine if further analyses should be conducted such as qualitative studies including "surveys, interviews, or focus groups…to determine the underlying reasons why certain outcomes are seen" (Penn State World Campus, n.d.b, para.2). Hopefully these studies will support NC State's upper management in determining if and how to adjust the number of employees within their international student affairs office.

References

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trends/

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Questions Regarding My Analysis

1. Should my analysis focus on one institution or on several institutions (like I proposed above)?

    a. Multiple institutions is fine, just use their own website and make leaps and try to figure out – are they trying to grow, but they only have 2 employees, are they really trying to grow?

    b. I don't need to necessarily use IPEDS, I can use just their websites and their data

2. Is it realistic to evaluate international department staff, or should I extend my focus to student affairs officers in general?

3. Are IPEDS and the institutional websites likely to provide enough information for a stock and flow analysis? I chose to conduct a stock and flow analysis because it seemed to require data that is accessible to the public, but am interest to see if you agree.

4. Regarding the type of analysis conducted, is a stock and flow analysis enough for this project, or should I also investigate salary, fulfillment, or workload studies as well?

5. Who gets counted? Find categories, what are the titles/departments/locations/who do I care about? Why do I care about them?

6. Questions 1-5 are the previous questions that I submitted with my initial draft concept study, at this time my only question is: Are the statistical methods I proposed likely to provide useful information to support the stock and flow analysis?