

Plan Overview

A Data Management Plan created using DMPTool

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Title: How freedom to change majors affects students' choice and public universities performance

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Template: NSF-EHR: Education and Human Resources

Project abstract:

This research project aims to explore the implications of allowing students the freedom to change their majors on both their academic choices and the performance of public universities. The study will analyze how such policies impact student satisfaction, retention rates, and academic success. Additionally, it will assess the administrative challenges and benefits that universities experience as a result of these policies. By examining a range of public universities with varying degrees of flexibility in changing majors, the project seeks to identify best practices and provide recommendations for policy makers. The ultimate goal is to determine whether the freedom to change majors enhances the educational environment and outcomes for students, as well as the overall effectiveness of public higher education institutions. This project is scheduled from April 26, 2024, to April 26, 2029, and is supported by the National Science Foundation (NSF).

Start date: 04-26-2024

End date: 04-26-2029

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How freedom to change majors affects students' choice and public universities performance

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Investigator: Yifan Lei, Fan Ye

Data Manager: Yifan Lei, Fan Ye

Administrator: Yifan Lei, Fan Ye

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Survey Data: Detailed responses to structured and semi-structured questionnaires aimed at assessing student satisfaction, preferences, and experiences with major change policies.

Interview Transcripts: Transcriptions of in-depth interviews with students, faculty, and administrative staff exploring personal perspectives and anecdotal experiences regarding the flexibility to change majors

Institutional Data Tables: Quantitative data from university records, including retention rates, graduation rates, and academic performance metrics, correlated with the flexibility of major change policies.

Video and Audio Recordings: Recordings from interviews and focus groups, providing firsthand insights into the impacts of major change policies on various stakeholders.

Analytical Reports: Comprehensive reports and publications summarizing research findings, policy implications, and recommendations for stakeholders.

Educational Materials: Development of curricular or informational materials designed to aid universities in implementing or improving major change policies.

Data Storage:

To make sure the data is backed up during the research, the project will be stored in a password-protected file on Research SharePoint, and backed up on OneDrive. The data manager Yifan will be responsible to backup the data and for recovery. Both platforms have enough storage capacity for our data dataset (one drive= 1TB) .

Data Preservation:

- **Long-term Preservation:** This research will last for 5 years and will be stored on the Teachers College, Columbia University cloud server for 10 years after the project is completed.
- **Documentation and Metadata:** To make sure the data can be read and interpreted in the future, documentation and metadata will accompany it. Including data dictionary, data model and other documentation to facilitate future researchers to reuse.

Data Sharing:

Data will be released for open access on completion of the project. It will have a DOI ascribed when it goes into the University repository. Findings from the data will be shared at conferences such as The International Learning Analytics and Knowledge Conference, and possibly through eventual publication, as well as team meetings within Educational Data Mining, Learning Analytics, and/or the wider academic team.

Storage: Due to the presence of sensitive information such as student demographics, academic records, and transfer request details, data must be stored securely. Use of encrypted databases and restricted access protocols is mandatory.

Restricted Access: Access to sensitive data (individual student records) will be limited to authorized project personnel only. This includes access controls at both physical and digital levels to ensure data security.

Long-term Storage: Critical data will be preserved in a format and location that guarantees access over the specified retention period. The data will only be preserved for ten years after the plan terminates.

Sharing: All data sharing will comply with applicable laws and institutional policies, including the Family Educational Rights and Privacy Act (FERPA) in the U.S., which protects students' educational records.

Survey Data: CSV (Comma-Separated Values) or Excel spreadsheets.

Interview Transcripts: DOCX (Microsoft Word) or PDF (Portable Document Format)

Institutional Data Tables: CSV (Comma-Separated Values) or Excel spreadsheets.

Video and Audio Recordings: MP3 or WAV formats

Analytical Reports: DOCX (Microsoft Word) or PDF (Portable Document Format)

Educational Materials: DOCX (Microsoft Word) or PDF (Portable Document Format)

Access and Sharing Duration: Data and research products will be available for a minimum of 10 years following the conclusion of the project. This duration is chosen to ensure sufficient time for the research community and stakeholders to access and utilize the findings, contributing to further research and policy development.

Question not answered.
