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# Research Proposal

Incorporating green space into indoor areas at Thompson Rivers University

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CMNS 2290

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## Introduction

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The impact of the environment on human health and well-being has always been significant. In the wake of the Covid-19 pandemic, governments urged citizens to spend time in nature as a means of alleviating stress and socializing safely. Given the harshness of the winters experienced in British Columbia, going out into nature is not always possible. The proposed research aims to investigate whether the incorporation of green space into indoor areas could enable year-round access to the benefits of nature, including improved air quality, reduced stress, and increased productivity.

## Project Description

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### Overview

In addition to the hindrances that Canadian winters pose enjoying nature, seasonal depression tends to peak during the winter season. With this in mind, the report will explore the potential benefits of indoor plants as it relates to the improvement of mental as well as increased social interaction and increased productivity. Additionally, the report will investigate potential drawbacks such as increased maintenance costs and potential health risks associated with indoor plants.

### Research Methodology

The report will include a literature review of relevant studies on the effects of indoor plants on occupants' health and wellbeing. To gather information on the subject, I will perform secondary research, which includes assessing academic articles, trade journals, news reports, and credible websites.

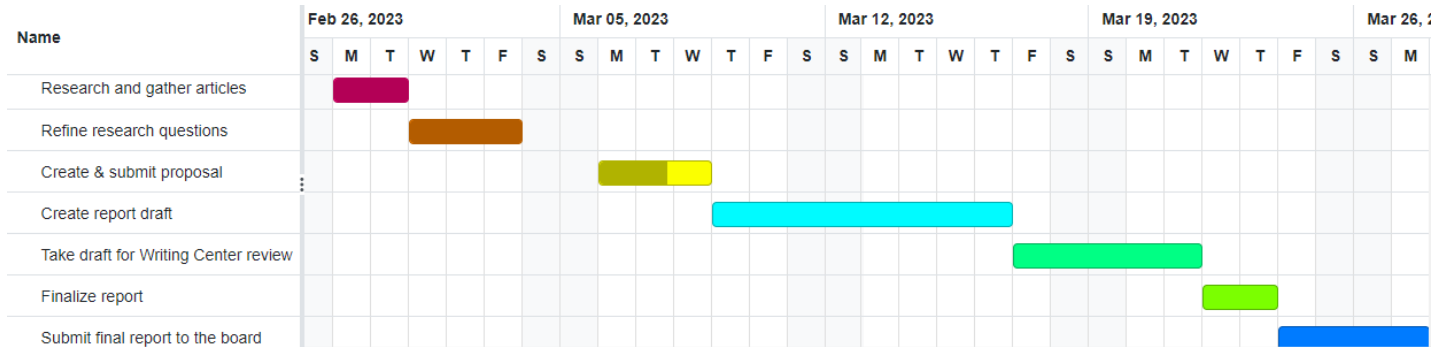
### Data to be collected

To facilitate this research, the following data will be collected:

- The statistics on prevalence and severity of mental health issues among students
- The potential benefits of indoor plants on mental health
- The potential health risks associated with indoor plants.

## Schedule & Costs

The Gantt chart below outlines the schedule for completing the formal report, including tasks such as research, data analysis, and report writing. This report will take just about a month to complete. There aren't any anticipated costs in producing this report. All help will be solicited from the TRU library staff and the writing center.



## Proposed Research Questions

The formal report will attempt to answer the following research questions:

1. Are there benefits of incorporating green space into indoor areas at TRU? If so, what are they?
2. Are there drawbacks of incorporating green space into indoor areas at TRU? If so, what are they?
3. Are students more prone to mental health issues than the general population? If so, why?
4. Are indoor plants a contributing factor of social interaction? If so, how can social interaction benefit the mental health of students?

## Annotated Bibliography

Liu, W., Sun, N., Guo, J., & Zheng, Z. (2022). Campus Green Spaces, Academic Achievement and Mental Health of College Students. *International Journal of Environmental Research and Public Health*, *19*(14). <https://doi-org.ezproxy.tru.ca/10.3390/ijerph19148618>

This article examines the impact of campus green spaces on the academic achievement and mental health of college students. The researchers collected data on students' academic achievement and mental health. The results showed that students who perceived the campus green spaces to be of higher quality had higher academic achievement and better mental health. The data collected in this study will help to assess the prevalence of mental health issues among students.

Gunn, C., Vahdati, M., & Shahrestani, M. (2022). Green walls in schools - The potential well-being benefits. *ss.*

<https://doi-org.ezproxy.tru.ca/10.1016/j.buildenv.2022.109560>

This article explores the potential benefits of green walls in schools for promoting well-being. Gunn et al. conducted a systematic review of the literature to identify relevant studies. They found that green walls immediately reduce levels of stress, anxiety and increase well-being and mood. Given that this article was published in *The International Journal of Building Science and its Applications*, this article serves as a source of authority for the formal report.

Gu, J., Liu, H., & Lu, H. (2022). Can Even a Small Amount of Greenery Be Helpful in Reducing Stress? A Systematic Review. *International Journal of Environmental Research and Public Health*, 19(16).

<https://doi-org.ezproxy.tru.ca/10.3390/ijerph19169778>

This article is a systematic review of the literature on the potential of greenery to reduce stress. The authors reviewed 19 studies that investigated the relationship between greenery and stress reduction. The results showed that even a small amount of greenery, such as indoor plants, can have a positive effect on reducing stress. The authors suggest that incorporating greenery into indoor environments can be a cost-effective and practical way to promote well-being and reduce stress. This article is useful as it can help to inform the recommendations of the formal report and provide alternatives given that TRU has already tried indoor plants on a larger scale.

Kamloops This Week. (2016). *Kamloops This Week*. <https://www.kamloopsthisweek.com/local-news/trus-living-wall-takes-its-final-breath-4364752>

This article reports on the removal of the living wall at TRU. The living wall, which was installed in 2012, was a prominent feature in the university's campus, but it had started to deteriorate due to maintenance and health issues. This article was chosen as it provides a more unbiased and local perspective on the challenges prompting the removal of TRU's living wall. This is necessary as it provides background information for the final report and help to create counter arguments.

## Conclusion

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In conclusion, incorporating green space into indoor areas at TRU has the potential to provide year-round access to the benefits of nature and improve the physical, psychological, and social wellbeing of its occupants. The proposed formal report will investigate the potential benefits and drawbacks of indoor. In doing so, the report aims to provide TRU's Board of Governors with evidence-based recommendations for creating more vibrant, healthy, and sustainable indoor spaces that support the wellbeing of students, faculty, and staff.