# Research Proposal

Incorporating green space into indoor areas at Thompson Rivers University (TRU)

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## Incorporating green space into indoor areas at Thompson Rivers University (TRU)

### Introduction

My proposal aims to explore the integration of green spaces within the indoor settings of Thompson Rivers University (TRU). For my final report I will be researching how green space exposure is positively associated with emotional well-being and psychological aspects among individuals. I will explore various innovative approaches in this regard. The articles I have found support the reasoning as to why we should implement these specific ideas in our school. TRU lacks sufficient green spaces in its common areas, an addition that could offer numerous mental and physical health advantages to students.

## Project description

#### Problem final report will address

My final report will address how green space exposure is positively associated with emotional well-being and psychological aspects among individuals.

#### Information needed to be collected

For my Final Report I will be finding certain information on

- Greener spaces,
- wayfinding regarding greener spaces,
- effects of having green space on mental health,
- the impact on emotional well-being when surrounded by green space.

### Research Methodology

My research will be done from the sources listed below:

- Reliable academic articles,
- academic journals,
- and news reviews.

I will only use creditable sources for my information, to reassure reader of reliability.

### Schedule and timeline

The schedule for my time working on the final report is the following:

March 4 -11	Finish Proposal and collect more data for final report.
March 12 - 26	Organize the data and plan the flow of final report.
March 27 - 29	Finish rough draft and send to writing the centre.
March 30 - April 2	Review and make my final edits.
April 3	Final Report due.

# Proposed research question

## Question 1

How do greener spaces change student's performances in the classroom?

## Question 2

How does air quality indoors affect human health?

## Question 3

How can wayfinding enhance efficiency and overall happiness?

## Question 4

Can there be a certain correlation between psychological effects on students when surrounded by greener areas?

## Annotated Bibliography

Ab Latib, H., Amir, M. A., Othman, K., Ratnasingam, J., & Liat, L. C. (2023). Dichotomy of Predictor Variables of Indoor Air Quality and Prevailing Public Perception of Green Living Space - A Preliminary Assessment. BioResources, 18(2), 3783–3801. <u>https://doi.org/10.15376/biores.18.2.3783-3801</u>

This article by Ab Latib et al. (2023) explains the difference in having good air quality indoors. It was shown in the research that having good air quality can improve productivity. This will be useful research in my final report to help show the quality of air indoors can improve human health. This is why we need more green spaces to make indoor air quality better.

He, G., He, L., Zhang, B., Ge, T., & Chen, Y. (2022). The greener, the happier? The effects of greenspace on residents' happiness in contemporary urban China. Journal of Community Psychology, 50(7), 2808–2828. <u>https://doi.org/10.1002/jcop.22798</u>

This article by He et al. (2021) illustrates how greenspace can correlate with happiness among individuals. While showing the negative effects of having no green space indoors (households especially). This will be help show different levels of green space you're around that can impact your mood and overall health.

Hopkins, E. A. (2022). Greening On-Campus Housing: Blending Commercial and Higher
Education Contexts. Journal of Higher Education Policy and Management, 44(4), 335– 346. https://doi.org/10.1080/1360080X.2022.2027611

This source by Erin A. Hopkins (2022) offers insights into innovations in sustainable development and highlights the critical role of green spaces in fostering environmentally friendly habits among our next generation leaders. This information will be valuable for my final report because it will show how green spaces can enhance student's performances in the classroom and for the future.

Mata, T. M., Oliveira, G. M., Monteiro, H., Silva, G. V., Caetano, N. S., & Martins, A. A. (2021).
 Indoor Air Quality Improvement Using Nature-Based Solutions: Design Proposals to
 Greener Cities. International Journal of Environmental Research and Public
 Health, 18(16). https://doi.org/10.3390/ijerph18168472

The article by M. Mata et al. (2021) demonstrates the connection between poor air quality and its considerable impact on human health, leading to economic damages. The focus of this study is on microalgae, which is proposed as a solution for purifying indoor air. This information will be valuable for my final report as an initiative TRU can take.

Saenen, N. D., Nawrot, T. S., Hautekiet, P., Wang, C., Roels, H. A., Dadvand, P., Plusquin, M., & Bijnens, E. M. (2023). Residential green space improves cognitive performances in primary schoolchildren independent of traffic-related air pollution exposure. Environmental Health : A Global Access Science Source, 22(1), 33. <u>https://doi.org/10.1186/s12940-023-00982-z</u>

This source by Saenen et al. (2023) describes the growing exposure to green space and how it can provide multiple health benefits. The study shows how more green space surrounding children can improve their cognitive performance. This information will help aid my research in how green space can improve overall mental health and make you more successful in the classroom.

Samreen, M., & Jha, G. (2024). Enhancing User Experience through Wayfinding in Educational Buildings. Urbanism. Architecture. Constructions / Urbanism. Arhitectura. Constructii, 15(2), 169–182.

In the article "Enhancing User Experience through Wayfinding in Educational Buildings" by Mansha Samreen & Gargi Jha (2024), they find in their results how wayfinding efficiency can significantly enhance user experience. By minimizing confusion, improving efficiency, and fostering increased overall happiness. This will be helpful in my final report because it will help answer the question of "How can wayfinding enhance efficiency and overall happiness?". Which I then can implement their ideas into TRU spaces.

## Conclusion

In conclusion, the integration of green spaces within Thompson Rivers University's (TRU) indoor environments represents a vital step toward enhancing the overall well-being of its community. The research outlined in this proposal clearly indicates a positive association between green space exposure and improvements in emotional and psychological health. Implementing the ideas supported by the articles reviewed not only aligns with evidence-based benefits but also positions TRU as a leader in fostering a health-centric educational environment.

Supported by reputable sources, my forthcoming report will demonstrate the substantial contribution of indoor green spaces to the mental and physical health of students. It will underscore the invaluable role of green spaces in promoting academic success and fostering personal growth among students, thereby emphasizing their significance in the university's overall well-being strategy.