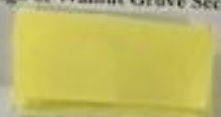


The Redesign of Walnut Grove Secondary



Walnut Grove Secondary

Urban Studies 12

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June 9th, 2023

### Abstract

Walnut Grove Secondary is one of BC's best high schools. Although the school's course selection and size is admirable, there's a fair amount of dead space in the area near the portables. Through urban planning, the awkward patches of grass could be utilized to make the school a more comfortable place for students. This could be done by adding artistic decorations to the exterior of the school, as public art adds appeal to spaces. Additionally, a school garden could be implemented to make better use of the space, since hands-on learning benefits students emotionally and socially. Lastly, Walnut Grove Secondary needs more seating, which is why an undercover patio alongside a barbeque grill will be necessary. Not only would outdoor seating allow students to get fresh air, a barbeque grill also provides healthier lunch options, meaning students won't have to rely solely on sugary beverages to get through the day.

*Keywords:* urban planning, public art, school garden, hands-on learning, outdoor seating

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Introduction

Walnut Grove Secondary is located in Langley BC, best known for being among the top 20 public highschools in the province. Although the school is sizable, the space is filled with around 2,000 students, meaning that it is paramount to maximize the use of all areas. With a plain exterior and underutilized areas of grass, the school becomes a relatively awkward area for students to stay during lunch breaks. It isn't the scarcity of space that's the issue, but rather the failure to make the most of the land. The areas of grass near the portables is an easy target when considering the redesign of Walnut Grove Secondary's exterior, for there's a great deal of empty space that could be used to make the school a more comfortable place for students. Since Walnut Grove Secondary is densely populated, numerous problems arise, like long lineups at the cafeteria and a lack of comfortable seating. COVID-19 has likely amplified students' general distaste for learning as well, which is why modifications must be made to Walnut Grove Secondary's exterior to make the school a place for students.

Jin and Ye's article *Impact of fine arts education on psychological wellbeing of higher education students through moderating role of creativity and self-efficacy* discusses how art impacts one's mental well-being. The writers emphasize the importance of art activities and courses in schools, as mental health is a prominent topic in today's generation. They discovered through surveying a group of Chinese undergraduates that participating in art activities improves students' mental state. Specifically, this positive relationship is due to the creative freedom they're given, and that art generally boosts people's self confidence (Jin & Ye, 2022). Using students' art to decorate schools may encourage new-comers to enroll themselves in a fine arts course, and the public display of students' work will allow them to feel a sense of pride.

Based on *The School Garden: A Social and Emotional Place* by Pollin and Retzlaff-Fürst, students tend to feel more emotional satisfaction when they're tasked with

It's not necessary to repeat the name of the journal just refer to the authors

activities in the school garden as opposed to the classroom. After observing a sixth grade class for 10 weeks, students have shown that participating in enjoyable hands-on activities result in a rise in social awareness, which includes a greater demonstration of attentive listening and eye contact (Pollin & Retzlaff-First, 2021). These psychological advantages allow the researchers to promote the idea of incorporating gardens in schools. Not only would this be an effective way to utilize empty space in schools, this'll also provide an opportunity for students to learn a new skill.

The article *What's for lunch? The content and quality of lunches consumed by Dutch primary school children and the differences between lunches consumed at home and at school* by Rongen et al. <sup>(year)</sup> centered around what students consume during lunch, and the vitality of having healthy lunch options at school. Through a questionnaire, it is evident that sugary beverages make up the majority of students' diets in a Dutch school (Rongen et al., 2019). The problem applies to students globally, and this is often due to short lunch breaks and a lack of healthy options offered in schools. The concerning results instigate the writers to shed light on this subject, and they strongly believe that schools should encourage healthy eating habits by increasing the accessibility of nutritious lunches.

### Method

When redesigning a space, it is important to consider who will be greatly affected by the changes, which is why these suggested implementations for Walnut Grove Secondary must be in the students' best interest. As Jane Jacobs stresses in her book *Death and Life of Great American Cities*, the citizens should be the center of the city, meaning that people who reside in the area should be greatly considered before city planners alter parts of a city. The <sup>indeed!</sup> same idea should be applied when modifying spaces in schools. Looking into journal articles with school-specific cases will be useful for identifying which particular modifications

should be made, as schools generally tend to lack in similar areas. While there are numerous ideas Walnut Grove Secondary should consider to make better use of the empty patches of grass, adding every possible option is incredibly costly in terms of time, space and money. Therefore, it's paramount to be selective when making such choices, which is why the sustainability, feasibility, and the cost of each idea must be examined. Specific factors that should be assessed when making alterations to an outdoor area includes the steepness of a slope, weather, and alternative surfaces for objects that are intended to be placed above grass. As urban planners often include a visual-aid to go along with their proposals in order to give the audience more insight regarding their thought process, it is significant to create a sketch of Walnut Grove Secondary that includes the suggested changes. The sketch will act as a reference when building a 3D model of the school.

#### Materials & Procedure

The overall purpose of the 3D model is for it to act as a visual representation of the suggested changes for the unused outdoor spaces in Walnut Grove Secondary School. Primarily, it is paramount to properly identify the shape of the school. This was done during a practice build of the model. The objective of the trial model was to get used to cutting the foam, as well as getting the opportunity to create realistic ground textures like grass and dirt. In order to construct the 3D model, a stable base is required, which is why a large sheet of foam (2 ft by 2 ft) is used. Materials like cardboard and lego pieces are used to represent most of the redesign, and all components will easily adhere to the base with the help of a hot glue gun. Decisively, additional pieces of foam, cut with an exacto knife, will be added to the base, as the visualization should consider the slope on the grassy areas. Lastly, paint and static-grass will be utilized to emulate the textures of grass, concrete and dirt.

Results

The suggested implementations for Walnut Grove Secondary's exterior will allow students to feel far more comfortable during school hours. However, if the school were to follow through with the changes, a fair amount of money would have to be sacrificed. ✓

Although these alterations will end up costing a few thousand dollars, each of these ideas will greatly benefit the students. To begin, wooden alligators will be utilized to decorate the plain fences right outside the exit through the English hall. As students will get the opportunity to personalize the decorations, the exterior of Walnut Grove Secondary will gain a sense of inclusivity towards students. ✓ Moreover, a school garden will be added to maximize the use of the empty patches of grass. ✓ The garden beds are placed above concrete, which will be achieved by excavating the grass and replacing it with concrete slabs instead. Even though the idea appears to be costly, the investment will be beneficial in the long run, since the wood will rot over time if it's placed above grass. Adding a school garden means that Walnut Grove Secondary could include a gardening course to its already wide selection of electives. This will provide an interesting option for students to consider during course planning. ✓ Finally, an undercover patio alongside a barbeque grill will be included. Much like the school garden, these new features will also be placed above concrete. One of the most crucial concepts in urban planning is place making, and the aim of redesigning Walnut Grove Secondary's exterior is to make the area an enjoyable place for students to stay. The addition of seating is a simple way to make a space more inviting, and the undercover patio will allow students to get fresh air while staying on school grounds. ✓ The patio is predominantly focused on students' physical health, since the barbeque grill offers students an alternative lunch option. Students often don't consume healthy lunches due to the inaccessibility of such choices as well as a lack of time. All these implementations heavily consider the aesthetics of the school as well as students' health.

*Love this idea!*

*Absolutely!*

## Discussion

### Undercover Patio & BBQ

Additional seating and an alternative lunch option provides numerous benefits for students. Primarily, students often don't have enough time to eat due to the fact that a fair portion of their break is spent waiting for food. This issue could easily be solved by adding a barbeque grill. Many choose to leave school grounds during lunch, because they're often faced with the struggle of having nowhere to sit. The undercover patio will provide more students with adequate seating, and they'll benefit from the fresh air simultaneously. Additionally, the WHO reports 16% of kids aged 4-11 in the Netherlands being overweight, and the lack of healthy lunch options in schools are likely culpable for these concerning statistics. To prove this claim, children from a Dutch school (ages 4-12) were inquired about the types of food they consumed during lunch. It was found that most students consumed bread and sugary beverages at school, while only 6-8% of children ate fruits and vegetables at lunch (Rongen et al., 2019). Although there is no specific data regarding students' lunches at Walnut Grove Secondary, adding a barbeque and a salad bar will allow more individuals to consume nutritious meals at school, leading to an improvement in focus and academic performance.

Good points!  
and  
when they  
leave there  
are still like up  
at Starbucks,  
Subway &  
The Donut  
Shop!

### Garden Beds

Implementing a school garden would be an effective way to make use of the grassy patches. This would allow Walnut Grove Secondary to add a new course. As ADST electives are required up to grade 10 in WGSS, those who feel anxious around machinery could opt for the gardening course instead. Moreover, most hands-on activities are able to increase students' interest. For gardening specifically, two sixth grade classes were observed for 10 weeks, and there was a significant contrast in behaviour when students worked in the school

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garden as opposed to the classroom. Generally, a higher intensity of positive emotions were displayed in the school garden, which results in a greater demonstration of social competence (Pollin & Retzlaff-Fürst, 2021). Not only would plants add aesthetic appeal to the school, students who are keen in the subject now get the opportunity to further that interest. Although school gardens aren't overly popular, it's an activity enjoyed by many students.

*Nearest story*

### Fence Decorations

One way to decorate the fences is to give grade 8 students the opportunity to personalize wooden alligator decorations. This would allow newcomers to make their mark subtly. Not everyone enjoys clubs or sports, but still craves a sense of belonging. This art activity caters to introverts, as it allows students to show school spirit without having to do a great deal of socializing. Furthermore, participating in visual arts activities improves people's people's psychological health, which was discovered through a survey involving 300+ Chinese undergraduates. Students get the chance to be expressive through creative freedom, which ultimately boosts their self confidence (Jin & Ye, 2022). While the wooden decorations would embellish the plain fences greatly, the predominant benefit is that it allows students to feel a sense of inclusion. Starting high school is overwhelming for many, and using grade 8's artwork to decorate the school is an effective way to welcome them.

*Especially like this idea!*

### Conclusion

There are several ways the grassy areas near the portables in Walnut Grove Secondary can be used to benefit students' physical and mental health. The suggested implementations include an undercover patio with a barbeque grill, a school garden, and wooden alligator decorations to the fences. Place-making is a predominant concept in urban planning and design, and each of these proposals would make the school a more inviting place for students.

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Fig.1 explain what this picture is



Fig.2 explain



Fig.3 explain