

**An Investigation into Placemaking for the New SUB: Board Games & Graffiti Wall**

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**University of British Columbia**

**APSC 261**

**November 22, 2012**

*Disclaimer: "UBC SEEDS provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student project/report and is not an official document of UBC. Furthermore readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Coordinator about the current status of the subject matter of a project/report".*

UBC Social Ecological Economic Development Studies (SEEDS) Student Report

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# **An Investigation into Placemaking for the New SUB: Board Games & Graffiti Wall**

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## **ABSTRACT**

Upon the new scheduled opening of the AMS new Student Union Building, restaurants, and social spaces will be released for students to occupy. In an attempt to connect all students into engaging and using the new Student Union Building as a vibrant social lounge space, different types of entertainment are being considered. The purpose of this report is to define the process of placemaking in the new SUB while assessing triple bottom line analysis on interactive board games and graffiti walls; the analysis consists of an economic, social, and environmental assessment. Research through these sections was gathered through academic papers, websites, and primary survey sources.

Two different types of entertainment solutions are reviewed; these are interactive electronic design walls for creating ideas and the other are board games for leisure purposes. A thorough analysis of each type of entertainment set was performed to focus on the economic effect, durability of each entertainment categories, and the social aspects for each type.

This report concludes that design boards are more suitable for engaging students with one another in the new SUB. The design board walls are easily erased and replaced, economically saving in a long term, and also more durable with less individual pieces, meeting all requirements in the desired triple line assessment.

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## **GLOSSARY**

- LCD                      liquid crystal display
  
- Thermosetting Plastic                      Plastic that hardens permanently after one application of heat and pressure
  
- Stewardship sustainability                      Ethic responsibility towards planning and management and linking to
  
- Sociability                      Inclination or quality of state towards being sociable

## **1.0 Introduction**

One of the goals of the new Student Union Building (SUB) is to improve the social atmosphere of the building by including a variety of games and social activities. The current SUB is designed to house clubrooms for Alma Mater Society (AMS) clubs to use; its design does not include any promotion towards social interaction or sense of communal cooperation through the concept of placemaking. Therefore, a triple bottom line assessment was implemented to address this concern.

Our assessment evaluated two topics: the availability of boards games in the new SUB and the concept of a graffiti wall for students. Primary sources are collected through student surveys from UBC students while researching through academic articles and websites. The student survey provided us with valuable information in terms of social aspects; however, limited resources were available while evaluating the economic and environmental portions of the triple bottom line assessment. The concept of placemaking has also been discussed to show a connection between the new SUB and the two social ideas that we have investigated.



## **2.0 Placemaking**

During different stages of designing the new SUB, students have expressed that the new building should serve as a “campus living” room (Longhurst, 2012) , where social spaces should be created to allow students to engage activities actively and be able to identify lounges where studies or communal hangouts. To make proper informed decisions in planning allocated social spaces, each structure built should be designed through the fundamental elements of placemaking. This section of the report is a detailed explanation of the term placemaking (with four categories) and how its importance plays a role in the design process of the new SUB, along with an example of a physical structural layout that can increase social life in public spaces.

### **2.1 Definition Analysis (Placemaking)**

The term “place-making” is a multi-layered design, planning, and management process of landscapes and spaces with a sole purpose of introducing communal responsibilities to connect different social aspects together, creating a common vision of enjoyment and use of public spaces. The importance of place making lies within the intangible aspect of society and community, where public spaces are evaluated not only based on the physical attributes, but also how each structure built in a public space connects with everyone – students and professors - with a sense of “communal stewardship” (cityrepair).

To perform an accurate analysis towards the concept of placemaking in the design process of public spaces, there are four fundamental categories: sociability, uses & activities, access & linkages, and comfort & image. Using these four aspects, the approach of placemaking will integrate diverse opinions into one consolidated space to unite different ideas that can increase communal spirit and foster social networks in social spaces.

Listed in Figure 2.0.1 are the four categories that evaluates the process of placemaking to improve public spaces; this diagram, also known as the Place Diagram (“*A Guide to*

*Neighbourhood Placemaking, 2008*), is often used to consider different approaches towards building structures that increases communal bonding.

**Figure 2.0: Place Diagram**



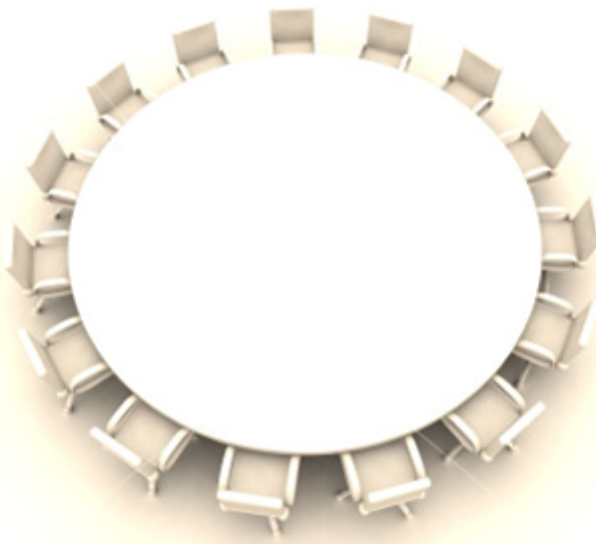
With the scheduled opening of the AMS New Sub in September 2014, new restaurants, lounges, and social spaces will be available for students and professors to use. The new AMS Sub project will need structural design that can designate lounges specifically for games and activities, as well as group studies and gathering. Following the concept of placemaking in Diagram 2.0.1, the restaurants and placements of stores falls under the category of “Uses & Activities”, sanitation and the building conditions of the new AMS is part of “Comfort & Image”, the placement of tables, social spaces, lounges, and physical structures are part of “Access & Linkages”, while the expected gathering of students at tables or games will

rate the “Sociability” of the new building. These are all the categories that describes the term “placemaking” in the AMS new SUB.

As written in Fleming’s *The Art of Placemaking*, public spaces should have a sense of safety and communal responsibility through the physical structures built in the place. One purpose of place-making designs is to manipulate the physical surroundings into creating spaces for students to gather together for sociable leisure and accessibility. Since there are many students in this campus that are engaged in video games and online competitions; the AMS new SUB should provide physical structures or furniture that allow groups of students to gather and perform such events. Students can also use these physical structures to lead discussions or host small gatherings.

Show in Figure 2.1.1, roundtables are physical placement of tables and chairs that can be situated in social spaces to engage students to interact with each other or foster spaces for discussion.

**Figure 2.1 Roundtables**





### 3.0 Board Game Analysis

The analysis of regular board games has been conducted using the triple bottom line assessment. After conducting a survey with UBC students, the majority of students were interested in Taboo and Monopoly. The amount of information on the economic and environmental factors of the triple bottom line assessment are quite limited; therefore, the social aspect was used as the main indicator of whether or not board games should be included in the new SUB.

#### 3.1 Economic Assessment

Due to the limited amount of economic factors, a comparison of various board games are selected to compare the cost of each game. Figure 3.0 illustrates the costs of these board games at different retail prices. By comparing these values, the prices for these board games are pretty standard for the four different companies, with the exception of Monopoly Deal. There is no maintenance cost after buying the board games; however, we will have to replace the board games every few years due to problems such as pieces missing and the board games breaking. The cost of replacing these five games when they are unusable is approximately \$110, an affordable price.

	<b>Sears</b>	<b>Toysrus</b>	<b>Walmart</b>	<b>Amazon</b>
<b>Taboo</b>	\$32.99	\$32.99	\$31.93	\$31.99
<b>Monopoly</b>	\$19.99	\$19.99	\$19.44	\$18.99
<b>Chess</b>	\$17.49	\$34.97	\$35.99	\$37.95
<b>Twister</b>	\$19.99	\$19.99	\$19.44	\$22.91
<b>Monopoly Deal</b>	\$20.25	\$5.24	\$7.87	\$15.99

**Figure 3.0 Approximate Prices of Board Games**

## **Environmental Assessment**

Currently, the materials used in board games are not sustainable resources and cannot be recycled. The plastic that is commonly used is made of thermosetting plastic waste. These plastics are made of materials that are usually disposed of through burning and burying, which is an extremely costly process (Panyakapo and Panyakapo, 2007). However, there has been research conducted to illustrate how these plastics can be reused in the development of concrete.

By using thermosetting plastics as part of concrete, the strength of the concrete increases if the correct proportions of plastic is added into the mixture. Up to 60% of the sand involved in the production of concrete was replaced by thermosetting plastics throughout the experimental process (Dweik, Ziara and Hadidoun, 2008). The compressive strength of the concrete was maximized when plastic waste replaced 30% of the sand (Dweik, Ziara and Hadidoun, 2008). By taking this into consideration, board games are sustainable because the plastic waste produced when disposing the board games can be reused in the production of concrete.

### **3.3 Social Assessment**

Our main indicator for the social aspect was the use of a survey that was completed by current UBC students. The survey obtained information on the percentage of students interested in playing with board games and what kind of games they prefer. Research has also been conducted to help us gain a better understanding of the types of board games that are more interactive.

The survey that we created had approximately 69 responses that were all valid towards our findings. As illustrated in Figure 3.1, the survey told us that approximately 58% of these students would be interested in spending their free time playing board games in the new SUB. Because there is the problem of board games going missing, we also asked if students were willing to temporarily trade in their student card to play with the games. Figure 3.2 shows that 71% of the students agreed with this idea to ensure that games are returned.

Would you spend your free time playing boardgames in the new SUB?

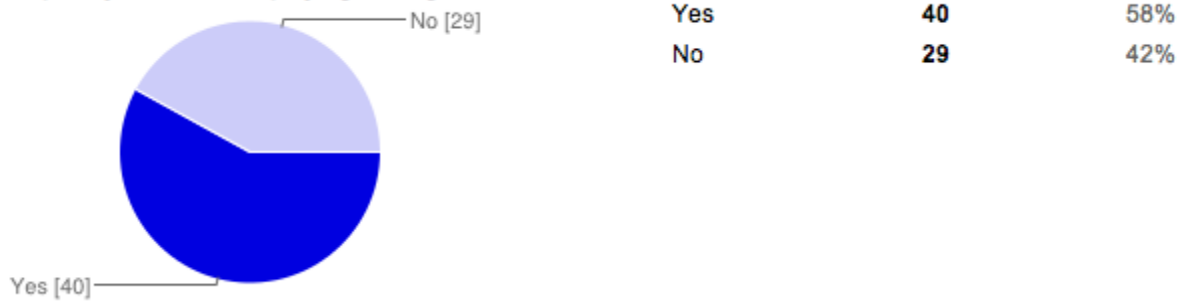


Figure 3.1 Students Interested in board games

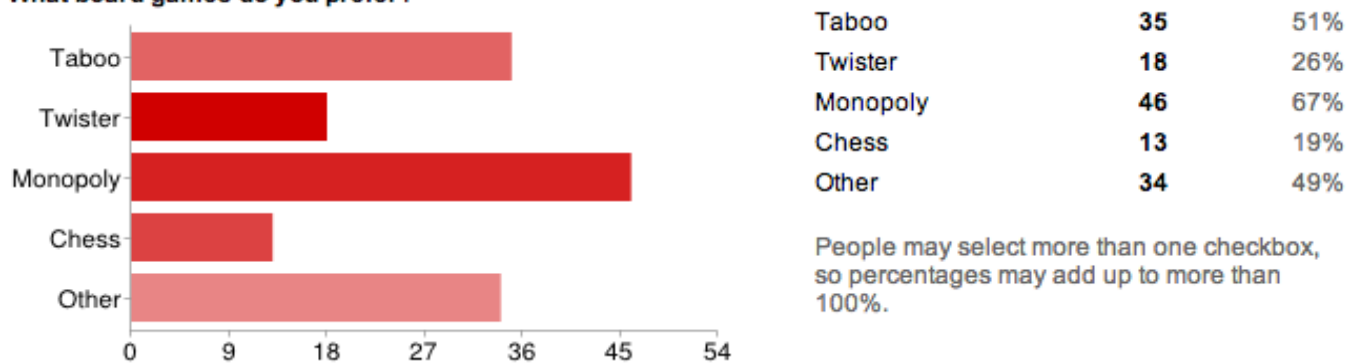
If board games are provided, would you borrow them by temporarily exchanging your student card?



Figure 3.2 Exchanging Student Cards for Board Games

Research has also been conducted that explains the types of games that people find more engaging. Studies have been conducted which explains that people prefer games that keep them constantly active. Most board games involve turn taking; as a result, one person is usually the passive person where they have no input to the game (Krzywinski, Chen and Rosjo, 2011). This passive person tends to get bored and is constantly looking for ways to entertain themselves while waiting for their turn. This provides us with a better explanation of the results of our survey. When asking what board games the students prefer, our survey shows us that the majority of people prefer Monopoly and Taboo, where 67% of students prefer Monopoly and 51% prefer Taboo, as shown in Figure 3.3. Both of these games have tasks which the players must complete even though it's not their turn; therefore, they are constantly being involved and engaged in the game. Board games also provide a better social atmosphere since it requires the players to face each other while playing the games (Tse, Greenberg, Shen and Forlines, 2006).

### What board games do you prefer?



**Figure 3.3 Preferred Board Games**

Considering that this is a small amount of student surveys compared to the entire student body of UBC, it is recommended that further research and surveys should be conducted before coming to the solid conclusion that UBC students will favour board games. However, the majority of students were in favor of including board games in the new SUB that allowed everyone to engage within the game at once, increasing the sense of communal bonding . Since research on the economic and environmental analyzes are greatly restricted, the social assessment towards the idea of board games is the key factor that has been used whilst determining our conclusion.

## **4.0 Graffiti Wall Analysis:**

The analysis of the graffiti wall concept has been conducted using the triple bottom line assessment. After conducting a student survey, the majority of students were quite interested in the concept. Many of these interested people believe that graffiti can be a good way of expressing oneself, but they are also concerned about the possibility of misuse. There is some information that we can use for economic and environmental indicators, but there is more of a social stigma that graffiti carries. This report investigates the economic, environmental, and social aspects of a graffiti wall.



#### 4.1 Economic Assessment

The research conducted on the graffiti wall brought about three possible mediums: LCD Touch Screens, Dry Erase Boards, and Windows/Glass walls. Figure 3.0 below illustrates the size and costs of each medium.

Medium	Size	Price
LCD Touch Screen	22" diagonal	~\$460
Dry Erase Board (White Board)	Largest at 8 x 4'	\$275
Window/Glass Wall	Dependent on Social Space Size	Varies with thickness and size

**Figure 4.0 Approximate Price of Graffiti Wall Mediums**

For replacements and repairs, the LCD screen would be the most costly. Sometimes it is not even possible to replace components, and the resulting cost would be for a full replacement. Unfortunately this is the reality of some technologies, in which one must replace the whole thing more often than repairing the damage.

Purchasing dry erase boards from companies will usually include metal frames, erasers, and markers. If the choice is to make a whole wall out of a similar material that dry erase markers can be used on, it can be done with a few trips to the local department store for white panel board with acrylic melamine coating. Without the metal frames it is easier to cover a whole wall with white panel board to use as the writing surface. Any damages to one panel can be easily replaced with a fraction of the cost of replacing a whole whiteboard.

If the medium were to be glass, then the architecture of the social space can be used to implement this. If a whole wall were to be made of glass, then this surface can be used as the medium for the graffiti wall. It wouldn't incur extra costs if the glass was already planned to be used in the design of the social space, and the maintenance costs would be the same if there were

to be any windows or glass walls. Durability and reliability will be the main factors for repair costs.

## **4.2 Environmental Assessment**

With each medium come different environmental factors. Each is made of different materials and during production creates different kinds of wastes.

The LCD Touch Screen produces the most harmful wastes during production, since it needs a variety of materials and each material is manufactured separately. Some of the materials are recyclable, and when the screen is broken down or outdated can be taken and stripped of the reusable materials. During the recycling process, there is more waste created, making it the least environmentally friendly option of the three, but improvements are constantly being made.

The most hazardous material would be the mercury in the backlights of the screen. Mercury is a known neurotoxin, but it can be recycled and kept out of landfills and garbage dumps. Companies that produce LCD screens are also reducing the amount of mercury in their products which makes them safer.

The Dry Erase Boards are often made with melamine, which is a resin that infuses with paper to create a smooth surface. This is one of the cheaper options for dry erase boards. The melamine is heated to fuse with the paper. Unfortunately not much information was available about the production processes, but some gaseous wastes can be safely assumed when it comes to using heat with resin.

Glass production does create some adverse effects for local environments near the factories. The main impacts on local environments are noise, fresh water use, water pollution, nitrogen oxides, sulfur oxides, and dust. Since the glass we are considering to use for the social space is meant to be used as the wall, it wouldn't incur additional pollution compared to adding LCD screens and dry erase boards into the social space. If the glass is durable and long-lasting, the environmental costs will be paid off over time.



### 4.3 Social Assessment

Visually, there isn't as big of an impact with the LCD Screen as there is with the other two mediums, as it is limited to size. Although the ability to zoom in and out of the full picture is convenient, the full effect of the mural cannot be viewed in its entirety without it being on a larger scale. However, an increase in the interest of high-tech gadgets has been viewed all around in society, so it may draw people in with that factor.

The dry erase board and glass mediums are much more immediately eye-catching, especially if people have already used them to express themselves. With a larger canvas, the appeal is much more immediate and people begin to wonder what is going on. If there is just a LCD Touch Screen on the wall, some may pass by and believe that it's just a television. However, if they pass by a mural with many forms of expression, they have a tendency to take a look while walking. There is no pressure to stop and scrutinize it; they can see the overall impact of the whole mural simply by taking a glance.

There is a majority interest in the graffiti wall, with a 65% approval rate in the survey that was conducted. Many are worried about people writing or drawing negative thoughts, such as racist comments. This is a major issue with any medium that promotes free-thinking. In the case that this were to happen, and in the case that the social spaces will use the aforementioned game rental system, the same person that oversees the rentals can also check the graffiti wall for any racial slurs, offensive drawings, etc., that may be present on the graffiti wall.

In the US, there was a study conducted in which graffiti from several prestigious post-secondary institutions was sampled and examined. The percentage of graffiti that was considered a form of insult was below 5% for all four institutions (Dombrowski, 2011). Everything else could be categorized into other categories and had a lot to do with forming the culture of the school. It created a community where one can ask a question and not be afraid of the social stigmas that the question may lead to.

There is a belief that the majority of users will make the graffiti wall a positive impact on the UBC community. It is true that graffiti in the eyes of the more elderly is seen mostly as vandalism or has a relation to gangs or racism, but like any idea, it evolves over time. It has become another form of self-expression and art. People think critically about the messages they want to tell the world, and make the viewers think hard on the messages as well. However, it is a bit early to tell if this is a truly good option for the social spaces, as a larger portion of the UBC student body should be surveyed before finalizing a

conclusion.

## 5.0 Conclusion & Recommendations

Involving the fundamental concepts of Placemaking, where both sociable and physical structural aspects are considered, we considered using both board games and graffiti walls to allow students and professors to identify the new UBC Student Union Building (SUB) as a welcoming lounge, enhancing the a sense of communal stewardship.

After conducting the triple bottom line assessment for both board games and graffiti walls, we would recommend the usage of both concepts as part of the design of the new SUB's social spaces. By taking into account the economic factors, board games are an affordable form of social activity with a cheap replacement price. Ecologically, the plastic waste produced from board games can be used in the process of making concrete. Finally, the board games can improve the social atmosphere of the SUB because it provides face to face activities.

According to our bottom line assessment, using the glass walls as the medium for the graffiti wall would be the best option; the price of a glass wall can be partially mitigated since it is replacing a wall possibly made of another material. The ecological downsides of making glass are lower compared to the production of an LCD screen, and the average lifetime of glass is much longer than LCD screens. Finally, a glass wall is much more visually stimulating compared to the size of an LCD screen, and can be viewed from two sides unlike a dry erase board wall. and the board games are convenient and cheap enough to purchase and replace in case of lost pieces or damage.

Comparing all the information found through primary and secondary sources, we recommend the implementation of both the availability of board games and graffiti walls in the new SUB. However, we feel that there needs to be a wider scale of surveying and sampling as our results only represents a small fraction of the UBC community.

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## APPENDIX - Survey Questions

### Apssc 261 Survey

\* Required

**Would you spend your free time playing boardgames in the new SUB? \***

- Yes
- No

**If board games are provided, would you borrow them by temporarily exchanging your student card? \***

- Yes
- No

**What board games do you prefer? \***

- Taboo
- Twister
- Monopoly
- Chess
- Other:

**Would you play games implemented in the environment? \***

Installed in the walls or floors

- Yes
- No

**What comes to mind when you think about graffiti?**

**Would you participate in drawing on a "graffiti wall" if available in the new SUB? \***

- Yes
- No

**How concerned are you about inappropriate materials written on the "graffiti wall"? \***

1   2   3   4   5

---

Not Concerned                  Very Concerned

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**Would you prefer the "graffiti wall" on: \***

- Regular White Board
- LCD Touch Screen
- Windows (using erasable window marker)