

# Learning in Informal Library Spaces

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The Value for Students

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## **Introduction**

This paper presents the results of a study of student perceptions of design features of informal learning spaces in an academic library. The purpose of the study was to determine what relationship exists between the design of learning spaces and student learning behaviours. Inspired by Bennett's (2015) comments on the need to go beyond the placement of things in libraries to the purposeful design of libraries for learning, this researcher was intent on discovering what students thought about how the features in a newly built library supported their learning. The goal was to identify possible best features which support informal learning to assist in future design-related decision-making. The results of the study show that more research is needed into the effect of space on learning in libraries. It also reveals interesting results on what students think about their own learning and its relationship to library space.

## **Background**

Academic libraries are in a state of change. New spaces are being created for collaborative learning, knowledge creation, and research. The spaces have been deemed successful in most part due to high levels of use by the students. Throughout her career this researcher has noticed that students have consistently come to the library to use it as a place for learning. Spaces can be good, bad or indifferent, but they still keep coming. My constant questions have been what are the learners doing and why are they doing it in the library? An opportunity arose to investigate these questions when the Taylor Family Digital Library (TFDL) opened at the University of Calgary. The University of Calgary is a research institution with a broad range of 4-year undergraduate programs in STEM and AHSS as well as intensive masters and doctoral programs. The TFDL is a modern 21<sup>st</sup> century academic library which offers a variety of student spaces spread over six floors. From open spaces for lounging to workstations in an open lab setting to quiet study spaces with carrels and tables, there is something for everyone. Students select and use the different spaces for their own purposes. In an observational study (Beatty, 2015) students in the TFDL were observed using the various spaces and participating in a variety of learning activities. Their behaviours were purposeful and intentional. But why they preferred the library was still unclear. To learn more about the students and why they choose to use certain spaces it was necessary to move beyond an observational study to a more direct study based on interviewing students who use the spaces in the TFDL to learn.

## **Methodology**

In 2016, a qualitative study was conducted using a series of semi-structured interviews. The study was funded by a University of Calgary teaching and learning grant. Print and digital posters were posted in the TFDL asking students who learn in the library to volunteer for a one hour interview. Students were offered a gift card as an incentive and in recognition of their time. Students were screened to ensure a good spread of disciplines and that they were active learners in the TFDL. In total, 21 interviews were conducted. Interviews were recorded with permission, transcribed and analysed using NVivo software. Students were asked to comment on their learning activities in the library and where, how and why they chose a particular place in the library to work. They were also shown a series of 15 photographs of various informal learning spaces in the library and asked to comment on how each space might be useful as a learning space. They were asked to comment on the features in the space that supported or would not support learning in their view. While they might comment on the space that they used most frequently, the purpose of discussing the photographs was not to identify a space as good or bad or to talk only about the space that they use, but to prompt the students to consider what it was about a

particular space that might be supportive to any learner as well as to themselves. As per the ethics approval, students were sent the interview questions as well as a copy of the photographs prior to the interview. This allowed for some preparation by the students.

## **Results**

Of the twenty-one students, eleven were female. Twenty participants were undergraduates with eleven in second year or below and nine in third year or above. Three undergraduates had completed a previous degree. They were all regular users of the library. Most made 3-5 visits per week to the library and generally stayed up to three hours at a time, with seven students normally staying more than three hours per visit.

Students were asked to discuss their learning behaviours and preferences. They also discussed the main features that appealed to them in a space where they would be learning. They described themselves as successful learners or at least well on their way to learning to learn. Their learning included a variety of activities such as reading, making notes, writing, conversation with others. They were familiar with the types of spaces in the library and each student generally preferred one location or type of space over others. The determinant for the type of space generally had to do with how they preferred to learn. The most frequently mentioned space features were not surprising in and of themselves. What was surprising was the varying opinions about any one feature or type of space. That is, a feature could be either an incentive to learning or a disincentive depending on the learner or the particular learning goal of the day. Most interestingly, the preferred features had to be in a certain combination for each learner and each learner knew instinctively what that would be.

### *Space design elements*

When the students viewed the photographs their comments ranged from “I would never use this space” to “I know it but I only go there for a particular use” to “that is my space”. The elements that generated the most comment and critique are as follows:

- **Sound and lighting:** Environmental factors played strongly in the choice of space. Sound was the most frequently mentioned element. The TFDL has three floors where conversation is allowed and three quiet study floors. Students would seek out quiet or noisy floors depending on their preferred environment. Students generally preferred natural lighting, but some made no comment at all on lighting, focussing on other elements more significant to them.
- **Distraction:** Students either preferred distractions such as a view of the mountains or being able to see what other folks are doing to avoiding distraction all together. Negative distractions could be such events as people traffic, reoccurring noise, or smell or even sitting across the table from someone.
- **Openness:** This element was described as an area not isolated or confined. Again, a space could be too open, with too many distractions and therefore not desirable.
- **Alone or together:** Students had a strong preference as to whether they would work near others or not. Either they would want to be away from or near others. Those who preferred having others nearby saw it as a way to either have access to those who could assist with their learning if needed. Or, they would simply prefer to be among those whose presence would act as a motivator. Those who preferred to be isolated felt the need to remove themselves from distraction.
- **Work space/furnishings:** Students need “enough space” to work and organize themselves and their belongings. They know how much space they need and will choose a space accordingly. If a work space is too limited for their needs, they will avoid it.
- **Electrical outlets:** While this study did not focus on technology some students did comment on the need for outlets. Proximity to an outlet was a possible determinant but not a critical priority. If other elements were in place, the student would prefer their “best space” even if an outlet was not available. They would adjust their work time accordingly.

### *Value of library learning spaces*

While the students were discussing their learning space preferences and their own learning behaviours it became clear that there was a subtext to their discussion. The purpose of this study was not to discuss what students thought about the library in general. However, they would often comment on how and why they viewed the library as a place to learn. There is value in having a physical library in which to learn, according to the students. This value is multi-faceted and based on students viewing themselves as self-directed or intentional learners who see the library as a place where they can best accomplish their learning goals. They see the library as a place where they can accomplish many goals at once, from printing to research to writing and yes, to relaxing and catching up with friends. Multi-functionality is critical to them as it allows them to use their time well. The library is also viewed as having an atmosphere that encourages and supports learning. This unique atmosphere provides students with motivation and encouragement. Students also prefer to take ownership of the space that they use. The concept of space ownership and control has been explored by Zimmerman (1989) and others in research related to self-regulated learning. Self-regulated learners take control of their environment and their learning behaviours in order to achieve successful learning outcomes. The library enables students to adjust their environment to suit their learning preferences which then allows them to achieve their learning goals. Finally, and perhaps most significantly, the students perceive the library as a symbol of success and academic achievement, representing their ultimate goals. Why are these elements of note? It seems that libraries not only need to provide spaces for learning with elements that support learning, but they also need to pay attention to the value that students place on the physical library and reinforce those values as well, so that students will recognize and use the library as a learning place.

### *Limitations*

This is a small study. Students self-selected based on the recruiting poster which called for students who learn in the library to volunteer. While there was screening to capture as broad a demographic sample as possible, there was no attempt to recruit a representative sample. As well, there was no attempt to recruit students who do not use the library spaces and prefer other spaces for their learning. This was a study of informal learning spaces in one academic library. Further investigation of students using other library spaces as well as other informal learning spaces across campus and elsewhere is needed in order to gain a larger understanding of how space design of informal learning spaces affects learning.

### **Implications**

This study identified various elements in space design that should be considered in combination when designing informal learning spaces in a library. It also uncovered the value students place on the physical library as a place of learning. It is an exploratory study. Further research into the relationship between learning preferences/styles/behaviours and space is needed to increase understanding of how and why students use the library for learning and to identify more precisely those combinations of design elements which support informal learning. Most significantly, from this study, it is clear that more conversations need to occur with students about how and why they learn in informal spaces in the library and the value they place on library space.

### **Outcomes: the need for comfort**

A significant outcome of this study was uncovering the concept of comfort and its relationship to learning. Students frequently commented on the need to be comfortable so that they could learn. Upon further exploration it became clear that comfort to them meant physical, emotional and mental comfort that created a feeling of openness and readiness to learn. The elements identified in the study combined for each student in a specific “right way” so that each was ready to learn and to accomplish his or her goals.

### **Outcomes: design**

For the designer who is looking for hints, the most likely best learning space for students is the space that looks like it offers the opportunity for them to be successful learners. They know it when they see it. The purpose and features of the space should be obvious. Make sure there is enough desk space, vary the furniture arrangement and work space size, and allow for

privacy or for space to be with or near others. Have the nature of the space be obvious, for example, make clear that it is a place for quiet learning or a space for conversation. Transitional spaces should be obvious so that there is no boundary crossing or miscommunication about the nature of other spaces. Furnishings should be flexible. The appeal of various spatial elements is unique to each individual but the values underlying the choices are universal. It is not practical to make each space unique, the learner will do that, but it is desirable to consider the learner to make sure you are doing it right.

### **Originality and value**

This study focused on student learning in informal spaces in a library. Throughout the study it became apparent that no one had talked to the students previously about the way they learn in the library or what they think about the relationship of space to their learning. It was also apparent that they had never really thought about it themselves. It was a new concept. To them, their choice of learning space was just natural. The results show that there is a need for further conversations and investigations into how students learn, where they learn and why, and how those elements feed into designing informal learning spaces in libraries and elsewhere. As more academic institutions create informal learning spaces in libraries and across campus, they will need to understand the relationship between learning, space and learner in order to create purposeful, comfortable spaces for learning.

### **Further reading**

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