

The Digital Media Commons at UNC - Greensboro's Jackson Library:  
An Observational Study  
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## Introduction

Over the past decade there has been a change in students expectations of spaces and services in academia. As Bennet (2003) noted, “At the same time the technology was being made available to the user, advances in learning theories were emerging. A long-gathering understanding of students’ most effective learning behaviors was making itself felt in the adoption of active learning practices. Students everywhere were increasingly working in collaborative study groups of their own making, to engage more strongly and often more adventurously with their coursework. Recognizing the power of this mode of learning, many faculty members built experiential and problem solving materials into their courses and shaped assignments around the expectation of collaborative study. In these and other ways, the daily practices of learning and teaching saw widespread, fundamental change. Quietly but powerfully, American higher education acknowledged and began to engage with the social dimensions of learning and of knowledge” (p. 3).

Academic libraries responded by creating new kinds of spaces. Known as a Commons (Information, Learning, Media, or Knowledge), these places, as Macwhinnie (2003) described it, “generally include collaborative learning spaces, multimedia workstations, hi-tech classrooms, and group study spaces. These features are designed to enhance group learning, to encourage faculty to incorporate technology and new information resources into their curriculum, and to provide a technologically advanced setting for conducting library instruction” (p. 244).

In September 2012, the Digital Media Commons (DMC) opened in the lower level Jackson Library on the UNCG campus in a space that was created out of former stacks and storage. It offers a mostly open floor plan containing an assortment of attractive and functional furniture, full featured media workstations, media creation rooms, cubicle style rooms used for group consultations, a presentation practice room and a group meeting room. It also has trained staff who, among other things, assist the users with various aspects of the technology.

A past experience with a Commons at the University of Michigan inspired me to engage in research in the new Digital Media Commons at UNCG. The purpose of the research was to focus on the users of the Commons and their activities there within the context of the Commons as a place of knowledge creation.

## Statement of the Problem

The objective for this research was to perform an assessment on the DMC to determine use and activities, with an eye towards features defined as key. These features were informed by earlier work I did (2012) that revealed access to technology and collaboration as key to a Commons. During a preliminary visit students of both

gender were observed scattered throughout the Commons, with certain areas seemingly more popular. Some users were working in groups, and many laptops were in use. This visit suggested targets for assessment, which resulted in five study questions:

1. *In general, is there any evidence of gender bias among the users of the DMC?*
2. *To what degree do the users participate in collaboration?*
3. *To what extent is technology being used?*
4. *What activities are the users engaged in?*
5. *To what extent are the users using the different areas of the DMC?*

## The Literature

A body of work emerged that addresses a Commons as an entity designed for knowledge creation. The work addresses the importance of access to technology and the need for spaces that respond to collaborative activities.

Bennet (2003) wrote about the essential social dimension of knowledge and learning [that] conceives of libraries as spaces where learning is the primary activity and where the focus is on facilitating the social exchanges through which information is transformed into the knowledge of some person or group of persons ( p. 4)

Lippincott (2006) describes how, as students mix academic and social activities, they require “an environment that nurtures these activities by providing content in a variety of formats, technologies that might not be affordable to individual students, and spaces built to encourage collaboration and interaction” (p 7.5). She further states that a Commons is a place where “Personnel assist with users’ technology needs, not just their information needs” (p 7.3) and that “A key purpose of a...Commons is to leverage the intersection of content, technology, and services in a physical facility to support student learning” (7.6).

Sinclair (2007) describes the intent and potential of a well-designed Commons: It incorporates the freedom of wireless communication, flexible workspace clusters that promote interaction and collaboration, and comfortable furnishings, art, and design to make users feel relaxed, encourage creativity, and support peer-learning. To this add self-help graphics services, color imaging, audio and video editing, and other production and presentation software and it becomes a one-stop collaboratory for out-of-class assignments, writing, research, and group projects (p. 4).

MacWhinnie (2003) wrote about the importance of “group study facilities that have technology for access to both physical collection and electronic resources, as well as productivity software that allows students to work together to complete shared assignments” (p.242).

Much has been written on the need for and means of conducting assessments within library spaces and within a Commons.

Dugdale and Kainz ( 2006 ) discussed the importance of technology use in a Commons as emerging from the work environment and the users.

Hunley and Schaller (2006) examined the need for assessment data to determine whether a space enhances learning, mentioning the importance of libraries as a place for informal learning. They go on to discuss the need for “a comprehensive assessment of learning space [that] addresses the use of physical space that accommodates formal as well as informal and technologically based learning” (p13.3). They discuss a multiple methods study conducted to determine the relationship between learning and physical spaces and found evidence that students were most engaged in settings and in activities that encouraged social interaction and use of technology. They conclude that well-designed assessments will provide the information needed to confirm the impact of learning spaces on learning.

Lippencott (2006) mentioned the need for a coordinated assessment program for the information commons. Such a program could combine statistical data (gate counts, use of equipment and software, information requests) and qualitative data (interviews with student and faculty users). Ideally, results can be compared with data gathered prior to construction of the information commons. This data can reveal needed changes (satisfaction with services, need for additional equipment or software), justify additional funding, and demonstrate the commons’ contribution to teaching and learning” (p7.1).

Haas and Roberson (2004) Look at how a new service model fits into the existing framework of user assistance offered in academic and research libraries today. They discuss assessment using survey methods and informal feedback to determine fit and satisfaction in academic and research libraries, with the intention of helping other libraries design services that will meet the needs of their communities.

Schmidt and Kaufman (2007) wrote about assessment that use surveys for better understanding of student needs and use of focus groups for determining usage and operations

Glven and Leckie (2003) examined the use of a “seating sweeps” observational method in a study of individuals’ use of public libraries in two large Canadian cities. The study operates from an investigation of the uses and meaning of central public libraries as social spaces occurring within the context of North American culture and also asks more specific questions about individual’s use of the spaces.

MacDonald and Haug (2012) reported on an intensive assessment conducted for

the Edmonton Public Library system using two rounds of behavioral sweeps. They charted data for different branches such as group use, use of spaces, technology, possessions, furniture, and noise levels, and included information gathering with staff.

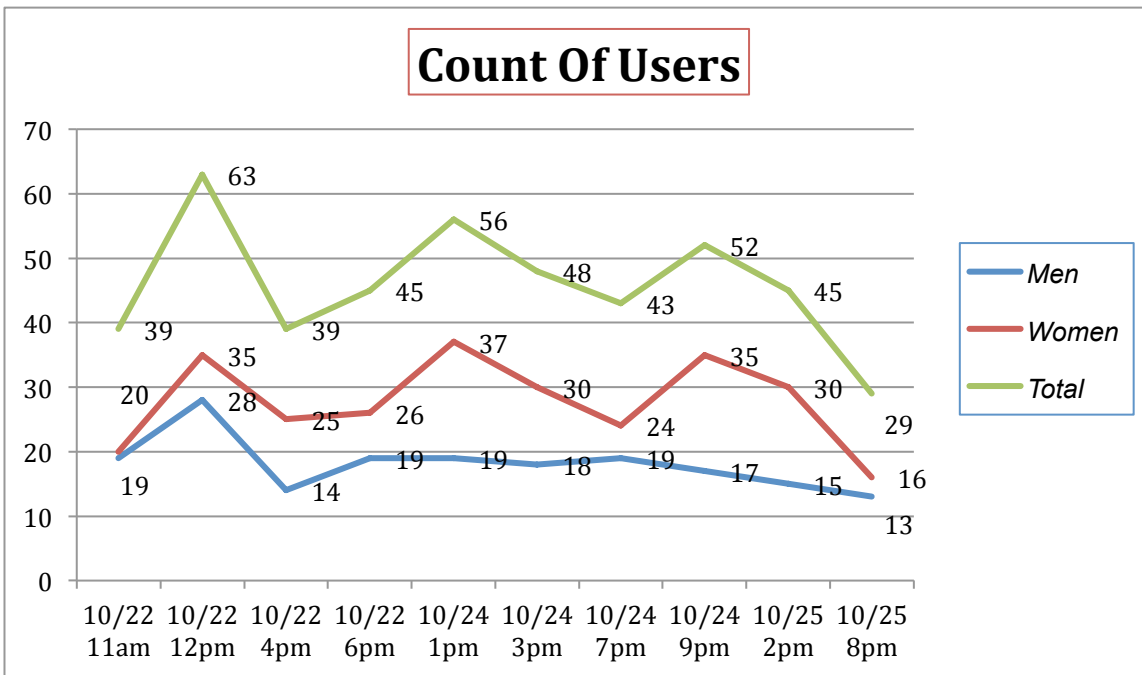
**The Method**

Following the example of MacDonald and Haug, an observational study method known as “seating sweeps” was used to gather data.

Three weekdays within the same mid-semester week were randomly chosen and 36 possible time slots occurring from 10 am to 9 pm over those three days were then identified. Using a randomizing tool (Research Randomizing Tool (2012), Social Psychology Network) 10 sweeps sessions were established. During each sweep, for each customer encountered the following data was recorded:

1. Date and time
2. Basic demographic information - male or female
3. Location in the DMC.
4. Activities and materials of the user - use of laptop, workstation, study materials, or other.
5. Whether or not user part of a group and the size of that group.

Data for 459 users was collected. Data was then input into Microsoft Excel for analysis.

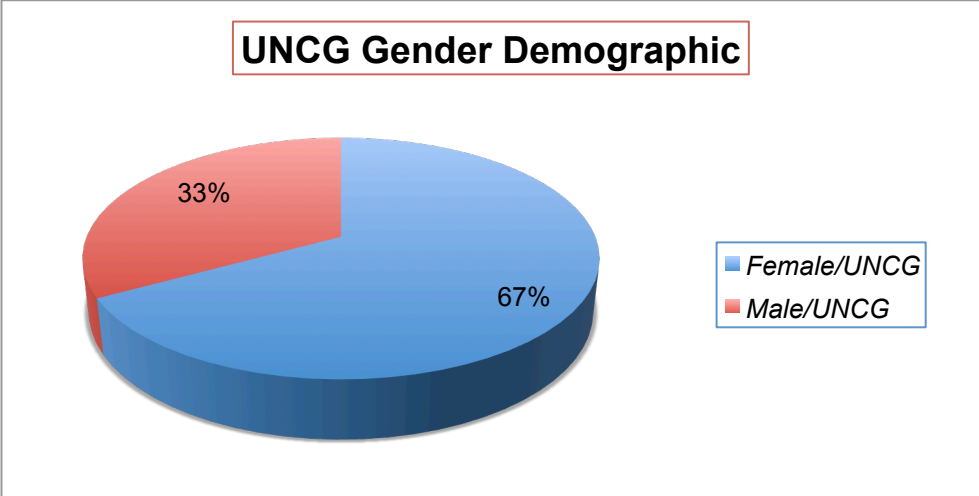
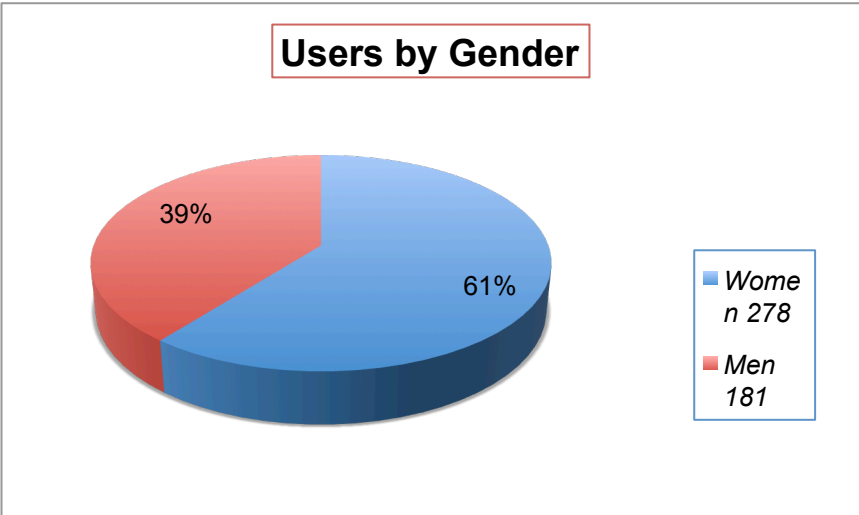


**Findings**

Findings included in each section are based on the data recorded during the seating sweeps.

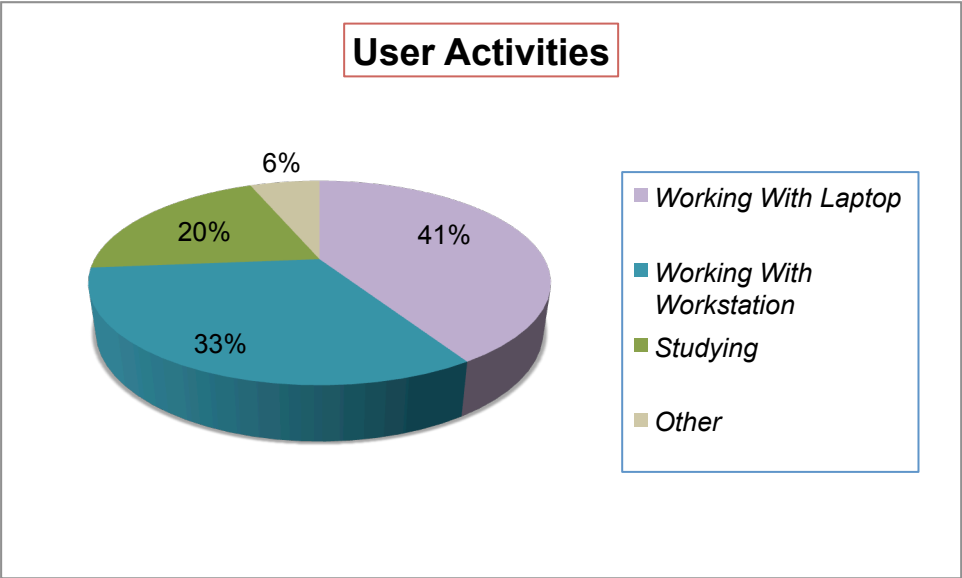
**Demographics**

There were more female users than male (278 women, 181 men) (61%/ 39%). This is close to the gender ratio (69% / 33%) of the University so one could conclude that there is no gender bias among the users of the DMC. However a consistent 6% skew to the numbers required closer examination. Expressed as a proportion of the population there were 1.54 women for every man using the DMC. University demographic is 2.03 women for every man; **therefore there may in fact be a gender bias among the users of the DMC.**



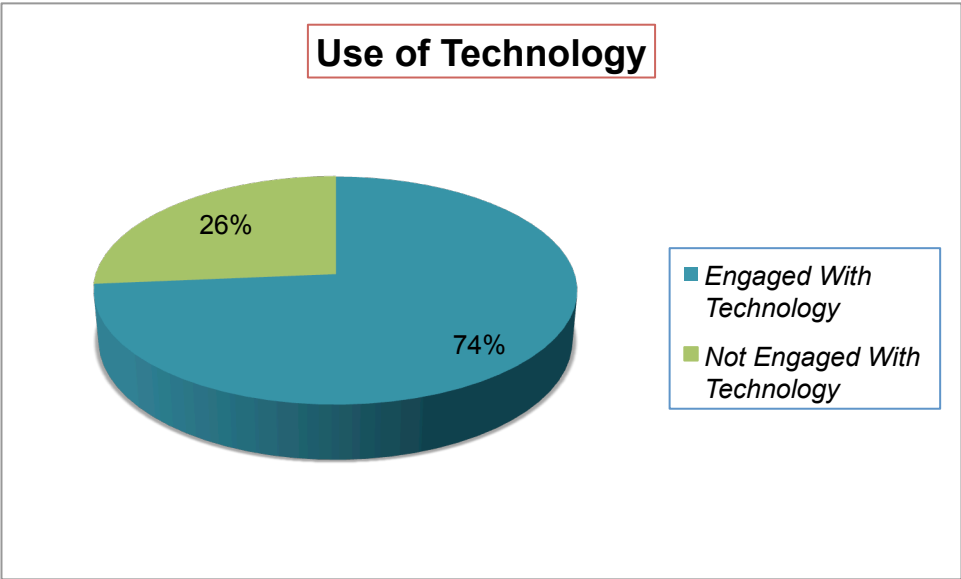
### User Activities

Over the course of the sweeps activities were tracked by noting the materials the person was using such as laptops (tablets were included in here), workstations, study materials or other (food, phone, ipod). To determine activity of a user with more than one kind of material, direct observation was used and primary use noted.



### Engagement With Technology

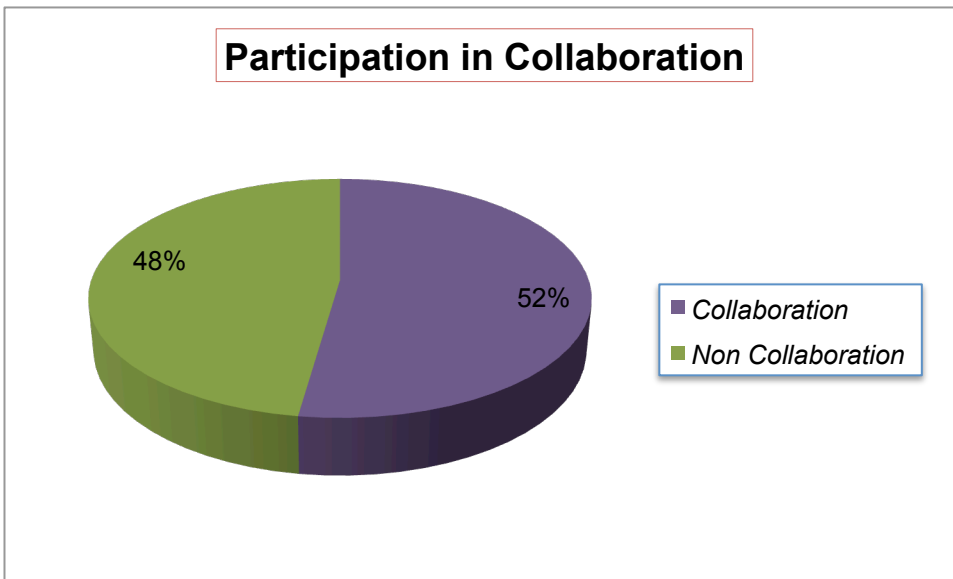
The above method was also used to determine the extent of overall engagement with technology. **74% of users** were observed engaging with technology.



Of those users engaged with technology **189 were working with a total of 185 laptops. 149 users were observed to be working with the workstations.**

### Collaboration

The number of users participating in collaborations was tracked during the sweeps. Collaboration was determined to be any user working in a group of two or more. **240 users were participating in collaboration, 219 were not. 52% users working in collaborations.**



### Percentage of Use

It was of interest to track the use of the different areas of the DMC. Tracking methodology was tricky to establish, because the DMC consists of mostly open areas, yet there were obvious “spaces” to be assessed. As a result usage of area was tracked in a couple of ways. For any space that had walls, which included the Consultation Rooms, the Media Rooms, the Group Meeting Room and the Presentation Rooms, data was gathered by *instance of use*, i.e., was it in use or not. For unenclosed areas, conceptual divisions of the space were created based on furniture and location within the Commons. Seats were counted and data generated according to *seats in use*. These definitions resulted in ten different identified locations: **1. Open/ Entry** (the area inside the door). **2. Brown Tables** (mostly next to the General area, with two outliers). **3. Consultation rooms.** **4. Open Area with Whiteboards.** **5. Desks with Workstations.** **6. Desks Without Workstations.** **7. Open Area/ Service Desk.** **8. Media Rooms.** **9. Group Study Room.** **10. Presentation Room.**



For the final two locations data was not available, because they are closed-door spaces. Therefore, they do not enter into this study.

**1. Open/ Entry Area:** This area is just inside the entrance to the DMC. It contains 19 upholstered chairs, and one long sofa that I counted as five seats for a total of 24 seats. 24 seats x 10 sweeps – 240 possible instances of use. 31 observed uses. **7.74% use**

**2. Brown Tables:** These are arranged along the left wall from the entrance to the back wall with two outliers located elsewhere. There are 10 tables, and at these tables 38 chairs, two sofa seats (2 seats each) and two upholstered chairs for a total of 44 seats x 10 sweeps - 440 possible instances of use. 91 observed uses. **20.68 % use.**

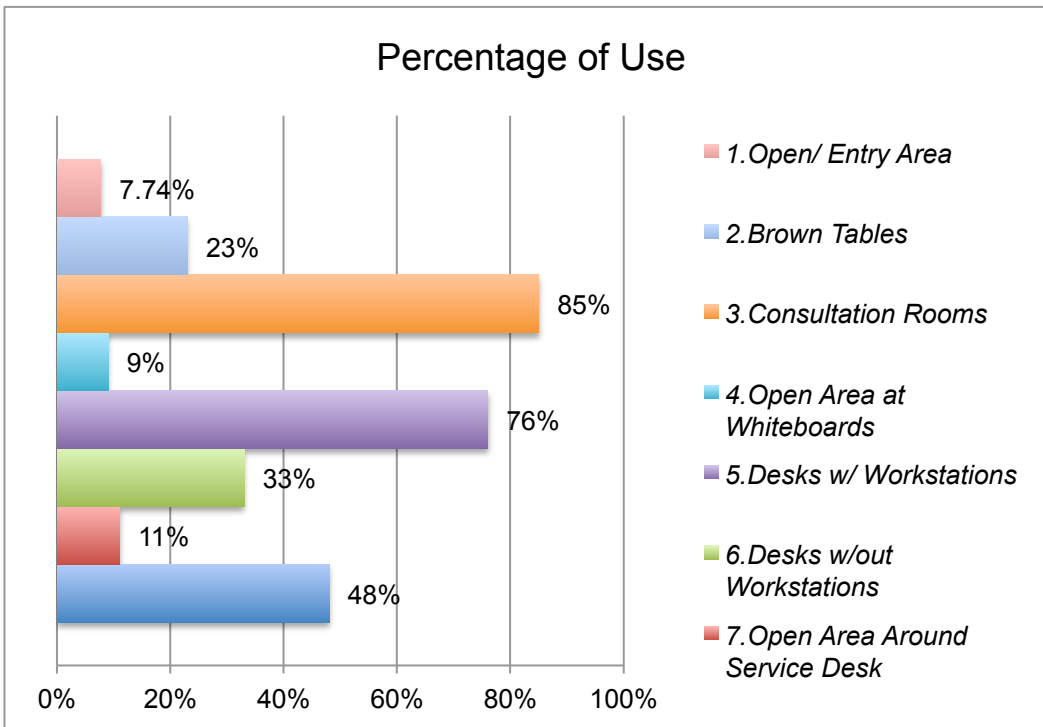
**3. Consultation Rooms:** There are four cubicle style meeting rooms in the middle of the DMC. Four rooms x 10 sweeps - 40 possible instances of use. 34 observed instances of use. **85% use.**

**4. Open Area at Whiteboards:** This area located outside of the Consultation Rooms, against the wall. It contains ten upholstered chairs. 10 chairs x 10 sweeps – 100 possible instances of use. 9 observed uses. **9% use.**

**5. and 6:** The DMC includes four modular desk constructions containing four desks each for a total of 16 desks, each with a chair. Eight of the desks contain a workstation, eight are without. Eight **workstations** x 10 sweeps – 80 possible uses. 61 observed uses. **76% use.** Eight **desks without workstations** x 10 sweeps – 80 possible uses. 27 observed uses. **33% use**

**7. Open Area Around Service Desk:** This is an open area that contains an assortment of furniture. While the Workstations are located in this area they were counted separately. Note: It also contains scanner stations; they were not included in this study. In this area there are 24 upholstered chairs, ten sofa seats (2 seats each), 32 seats with rollers, and three sofas of five seats each. 91 chairs x 10 sweeps – 910 possible uses. 98 observed uses. **10.8% use.**

**8. Media Rooms:** The DMC offers six Media editing rooms, each with a workstation. During the 10 sweeps, two of the rooms were out of order for four of the sweeps, which allows a total of 52 possible uses. 25 observed uses. **48% use.**



### Limitations of the Method

All data collection is based on my own perceptions of the customers and their activities in the DMC. No self reported data was gathered and no one was asked about his or her activities for clarification.

### Observations

There were some observations made during this study. One is that users tended to choose seating that offered some sense of enclosure, such as in a corner or against the wall. Another observation is in a similar vein. I noticed multiple instances of users employing a rolling whiteboard as a door, or as a partition to provide some degree of privacy from the larger space. Further studies would be needed to understand these trends. I also noticed a user preference for non – upholstered furniture. This may be because most “hard” seating had a relationship to a flat surface, a desk. Again, further study would be needed. One final observation is casual and anecdotal, but may be worthy of attention. The light levels in the DMC seem to be unnaturally high. It would be interesting to get user feedback on this item.

### Conclusion

To some extent this study raised more questions than it answered. First of all, in a sampling this small it is difficult answer questions about use at times of day. The fact that in two of the evening sweeps the Media Rooms were not in use at all raises questions about user trends. There are many questions that can be asked about the users activities, especially in the context of their use of technology. Are they using the

workstations for media intensive scholarship, or for play? Interaction with the Service Desk and librarians is another area to examine. Finally, in studying the in- use interactive maps in the lobby, I began to wonder about the other Commons areas in the Jackson Library. What does the DMC have to offer that is different than other Commons areas, such as the Information Commons? What about the other collaborative areas throughout the library?

The Digital Media Commons has not been with us long, and will continue to evolve. As it does experimentation as well as assessment will be required to refine this space in order to respond to user needs and thereby strengthen the DMC's position as a participant in knowledge creation.

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