Voting with their Seats: Ethnographic Observation of Student Behaviors to Inform Library Space Planning

**OBJECTIVES**
This case study presents an approach to assessing functional needs of medical and health care students and their perceptions of adequacy regarding library space. It was designed to remove subjectivity from the analysis by observing students in their environment and drawing conclusions based on actual behaviors and expressed choices. It aims to generate new knowledge about student interactions with library facilities, informing processes related to space study redesign, and build capacity in ways that better align with actual student needs.

**BACKGROUND**
Persistent feedback from students spanning several years suggested that library space allocated for study was not optimal in accommodating the varied needs of students who frequent the library. In seeking institutional funding to renovate and improve library space, we found that “squeaky wheel” comments from students, typically anecdotal and subjective, did not make a strong and compelling case for change. Analysis based on student self-reported preferences may potentially introduce personal bias or statements that are not congruent with actual behaviors. As such, we elected to use an unobtrusive ethnographic approach that observed student behavior in the context of the existing physical study space and gathered use data without requiring direct querying of students or librarian-student interaction.

**METHODS**
After defining functional use zones in the library, we initiated a sampling period in which staff would periodically pass through the library at peak and moderate volume times. During each sample event, a library staff member would observe the number of students in each functional zone and record activities according to location, privacy, furniture type, ambient noise, time of day, and interaction with other students. Functional zones comprised public workstations; small table seating; large table seating; carrels in noisy conversation areas; carrels in limited conversation areas; soft seating; group study room seating; and computer lab. A total of 20 samples were conducted after which the data was aggregated and analyzed to identify gaps in functional design and suggest areas for improvement. A follow-up online survey was administered to students to compare their perceptions with revealed observable behaviors.

**RESULTS**
Data from the observation period figured importantly in our attempt to reconcile competing demands for quiet independent study space against trending patterns of collaborative study. A key finding is that, on average, a significant proportion of students (62%) are engaged in conventional activities as opposed to independent study.

The analysis of activities by functional zone outlines how a “voting with their seats” observational strategy can accurately and impartially reveal preferences for various types of library study space. A key finding shaping space planning is the shrinking demand for individual study carrels, which now represent less than 6% of total student seating capacity. By a large margin, the most heavily populated environments (55%) feature tables around which students can congregate for group activity and conversation.

Data present a useful contrast between quiet independent study and group activity within the various functional zones. In areas that can accommodate multiple students around small and large tables, roughly 50% of students elect to use this space for independent study and have expectations, realistic or not, for privacy and quiet. Some areas, such as public workstations and soft seating, showed clear tendencies toward quiet independent use. These findings reinforce the need to redesign the library environment in a way that better accommodates student needs for group process while preserving sound isolation for independent learners.

Analysis of occupancy rates indicates that even in the highest demand areas, no functional zones are overtaxed in their capacity to provide adequate seating. Use of some functional areas, such as carrels (6.7% vs 31.4% for noisy vs quiet carrel areas) were closely linked to the degree of exposure to ambient noise.

**CONCLUSIONS**
Our ultimate goal in conducting this study was to garner support and financial resources from administration to undertake a redesign and renovation of library study space. The findings point to a competition for functional areas from students whose opposing need for quiet or collaborative use creates a potential for discord. As such, school administration was agreeable to funding plans to restructure the library into more clearly defined quiet and noisy zones, and to build additional group study areas with sound enclosures to provide a greater degree of privacy and acoustic isolation. Before and after visuallize some of the repurposed spaces for group use and the consolidation of carrels into a clearly identified quiet use area.

**DISCUSSION**
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