

Title: SEATING SWEEPS REPORT

Presented by: Valerie MacDonald, 21st Century Library Spaces Intern Librarian
Carla Haug, Digital Literacy Librarian

Date: April 12, 2012

Introduction

Behavioural mapping, also known as “seating sweeps,” is an observational method intended to document use of a space by the people in it. This method was used due to its ability to document what customers are doing in library spaces, and its increased popularity in library spaces research (e.g. Given & Leckie, 2003; Hopkins & Leckie, 2002). In a first, second, and third round of data collection, the 21st Century Library Spaces Intern librarians conducted seating sweeps at 16 EPL branches. The first round was conducted from July 26 to August 27, 2011: Abbottsfield, Castle Downs, Idylwylde, Lois Hole, Mill Woods, Shelley Milner Children’s Library, Strathcona, and Woodcroft. The second round was conducted from October 4 to November 12, 2011: Calder, Capilano, eplGo, Highlands, Londonderry, Riverbend, Sprucewood, and Whitemud Crossing. The third round was conducted February 7 to 18, 2012 and included the first and second floor of Stanley A. Milner, excluding the Children’s library which was covered in the first round of sweeps. No sweeps were conducted at JPL because the building was under construction.

In order to explore how customers currently use and how they might like to use EPL’s spaces in the future the 21st Century Library Spaces internship is guided by four questions:

1. What are customers doing in EPL’s spaces?
2. How would customers like to be using EPL’s spaces?
3. What are current and future trends in library spaces and customer activities?
4. How could EPL’s spaces best meet the needs of EPL’s customers?

The seating sweeps method was selected to help answer the first of these questions as it addresses:

- Demographic components (who are the customers in EPL’s spaces?)
- Activities (what are they doing in EPL’s spaces?)
- Use of the physical space (e.g. frequency, time of day or season, and furniture)

The categories included in the seating sweeps were chosen based on the interns test seating sweeps, as well as feedback gathered at branch staff meetings. Ultimately the findings will help to fulfill Objective 1 of the Open Spaces component of EPL’s Business Plan: “We understand how customers use our spaces and do something about it.”

Spread the words.

This report presents findings from the first and second round of sweeps, including findings at the branch level. The findings from this report will also be used in the project's final report, as one of several methods that help us to better understand EPL's customers and spaces.

Method – What were the seating sweeps?

One intern visited one branch for three days per week (Tuesday, Thursday, Saturday), conducting three sweeps per day, for a total of nine sweeps per branch and 162 sweeps overall.¹ In order to obtain the broadest perspective possible, sweeps were scheduled to include daytime, evening, and weekend hours. Time allotted for each sweep was 1.5 hours, totaling 4 hours per day, and 12 hours total per branch. However, this amount of time was not always necessary to complete a sweep depending on the level of activity in a space at that time.

Percentage of opening hours covered by the sweeps was as follows:

- All branches (excluding Stanley A. Milner and eplGo)
 - Tuesday: 40.9% (4.5hrs/11hrs)
 - Thursday: 40.9% (4.5hrs/11hrs)
 - Saturday: 56.3% (4.5hrs/8hrs)
- Stanley A. Milner
 - Tuesday: 37.5% (4.5hrs/12hrs)
 - Thursday: 37.5% (4.5hrs/12hrs)
 - Saturday: 50.0% (4.5hrs/9hrs)
- eplGo²
 - Monday: 56.3% (4.5hrs/8hrs)
 - Tuesday: 56.3% (4.5hrs/8hrs)
 - Thursday: 56.3% (4.5hrs/8hrs)

For each customer encountered during a sweep the following data was recorded:

- Date and time
- Location
- Basic demographic information
- Whether or not customer was in a group and the size of that group
- Type of furniture being used by the customer
- Possessions they had with them
- Activities the customer was engaged in

Data was collected using a survey created in Survey Monkey and run on an iPad or iPhone. In total we recorded 9834 customers who were engaged in 13567 activities (see Appendix A). Analysis was then conducted using Survey Monkey's analytic functions, as well as by exporting data into Microsoft Excel.

¹ Milner was divided into three separate sweeps. The Shelley Milner Children's Library was swept in the first round. In the third round the first and main floors of Milner were done in two sweeps.

² At eplGo sweeps were conducted in the daytime on Monday, Tuesday, and Thursday, as the branch is only open Monday to Friday from 9AM to 5PM.

Findings

Findings included in each section are based on the data recorded during the seating sweeps. Data included in charts states the sample size used to create that chart (n=##).

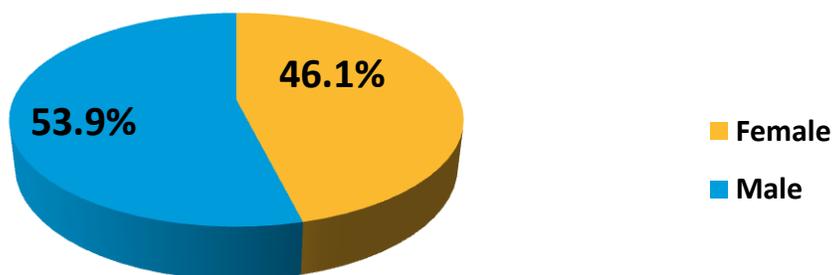
Demographics

The seating sweeps included categories for both age and gender. All demographic data was based on a visual assessment by the interns.

Gender

The overall gender division for customers recorded was slightly more male than female.

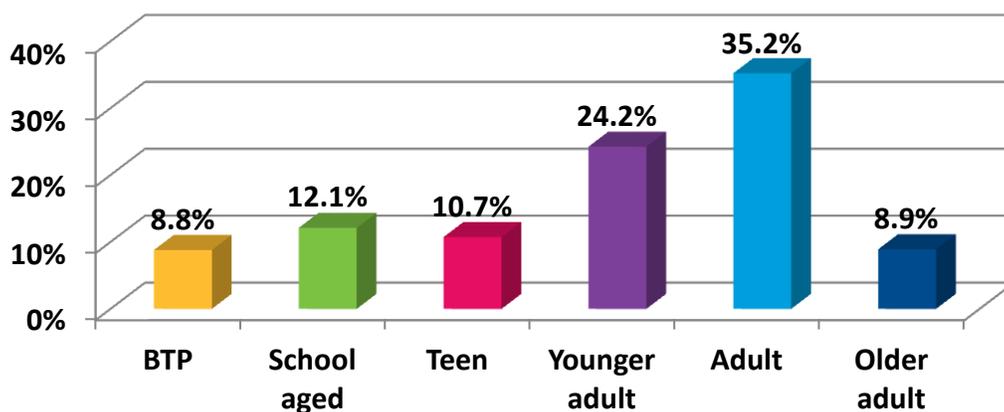
Figure 1. Gender Distribution (n=9834)



Age

The category for age was divided into eight separate categories: Baby (0-12 months), Toddler (1-2 years), Preschool (3-5 years), School-aged (6-11 years), Teen (12-18 years), Younger Adult (19-35 years), Adult (36-60 years), and Older Adult (60+ years). For the purpose of this report babies, toddlers, and preschool children are collapsed into a category titled BTP because of the smaller numbers recorded for the individual age groups.

Chart 1. Age Distribution (n=9834)

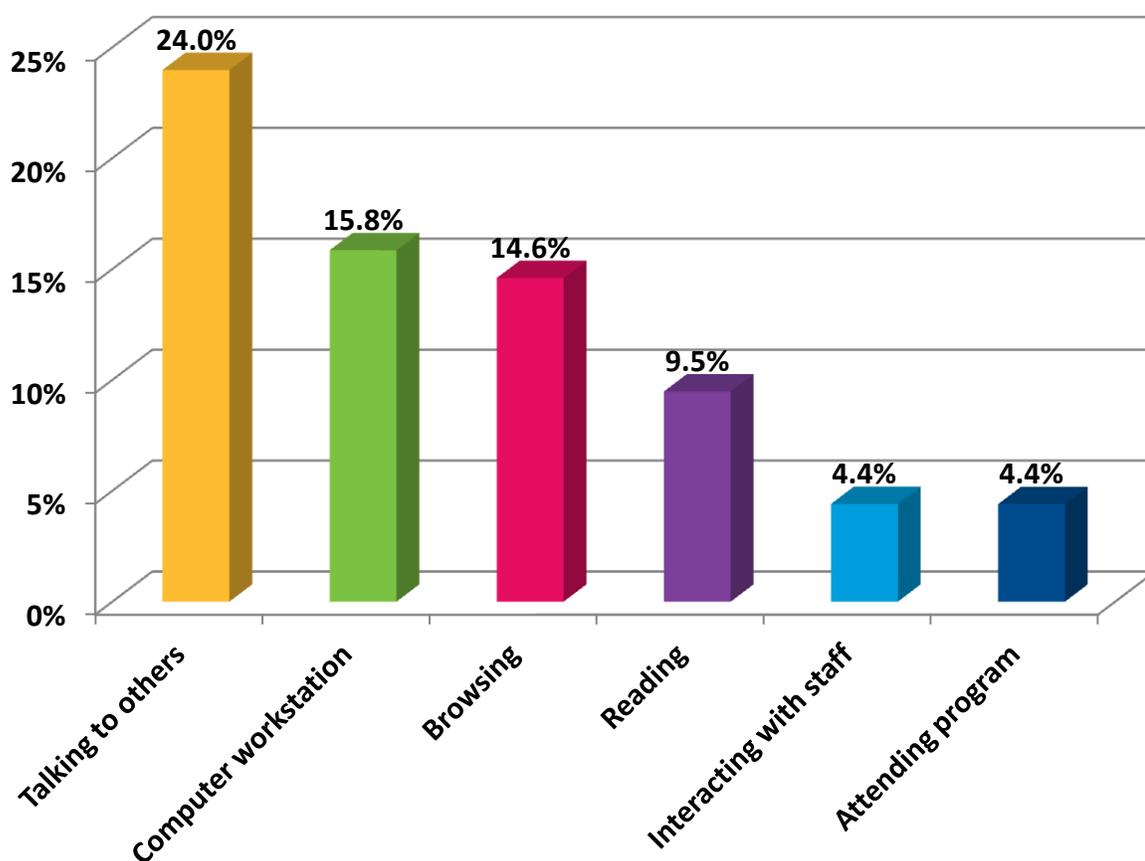


Activities

Over the course of the sweeps 38 different activities were tracked.³ These activities were recorded as being performed by a total of 9834 customers, who engaged in a total of 13567 activities.⁴

The top activities recorded were: talking to others, browsing, using computer workstations, reading, attending programs, and interacting with staff. These top six activities constituted 72.7% of the activities recorded.

Chart 2. Most Common Activities Observed (n=10835)



³ This includes an “other” category with items such as Summer Reading Club (SRC) activities, singing, knitting, crying, using the printer, drawing, etc.

⁴ Some customers were engaged in more than one activity resulting in a greater number of activities than customers.

Activities by age

The 13567 activities recorded were also broken down by the six different age categories.

Each age group listed below includes the total number of activities for that group, as well as the five most commonly observed activities for the age group.

BTP (0-5 year olds)

n=1307

1. Talking to others
2. Attending program
3. Early literacy workstation
4. Playing with toys
5. Browsing

School aged (6-11 year olds)

n=1832

1. Talking to others
2. Browsing
3. Computer workstation
4. Attending program
5. Interacting with staff

Teens (12-18 year olds)

n=1620

1. Talking to others
2. Computer workstation
3. Browsing
4. Reading
5. Studying/Using handheld device

Younger adults (19-35 year olds)

n=3309

1. Talking to others
2. Computer workstation
3. Browsing
4. Using laptop
5. Studying

Adults (36-60 year olds)

n=4408

1. Browsing
2. Talking to others
3. Computer workstation
4. Reading
5. Interacting with staff

Older adults (60+ year olds)

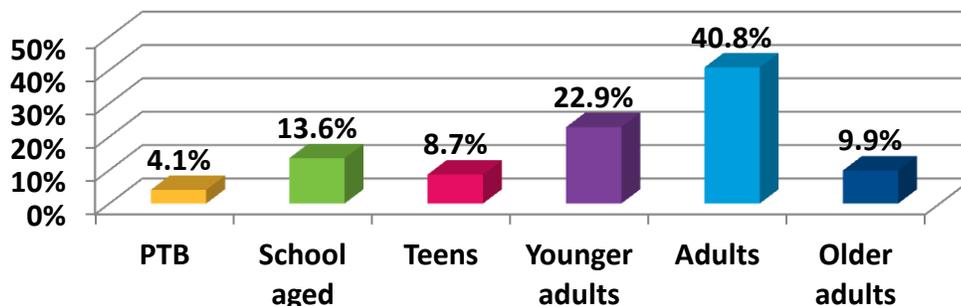
n=1091

1. Reading
2. Browsing
3. Talking to others
4. Computer workstation
5. Interacting with staff

Browsing

Browsing made up 14.6% (1980/13567) of total activities and was the third most common activity observed. This category was defined as customers looking at library materials on shelves and/or displays. It is important to note that customers looking through their holds were also categorized as browsing for the purposes of this study.

Chart 3. Age Distribution for Browsers (n=1980)



The data showed 55.4% (1096/1980) of browsers to be female, while 44.6% (884/1980) were male. It also showed that browsing is not necessarily a solo activity. We observed that 40.0% (784/1980) of customers engaged in browsing were in groups of two or more people and 35.6% (705/1980) of customers browsing talked to others.

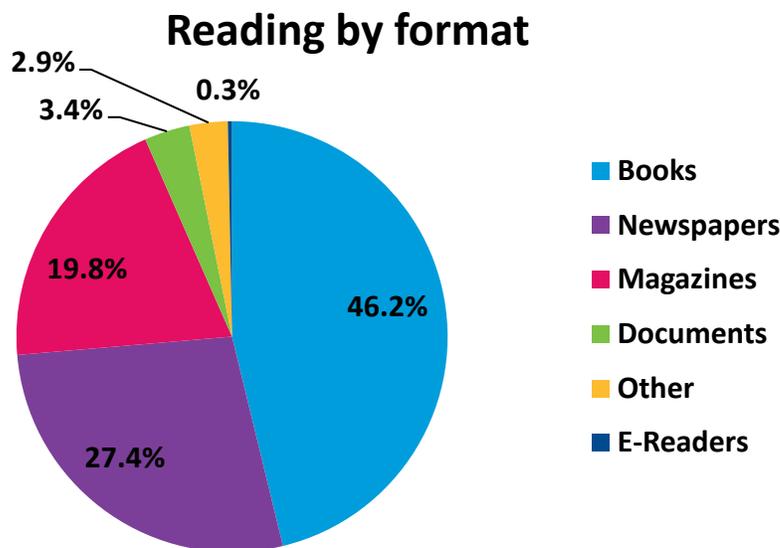
Browsing was observed to occur in many different ways. Some customers glanced at all the items on the shelf to make a selection; others would take items off the shelf and flip through pages or read DVD covers; some would place the book on a spare truck at the end of an aisle to read it. Some customers would sit on the floor to look at shelves or at the materials, and others moved furniture to facilitate their browsing. The photo to the right shows, for example, a boy sitting on a computer chair that he moved along the shelves as he looked at titles.



Reading

Reading activities made up 9.5% (1286/13567) of all activities in the library, and was the fourth most common activity observed. Reading was subdivided by format, and books made up the most commonly read format at 46.2% of all materials read.

Figure 2. Reading by Format (n=1290)



46.0% of customers reading sat in soft seating during this activity, 27.9% of customers sat at work tables, and 15.4% in work carrels. The Herman Miller scooter stands (photo on the right) were used by 2.6% of all customers engaged in reading, despite only being located at two out of the seventeen branches (Lois Hole and Idylwylde). They constituted 14.1% of all furniture used at Lois Hole.



Every format except “other” had adults as the highest percentage of readers. The data showed that 68.1% (873/1282)⁵ of people we observed reading were male, and constituted more than 50% of the readers for all formats.

Computer Technology

Overall Computer Usage: Computer Workstations, Laptops, Early Literacy Stations, Catalogue Stations

22.5% (2209/9834) of all customers at the libraries were reported as being “at a computer workstation,” meaning EPL’s internet workstations. Our criteria for inclusion in this category was whether the person was engaged with a computer at a workstation, and so included in this number were not only the customers who were seated at the workstation, but also those who may have been standing behind or near the person seated at the workstation, were seated on a chair next to or near to them, at an adjacent workstation, or on the floor. This allowed for groups to be included in the computer activities data.

⁵ Number of people reading is lower than number of reading activities because some customers were recorded as reading more than one format.

It should be noted that 59 customers were recorded as being at computer workstations but were not engaged in any way with a computer. These customers were engaged in the following activities: reading and/or writing (alone and with others), using a handheld device, using a laptop, talking with others (who were or were not using the computer), waiting for others, playing with computer peripherals, colouring, and sleeping.

2.5% (241/9834) of customers were at early literacy stations, and 1.2% (115/9834) used a catalogue computer.

5.1% (498/9834) of customers had a laptop, with 4.9% (479/9834) customers actively using them at the time of recording. No one was observed using or possessing an EPL laptop.

Taking these numbers into account, the total number of customers reported as engaged with a computer at the library (internet stations, laptops, catalogue stations, and early literacy stations) is 30.4% (2985/9834) of customers.

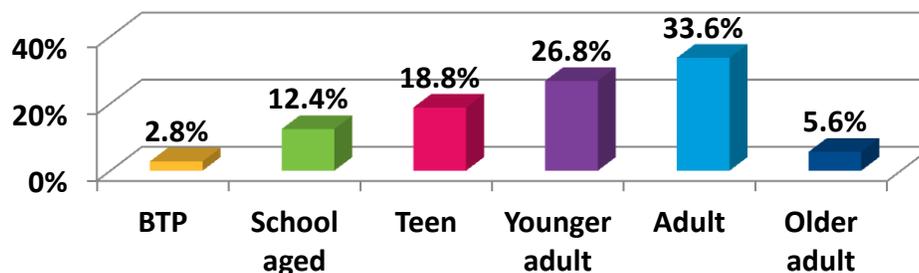
Demographics by Computer Type

Demographics for computer technology use are calculated using the number of people physically at the stations, not just the number actively using them.

Computer Workstations

More male customers than female customers were recorded as being at computer workstations, 63.1% (1394/2209) versus 36.9% (815/2209). Adults were the age most frequently reported at computer workstations.

Chart 4. Ages at Computer Workstations (n=2209)



Laptops

5.1% (498/9834) of customers had a laptop, 69.1% (344/498) of which were male, 30.9% (154/498) were female. No one aged 0-5 was recorded as having a laptop, and the most common users were younger adults at 48.8% (243/498) and adults at 39.4% (196/498). 17.7% (88/498) of people with laptops were in a group.

Early Literacy Stations

Male and female customers were nearly equally represented at early literacy stations at 47.3% (114/241) and 52.7% (127/241) respectively. Not surprisingly, the BTP age group was the most frequently represented at 51.5% (124/241), followed by school-aged children at 29.0% (70/241).

Catalogue Stations

1.2% (115/9834) of all customers were observed at catalogue stations. Customers were also using the library catalogue on internet only stations. Identifying catalogue-only computers was also sometimes challenging, especially if they were in a bank with other computer workstations or only signed by a screen saver.

Activities on Computer Technology

Rather than record just whether or not a customer was using computer technology, as much as possible we attempted to identify and record what customers were doing.

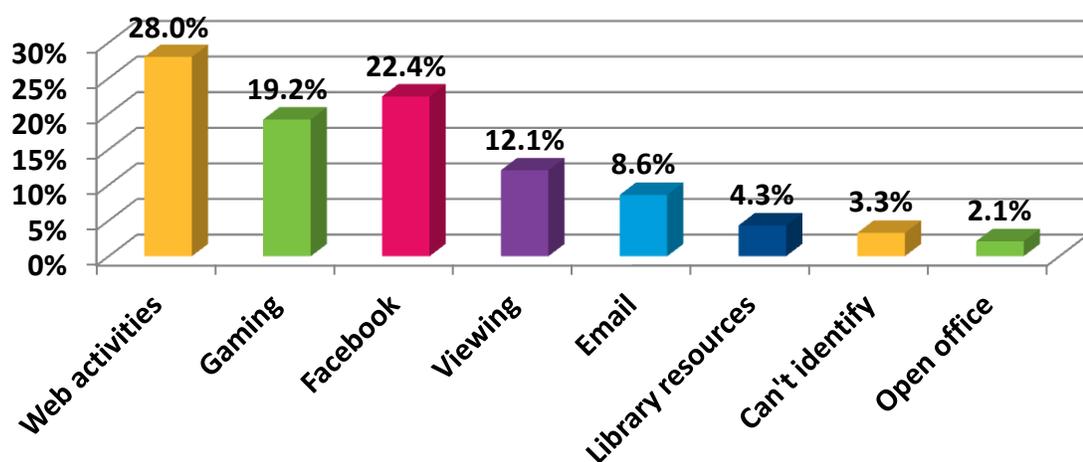
Activities on Computer Workstations

Customers engaged in activities on computer workstations were organized into the following pre-defined categories:

- Gaming
- Viewing – viewing a video
- Email
- Facebook
- Library resources – catalogue, website, databases
- Open Office
- Web activities – activities we were able to see, but were unsure of the content
- Can't Identify – instances where interns were unable to see the computer screen

As with the other activities, it was possible for and was often observed that customers were engaged in more than one of these activities at a time. 2150 customers were actively engaged in using a computer workstation and were involved in 2287 activities on those computers.

Chart 5. Activities at Computer Workstations (n=2287)



19.3% (388/2015) of customers were recorded as using headphones at computer workstations and 1.9% (39/2015) of computer workstations were emitting some kind of audible noise.

Web Activities

For the web category we attempted to either name the website or, if that was not possible, to describe what kind of website the customer appeared to be looking at. The chart below represents the main categories of web activities that were observed during the sweeps.

Amazon	Automotive	Avatar	Blogs	Booking tickets
Children's sites	Comics	eBay	Engineering	Financial (banking, mortgages)
Food	Forms	Game sites	Genealogy	Google
Government	Housing	Insurance	Jobs	Kijiji
Maps	Movies & TV	Multilanguage sites	Music	News
Phone companies	Photos	Pornography	Radio	Reading
Religion	Schools (SchoolZone)	Shopping	Social networking	Sports & recreation
Stocks	Technology	Twitter	University websites	Wikipedia

Gaming

42.8% (188/439) of gamers were in groups of 2 or more. Groups of two were the most common, but we also observed groups of 3, 4, and 5. Unexpected forms of gaming in a group were observed: group configurations included sitting next to each other at their own workstations, sitting next to each other at the same workstation, standing behind someone at the workstation, or talking to others at nearby workstations.

Examples of some of the games observed included Minecraft, avatar-creating games, Farmville, Mafia Wars, other Facebook games, first-person shooter games, sports games, chess, *Barbie* games, *Dora the Explorer* games, and Family Channel website games.

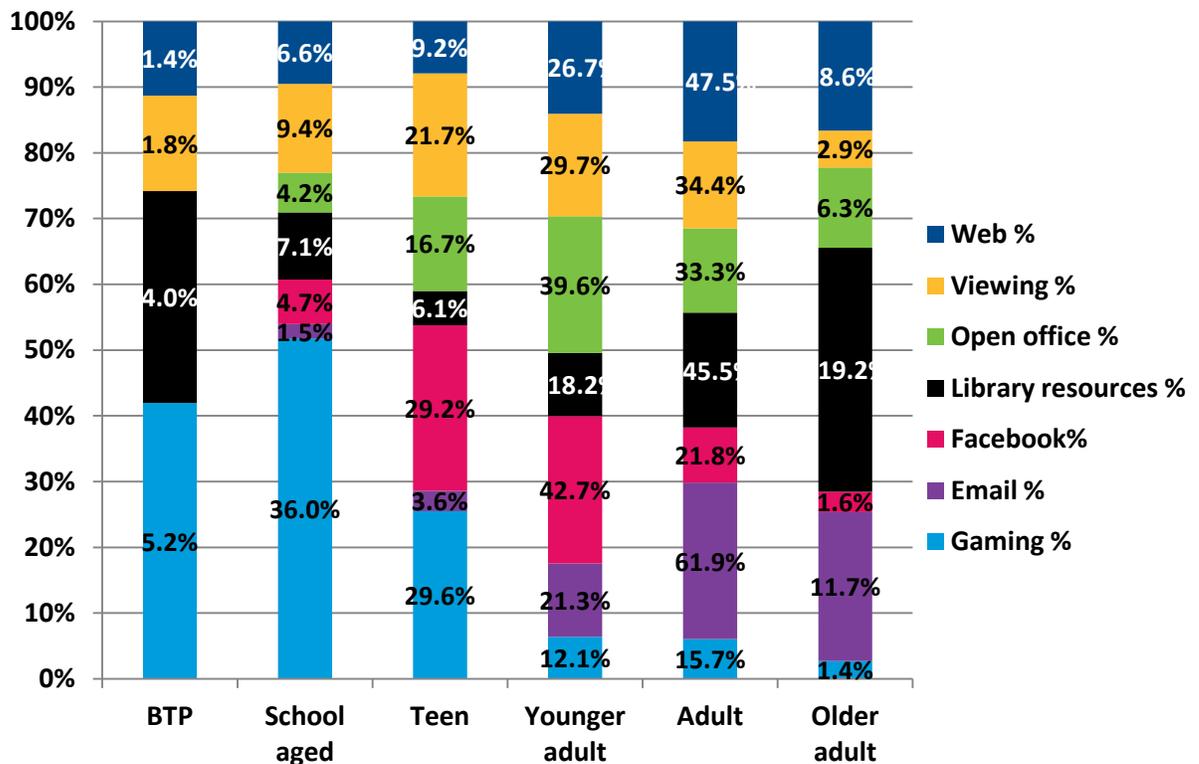
Viewing

26.8% (74/276) of people viewing were in groups, mostly of 2 and 3, but also groups of 4 and 5. YouTube was one of the most common sites customers used to view content. However, we also observed customers using Vimeo, television network sites, and other unidentified sites to stream content. Some examples of viewing included skateboard videos, music videos, other language TV shows and films, English-language TV shows, videos of video games like *World of Warcraft*, wrestling and UFC matches, anime, news stories, and cooking shows.

Library resources

The library resources observed in use were: library website, Bibliocommons, PressDisplay, Program guide, and Freegal.

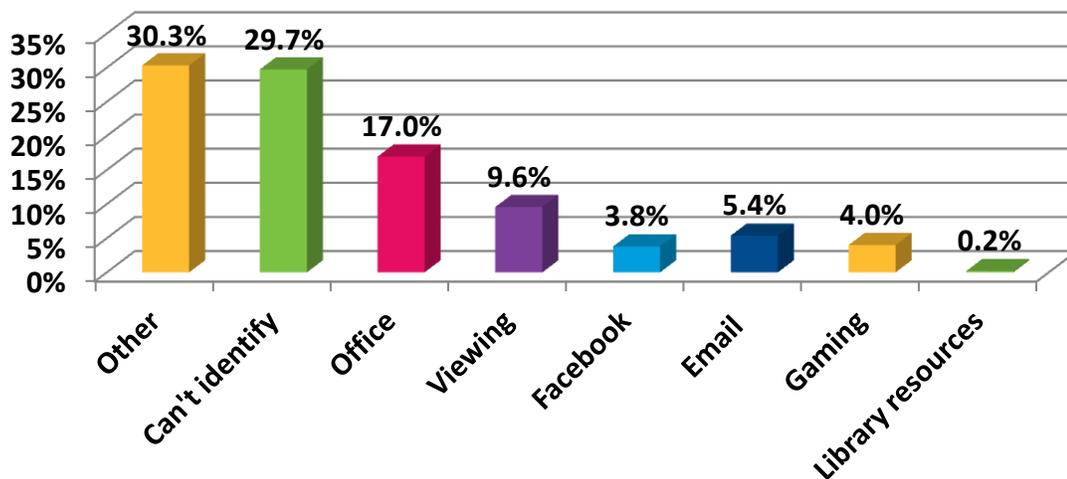
Chart 6. Computer Workstation Activities by Age Group



Activities on Laptops

The most frequently observed activity on a laptop was the “other” category, meaning that customers were typically on websites or using other software programs like iTunes. 30.3% (152/501) of customers using laptops were using headphones. The “office” category refers to commercial products such as PowerPoint, Outlook, and Word.

Chart 7. Activities on Laptops (n=501)



29.7% of all patrons with laptops were recorded with the activity category “Can’t Identify”, meaning that they were using their laptops but we could not physically see the screens to note their activities. For comparison, only 3.3% of computer workstations were not visible.

Some of the activities that were observed on laptops included engaging in video chat, using iTunes, viewing web pages, Excel, conducting business, watching a movie, studying, and online tutorials.

The most popular furniture choice for laptop users was work tables, followed by work carrels, and soft seating. Despite not being available at many locations, 9.2% (44/479) made use of laptop bars.

Handheld Devices

Handheld devices were defined as any hand-held devices including mp3 players, cell phones, or smart phones, as it would have been difficult for us to assess the type of device being looked at (due to a myriad of devices and devices with a myriad of functions).

5.7% (557/9834) of customers were observed in possession of a handheld device, and 3.1% (308/9834) of these were recorded as using their device at the time of observation – typing, listening with headphones, gaming, or viewing content on the screen, and audibly listening.

Digital Readers/iPads/Tablets

13 customers were observed with an iPad, digital reader or tablet. Customers were observed typing, reading, gaming, and getting help from staff with these devices.

Groups

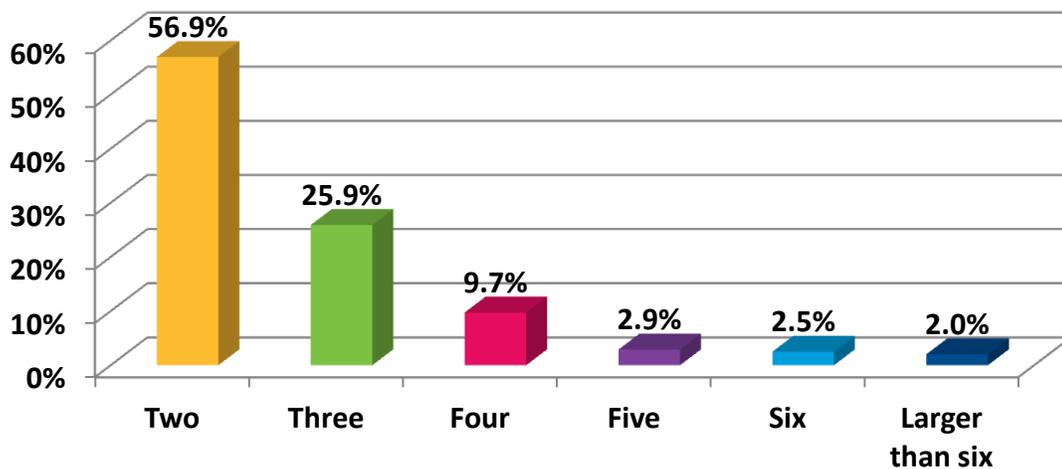
The data showed that 40.7% (3760/9237) of customers using the library during the sweeps were in a group of two or more. We assessed whether customers were in groups by factors like talking to others, touching others, or being in close enough proximity to the other person such that it could be reasonably interpreted that they knew one another.

Figure 3. Groups Distribution (n=9237)⁶



⁶ Customers attending programs were excluded from this data as it was difficult to determine groups, although many were noted as entering and leaving the program room in a group.

Chart 8. Percentage of People in Group Sizes (n=3760)



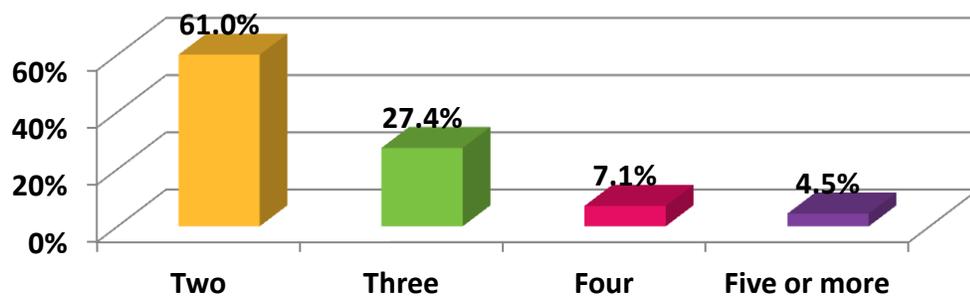
Groups and Activities

Four activities were noted as having a high percentage of groups engage in them: browsing, using the self check-out, using early literacy workstations, and using computer workstations.

Groups Browsing

The data showed that browsing was not necessarily a solo activity as 40.0% (784/1980) of customers were browsing in groups of two or more. People in groups were most commonly in groups of two, followed by groups of three.

Chart 9. Percentage of People in Group Sizes Browsing (n=784)



Groups at Self Check-out

515 people were recorded either using the self check-out or as located in the area of the self check-out. Of these people 61.9% (319/515) were in groups of two or more, with the highest percentage being in groups of three.

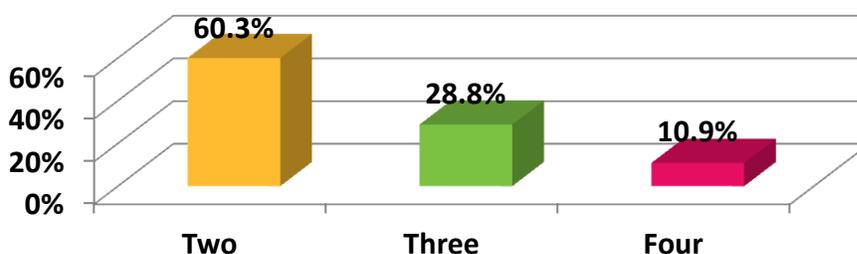
Chart 10. Percentage of People in Group Sizes at Self Check-out (n=319)



Groups at Early Literacy Stations

64.7% (156/241) of customers at early literacy stations were in groups. People in groups of two were the most often observed at 60.3% of people in groups at early literacy stations.

Chart 11. Percentage of People in Group Sizes at Early Literacy Stations (n=156)

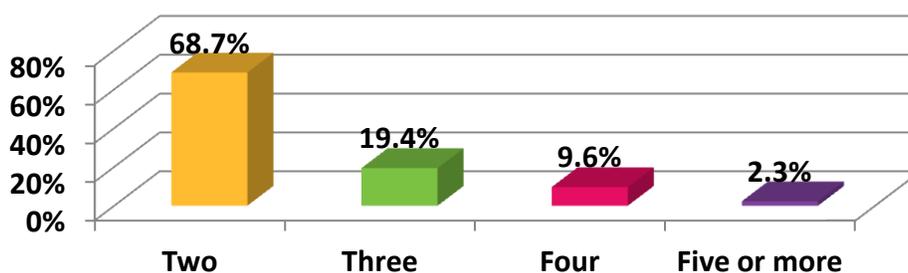


Groups were observed varying configurations. Adults were often observed helping children with the set up and navigation of the workstations, leaning over the workstations while standing or seated, or were observed seated on regular or child-sized furniture close to the stations and were browsing collections, looking through materials, or reading. Children sometimes got up from early literacy workstations to speak with adults seated in the vicinity, or at computer workstations. Children in groups at the stations were also observed working together to play the games, giving instructions and guidance to one another.

Groups at Computer Workstations

31.5% (696/2209) of people at computer workstations were in groups.

Chart 12. Percentage of People in Groups at Computer Workstations (n=696)



Groups were observed in many different configurations at the workstations: customers each using their own computer but talking to others seated beside or across from them; one customer using a computer and another customer seated at the adjacent workstation, using the chair but not the computer; one customer using the computer and another has pulled up a chair to occupy a single workstation space; one customer using the computer and others standing around them, sitting on the floor, leaning on the workstation, sitting in chairs, or combinations of these; as well as groups shifting in their makeup.



One example of this shifting makeup occurred at Lois Hole Library. In a row of computers in the children's section a group of two girls were seated together at one computer workstation watching a video, three boys were seated at the workstation next to them playing a game, and one boy was seated playing a game to the right of them. One of the boys in the middle group of three stood up and talked to the girls beside them, and one of the girls would sometimes get up to stand behind and talk to them. The boy on the right-hand computer would sometimes lean over to watch the screen of the three boys.

Group Reading and Learning and Tutoring

Three categories included in the seating sweeps were group activities. These included: group reading, group learning, and tutoring. 174 people were involved in these activities.

Noise

In speaking to EPL staff, noise and the difficult task of zoning for noise was commonly discussed. Opinions about noise were also mentioned by many customers on the library spaces survey, and during interviews about library spaces. Many of the activities included in the seating sweeps created some level of audible sound. These categories include:

- group learning
- group reading
- interacting with staff
- talking on cell phone
- talking to others
- talking to self
- audible noise on computer technology
- audible noise on handheld devices

The level of noise for these activities ranged from talking (e.g. conversations, learning groups, people reading out loud, etc.), to sound from computers (e.g. early literacy station with no headphones, loud music through headphones, etc.), to children screaming and crying.

38.5% (3784/9834) of all customers were involved in at least one activity associated with audible sound. 59.4% (708/1191) of school aged children were involved in an activity creating noise, followed by 55.0% (472/865) of BTP aged children, 52.2% (551/1056) of teens, 36.0% (858/2384) of younger adults, 28.8% (996/3463) of adults, 22.7% (199/875) of older adults

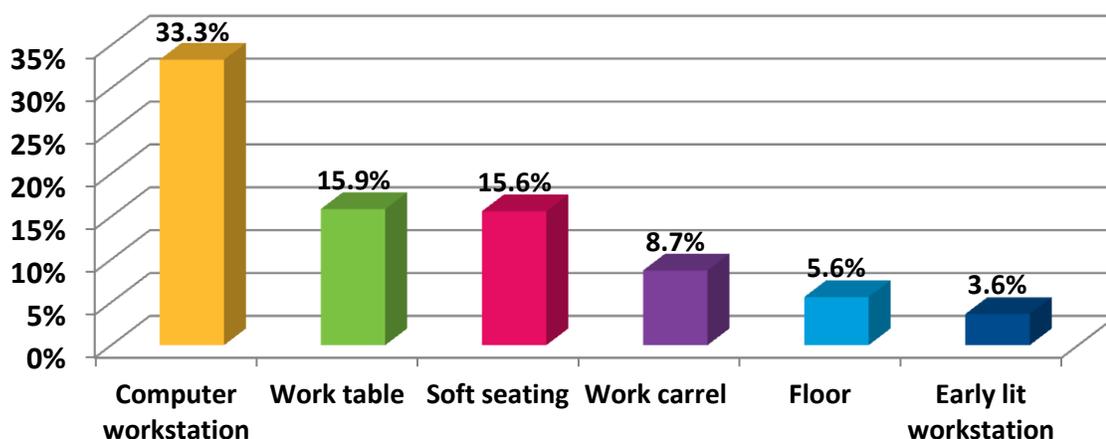
In some cases people attending programs could be included in the noise category. For example, programs that were held on the floor instead of in the program room or programs that created enough noise to be heard beyond the room.

Furniture

The data showed that 64.6% (6353/9834) of customers made use of at least one piece of furniture during the seating sweeps. 6353 customers made use of 6634 pieces of furniture.

Computer workstations made up 33.3% (2209/6634) of furniture that was used by customers during the seating sweeps, which typically consisted of chairs at stations in a pod or bank arrangement.

Chart 13. Most Commonly Used Furniture (n=6634)



The “floor” was added as a furniture category as we had previously observed customers sitting on the floor, making it an important space interaction to track. The floor accounted for 5.6% of furniture used, however, 59.7% (222/372) of customers we observed sitting on the floor were in a program room. The remaining customers sitting on the floor were most often engaged in browsing, playing with toys, talking to others, and/or reading. 27.7% (103/372) of customers were sitting on the floor in the children’s area, 12.6% (47/372) of customers were in other areas such as: audio visual, holds, adult fiction and non-fiction, teens, aboriginal collections, and vestibule/foyer.





While conducting the seating sweeps, we also observed customers adapting furniture to serve their needs, or making use of furniture for activities or in group sizes that we had not expected. For example, the photo on the previous page shows a grandfather and granddaughter colouring using an individual study carrel with two chairs. The photo to the left shows a group of three men talking and reading newspapers

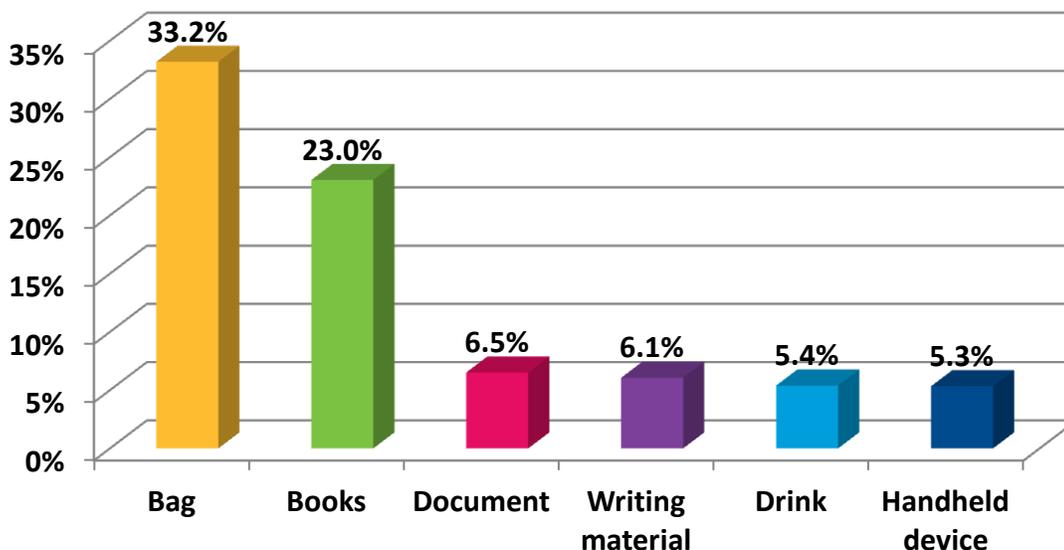
using three chairs and the table space provided by two work carrels. The photo below shows two teens sharing one chair at a catalogue computer talking about the books they are looking up.



Possessions

Customer possessions were recorded as part of the seating sweeps and included items such as bags, books, electronics, food, strollers, etc. In total we recorded 10431 possessions.

Chart 14. Most Common Possessions (n=10431)



The six most common possessions included in this chart account for 79.5% of total possessions recorded.

At times possessions were difficult to track. Handheld devices, for example, were sometimes difficult to see. It was also a challenge at times to discern which customer a possession belonged to. People attending programs were often not tracked as having any possessions because it was difficult to see what they had with them.

Strollers that were parked in the library and not noticeably linked to a person were not recorded. This is one possession where the data recorded does not reflect the actual amount in the library at the time of a sweep. The photo shows an example of strollers parked outside a program room that were not tracked in the data because there was no indication of their owner.



Locations

Before sweeps commenced at each branch, we assigned specific location codes to the different areas of the library from a list of pre-defined options so that during the sweeps we were able to consistently assess where customers were located in the library. However, because different libraries are arranged differently, and some areas sometimes overlapped, it was possible, for example, to have computer workstations located in the non-fiction section because they were

either within the stacks or “non-fiction” was the location code to which the computers were adjacent. While this makes analysis of different areas possible at the branch level, it renders comparison of particular location codes across branches complicated or meaningless.

However, three areas that were consistent across libraries were the Teen Area, Children’s Area, and Study Rooms (at Lois Hole, Abbottsfield, and Whitemud Crossing). These were also areas that were frequently discussed with staff during data collection for the Initial Site Inventory Report.

Teens and the Teen Area

During staff meetings, library staff often reported that teens never or rarely sit in designated teen zones. We were interested in examining the questions: 1. Are teens in the teen area? and 2. Where in the library are the teens?

5.7% (556/9834) of library customers were identified with the location code “teen area.” Teens were the most frequently reported demographic group in the teen area at 32.6% (181/556), followed by adults at 31.1% (173/556), and younger adults at 18.9% (105/556).

Customers in the teen age group were found in many different locations around the library. The following is a breakdown of the locations teens were found most often:

1. Teen Area: 17.1% (181/1056)
2. Children’s: 11.7% (124/1056)
3. Adult NF: 11.6% (122/1056)
4. Adult FIC: 11.3% (119/1056)

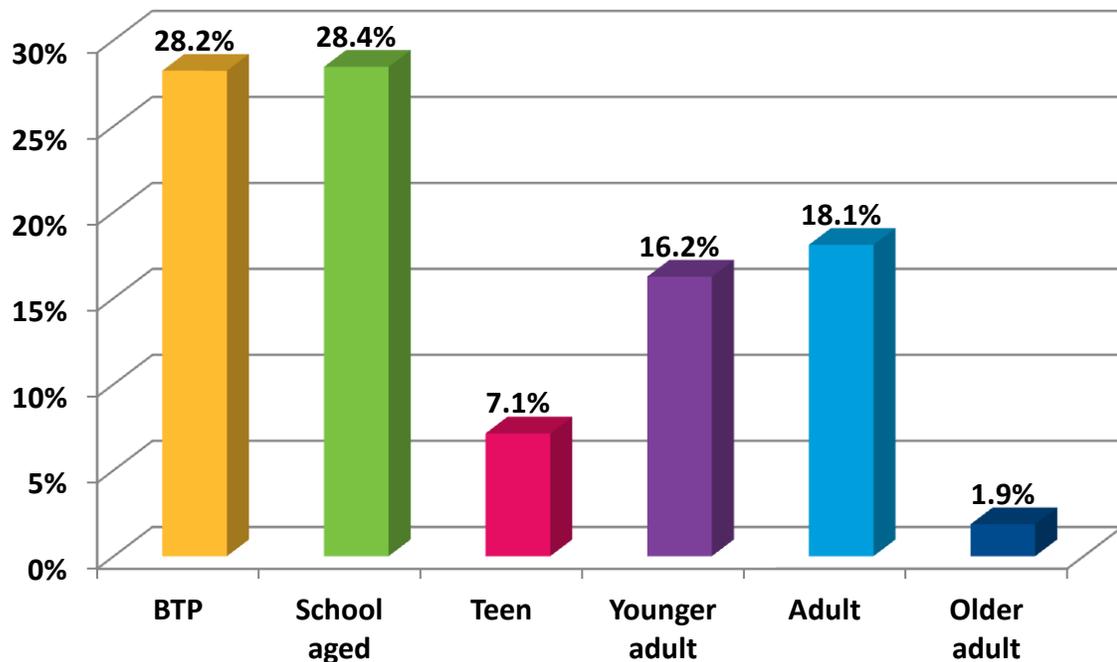
At times we found it difficult to identify the boundaries of the teen area. In some cases the teen area included many computers that were frequently used by other age groups. Adults were the highest users of computers located in the teen areas at 39.6% (122/308), followed by younger adults at 22.1% (68/308), while teens made up 19.8% (61/308).

Children and the Children’s Area

Similarly, the data collected shows if children were in the children’s area, where children were in the library, and what other age groups were in the children’s area. Staff had expressed a need for both child- and adult-friendly furniture in the children’s area to accommodate parents who wanted to interact with or supervise their children, or to interact with other parents.

18.1% (1779/9834) of all customers were recorded in the children’s area, the highest percentage recorded in any single location area. Customers under 12 years old made up 56.6% of people in the children’s area.

Chart 15. Ages in Children's Area (n=1779)



48.2% (990/2056) of children under 12 were recorded as being in the children's area. The next most common locations for children were the program room and the self check-out. Children were also found in smaller numbers in all other locations in the library.

Study Rooms

Small study rooms are available at Lois Hole (2 rooms), Abbottsfield (1 room), and Whitemud Crossing (1 room) branches. Staff often identified to us a desire for small study rooms as a way of managing noise in the library and noted that they were highly requested by customers.

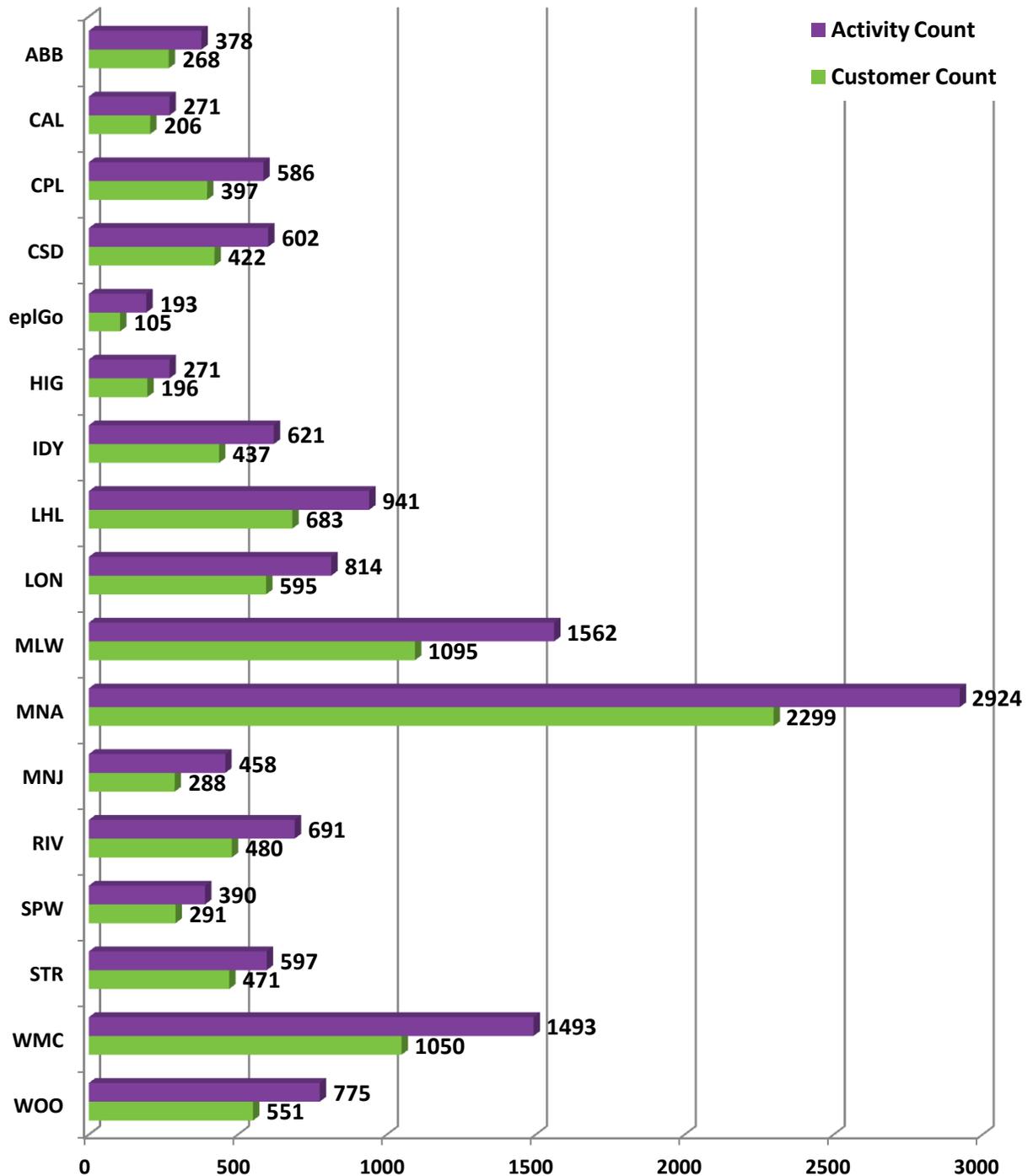
0.01% (52/9834) of all customers were recorded as using a study room. Younger adults were the highest users of the study rooms at 65.4% (34/52), followed by Adults at 25.0% (13/52).

As much as possible we attempted to include notes in the seating sweeps data when customers were encountered over more than one sweep. 10 comments were recorded for customers in study rooms indicating that they had been there for more than one sweep (sometimes for the length of our visit, ~7 hours). At Whitemud Crossing, for example, several customers were noted as being in the study room for two or three sweeps, as well as over two or three days of the sweeps.

Branch Data

The data collected through seating sweeps includes a category for branch. The following chart is a breakdown of the total customers and total activities recorded at each branch.

Chart 16. Branch Customer and Activity Count



Branch Patterns

Patterns between branches emerged as the seating sweeps data was analyzed at the branch level. 12 of the 17 branches had talking to others as their most commonly observed activity. 15 of the 17 branches had the following activities included at some position in their top five activities:

- Talking to others
- Computer workstation
- Browsing
- Reading

This first group of branches with similar activity patterns had the use of computer workstations as the most common activity, followed by talking to others and browsing. The data for Strathcona shows attending a program to be the most common activity, however, this was only first by a small margin and due to an unusually large program held during one sweep. The following activities for Strathcona are similar to the other branches in this group.

ABB Activities (n=378)

1. Computer workstation
2. Talking to others
3. Browsing
4. Reading
5. Interacting with staff

CSD Activities (n=602)

1. Computer workstation
2. Talking to others
3. Browsing
4. Reading
5. Interacting with staff

STR Activities (n=597)

1. Attending program
2. Computer workstation
3. Talking to others
4. Browsing
5. Reading

SPW Activities (n=390)

1. Computer workstation
2. Talking to others
3. Browsing
4. Attending program
5. Reading

The second group had talking to others as their most commonly recorded activity, followed by using a computer workstation, and browsing or reading.

HIG Activities (n=271)

1. Talking to others
2. Computer workstation
3. Browsing
4. Reading
5. Attending program

LHL Activities (n=941)

1. Talking to others
2. Computer workstation
3. Browsing
4. Reading
5. Studying

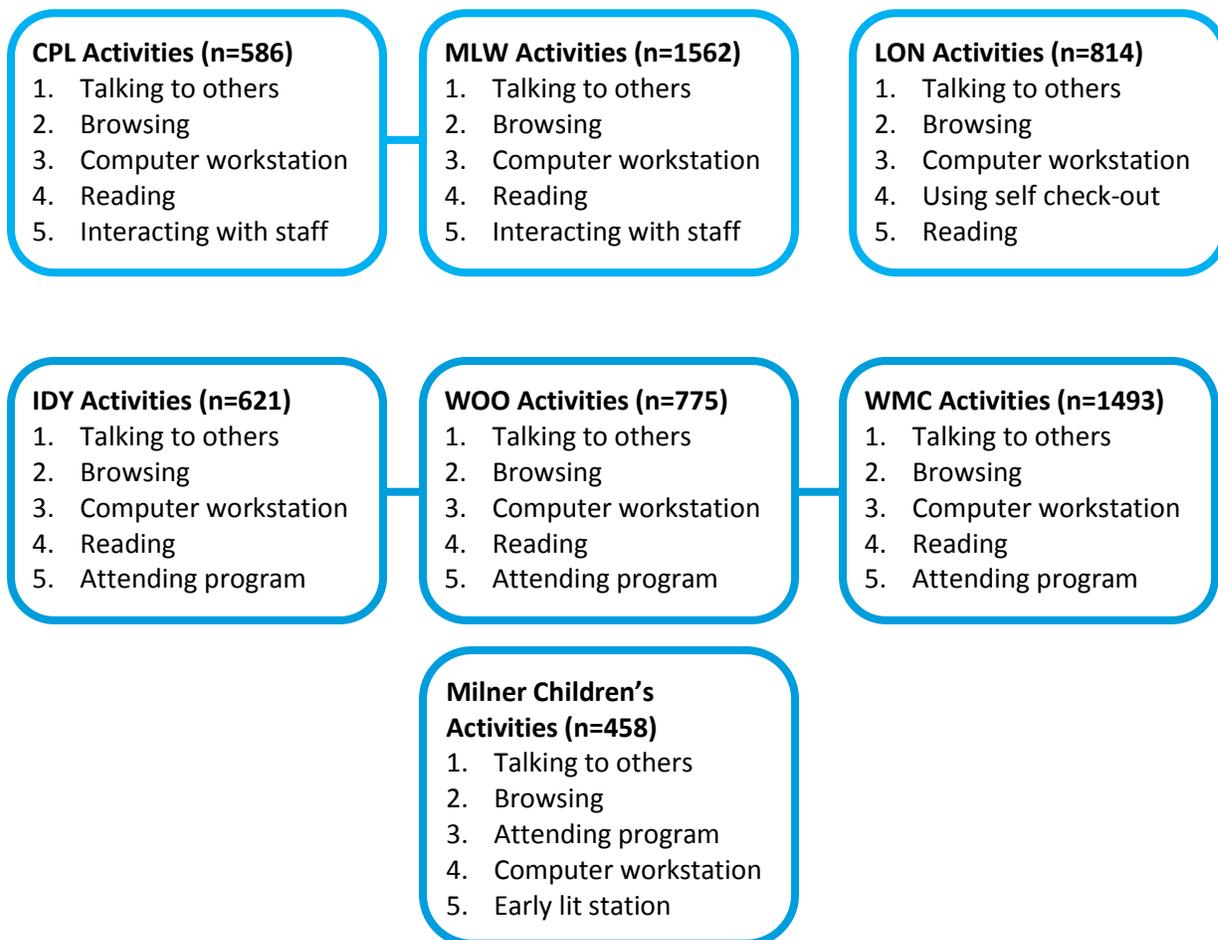
CAL Activities (n=271)

1. Talking to others
2. Computer workstation
3. Browsing
4. Interacting with staff
5. Reading

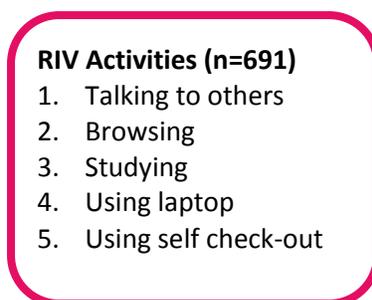
Milner Activities (n=2924)

1. Talking to others
2. Computer workstation
3. Reading
4. Browsing
5. Using laptop

The third group had talking to others as their most commonly recorded activity, followed by browsing, and using a computer workstation.



Two of the branches (RIV & eplGO) did not have activity patterns that were similar to other branches. The data collected at RIV showed three activities in the top five that were rarely seen at other branches in the top 5, which included studying, using a laptop, and using the self check-out. However, RIV did have the first top two activities in common with the group above.



The data from eplGo showed browsing to be the most common activity, something not seen at any other branch. Their top five activities also included using a handheld device, and using the self check-out, which was uncommon at other branches. This difference in activity pattern could be attributed the fact that eplGo does not have a program room or internet computers.

eplGo Activities (n=193)

1. Browsing
2. Talking to others
3. Interacting with staff
4. Using self check-out
5. Using handheld device

Limitations of the Seating Sweeps Method

As an observational method, all data collection is based on our own perceptions of the customers and their activities in the library. No data is self-reported and no one was asked about their activities for clarification. We conducted several test sweeps to improve reliability between and within ourselves, and also defined each category recorded as specifically as possible to ensure we consistently labeled observations. Conducting surveys and interviews will allow for us to collect this information from the customers themselves, which will allow for customers to put into their own words the information we collected as well as allow for a comparison between what is self-reported and what we observed.

Attempting to observe people who were engaged in activities in which they are moving, and not just while stationary at furniture (as has been the case in other seating sweeps studies in libraries) we feel gives a more accurate impression of the way the spaces are used at EPL. All entries were completed at a particular moment in time, however, and often represent only a fraction of the customer's activities in their library visit. One example in particular was the elastic nature of groups: in the children's areas, for example, groups changed size as children moved between them to perhaps join some new friends in a game, then return to their parent and sibling to read. Collecting data in high traffic areas is also difficult as inevitably customers are missed when one's attention shifts from the space to entering data for a particular individual. It is impossible to freeze the library at a single moment in time to allow us to walk through the space and observe exactly what is going on, and so we tried to establish some consistency in our observations by following the same path through the library on each sweep; staying in a space and recording individuals until a time when no one new was entering into it; and, when necessary in a fast-paced space, by taking notes and entering the data later.

Further Observations

There were some observations that were made during the seating sweeps across many of EPL's branches.

Length of Visit

The first was the length of time some customers spent at the library, something that was mentioned by staff at staff meetings. Whenever possible we attempted to make note of customers who were observed over the course of one or more sweeps. 129 notes were recorded in the data that mentioned this phenomenon. 110 of the notes indicated that a customer had been in the library since the previous sweep was conducted; in most cases they were even in the same spot we had observed them previously. 19 notes indicated that customers had been in the library for the past two sweeps (our entire visit), again many in the same location for this time. This data indicates that there are customers spending long periods of time in the library, sometimes remaining in the same location for most of their visit.

The five branches with the highest percentage of customers recorded as being in the library for more than one sweep were:

1. MNA: 44.2% (57/129)
2. WMC: 18.6% (24/129)
3. MLW: 6.2% (8/129)
4. RIV: 6.2% (8/129)
5. CPL: 5.4% (7/129)

Three activities were most commonly observed with customers staying for more than one sweep. These included: Using a laptop, reading, and studying. The three most common pieces of furniture used by these customers were: work table, work carrel, and soft seating.

It is important to note that this may only be a small sample of customers who were in the library for more than one sweep. In order to record customers in this category we had to be able to recognize them a second or third time, which was especially difficult during very busy sweeps and if the customer had moved to a different location in the library.

Staff Identification

Another observation we made was related to the difficulty we had identifying staff. Our data includes several staff members as we were only able to identify them as staff after their information had been entered into the data. In some cases we only discovered them to be staff much later into our data collection. This was especially the case for staff members in the stacks who did not have a visible EPL lanyard.

Catalogue Station Identification

The identification of catalogue only stations was difficult at times. This was especially the case if the computer was only marked by a screen saver to identify that it was catalogue only.

Accessibility

We observed a range in the accessibility among the library branches. During one sweep a customer with a stroller was observed getting stuck between a chair and a shelf, then having to back up and find another way to exit. Many customers were observed crouching down or sitting down to browse or retrieve materials.

Technology Friendly Spaces

During staff meetings staff raised the need for more plug-ins available for customers' various devices. During the sweeps we observed many customers adapting spaces that contained plug-ins. For example, the photo on the right shows a customer who moved a chair into the stacks in order to plug their laptop into the plug-in located there. Also observed were customers in unexpected areas (e.g. standing by a plug-in by the bathroom) in order to charge other devices such as cell phones.



Next Steps

The data from seating sweeps will be used to inform questions for surveys and interviews to be conducted with customers.

References

- Given, L.M. & Leckie, G.J. (2003). "Sweeping" the Library: Mapping the Social Activity Space of the Public Library. *Library & Information Science Research*, 25, 365-385. doi:10.1016/S0740-8188(03)00049-5
- Hopkins, J. & Leckie, G.J. (2002). The Public Place of Central Libraries: Findings from Toronto and Vancouver. *The Library Quarterly*, 72(3), 326-372.

Appendices

Appendix A: Survey Monkey

Seating Sweeps Exit this survey

Tuesday sweep time

*** 2. Tuesday sweep time**

10:30AM-12:00PM

1:00PM-2:30PM

3:00PM-4:30PM

Prev Next

Seating Sweeps Exit this survey

Day of Sweep

*** 1. Day of Sweep**

Tuesday

Thursday

Saturday

Next

Seating Sweeps Exit this survey

Location Codes

*** 3. Branch**

ABB

CAL

CPL

CRA

CSD

eplGo

HIG

IDY

LHL

LON

MLW

MNI

MNJ

RIV

SPW

STR

WMC

WOO

***4. Location Code**

- Aboriginal collection
- Adult FIC
- Adult NF
- AV
- Children's
- Children's reference desk
- Desk - Circulation
- Desk - Reference
- Desk - Single service
- Fireplace
- Floor
- Holds
- Magazines
- Newspapers
- Patio
- Program room
- Self check-out
- Self check-in
- Sitting area
- Study room
- Teens
- Vestibule
- Washroom
- World languages
- Other

Notes (please specify)

5. Furniture type

- Bench
- Catalogue computer
- Chair
- Child-size furniture
- Computer workstation
- Display
- Early literacy workstation
- Feature
- Floor
- Laptop bar
- Microfilm/fiche machine
- Photocopier
- Scooter table
- Soft seating
- Work carrel
- Work table
- Other

Notes (please specify)

Prev

Next

Seating Sweeps Exit this survey

Demographic Information

***6. Gender**

Male

Female

***7. Age**

Baby (0-12 months)

Toddler (1-2)

Preschool (3-5)

School aged (6-11)

Teen (12-18)

Younger adult (19-35)

Adult (36-60)

Older adult (60+)

8. Group size

Seating Sweeps Exit this survey

Possessions

9. Possessions

Bag

Books

Calculator

Digital reader/iPad/Tablet

Document

Drink

EPL laptop

Food

Laptop

Magazines

Mobile device

Newspapers

Skateboard/rollerblades

Stroller

Walking aid

Writing material

Other

Notes (please specify)

Seating Sweeps

[Exit this survey](#)

Activities

10. Activities using a laptop

- Audible noise
- Email
- Facebook
- Fingers on computer
- Gaming
- Headphones
- Library resources
- Open Office
- Viewing
- Can't identify
- Not using
- Other

Notes (please specify)

11. Activities using a computer workstation

- Audible noise
- Email
- Facebook
- Fingers on computer
- Gaming
- Headphones
- Library resources
- Open Office
- Viewing
- Can't identify
- Not using
- Other

Notes (please specify)

12. Activities on early literacy workstations

- Audible sound
- Headphones
- Not using
- Other

Notes (please specify)

13. Activities using EPL Laptop

- Audible noise
- Email
- Facebook
- Fingers on computer
- Gaming
- Headphones
- Library resources
- Open Office
- Viewing
- Can't identify
- Not using
- Other

Notes (please specify)

14. Activities using handheld device

- Audibly listening
- Headphones
- Typing
- Viewing
- Other

Notes (please specify)

15. Reading

- Books
- Document
- E-reader
- Magazine
- Newspapers
- Other

Notes (please specify)



16. Other Activities

- Attending program
- Browsing
- Colouring
- Drinking
- Eating
- Group learning
- Group reading
- Interacting with staff
- Just watching/sitting
- Looking at fish
- Playing games
- Playing with features
- Playing with toys
- Praying
- Returning books
- Sleeping
- Studying
- Talking on cell phone
- Talking to others
- Talking to self
- Touching another person
- Tutoring
- Using assistive technology
- Using catalogue
- Using microfilm/fiche machines
- Using payphone
- Using photocopier
- Using self-checkin
- Using self-checkout
- Waiting in line
- Writing
- Other

Notes (please specify)

17. Further observations