# Shelving Books with Library of Congress Call Numbers Formative Evaluation

Beth Tillinghast

Pulelehua RuthMarie Quirk

betht@hawaii.edu

rmq@hawaii.edu

Submitted to Catherine P. Fulford, Ph.D.

In partial fulfillment for course requirements for

ETEC 603 – Spring Semester 2005

May 3, 2005

I certify that I have 50% of the effort to the conceptualization, information, collection, analysis, and writing of this paper. I understand that I am responsible for all the contents and will be evaluated for the total project.

Beth Tillinghast	Pulelehua RuthMarie Quirk

This work follows the Creative Commons Attribution License. To view a copy of this license, visit http://creativecommons.org/licenses/by/1.0/ or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA

#### **ABSTRACT**

Shelving books in college and university libraries is probably the most important task in assuring users access. If this job is not done properly, books simply cannot be found. Although this task is very important, and more complex then it appears it is handled by entry-level student assistants and staff who have a minimum of library training.

The goal of the module was designed to motivate, inform, and train University of Hawai'i at Manoa Sinclair Library employees who shelve books. These learners are called shelvers. It was designed to provide all the information needed by an English-speaking learner with a high school degree who is unfamiliar with Library of Congress call numbers.

In the testing of this module by our sample population, the authors discovered several interesting facts. Though the target population has at least a high school education, instruction was still needed in the area of sorting by decimals. In addition providing detailed engaging information about call numbers did not appear to aid in the learning process, and, in fact, it made the module too long can complex for most people.

In the future, this module will be converted to an online environment. The lessons about the needs of the user will be valuable in designing e-learning instruction. The presentation of questions throughout the module was done on paper because this would mimic the electronic environment. It worked well. The online module will incorporate automatic feedback for embedded questions. This more dynamic organization should greatly improve the module. The other major conclusion was that it is critical to have a kinetic psychomotor component to the leaning. This will also be implemented.

## TABLE OF CONTENTS

METHODOLOGY	1
INTRODUCTION	1
ANALYSIS AND RESULTS	8
Phase I: Subject Expert Review	8
Phase II: Peer and Instructor Review	10
Phase III: Instructor Review	11
Phase IV: One-on-One Review.	12
Phase V: Small Group Review	16
Demographic Data Analysis	17
Test Data Analysis	19
Anecdotal, Attitude and Reflective Survey Data	32
CONCLUSION	35
Recommended Revisions	35
Discussion	42
Reflective Summary	46
APPENDIX A: FORMATIVE EVALUATION PLAN	48
APPENDIX B: ONE-ON-ONE TEST RESULTS	52
APPENDIX C: DEMOGRAPHIC INFORMATION AND RETROSPECTIVE SURVEY	53
APPENDIX D: ATTITUDE SURVEY WITH RESPONSES	55
APPENDIX E: INSTRUCTIONAL MODULE WITH PRETEST, POST TEST, AND	
ANSWER KEYS	57

# LIST OF TABLES

Table 1: Clusters and Chapter Titles	4
Table 2: Demographic Data	18
Table 3: Attitude Survey	34
Table 4: Recommended Revisions	38

# LIST OF FIGURES

Figure 1: Raw Data for Entry-level Questions.	19
Figure 2: Instructional Analysis Hierarchy	21
Figure 3: Raw Data for Pre-, Embedded, and Post Test Questions	24
Figure 4: Line Graph Depicting Pre-, Embedded, and Post Test Scores by Objective2	28
Figure 5: Bar Graph Depicting Pre-, Embedded, and Post Test Scores by Objective	29
Figure 6: Summary by Participant	30
Figure 7:Total Test Scores by Participant for Each Cluster	31

#### METHODOLOGY

#### Introduction

The purpose of this report is to discuss the methodology and analyze the findings of the study of a paper-based module on how to shelve of books in Sinclair library with Library of Congress (LC) call numbers. The methodology was developed after a content analysis was completed. It included using in–house subject matter experts in the development of the criterion-referenced tests, from which a module was developed. The module was then progressed to peer review, instructor review, one-on-one review by an expert and novice, and finally small group review. All these reviews included surveys, pre-tests, practice tests, post-tests and marginal notes as sources of data. The module was revised after each of these reviews. The goal was to design a totally paper-based module that would provide appropriate instruction for the target population. The process involved testing the module for validity and analyzing the results. Through the instruction shelvers would understand how to shelve books through interpreting the Library of Congress (LC) call number, collecting books, identifying ownership, identifying their shelf location within the library, and recording statistical data.

## Target Audience.

The intended population for this instructional module was employees in libraries utilizing Library of Congress call numbers to shelve materials. A limitation for most employees is that they are not familiar with the LC call number system when they are initially hired. Those that have some familiarity often do not understand the intricacies of the system. The population of new hires would have participated in a library tour as part

of their initial orientation. They would also have been introduced to the mission of Sinclair Library.

Some general characteristics of the target population of employees include that they have the minimum of a high school degree, indicating that they can read and sort both alphabetically and numerically. They are familiar with the overall layout of the library building and the fact that it has various locations. They understand that they can always utilize library charts to refresh their memory or to find specific locations within the library. Library employees who train to be shelvers are physically capable of carrying books and pushing book trucks. They must be able to read at various distances so they can see the call numbers displayed not only at eye level but also at the top and bottom of shelves. Library workers have an interest in library service and are motivated to provide the resources that support the research and instruction throughout the university's numerous disciplines. The workers are part of a team, which works together closely to provide the best service possible while remaining invisible to library patrons. The shelvers are motivated in part by their relationships to the other workers who work more closely with the library users. When the shelvers' work is successful, everything runs more smoothly, and the library patrons have fewer problems and need less help. Shelvers keep the library tidy and well organized. This is appreciated, valued, and acknowledged by the rest of the library staff, though the library user will not notice this service. They usually assume that the books will always be on the shelves, in order, when they need them.

The target population consists of two types of employees, both part-time student employees and full-time permanent staff. Motivation to succeed, as a shelver is two-fold:

the first is to successfully complete the probationary period of employment; the second is to support the mission of the library, which is to provide access to library materials. Part of the actual training can be fun and motivating if one enjoys a good scavenger hunt. One of the training experiences is to search for incorrectly shelved books. This activity is designed to help the shelver make the connection between the books on the shelf and the library users. "Missing books" are those books that a library user looks for but cannot find on the shelf. When a missing book is found incorrectly shelved in the book stacks, the shelver has a feeling of accomplishment. This feeling acts as a reward for the kind of person who enjoys helping others and who likes the challenge of a good mystery. *Module* 

The module to teach the Library of Congress call number system was designed to train novice shelvers to be competent employees at Sinclair Library. The module included information on the components of the instructional strategy: pre-instructional activities; testing, including pre, post, and embedded as part of practice activities in instruction; and follow-up activities.

The module contained twenty-three objectives, clustered into six groups.

Instruction was provided for all these objectives. The terminal objective was a culmination of all the other objectives and was not taught specifically. It was seen as the finale. The objectives for each cluster and each sub-skill were stated at the beginning of each chapter. Students then understood and focused on the stated objective during instruction.

## Testing

Pretests. A pretest was administered to evaluate student/employee familiarity with

the content area.

Embedded Tests. Practice tests were given throughout the chapters located within the module. In this way, competence for each objective was measured. Feedback was given to the learners noting both correct responses and incorrect responses with additional information provided.

<u>Posttests</u>. A posttest was administered upon completion of the module. This information was used to identify the sub-skills in the module that needed to be improved in order to support learner success.

### Clusters

The objectives for this module were organized into clusters of skills with the aim of facilitating learning. The following table identifies the cluster, the actual time needed to present the material, and the title for each chapter in the module.

Table 1 Clusters and Chapter Titles

Cluster 1 Subskills	Learning Time:	Cluster 4 Subskills	Learning Time:						
	10 minutes		10 minutes						
Chapter 1 Title: So,	Whose Books Are	Chapter 4 Title: Books Have Stats Too							
These?									
Cluster 2 Subskills	Learning Time:	Cluster 5 Subskills	Learning Time:						
	10 minutes		10 minutes						
Chapter 2 Title: Retr	rieving Books	Chapter 5 Title: Finding Our Way in the							
		Maze of Shelves							

Cluster 3 Subskills	Learning Time:	Cluster 6 Culminating	Practice Time:
	20 minutes	Activity	20 minutes
Chapter 3 Title: Tho	se Pesky Call Numbers	Conclusion Title: Let's	Hit Those Shelves

## Description

Design Team. The module was designed and developed jointly by the two authors. They are graduate students in Educational Technology and librarians at the University of Hawaii at Manoa libraries. Beth Tillinghast and Pulelehua RuthMarie Quirk both hold masters in library science and are familiar with LC call numbers. Pulelehua served as the content expert on specific aspects of the module for Sinclair Library and concentrated on the demographic and attitudinal information. Beth and Pulelehua worked on the module and all of the tests together. Beth was the superior writer and editor of all the documents produced.

Both team members were involved in all the levels of review described. Pulelehua was the contact for the subject experts that were used to evaluate the original criterion-referenced tests; she also contacted and selected the subjects used for the one-on-one reviews. The specifics of all the reviews are provided below. Both team members were involved in all the reviews as described in the description section.

Subject Matter Experts. These were library assistants who either work shelving library books with Library of Congress call numbers or who train or supervise employees who do this work. On February 9, 2005, at 2 P.M. Pulelehua made a presentation at a meeting with the group of Subject Matter Experts (SME) describing the project. She outlined the objectives in creating a self-instruction module for LC call numbers. The SME were then asked to complete the criterion-referenced test questions that had been

developed. They were given two days to complete the test on their own time. Of the seven people who had been asked to complete these tests, five completed them and provided the team with written feedback.

<u>Peer Review</u>. Members of the instructional design course served as peer reviewers. Both Beth and Pulelehua analyzed two other peer modules, and they in return analyzed the LC project. The peer review process included margin notes on the module, a one page written summary, and a face-to-face feedback session with each peer reviewer on March 15, 2005.

<u>Instructor Review</u>. The instructor reviewed our module as part of our content analysis and graded it based on the checklist provided. She provided margin notes and suggestions. In addition to this she met with the team for about 45 minutes outside of class to discuss the progress and assist with analysis and the consolidation of the numerous revision suggestions. This included a reworking of the hierarchy of the instructional analysis.

One-on-One Review. Both one-on-one review sessions were held on March 30, 2005, in a large comfortable room without distractions. The review was done privately to encourage frankness from the subjects. Beth was chosen to work with the expert since the expert was a member of Pulelehua's staff. The novice was recruited from a different library department so the session would be minimally influenced by Pulelehua's position at the library. In both cases, the subjects were asked to take all of the tests and the module. They were asked to talk out loud as they worked and to ask questions. They were also asked to make written and oral comments as they worked.

Small Group Review. On April 6, 2005, a small group reviewed the work during a session from 11:00 A.M. to 2:30 P.M. The small group of twelve people was recruited using email lists for various library groups. Originally, fifteen people had agreed to attend but only twelve could actually make it on the day of the testing.

Each subject was asked to sign in when they arrived on a numbered list. They were then given a folder, matching their sign-in number from the list. In the folder was a numbered copy of the survey, the pretest, the module, a colored packet of practice-test answers with feedback, the posttest, and a separate enlarged Shelving Locations Chart. The subjects were encouraged to settle in and make themselves comfortable while people arrived. The Staff Lounge at Sinclair Library was used as it has large tables with lots of room to spread out. The room was reserved for the group, so there were no interruptions from other users of the space.

Both Beth and Pulelehua were involved in the testing session. The test group did not all arrive on time. Beth provided the introduction for the first group, and Pulelehua did so for the group arriving late. Pulelehua provided the books truck and books that were used by the subjects as examples.

The subjects' instructions included a review of the final survey questions before they started so they were aware of what to look for as they progressed through the module and tests. They were also asked to consider the reflective questions on confidence and knowledge.

The subjects were told to turn in the pretest when it was completed. The timing was designed so that lunch would be provided at 12:30 P.M. when the subjects would have completed the module. Many did not finish until closer to 1:00 P.M. or later. They

were encouraged to take a break whenever they chose in order to avoid fatigue. Cold water and soft drinks were available throughout the session. It would have been interesting to note where each person was on the module when they paused for lunch, but we did not realize that at the time. Many subjects completed the module and then ate before going back to the post-test, survey, and reflective instrument.

#### ANALYSIS AND RESULTS

Many stages in evaluation are necessary in order to create a highly successful instructional model. The process strengthens the outcome. Careful appropriate revision was the key throughout the various iterations of the instructional module. Formative evaluation took place as the module moved through five different phases. The detailed plan for the formative evaluation appears in Appendix A.

Phase I consisted of an in-house review of the very first draft of the module by students currently employed at Sinclair Library. These reviewers acted as Subject Matter Experts. Phase II involved both Peer and Instructor review and evaluation for the entire Content Analysis. This consisted of the introductory materials, the hierarchy, performance objectives, the instructional strategy and pre-, post-, and embedded test questions. Phase III consisted of the course Instructor evaluation with recommendations for the second draft of the completed instructional model and tests, including the demographic and post module survey. Phase IV involved feedback from two different one-on-one sessions with both an expert and target population subject. Finally Phase V consisted of a small group of learners from several local academic institutions. Every phase resulted in further refinement of the instructional module.

Data was collected during the formative evaluation process through a number of methods. Revisions that were made from each of the following groups are noted in the Revisions Chart.

## Phase I: Subject Matter Expert Review

The library assistant civil service staff of the Library played a crucial role in the review of the instructional strategy as it was being developed. The staff reviewed the hierarchy and the criterion-referenced test questions when they were initially created in early February. The input received from them helped to reframe the module before it was created. Five of the seven library assistant staff members took the time to take the criterion-referenced tests and to review and to comment on the criterion-references tests and the related objectives.

The staff pointed out that several of the initial questions were not testing the skill needed to perform the job. They also pointed out that some of the major skill areas such as shelf reading, placing materials on book trucks, and arranging books in the stacks had been left out of the instructional module. The staff also pointed out the need for question clarity and relevance as they pertained to the objectives.

The criterion-referenced test questions and objectives were then modified to take into account the information provided. In some cases not all suggestions were included because they applied to instruction outside of the scope of the module; however, that information was noted and will be used in the creation of other related modules. For example, it was suggested that instruction should be provided in how to shelve items with accession numbers or other non-Library of Congress call number materials. Though these are important skills, they fall outside of the scope of the terminal goal for this particular

module. The most important change made because of this in-house review was to add some characters, and humorous wording to make the module more interesting and to keep the attention of the user.

The process of having SME review and comment on the objectives and criterion-referenced tests before the module was developed allowed revision of the module development before the plan was further developed. This provided the design team with information that allowed a more comprehensive module to be created that satisfied the instruction needs as determined by the content experts. This group of staff is responsible for training those employees who will be utilizing the module in the future. To involve the SME early in the development process meant that they would later be more invested in its introduction into the training process.

#### Phase II: Peer Review

Copies of the Instructional Strategy were exchanged with four instructional design students from ETEC 603. An additional copy was given to the Instructor of the course for evaluation. Feedback from these evaluations resulted in improvements in grammar, spelling, and vocabulary. In particular, one reviewer suggested rewording, which resulted in improving the clarity of the terminal objective. Other beneficial recommendations were made in regards to a lack of continuity between the desired outcome for the skill and the manner in which it was being tested. Several test items were revised as a result of these recommendations. The most beneficial recommendation came in the form of advice and suggestions on how to rework test items for several rules and the terminal objective. This included changing the order of some of the test items.

The key element was to include additional diagrams and to use a scenario for some test questions in order to replace the face-to-face requirement for those questions. Through these suggestions, the authors were able to move to a totally paper-based module with a great savings in time and effort. Although the test was then converted to paper-based, the time for completing the tests was still lengthy, making the overall experience too long and perhaps not as effective due to fatigue of the subjects.

#### Phase III: Instructor Review

Early in the content analysis, process the instructor assisted in the hierarchy restructuring and in re-working several test questions so they were better tested the performance objections.

The Instructor reviewed the module and provided input on the format and structure of the module. The paper-based work was long but broken down into many small clusters which usually proves to be less effective. The designers had used many small clusters to break up the module into measurable parts and so they could be rearranged if necessary. Since the testing happens throughout rather than at the end of a cluster, the cluster size is not as critical as it is in situations when questions are grouped at the end of a cluster. These clusters corresponded to the environmental needs for the kinetic parts of the training, which do not actually take place in this module. When the module is converted and implemented in an online environment, the two chapters that include the log sheets and statistics will be organized together. Also the cluster on shelving will be moved to a completely different module, one dealing with the general orientation to the library. Problems encountered in making the module paper based and stand-alone will be alleviated in the online version.

The format and appearance of the module needed some work to make it clearer. For example, the instructor suggested to rearrange the tables so they appeared before a question and to add more white space in the document.

#### Phase IV: One-on-One Session

We conducted two one-on-one sessions; they were completed in one session each. One subject was a student working in a different library department. This subject works in the library and is familiar with locations, though she is a novice at using Library of Congress call numbers. She works in a department where the documents are organized by a different classification system, the Superintendent of Document system. The second subject was an expert reviewer, as she works in Sinclair Library overseeing student hires that shelve books. Each session took about two hours to complete.

The sessions were given in a private and quiet environment. The subjects were encouraged to talk while they took the tests and completed the module so that the researcher could better understand their thoughts and questions as they worked. Both of the one-on-one subjects had been trained in the face-to-face environment. The expert was especially interested in the module, hoping that it would improve student training and save staff time used in the process. They both felt that having books available as they worked through the module would greatly help the process. The expert wanted more details to be added to the module and was helpful in pointing out details that were good to know but not critical to the job. The novice had a problem with decimal sorting and was given some face-to-face instruction in order to help her progress to the next component.

## Analysis and Results

Pulelehua met with the novice subject on Wednesday, March 30, 2005, from 8:45 A.M. until 10:45 A.M. Pulelehua chatted with the subject a little just to help her feel comfortable. They then reviewed the module and went over the other introductory materials. During the session it became clear that the subject did not understand how to sort decimally and that she needed instruction in that entry level #4 skill. Instruction was quickly given verbally. She was told that decimals sort from the left, while whole numbers sort from the right. This seemed to be all that the subject needed to remember about decimals. The subject noted a few spelling and grammatical errors and pointed out minor vocabulary selections that were a little confusing.

The subject suggested that real books be used for the exercises. She stated that she did not feel confident that she could shelve books correctly based on what she had learned in the module. However, she thought that she would be able to sort books properly. This comment led the authors to the conclusion that several book trucks should be available in the testing area with a number of Sinclair Library books placed on them. That way the learners would be able to really look at actual books and call numbers and try their hand at sorting if so motivated. One good recommendation that this subject made was to clarify the test question for Skill #12. She found this question very, very confusing. (Please see the following comment section for the expert subject.) She recommended for this question that we state more obviously that the first three parts of the call number were the same in the test so that the learners would have only to focus on the fourth part, thereby saving them both time and sorting through unnecessary parts of the call number.

Beth Tillinghast met with the expert subject on Wednesday, March 30, 2005; from 11:30 A.M. until 1:40 P.M., Beth read the introductory script and asked for feedback on the content. The subject relayed that the introduction and steps were very clearly stated. She was very meticulous in working through the module and gave good detailed feedback. Her remarks about the overall project were positive. She really enjoyed the more informal approach taken in the instruction and thought that the humor and activities throughout the terminal objective test question greatly enhanced the module. The subject and Beth discussed the original approach to testing the terminal objective, the use of staff and a hands-on test, and the subject highly recommended that the authors continue to use the revised paper-based version.

The expert subject made a few grammatical and spelling recommendations. She made very good suggestions on the rewording of some sentences for clarification. She also pointed out a more logical way to arrange some of the "Remember" boxes. For example she thought it best to place the reminder box for Skill #6 after the instruction and example, which placed it right before the practice question. This way the example of the "Book Pick-up Log" transitioned more appropriately from the instruction and the reminder was more visible before the practice question was begun. However, her strongest recommendation came about through a discussion of the practice question and answer for Skill #12. During the session the subject and Beth debated the proper arrangement of the copy and publication year in the fourth part of the call number. In light of this lengthy discussion, the authors later decided to change the test example to make it less difficult. If an expert and a librarian were required to contemplate the

question in a lengthy manner, it would surely be too technical for a beginning shelver and therefore inappropriate in an instructional module for beginners.

The expert answered the following questions from the formative evaluation plan:

Question: What did you see as the major weakness or confusing part of the materials?

Answer: I think decimals are confusing and so is the arrangement of books on shelves where there is lots of room.

Question: Does the hierarchy make sense to you?

Answer: Sort of. You might want to teach the shelving information earlier. In truth they get that information elsewhere in their training.

Question: Did you feel you could evaluate when you did not have the materials for the hands-on questions?

Answer: Yes, I could evaluate what was written, but I do not know if you could evaluate if people could do this without the hands on component.

Question: Do you have a suggestion for another way to test rather than using the nds-on experience we used in Skill #23 and #24?

Answer: Not really. I think it was better to actually have them work with the

Books. I could help with the evaluation.

Question: We tried to provide enrichment information when explaining call numbers to help with retention. Do you feel too much information is if is not tested?

Answer: I thought the information was very interesting and helped make the information memorable.

All of the above changes were made to the module, tests, and answer keys.

## Phase V: Small Group Session

The testing took place in the staff room at Sinclair Library, a large comfortable room with a single large table around which all the participants could sit. The participants did not all arrive on time, so the authors decided to start the first group of six when the others were fifteen minutes late. Beth conducted the introduction for the first group, and Pulelehua gave the introduction for the second group.

The participants had been recruited through electronic mail distributed to several professional list serves. They were comprised of librarians working in the field, not only in the public university setting, but also librarians from a private university and a private high school. Several student hires, working in the Circulation Department at a private university also participated. The complete draft of the instructional module with attached tests, survey materials, and supplemental chart were provided for each participant. (See Appendix D.) The materials were pre-numbered to assure anonymity and consistency for tracking data.

The session was scheduled to take place from 11:00 A.M. until 2:30 P.M. Lunch was provided for the participants, not only as a motivator for participation, but because the session ran through lunchtime. The design was that the participants would have time for the pre-test and the module before lunch and the post-test and demographic and attitudinal survey after lunch. One of the participants finished all the tests, module, and survey in 90 minutes. Most participants finished the pre-test module in 90 minutes and were ready for lunch between 12:30 and 1:00 P.M. One participant took much longer than the other since she was trying to learn how to teach her students how to use the Library of Congress call numbers.

#### Data Collection

Data was collected by four means: a demographic data collection sheet, test items for each learning objective, a post-module attitudinal survey, and qualitative comments written in the margins of the body of the module. Participants were encouraged to make qualitative comments in the pre-module instructions. All of the items were provided in individual folders for each participant.

### Survey Analysis

## Demographic Data

The participants involved in the evaluation for this instructional module were predominately female. Approximately two-thirds of the participants use the LC call number system on a regular basis, and the same number of participants reported having training in this system. However less than half reported having completed formal library instruction classes. This question was misinterpreted by some of the participants, who thought the question was asking if they had ever taught a class in library instruction rather than taken such a class.

## Sample vs. Target Populations

As evidenced in the demographic data in Table 2, the sample population is comprised of a higher number of individuals with experience and training in working with LC call numbers. The target population will presumably not have the advantage of this same experience and training. This parity needs to be noted when reviewing the test data. It will be necessary to conduct further testing with a population more realistically representing the intended target population.

# Table 2 Demographic Data

# Gender

Male	2
Female	10
Position	
UH Library Staff	2
Library Faculty	2
Graduate Student	3
Undergraduate Student	4
Private School Librarian	1
Experience with LC call numbers	
Never	1
Few times in the past	2
2-3 times in the past year	1
4-6 times in the past year	1
On a regular basis	7
Training in reading LC call numbers	
None	3
Yes	9
Completed library instruction class	
No	7
Yes	5

## Test Data Analysis

## Entry Level Test

The results of the data for the entry-level skills indicate that four are appropriate for that level and no remediation is necessary. However, the skill for Entry-level (EL) Skill 4 proved problematic for 33% of the sample population as shown in Figure.

CONTENT	Call number recognition	Alphabetical sort	Numerical sort	Decimal sort	Date sort	
Objective	EL1	EL2	EL3	EL4	EL5	
Objective	CLI	ELZ	ELS	CL4	ELS	EL Total
Participant						LL Total
Key						
1	1	1	1	0	1	80%
2	1	1	1	1	1	100%
3	1	1	1	1	1	100%
4	1	1	1	1	1	
=	1	1	1	1	1	100%
5	1	1	1	1	1	100%
6	0	1	1	1	1	80%
7	1	1	1	1	1	100%
8	1	1	1	0	1	80%
9	1	1	1	1	1	100%
10	1	1	0	0	1	60%
11	1	1	1	1	1	100%
12	1	1	1	0	1	80%
Total						
Correct	11	12	11	8	12	90%
%Mastery	92%	100%	92%	66%	100%	90%
Difference	1	0	1	4	0	

Figure 1. Raw data for entry-level questions

These participants were those having little or no LC call number experience. It should therefore be assumed that this would more accurately represent the entry-level skills of the target population and that Entry-level Skill Four should be added to the instructional objectives for the module.

Figure 2 depicts the pre- and post test scores arranged by instructional objective in the hierarchy. Entry-level skills are listed below the dashed line, and it is assumed that the subjects are proficient in these skills prior to instruction. The hierarchy will be revised

to reflect the change of EL#4 to a learning objective. The key data areas of interest are highlighted using a dark box around the areas.

The results indicate the expected trend of increased understanding as the participants worked through the material. However, the data for several questions demand reflection. The data from the small group review for EL #4 suggests that it needs to be incorporated as an instructional objective. In analyzing the question more closely, it was determined that the low scores on this question were a result of the need to understand decimals, a skill that becomes rusty with little use. This was brought to the authors' attention earlier during the one-on-one testing, and more detailed instruction had been provided in Skill #10. However, additional instruction needs to be incorporated into the module. The results of this problem affected the ability to answer questions in Skill #15 and Skill #16. Both questions assume that a person can sort by decimals. Several of the written comments on the module support the need for further instruction.

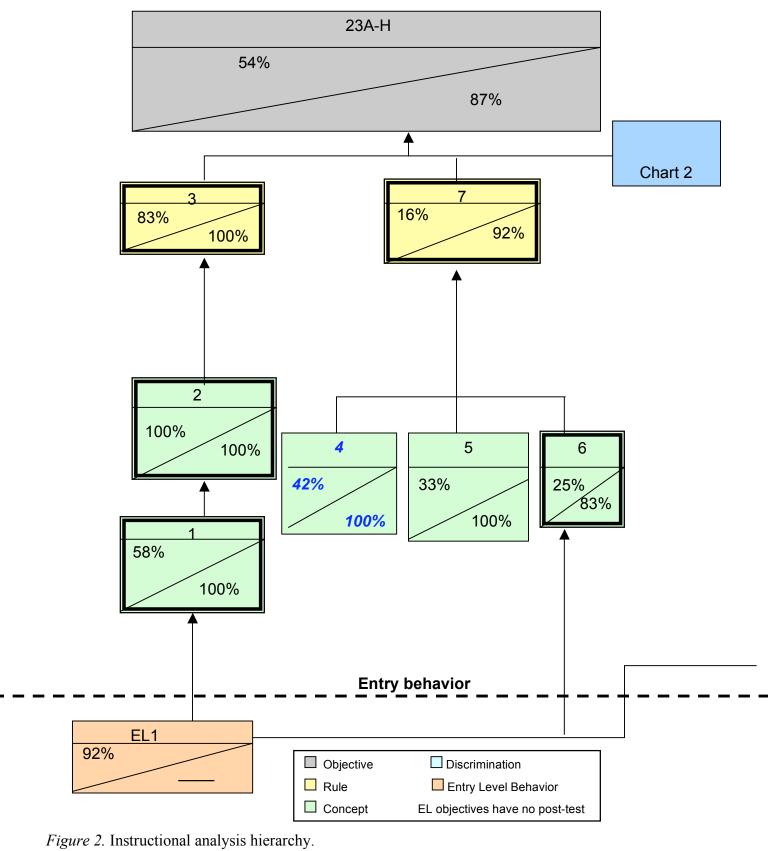
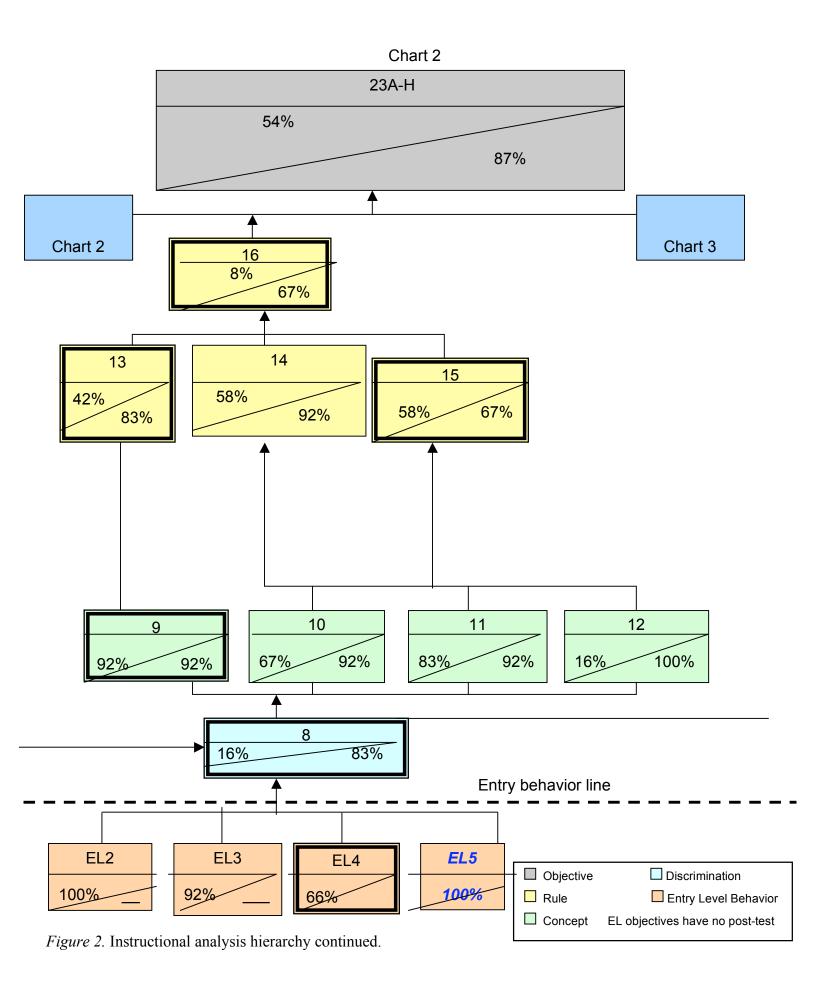


Chart 1



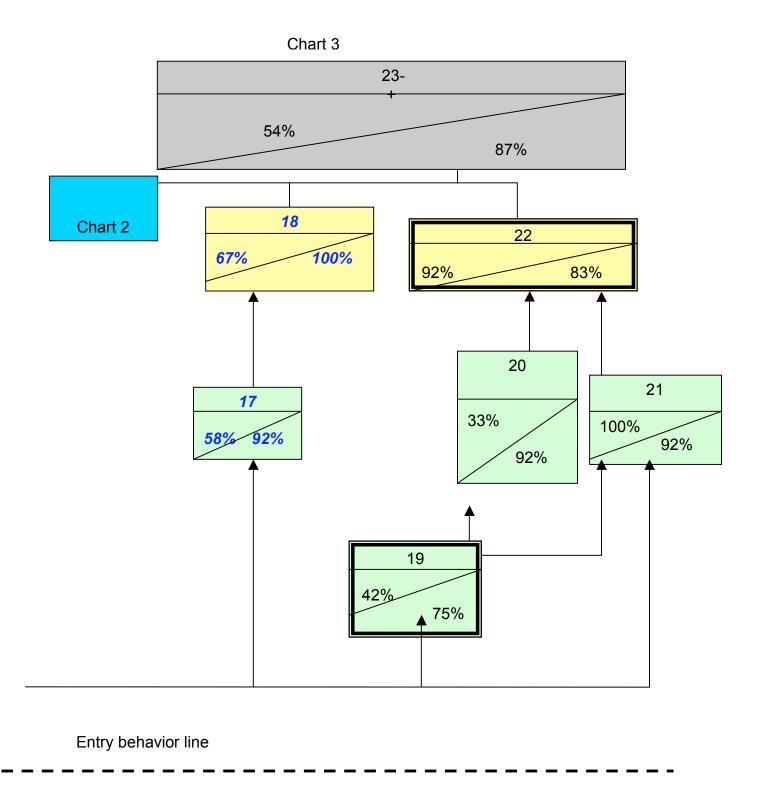


Figure 2. Instructional analysis hierarchy continued.



One objective that might be moved to an entry-level question is Skill #2, which focuses on the property stamp used by the University of Hawaii at Manoa libraries. This question yielded 100% accuracy on the pre-test. Skill #21, concerning range labels, also revealed 100% accuracy on the pre-test and might be made an EL skill. However, before changing these objectives into EL skills, it will be important to test the skills with a population more representative of the target population.

OBJECTIVE							-			Cluster 1			
OBJECTIVE		itify a lib	•	Identify UH Manoa			-	parate boo					
	book f	rom other	books	ownership of retireved books			b	y ownersh	ip				Average
		1			2			3		Pre	Е	Po	Total by
	Pr	Е	Po	Pr	E	Po	Pr	E	Po				Participant
Participant Key													
1	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
2	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
3	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
4	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
5	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
6	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
7	0	1	1	1	1	1	1	1	1	66%	100%	100%	89%
8	0	1	1	1	1	1	0	1	1	33%	100%	100%	78%
9	0	1	1	1	1	1	0	1	1	33%	100%	100%	78%
10	0	1	1	1	1	1	1	1	1	66%	100%	100%	89%
11	0	1	1	1	1	1	1	1	1	66%	100%	100%	89%
12	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
Total Correct	7	12	12	12	12	12	10	12	12				
%Mastery	58%	100%	100%	100%	100%	100%	83%	100%	100%				93.44%
Difference	5	0	0	0	0	0	2	0	0				
	-						-						

Objective	Identif	y areas in	library I	dentify I	book arra	ngement	1	Intrepret			d statistic	cal log				
	for	book pick	up	fo	or transpo	rt	Pi	cku-up L	og	entry fo	r retrieve	d books				Cluster 2
		4			5			6			7		Pre	Е	Po	All Tests
Participant	Pr	E	Po	Pr	Е	Po	Pr	Е	Po	Pr	Е	Po				Total by
Key																Participant
1	1	1	1	0	1	1	0	1	1	0	1	1	25%	100%	100%	75%
2	0	1	1	0	1	1	1	1	0	1	1	0	50%	100%	50%	67%
3	1	1	1	0	1	1	1	1	1	1	1	1	50%	75%	100%	75%
4	1	1	1	1	1	1	0	0	1	0	1	1	50%	75%	100%	75%
5	1	1	1	1	1	1	0	0	0	0	1	1	50%	75%	75%	67%
6	0	1	1	1	1	1	1	1	1	0	1	1	50%	100%	100%	83%
7	0	1	1	0	1	1	0	0	1	0	1	1	0%	75%	100%	58%
8	0	1	1	0	1	1	0	0	1	0	1	1	0%	75%	100%	58%
9	0	1	1	1	1	1	0	1	1	0	1	1	25%	100%	100%	75%
10	0	1	1	0	1	1	0	0	1	0	1	1	0%	75%	100%	58%
11	0	1	1	0	1	1	0	1	1	0	1	1	0%	100%	100%	67%
12	1	1	1	0	1	1	0	0	1	0	1	1	100%	75%	100%	92%
Total Correct	5	12	12	4	12	12	3	6	10	2	12	11				
%Mastery	42%	100%	100%	33%	100%	100%	25%	50%	83%	16%	100%	92%				
Incorrect	7	0	0	8	0	0	9	6	2	10	0	1				
						-										

Figure 3: Raw Data for Pre-, Embedded, and Post Test Questions: continued

	Discriminate parts			Identify 1st part of			Ident	Identify 2nd part of			fy 3rd p	art of	Identify 4th part			
	of	f call numb	er	С	call number			call number			call number			if there		
		8			9		10				11		12			
Participant	Pr	Е	Po	Pr	Е	Po	Pr	Е	Po	Pr	Е	Po	Pr	Е	Po	
Key																
1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	
2	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	
3	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
4	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
5	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	
6	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
7	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
8	0	0	0	1	1	1	0	1	1	0	1	0	0	1	1	
9	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	
10	0	1	1	1	1	1	0	1	0	1	1	1	0	1	1	
11	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
Total Correct	2	11	10	11	12	11	8	12	11	10	11	11	2	11	12	
%Mastery	16%	92%	83%	92%	100%	92%	67%	100%	92%	83%	92%	92%	16%	92%	100%	

		Interpret Record shelving											Cluster 4
CONTENT		Shelv	ing Log			sta	tistics	;	P	re	Е	Po	average
QUESTION #		1	L7			1	8						Total by
	Pr		E	Po	Pr		Е	Po					Participant
Participant Key													
1	0		0	1	1		1	1	33	3%	66%	66%	55%
2	0		1	1	1		1	1	33	3%	100%	66%	66%
3	1		1	1	0		1	1	66	5%	100%	100%	89%
4	0		1	1	0		1	1	0	%	66%	100%	55%
5	1		1	1	1		1	1		5%	100%	66%	77%
6	1		1	0	1		1	1		5%	100%	66%	77%
7	1		1	1	1		1	1		5%	66%	100%	77%
8	0		1	1	l 0		1	1	0	%	100%	100%	67%
9	1		1	1	1		1	1	66	5%	66%	100%	77%
10	0		1	1	1		1	1	33	3%	100%	66%	66%
11	1		1	1	l		1	1		3%	66%	100%	66%
12	1		1	1	1		1	1	66	5%	100%	100%	89%
Total Correct	7		11	11	8		12	12			20070	20070	05 70
%Mastery	58%		2%	92%	679		00%		% 44	1%	86%	86%	72%
Difference	5		1	1	0,		0	100	, ,	. 70	0070	0070	, 2 , 0
Decipher	Sort alı	nhanum	erically		hanume	erically	. ,	Sort by					Cluster 3
Location		vhole nu	•	-	th decima	-		II numb		Pre	Е	Po	average
13		14			15			16	-	]			Total by
Pr E Po	Pr	Е	Po	Pr	Е	Po	Pr	Е	Po				Participant
													•
0 0 1	0	0	1	0	1	1	0	1	0	0%	77%	6 88%	55%
1 1 1	0	1	1	1	0	0	0	1	0	66%	88%	6 55%	70%
1 1 1	1	1	1	1	1	1	1	0	1	77%			88%
0 0 1	0	1	1	0	1	1	0	0	1	33%			70%
1 1 1	1	1	1	1	1	1	0	1	0	55%			81%
1 1 1	1	1	1	0	1	0	0	1	1	55%			81%
0 1 0	1	1	1	1	1	1	0	0	1	66%			81%
1 1 1	0	1	1	0	1	0	0	1	1	22%			59%
0 1 1	1	1	1	1	0	1	0	0	1	55%			70%
0 1 0	0	1	0	0	1	0	0	1	0	22%			55%
0 0 1	1	1	1	1	1	1	0	0	1	66%			81%
0 1 1 5 9 10	1 7	1 11	1 11	1 7	1 10	1 8	0 1	1 7	1 8	66%	1009	% 100%	89%
42% 75% 83%	58%	92%	92%	7 58%	10 83%	8 67%	8%	/ 58%	8 67%				73%
7 3 2	58%	92%	92%	58% 5	83%	6/%	8% 11	58%	4				/3%
Figure 3: Pay									-	 	ontin	- d	

Figure 3: Raw data for pre-, embedded, and post test questions continued

Objective	D-6			T-1	h 1		74		-1.	C.						Cluster 5
Objective	Define shelving			Identify book arrangement			Interpret stack			Shelf read to find				_		
	terminology			in section of stacks			range labels			location for book			Pre	Е	Po	average Total
			19			20		21			22					by
	Pr	E	Po	Pr	E	Po	Pr	E	Po	Pr	E	Po				Participant
Participant Key																
1	1	1	1	0	0	0	1	1	1	1	1	1	75%	75%	75%	75%
2	1	1	1	1	1	1	1	1	1	1	1	0	100%	100%	75%	92%
3	0	1	1	0	1	1	1	1	1	1	1	1	50%	100%	100%	83%
4	0	1	1	0	1	1	1	1	1	1	1	1	50%	100%	100%	83%
5	0	1	1	0	1	1	1	1	1	1	1	1	50%	100%	100%	83%
6	1	1	1	0	1	1	1	1	1	1	1	1	75%	100%	100%	92%
7	1	1	1	1	1	1	1	1	1	1	1	1	100%	100%	100%	100%
8	0	1	0	0	1	1	1	1	1	1	1	1	50%	100%	75%	75%
9	1	1	0	1	1	1	1	1	1	1	1	1	100%	100%	75%	92%
10	0	1	0	1	1	1	1	1	0	0	1	0	75%	100%	50%	75%
11	0	1	1	0	1	1	1	1	1	1	1	1	50%	100%	100%	83%
12	0	1	1	0	1	1	1	1	1	1	1	1	50%	100%	100%	83%
Total Correct	5	12	9	4	11	11	12	12	11	11	12	10				
%Mastery	42%	###	75%	33%	92%	92%	100%	100%	92%	92%	100%	83%	69%	98%	88%	85%
Difference	7	0	3	8	1	1	0	0	1	1	0	2				

Objective	The s	helvers	will un									ber, colle			fying own	er ship,
	identifying their shelf location within the library, and recording statistical data.															
	23A		23B		23C		23D		23E		23F		23G		23	3H
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
Participant Key																
1	1	1	0	1	1	1	1	1	0	0	1	1	0	1	0	1
2	1	0	0	1	1	1	0	0	1	1	1	1	1	1	0	1
3	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	0	1	0	1	0	1	1	1	0	1
5	1	1	1	1	1	1	0	0	1	1	0	1	1	1	0	1
6	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1
7	1	0	0	1	0	1	0	1	1	1	0	1	1	1	1	1
8	1	1	0	1	0	1	0	1	0	0	0	0	1	1	0	1
9	1	1	1	1	0	1	0	1	0	1	0	1	1	1	0	1
10	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0
11	1	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1
12	1	1	0	1	1	1	0	1	0	1	0	1	1	1	0	
Total Correct	12	10	4	12	7	12	1	8	6	9	3	10	10	12	3	10
%Mastery	###	83%	33%	100%	58%	100%	8%	67%	50%	75%	25%	83%	83%	100%	25%	90%
Difference	0	2	8	0	5	0	11	4	6	3	9	2	2	0	9	1

		Terminal	Pretest	Embedded	Post
Pre	Po	objective	Summary by	Summary by	Summary by
		average	participant	participant	participant
		Total by			
50%	88%	69%	40.00%	81.82%	90%
63%	75%	69%	70.00%	95.45%	70%
63%	100%	81%	70.00%	95.45%	100%
50%	100%	75%	46.67%	86.36%	100%
63%	88%	75%	63.33%	95.45%	90%
75%	100%	88%	70.00%	100.00%	93%
50%	88%	69%	60.00%	90.91%	93%
25%	75%	50%	23.33%	90.91%	80%
38%	100%	69%	53.33%	81.82%	97%
13%	50%	31%	26.67%	95.45%	60%
50%	88%	69%	50.00%	90.91%	97%
38%	88%	63%	56.67%	95.45%	97%
48%	86%	67%	52.37%	91.73%	89%

Figure 3: Raw Data for Pre-, Embedded, and Post Test Questions: continued

Test results showing raw data for the pre-, embedded, and post test items are included in Figure 3. Please note that there is no data for the terminal objective in the embedded test section of these figures. In order to shorten the length of the module, the

authors chose to remove the test for the terminal objective for the embedded test only. These items were tested individually throughout the module via the embedded test items for each specific objective, and they were tested in the pre- and post tests. The authors felt that the data could be gathered accurately through these tests and that the savings of time to the participants warranted such an approach.

Examining the summary data by clusters confirms the designers' analysis that the sample population was very knowledgeable. This can be seen by the high number of perfect scores for pretest items. The perfect scores for embedded and post tests in the first cluster covering book ownership make the designers realized this area may not need instruction. The embedded and posttest scores are affected by this, but they also reflect the effectiveness of the instruction provided. The lowest scores for all tests are found in the call number section of the module cluster three.

The very low pre-test scores for Skills #6, #7, #8, #16, and #23D as depicted in Figure 4 were of interest. Considering that 58% of our sample population responded that they have Library of Congress call number experience as shown in the demographic data of Table 2, these pre-test scores seem low. However, a closer look at these test items reveal that they pertain to skills specific to Sinclair Library and are not generalized items for LC call numbers.

The pretest scores reveal over 50% mastery for half of the objectives. This is because the sample population did not include novices with no call numbers experience. As demonstrated in Figure 4 below, the areas in which all participants performed poorly were skills that are executed differently at different institutions. Blue represents the pretest, pink the embedded test, and yellow represents the posttest score by objective.

#### Pre-, Embedded, and Post Test Scores by Objective LC Call Numbers - 12 Subjects

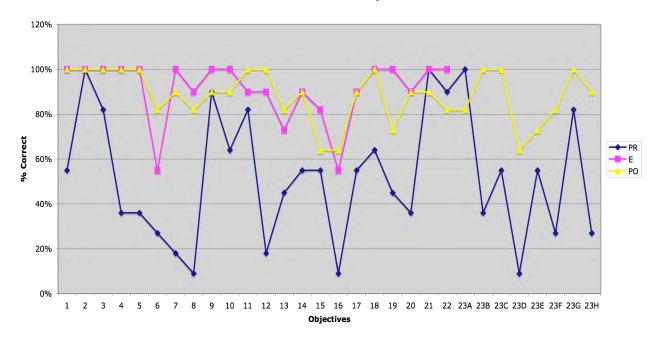


Figure 4. Pre-, embedded, and post test scores by objective

The question for Skill #6 resulted in low data. The participants scored only 50% on the embedded test and 83% on the posttest. The results were of interest as the question was not a particularly difficult one. In looking at the actual exam papers, it was discovered a number of individuals skipped answering the question. The authors believe it is due to the format for the answer. Most of the questions call for circling an answer; however, Question #6 listed the word "Answer:" after the questions, which was a scenario, and a space was left to write in several sentences. The change in format must have proved problematic for some subjects. More complete details for answering questions will be added to the introductory instructions.

Questions for Skill #9 and #23A both evidence high scores for the pretest, 92% and 100% respectively. In analyzing the question, it is evident that the higher scores resulted from the ability to decipher the Shelving Locations Chart rather than from

understanding the locations within Sinclair Library. This speaks well for the clarity of the chart. However, this seems contradictory to the lower posttest score for Question #23A, which resulted in an average mastery of 83%. In analyzing the posttest question, it was determined that an in-house abbreviation had been used for one of the locations on the chart. "RBR" was used in the question and referred to the Reserve Book Room.

However, the chart lists the location as "Reserves". This correction has been made in the chart.

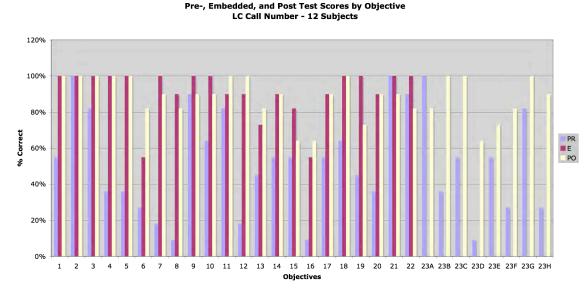


Figure 5. Bar Graph Depicting Pre-, Embedded, and Post Test Scores by Objective

The test results for a number of the questions do not follow the general trend of a participant's increased understanding throughout the module, especially with the feedback section, and then a lowering of the post test mastery score. This is evidenced in 36% of the results only. 55% of the posttest questions showed mastery at the same or greater level than the embedded test. The favorable comments from the subjects lead to the conclusion that the detailed and excellent feedback accounts for this discrepancy.

The results for Question #22 indicate that the question is too simple. The mastery level was 92% for the pretest and 100% for both the embedded and posttests. The complexity of the question was not parallel with the complexity for the instructional objective. This question will be modified to more appropriately correspond to the objective in Skill #22.

A closer look at the data for Questions #21-#23A show an anomaly in the test results. As displayed in Figure 5, these questions received very high pre-test scores, with mastery at from 8% to 17% higher than the posttest score. An analysis of the questions didn't reveal the cause of the anomaly. The authors therefore suggest that the length of time to complete the module was overly long and might have affected the results as the participants tired: testing time varied from ninety minutes to over three hours, with an average time of two hours for module and test completion.

In Figure 6, each line represents a different participant; you can see that everyone clearly improved over the pretest scores. The posttest scores are high which means the instruction did not confuse the learner. Instead, the learners improved.

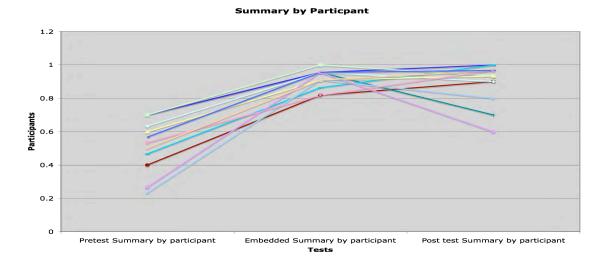


Figure 6. Summary by participant

Figure 7, lists the total scores for pre-test, embedded test, and posttest for each participant, by cluster. It is immediately evident that the overall the scores are high for pretests, especially for cluster 1 dealing with book ownership and cluster 5 dealing with shelving. These scores are so high because the sample population was not novices. Once again, it will be interesting to see if the scores are very different when the module is tested with a more representative target population.

	Shelving		Obje	ninal ctive	Pretest	Embedded Summary	Post test	
Pre	Е	Ро	Pre	Po	Summary by participant	by participant	Summary by participant	Participant
								Key
75%	75%	75%	50%	88%	40%	82%	90%	1
100%	100%	75%	63%	75%	70%	95%	70%	2
50%	100%	100%	63%	100%	70%	95%	100%	3
50%	100%	100%	50%	100%	47%	86%	100%	4
50%	100%	100%	63%	88%	63%	95%	90%	5
75%	100%	100%	75%	100%	70%	100%	93%	6
100%	100%	100%	50%	88%	60%	91%	93%	7
50%	100%	75%	25%	75%	23%	91%	80%	8
100%	100%	75%	38%	100%	53%	82%	97%	9
75%	100%	50%	13%	50%	27%	95%	60%	10
50%	100%	100%	50%	88%	50%	91%	97%	11
50%	100%	100%	38%	88%	57%	95%	97%	12

	Воо	k Owners	hip	В	ook Pick	up	Ca	all Numbe	ers	9	Shelving Lo	g
Participant	Pre	E	Ро	Pre	E	Ро	Pre	E	Ро	Pre	E	Ро
Key												
1	100%	100%	100%	25%	100%	100%	0%	77%	88%	33%	66%	66%
2	100%	100%	100%	50%	100%	50%	66%	88%	55%	33%	100%	66%
3	100%	100%	100%	50%	75%	100%	77%	88%	100%	66%	100%	100%
4	100%	100%	100%	50%	75%	100%	33%	77%	100%	0%	66%	100%
5	100%	100%	100%	50%	75%	75%	55%	100%	88%	66%	100%	66%
6	100%	100%	100%	50%	100%	100%	55%	100%	88%	66%	100%	66%
7	66%	100%	100%	0%	75%	100%	66%	88%	88%	66%	66%	100%
8	33%	100%	100%	0%	75%	100%	22%	88%	66%	0%	100%	100%
9	33%	100%	100%	25%	100%	100%	55%	55%	100%	66%	66%	100%
10	66%	100%	100%	0%	75%	100%	22%	100%	44%	33%	100%	66%
11	66%	100%	100%	0%	100%	100%	66%	77%	100%	33%	66%	100%
12	100%	100%	100%	100%	75%	100%	66%	100%	100%	66%	100%	100%

Figure 7. Total test scores by participant for each cluster

### Anecdotal, Attitude, and Reflective Data

The length of the instructional session was a major issue of concern.

The time it required for the subjects to take the tests and complete the module led the authors to really look at the mechanics of the module. How easy was it to read and understand? The participant who finished first in the small group review was a male undergraduate working in stacks at a private university. He commented on how much he enjoyed taking tests. He went through the module quickly and finished it under an hour. He did this by going right to the questions and just going back to the instruction materials to find the answer. He did not use the feedback sheet to confirm his answers to the questions, and the only items he had wrong were the ones that were library specific. This information provided support for thinking that the revised questions were more clearly presented on this draft of the module.

There were still some errors in the questions and answer sheets, which were picked out and commented on by 50% of the participants. These same people wrote other comments throughout the text that showed that people were really thinking about the evaluative task at hand.

One subject who made many comments, both written and oral was the high school librarian. She told the authors that she was participating in order to learn what she needed to know to convert her the call number classification system for her collection. She was in the process of converting her collection from a Dewey Decimal system used in most elementary and secondary schools to the LC call number system. This subject spent more than three hours completing and critiquing the module. She used the feedback answer

sheet to check her answers and asked to keep the module to look at when taking the posttest. The module presented very similar but different questions for pre-test, embedded test, and posttest. She was extremely motivated, and even when everyone else had finished she asked to be able to continue working. Luckily, the room had been booked for the afternoon, so she was able to continue to work until she finished.

In the small group, people would make comments out loud to the whole room when they found something that was not quite right. However, not everyone seemed to notice, and this was not a disturbing factor.

Only 50 % of the subjects consistently looked at the answer/feedback sheet while working through the module. The others glanced at the feedback but the authors do not know to what extent it was referenced. The authors had mentioned several times that the use of the feedback packet was beneficial and that we would like it critiqued. It appeared that approximately 50% of the subjects became more involved with the learning process and forgot that they were also to act as reviewers for the material.

The attitude survey results are shown in Table 3. In addition to the data shown,

Table 3 Attitude Survey

		SA	A	D	SD
6	This instruction was motivating	6	6		
7	The material covered in this instruction will	5	7		
	be useful for me personally.				
8	The material covered in this instruction will	5	5	2	
	be useful for me professionally.				
9	I am satisfied with the knowledge and skills	9	3		
	gained from this instruction.				

a number of subjects wrote comments next to the questions in the margin of the module. Both having the larger 1.5" margin on that side as well as the introductory instructions encouraged notes. These comments indicated that the subjects had a number of different ideas and suggestions: the rearrangement for some of the chapters; the consolidation of a few of the concepts; and a more precise management of the scope and breath of the topic. Three of the participants who were thinking of using the module for student employee instruction purposes suggested taking out the "Nice to Know" items and providing it as separate instruction. This seemed like a good way to simplify the module and yet maintain the full scope of skills needed to shelve books. This was not implemented in the revised module but will become a link to "More Information" in the online tutorials.

The survey also included questions about the content and layout of the module and tests. Overall the responses were positive. The possible problem areas were in the level of the instruction, the length of the instruction, the scope of the instruction, and the

readability. Even so the attitude section indicated that people were generally satisfied and felt the module was useful. Only one person did not feel an increase in confidence in shelving with LC call numbers at the completion of the module. This was the same person who did not respond on rating the knowledge section. (See the Retrospective Survey in Appendix C.) Subject #10 was a supervisor of circulation students in a private college, and although one of her students was the subject who had completed the module and tests in the least amount of time, she found the module long and tedious.

The complete survey with all the data and comments can be found in Appendix D.

### **CONCLUSION**

#### Recommended Revisions

The current version of this module will undergo further refinement to the content before it is tested again with more representative participants of the target population.

Table 4 provides a summary of the identified problems, the recommended changes, and the evidence to support change.

The content of the module has undergone a number of revisions. These revisions mostly revolved around clarification of certain objectives through the rewording of the instructional goals or through the reorganization of the instructional hierarchy in terms of the order of the objectives. It became obvious during the small group testing that one of the important skills required for successful completion of the module needed to shift from an entry-level position to a learning objective in the instructional hierarchy. In addition certain performance objectives need to be further modified so that they are more appropriate for the target population. The authors found that the test questions were designed for more advanced library users as opposed to the target population.

Another revision that was made after an instructor review was the reformatting of several main objectives and the terminal objective. In the earlier drafts several objectives were dependent upon library personnel being present to complete the testing and feedback. This process would have been cumbersome for the testing sections of the module. A revision was made so testing and feedback became totally paper based.

There were also several test items that were modified when the authors realized that the test questions were not specifically testing the skills that were presented in the objective. The layout of the content was generally reorganized a number of times.

Information in the instruction that was interesting but extraneous to the objectives was boxed and displayed as such. Reminder and hint boxes were added to assist the flow of information. More revisions need to be made to the module to allow for more white space on certain pages. As the module developed examples, non-examples and feedback were added and modified. Written comments during the small group review highlighted how helpful the feedback had become for the learning process. Generally, the module was very well received by the sample audience and by the one-on-one participants. The general feeling was that it dealt with a difficult topic in an organized and fun approach.

Numerous changes were made to modify the process of delivering instruction and of conducting the formative evaluation. There was some rearrangement of the clusters and further modifications will take place with format changes as the module is developed into an online tutorial. The first draft of the module was not particularly stimulating. Remarks from the in-house reviewers indicated that the module was somewhat uninteresting. Therefore the tone of the language was changed to become more informal. Characters were added to scenarios as well as colorful images for instruction and test

items. These modifications increased the motivation for the participants. This was supported later by the comments from participants in the small group session. Actual books on carts were brought into the small group session as a result of initial comments from the one-on-one session. There will be further refinement in the process of delivering instruction and conducting the formative evaluation. The directions in the introduction to the module will be changed to make learners aware that there are several formats for responses on test questions.

Throughout the development of the paper-based module, minor changes were made to the format of the module in terms of spelling and vocabulary selection. Graphics were also changed as a result of comments about images that were difficult to interpret. A large version of the Shelf Locations Chart was created and added to each module to support instruction. The answers to embedded questions and the feedback were placed in a separate section of the module and printed on colored paper to distinguish it from other sections. The authors felt that more attention would be given to the feedback as a valuable source of instruction if it were individually packaged. Finally a major refinement in format will take place when the module is adapted for the online environment. The instructional objectives will remain constant as will much of the instruction and graphics. However, the actual method for testing will change to an interactive approach and allow multiple options for feedback. No changes would be made to the data collection process.

Table 4 Recommended Revisions

	Component	Problem/ Recommendation	Revisions	Evidence
<b>Content Revision</b>	Instructional Goal	Wording did not flow, making it hard to easily understand.	Reworded goal.	Peer Review
	Instructional Hierarchy	Too many similar concepts for "terminology"	Combined several concepts into Skill #19	Instructor Review
	Performance	66% incorrect on EL#4	Change this skill from an entry level to an instructional objective	Small Group Review
	Objectives	Needed information in Skill #20 & #21 in order to understand #18 & #19.	Switched the objectives to provide appropriate instruction.	Peer Review
Content Revision Continued		Need to separate the skill of defining terminology from the higher skill of shelving properly.	Created a "Defining Shelving Terminology" objective.	Instructor Review
	Test Items	Skill #2, 22, & 23 were dependent upon library staff for correction and feedback, which was too time consuming.	Revised these skills to a paper-based format.	Instructor Review Peer Review
		Tests for Skills #6 & #7 were not testing the performance objectives.	Revised test questions.	Instructor Review
		Skill #9 practice lists Wong AV; this location is no longer used and is not on the chart.	Changed location to Sinclair.	One-on-One Review

Table 4 Recommended Revisions

	Component	Problem/	Revisions	Evidence
		Recommendation		
		Skill #23. D. and #24. E. had error in answers.	Modified answers and added emphasis in instruction.	Expert Review
		Skill #12 had #2 incorrect answers	Modified the answers.	One-on-One Review Expert Review
		Skill #12 test question was too technical for beginning shelvers. Skill #12 test question could have been more clearly stated to aid completion. Question #6 was not	Question modified appropriately. More details added to test question instruction. Emphasized the	One-on-One Review Expert Review One-on-One Review Expert Review Small Group
		consistently answered.	answer area, where a short answer needed to be written out.	Review
		Question #15 was difficult because it dealt with decimals.	This skill needs to be moved from entry level to objective.	Small Group Review
Content Revision Continued		Question #16 was difficult because one component of the question was not very obvious	Simplify question.	Small Group Review
	Instruction	Left out some critical information in Skill #9, knowledge we took for granted.	Added information about call numbers to this skill.	Instructor Review
		Question #16 was difficult because one component of the question was not very obvious	Simplify question.	One-on-One Review
		Vocabulary incorrectly used in Shelving Locations Chart.	Revised vocabulary for clarification.	Expert Review

Table 4 Recommended Revisions

Too much extraneous information given in Skill #9 & #10.  Difficult to remember numerous critical pieces of information.  Difficult to remember numerous critical information in highlighted "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples Not all skills had examples.  Examples Non-examples were not identified as such.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Clarify instruction.  Feedback Skill #2 had little feedback on the incorrect choice.  Feedback Skill #2 had little feedback for practice test.  Process Revision		Component	Problem/	Revisions	Evidence
Too much extraneous information given in Skill #9 & #10.  Difficult to remember numerous critical pieces of information.  Difficult to remember numerous critical pieces of information.  Difficult to remember numerous critical information in Instructor Review  "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples Not all skills had examples were not identified as such.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Clarify instruction.  Feedback Skill #2 had little feedback on the incorrect choice.  Feedback Skill #2 had little feedback for practice test.  Process Revision		Component		Kevisiolis	Lyluence
Skill #9 & #10. with extraneous information.  Difficult to remember numerous critical pieces of information.  Difficult to remember numerous critical pieces of information.  Peer Review information in highlighted "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Added Peer Review examples to examples to every skill.  Non-examples were not identified as such.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision				Added "Nice to	Instructor
Difficult to remember numerous critical pieces of information.  Difficult to remember numerous critical pieces of information.  Peer Review information in highlighted "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples/ Not all skills had examples.  Examples Non-examples were not identified as such.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision			information given in	Know" boxes	Review
Difficult to remember numerous critical pieces of information.  Peer Review Instructor Review (Remember') boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Added "Helpful Hint" boxes, especially in Chapter 5.  Non- examples.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision			Skill #9 & #10.		
numerous critical pieces of information.  numerous critical pieces of information.  nighlighted "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples/ Not all skills had Added examples to every skill.  Non-examples were not identified as such.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision  Instructor Review  Review  Peer Review			7.00		
pieces of information.    bighlighted "Rewiew"					
"Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples/ Non- examples.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision  "Remember" boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  examples to every skill.  Identified non- examples and added two more.  Peer Review					
boxes. Added "Helpful Hint" boxes, especially in Chapter 5.  Examples/ Non- examples.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Peer Review			pieces of information.	~ ~	Review
boxes, especially in Chapter 5.  Examples/ Not all skills had Added Peer Review examples to every skill.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Process Revision  Some definitions hard to conceptualize in Chapter 5.  Feedback Skill #2 had little feedback for practice test.					
Examples/ Not all skills had examples.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Feedback  Process Revision  Review  Peer Review				"Helpful Hint"	
Examples/ Non- examples  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Added Peer Review examples to every skill.  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Some definitions hard to conceptualize in Chapter 5.  Clarify instruction.  Feedback  Skill #2 had little feedback on the incorrect choice.  Feedback  Peer Review more photos to clarify instruction.  Peer Review propriate feedback for practice test.					
Examples/ Not all skills had examples.  Non-examples examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Peer Review examples to every skill.  Identified non- examples and added two more.  Added many Peer Review more photos to clarify instruction.  Peer Review examples and added two more.  Added many Peer Review examples and added two more.  Added many Peer Review examples and added two more.  Added many Peer Review examples to every skill.  Peer Review examples to examples to every skill.  Peer Review examples to examples to every skill.  Peer Review examples to every skill.				-	
Non- examples  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Peer Review  Review  Peer Review		Evamples/	Not all skills had	-	Door Davious
examples  Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little feedback on the incorrect choice.  Peer Review		_			Peel Review
Non-examples were not identified as such.  Some definitions hard to conceptualize in Chapter 5.  Feedback  Skill #2 had little feedback on the incorrect choice.  Peer Review  Added many more photos to clarify instruction.  Added Peer Review			examples.	-	
Some definitions hard to conceptualize in Chapter 5.  Feedback  Skill #2 had little feedback on the incorrect choice.  Process Revision  Added many peer Review more photos to clarify instruction.  Peer Review peer Review feedback for practice test.			Non-examples were	•	Peer Review
Some definitions hard to conceptualize in Chapter 5.  Feedback  Skill #2 had little Added Peer Review feedback on the incorrect choice.  Process Revision  Peer Review  Feer R			not identified as such.	_	
Some definitions hard to conceptualize in Chapter 5.  Chapter 5.  Clarify instruction.  Skill #2 had little Added Peer Review feedback on the incorrect choice.  Process Revision  Peer Review  Peer Review  Feedback Peer Review  Peer Review  Peer Review  Peer Review  Peer Review					
to conceptualize in Chapter 5.  Chapter 5.  Skill #2 had little Added Peer Review feedback on the incorrect choice.  Process Revision  To conceptualize in more photos to clarify instruction.  Added Peer Review appropriate feedback for practice test.			Some definitions hard		Daar Raview
Chapter 5. clarify instruction.  Feedback Skill #2 had little Added Peer Review feedback on the incorrect choice. feedback for practice test.  Process Revision				-	1 cel Review
Feedback Skill #2 had little Added Peer Review feedback on the incorrect choice. feedback for practice test.  Process Revision			-	-	
feedback on the appropriate incorrect choice. feedback for practice test.  Process Revision			-	instruction.	
incorrect choice. feedback for practice test.  Process Revision		Feedback			Peer Review
Process Revision practice test.					
Process Revision			incorrect choice.		
Revision	Process	l		practice test.	
		Cluster Size	Chapter 3 cluster too	_	Peer Review
long. made to paper Small Group			long.		-
module but Review changes will					Review
appear in on-				<u> </u>	
line interactive					
version.					
Motivation Module seemed Added Expert Review		Motivation			Expert Review
uninteresting. characters and some humorous			uninteresting.		
wording to					
module.					

Table 4 Recommended Revisions

	Component	Problem/ Recommendation	Revisions	Evidence
	Environment	No books available to look at during session.	Brought in a cart of books during test session.	On-on-One Peer Review
	Directions for Tests	Some test answers skipped.	Need clarification that there are some short answers and some fill in questions.	Small Group Review
Format	Data Collection Procedures	No changes	questions	
Revision				
Tevision	Spelling	A few scattered misspelled words	Corrected all errors.	Peer Review Expert Review Instructor Review
	Vocabulary	Vocabulary in Shelf Location Chart confusing to lay person.	Added definition for clarification.	Self Review
Format Revision Continued	Graphics	Some graphics hard to read because of contrast or font size.	Retook some photos. Added supplemental chart with large font size.	Peer Review Instructor Review
	Feedback	Not enough attention given to feedback information	Remove the embedded questions and the feedback to a separate section of the module	One-on-one Review
	Environment	No books available to look at during session.	Brought in a cart of books during test session.	On-on-One Peer Review

Table 4 Recommended Revisions

Component	Problem/ Recommendation	Revisions	Evidence
Directions for Tests	Some test answers skipped.	Need clarification that there are some short answers and some fill in questions.	Small Group Review

#### Discussion

### *Interesting Findings*

The authors found it interesting that decimal sorting was a problem for so many people. It was assumed that the understanding of decimals was a skill everyone learns in elementary school that it was a skill that would be easily remembered. This proved to be an incorrect assumption. This may be one of the reasons librarians find library books out to order so often! The other objective that proved difficult to instruct was explaining the many locations or collections within a library and that other libraries complete some of the routine tasks differently.

### *Improvements*

Further improvements will be incorporated as the self-instruction module converts from a paper-based to an electronic format. The graphics and page design problems will be resolved. The materials are currently being presented in a linear manner, which assumes all users need all levels of instruction with little option to choose additional information required for understanding. It is clear from our participant data that some users will need more work in some areas and less in others. This can be easily handled in the online environment that would allow for branching and additional practice questions

for all areas. The authors had developed additional versions of every question, and these will be used as additional practice items in the online module. The online environment will also allow the use of an introductory scenario. This will take the form of a set of questions, much like those used in the terminal objective, which could determine areas of training needed for specific individuals.

### Insights

The authors gained insights into the difficulty of shelving. This proved as a reminder that while this essential skill is critical to the maintenance of a well-organized library, it is often assigned to the newest and least experienced staff and workers. Shelving skills need to be quickly and fully developed until they become second nature. Nevertheless, bad habits, which cause shelving errors, have to be avoided from the beginning of employment or they may be very difficult to overcome.

### Future Developments

The future is being developed now. The e-learning version of this tutorial will be available for use at Sinclair Library by summer semester. It will be integrated into an overall e-training module for library workers. Two Library and Information Science graduate students and Sinclair Library staff have already begun the process of working with the objectives, the instructional strategy hierarchy, and the criterion referenced tests for several modules. The Sinclair Library author has already begun developing an umbrella structure for further module development. Learn, teach, test, implement, revise, revise, and revise is the process that is being used.

### What worked?

The instruction and questions worked. There were definite improvements in the confidence and the knowledge of the learners, and their comments indicated that the majority of subjects enjoyed the instruction.

The environment for testing was appropriate for the paper-based instruction module, but it may not have been the most ideal location if some of the module had been kinetically based as in the original draft.

The authors received excellent feedback from most of the reviewers that was crucial to the refinement and further development of the module and tests. The authors were most appreciative of the time and effort that so many people gave.

What did not work?

The biggest disadvantage to the paper-based system was that the novice learners expressed their lack of assurance that they could actually apply what they had learned when faced with the physical reality of picking up and shelving books. The e-learning module will have aspects of constructionist learning. The trainee will spend time acquiring the psychomotor skills needed to accomplish the tasks.

The concept of using feedback on practice questions for further instruction and remediation will only work if individuals choose to take the time to access this information. It was disappointing that not all subjects chose to take advantage of this additional instruction even when their test results indicated the need for it.

The black and white reproductions of the module did not work well for many of the participants. If the module were to stay paper based, it would be produced in color with a separate answer sheet so that they could be reused.

What went wrong?

Our small group was smaller than the authors expected. The subjects did not arrive on time and did not finish on time. The length of time it took to take the module had a much greater variance than expected.

The sample population was unexpectedly very different from the desired target population. Therefore testing did not provide sufficient information about the problems that might arise with the actual target population. This requires further testing with subjects more truly representing the target population

What went well?

The process of conceptualization, development, and revision went smoothly. The use of experts meant that the instruction was almost too thorough. The timetable was reasonable.

Next Time

The authors would pick a smaller and simpler project next time. This project was more complicated and much larger than the authors originally identified because there were many skills needed to be taught before a book could be sorted and shelved using the LC call number system. This included all of the small jobs that are actually done in the library: using Pick-up Logs and Shelving Logs. The need for making the module more useful made it more tedious for the authors to develop. Having to teach the arrangement of shelving and books in the stacks and even the terminology for that was all something, the authors as librarians did not plan to include originally.

What to always do

Having a test population that is diverse and open to learning is something that should always be arranged. Creating an instructional hierarchy strategy so that all of the

objectives are clear and organized in a logical fashion really worked. The identification of what those sub-skills that were needed to support specific tasks proved very beneficial. Without conceptualizing the process in this manner, the authors might not have realized that decimal sorting needed to be taught.

The development of criterion-referenced tests and having them examined for relevance was crucial to the success of the process. All of the reviews made the product useful in ways the authors did not originally imagine. This process is one that will become a fundamental part of any instruction designed in the future at Sinclair Library.

\*More time and money\*

Color images, color charts, and a cleaner layout would be something that would be accomplished with more money and time. More error checking and the use of novices as testers would be incorporated into the process with money to pay for participation.

Implementing this as an e-learning module would have been great to do from the beginning though it may have taken more time to develop and test. Although the expense might have been more in some cases, the current situation at Sinclair Library allows for the development of software and opportunity for server space. Considering this, it might have actually been cheaper to create the module as an online tutorial from the beginning.

Testing the skills kinetically would have taken additional human resources.

However the final scenario in the paper-based version, testing the terminal objective, took the subjects a long time to complete. In reality it might not have taken any longer to test the terminal objective kinetically in its first format. This would have at least enabled the novices to have a better idea of their actual skill level when the training was completed.

Reflective Summary

The authors feel that, overall, this module was very successful in delivering instruction to reach the terminal objective. The entire design process was crucial in the development and success of the module. With continued revision from the small group feedback and further testing of the module on target population participants, this module will be developed into a useful online tutorial to be used by Sinclair and Hamilton Libraries. Discussions have ensued about sharing the tutorial with other libraries and about modifying the main module for library patron information literacy needs. The authors feel the knowledge of the design process will affect their current positions as librarians in a very positive way.

The small group participants from other Hawaiian institutions were all interested in using the final materials. Working to develop something that can be easily used by various institutions will be very rewarding. The processes undertaken to complete this project provided the insight need to make that general release of shelving books module possible. A great accomplishment!

### Appendix A.

### Formative Evaluation Plan

### **Test Population**

The test population will include the following:

6 Subject Matter Experts working at

Sinclair Library

4 Peer Reviewers Instructional Design Students

1 Instructor Reviewer Professor, Instructional Design

1 One-on-One Content Expert Sinclair Library staff Library Assistant IV

1 One-on-One Target Audience Learner Government Documents student

12-15 Target Audience for

Self-instruction

Library instruction class or undergraduate

psychology class and Hamilton and Sinclair Library Access Services

student workers

### **Strategies for Meeting Times**

Group: We are scheduling this group for April 6, 2004 from 11:30AM to

2:00PM. Our group will meet at Sinclair library on the first floor. We used the staff room, as it is large enough to hold the group and private enough to serve pizza. We picked lunchtime on a weekday as it seems like a good time for students on campus. Lunch will be provided

following the module and before the post-test.

One-on One: The one-on-one testing times will be held on Wednesday, March 30,

2005. One session is scheduled for 8:45 AM and the other at 11:30

A.M. Both will be held at Sinclair Library room 101.

Timeline

March 8 Submit copies of Instructional Strategy for

Instructor/Peer Review

March 15 Peer Review
March 28 Complete module

March 30 Administer instruction to one-on-one content

expert and target audience learner

April 5 Revise complete module

April 6 Administer instruction to small group

April 12	Revise module
April 19	Collect data and write up Formative Evaluation
April 26	Turn in Formative Evaluation, CD, & Milestones
May 3	Presentation

### Types of Data to Be Collected

- 1) Demographics from survey
- 2) Quantitative data from test results
- 3) Qualitative data from survey, debriefing, and margin notes

### Types of Evaluation Instruments

All Groups: -Pretest, embedded and posttest information will be collected from

all participants.

-Demographic information will be collected.

-Retrospective survey to rank the learner's own knowledge before and

after instruction

-Margin notes to be collected, via a comments column for the

post-test only.

One-on-One: -Think aloud, ask them to ask questions as they go along.

-Use an MP3 recorder or a video camera to record sessions.

Small Group: -We will debrief those willing to stay and talk about the learning

process with at least two people.

Misc.: -Note books to record observable behavior, questions etc.

### Methods for Gathering Information

Each learner is given a numbered packet with the following items:

- 1. Sufficient numbered copies of instructional materials
- 2. Pens to mark answers and comments
- 3. Answer key for embedded questions in instructional materials
- 4. Sufficient numbered copies of pre-test and post test
- 5. Survey with demographic, retrospective pre/post questions

#### Items needed not in packet:

- 1. Books truck and books for shelving
- 2. Shelving evaluators to examine learners' work

### Questions for content expert:

What did you see as the major weakness or confusing part of the materials?

Does the hierarchy make sense to you?

Did you feel you could evaluate when you did not have the materials for the hands-on questions?

Do you have a suggestion for another way to test rather than using the hands-on experience we used in Skill #23 and #24?

We tried to provide enrichment information when explaining call numbers to help with retention. Do you feel too much information is provided that is not tested?

### Script For Describing Project

Aloha. Thank you for joining us today.

Welcome to our instruction session. We're going to focus today on how well our teaching module can instruct you to shelve books at Sinclair Library using the Library of Congress call number system.

Our names are Ruth Marie Quirk and Beth Tillinghast and we are librarians at UH Manoa campus as well as students in the Educational Technology program. Today we would like you to help us evaluate this instructional module. We really want to emphasize that we are **NOT** evaluating you. In fact you will be evaluating our skills in developing this module. Our goal for this module is to eventually develop it into an online tutorial that will be used by students working at the libraries. This will be one means to instruct them in the valuable skill of learning to shelve books. If you've ever gone to the shelves of our libraries and have not found something that Voyager says is on the shelf, then you will appreciate the importance of teaching these shelvers well. So, if when you are done with our module and you cannot shelve books, WE failed not you! Your feedback on this paper-based module will help us make changes to the module before it is developed into an online tutorial.

This session will probably take you two hours to complete. As a way of saying thank you for your time, we will have pizza and drinks for you after the session.

You all have a packet of materials. Let's look at this, so we can introduce you to its contents. You should have a copy of the instructional material. This is the heart of the teaching module. You should also have a pre-test, a post-test as well as a pen to mark answers and for making comments. An answer key is also provided. This is for the practice questions in instructional materials. There is also a survey form that we would like you to fill out at the end of the session.

This is what we'd like you to do this afternoon:

1) Complete the pretest and turn that in to one of us. We will use this to see how many skills are presented in the module that a typical student would already know. If you do not know the answer in the pretest, please mark the "I don't know" selection for the answer

For the pre-test, the practice test questions and the post-test, you will see several questions where you actually need to do some shelving activities. Just come over to us and we will have someone assist you for that segment of the test.

- 2) Take out the teaching module and the answer key to the practice questions. DON'T look at those before answering the questions within the module!
- 3) Let's look at the module together. It consists of five short chapters. You will work through each chapter at your own pace. We've left room just for that purpose. Within each chapter is a practice test called an embedded test. After you mark your answers in the module, you can check the answer sheet and then move on to the next chapter.
- 4) As you work through the material, please write comments freely on the right margin of the pages. In addition if you see spelling, grammatical or punctuation errors, please mark them as well. On a different note, if you see something that you think is interesting or fun or well written, please make a comment about that as well. We will use your comments and feedback to revise the module.
- 5) When you're finished with the module, please take the post-test and complete it just like you completed the pre-test. Once again come over to us for the sections of the test where you will need to complete the activity.
- 6) After completing the post-test, please fill out the final survey that is in the packet. We will use this information, as well, to fine tune this instructional module.
- 7) Then you'll be ready for the fun part you can help yourself to pizza and a drink that you'll find...

We'll be in this area the entire time, so if you have questions, please come and ask us. Finally we want to thank you again so much. Maybe some of you will end up working here and will use this module – that you have helped to create – during training!

### Appendix B One-on-one Test

The two one-on-one interviewees both took the pre-test, post-test and did the complete module. Neither one looked at the answer key for the embedded tests. The expert one-on-one is listed first in this chart with the government documents student afterwards. From these results, we can see that the tests did well.

	Boo	k Owners	ship	Book Pickup		Ci	all Numbe	ers	
_	Pre	Е	Ро	Pre	E	Ро	Pre	Е	Ро
	100% 100%	100% 100%	100% 100%	100% 25%	100% 100%	100% 100%	100% 0%	100% 77%	100% 88%

Shelving Log			Shelving			ninal ective	
Pre	Е	Ро	Pre	Е	Ро	Pre	Ро
100% 33%	100% 66%	100% 66%	100% 75%	100% 75%	100% 75%	100% 50%	100% 88%

Pretest	Embedded	Post test
Summary	Summary	Summary
100%	100%	100%
40%	82%	90%

### Appendix C

### Demographic Information and Retrospective Survey

By participating in this instruction, you will help us to determine if this instruction is effective. Thank you for your time.

Please complete the following questions regarding yourself and your experience with Library of Congress call numbers.

Please ch	eck the approp	priate boxes			
1.	☐ Male	☐ Female			
2.	☐ Faculty	☐ Staff D	epartment _		
	☐ Student	☐ Undergra	duate $\square$	Graduate	
	Program /	Area of Study			
	he circle next to	•		Library of	Congress call numbers
	A few times in Once in the particular of the par	-	e than a 1 y	ear ago	
0	2-3 times in the	he past year			
	4-6 times in the On a regular b	•			
-	ou had any prev No	vious training i	n reading li	brary of co	ngress call numbers?
_	Yes, Describe	training			
-	ou taken any li	brary instructi	on classes?		
_	No Yes, List cour	rses taken			
O	1 05, 12150 0001				
Please cir	cle your respo	onse:			
6. This in	struction was n	notivating.			
Str	ongly Disagree	e Disagr	ee	Agree	Strongly Agree
7. The ma	aterial covered	in this instruct	ion will be u	useful for m	ne personally.
Str	ongly Disagree	e Disagi	ee	Agree	Strongly Agree

Disagree eledge and skil disagree denoted by DENCE level	Agree Ils gained from thi Agree	Strongly Agree s instruction. Strongly Agree
Disagree	•	
Disagree	•	
C	Agree	Strongly Agree
DENCE lovel		
Low	Moderate	High
I EDCE of sh	polying with Libra	ary of Congress call
	Low	LEDGE of shelving with Libra

Moderate

High

Low

Additional comments / Suggestions:

Knowledge

Before Instruction

After Instruction

# APPENDIX D Attitude Survey with Responses

Note: Demographic information is in text as Table 2

### Content:

		SA	A	U	D	SD
1	The instruction was written clearly.	3	9			
2	The module was appropriate for high school graduates.	4	5	2	1	
3	The introduction at the beginning of each chapter was useful.	5	7			
4	There were sufficient practice exercises.	4	7	1		
5	The examples and non-examples were helpful.	9	3			
6	The content covered in each chapter was sufficient for mastery of the skills.	5	6	1		
7	There was too much instruction for a single training session.	4	3	3	2	
8	There were adequate practice questions in each chapter.	5	6	1		

## Layout:

12	The chapter structure was easy to follow.	7	5			
13	The graphics were clear and understandable.	3	7	1	1	
14	The graphics were helpful in clarifying concepts.	5	6	1		
15	There was too much information on each page.	3	2	2	4	1
16	I would have preferred to have questions at the end	1	2	1	5	3
	of the chapter instead of disbursed throughout.					

## Attitude questions:

		SA	A	D	SD
6	This instruction was motivating	6	6		
7	The material covered in this instruction will		7		
	be useful for me personally.				
8	The material covered in this instruction will	5	5	2	
	be useful for me professionally.				
9	I am satisfied with the knowledge and skills	9	3		
	gained from this instruction.				

## 10. Please rate your CONFIDENCE level for shelving with Library of Congress call numbers before and after the instruction.

Confidence	Low	Moderate	High
Before Instruction	4	3	5
After Instruction	1	3	8

## 11. Please rate your KNOWLEDGE of shelving with Library of Congress call numbers before and after the instruction.

Knowledge	Low	Moderate	High
Before Instruction	3	5	4
After Instruction		2	10

### Additional comments / Suggestions:

I cannot rate my knowledge. Mixed feelings I would appreciate a copy of these tests for my students. But I would like it not to wordy or limit to basic information. It took too much time – that I just @ times guessed. But I enjoyed this!

I thought this was excellent. Now I have a feel of how library of congress books are shelved. If I ever have to borrow one or shelve, one I have more confidence than I had before in doing so.

I thought calling the questions 'practice' makes the module less like a test.

Module might be separated into call numbers/shelving units it is very long.

Two sessions are needed.

A couple questions could be clarified.

Include a decimal refresher at the start of the module rather than at the end.

Shocked at how many I had a hard time with.

Module might be separated into call numbers / shelving units. It's very long.

Interspersed questions forced me to pay more attention.

Reproduction of the photographs in black and white was hard to read.

It confirmed I do know stuff.

Exam too lengthy but great knowledge.

Too wordy.

# APPENDIX E Instructional Module with Pretest, Post Test, and Answer Key

# Shelving Books with

# Library of Congress

# Call Numbers

A self-paced instructional module designed to teach how to shelve books using Library of Congress call numbers in UH Manoa Sinclair Library.

## **Table of Contents**

	<u>Page</u>
Introduction	3
Chapter 1, So, Whose Books Are These?	5
Chapter 2, Retrieving and Counting Books,	9
Chapter 3, Those Pesky Call Numbers	14
Chapter 4, Shelving Books Have Statistics Too	27
Chapter 5, Finding Our Way in the Maze of Shelves	30
Copyright	39
Appendix	40

### INTRODUCTION

Are you a library user?

Have you tried to find books in a library?

Do Library of Congress call numbers confuse you?

Do you want to be able to tell the general subject area of a book when you look at its call number?

Do you want to learn the four distinctive parts to these call numbers?

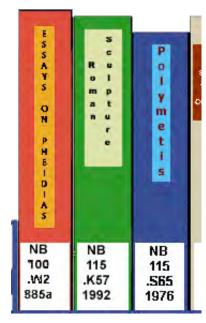
Do you want to find your way easily through the library?

Do you want to know where to find the next book when you get to the end of a shelf?

Do you want to know the various locations in libraries where call numbers are arranged?

Are you ready to learn about shelving books in libraries?

If you answered, "YES" to these questions you are about to begin the instructional module that could make going to the library shelves a completely new experience.







### **Purpose**

The purpose of this instructional module is to teach you how university libraries, specifically UH Manoa Libraries, organize books on shelves to make it easier for library patrons to find materials. This module will teach you how to read Library of Congress (LC) call numbers, to find the various collection locations in Sinclair Library, and to shelve our library books. You will also learn how to record data, which will help us organize our library. Once you understand this system and gain experience, you will be able to complete your duties skillfully as a shelver for Sinclair Library.

Please help us make improvements to this instruction. We encourage you to write freely in the margins of this paper. Include any comments, questions, or suggestions that will help us create a better instructional module.

This module is composed of a pretest, instruction with practice, and a posttest. Circle or write in your answers right on the module itself. As you work your way through the module, please refer to the answer sheet for the practice exercises as it includes valuable feedback. Also included is a Shelving Locations Chart that is a larger version of one that you'll be referring to within the module.

The entire module should take about an hour to complete.

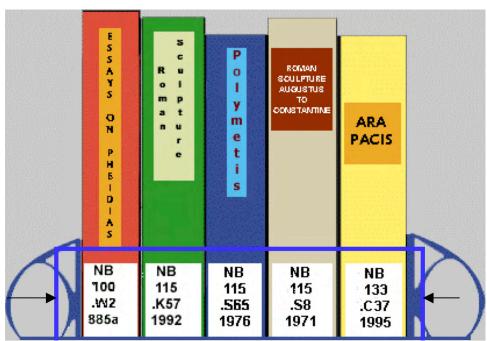
Have fun!

### CHAPTER 1 SO, WHOSE BOOKS ARE THESE?

Upon completion of this chapter, you will be able to identify library books that belong to the University of Hawai'i at Manoa Libraries.

Have you ever wondered how library books differ from other books? Library books have two distinguishing features. The first feature is the call number that is usually located on the spine of the book. The spine is the back of the book that faces out towards you as you look at a shelf of books in a library. You usually find the call number located at the bottom of the book spine or on the bottom left corner of the front cover of the book.

<u>Example:</u> In order to see examples of call numbers and their locations on books, all you need to do is cruise through Sinclair Library and have a look at the books on the shelves. You will probably see something that looks like this picture. In this example the call numbers all start with NB and are located in a white square on the bottom of the spine of the book.



Permission to use this graphic for any purpose with credit was obtained via email from CarolineF. Thompson, Librarian, at the University of West Florida Library.

NOTE: Books without call numbers are NOT library books.



**Practice: 1.** Which of the following features identifies a library book?

- a ISBN
- b. Barcode
- c. Call number
- d. UPC

Now you know that a library book must have a call number, you also need to know to what library it belongs. Did you know there are many libraries in Hawai'i? There are public libraries, school libraries, private libraries, and university and college libraries. How can we tell which books belong to which library? Each of these institutions has their own property stamp for identification found printed somewhere on the book.

There are also many libraries in the University of Hawai'i System. Each campus has a minimum of one library. How can we tell which books belong to which campus? Just like the other libraries in Hawai'i, each of these campus libraries has its own property stamp for identification. This stamp is usually printed on the outside edge of the pages of the book to aid identification. In the case of UH Manoa, there are multiple libraries. However, all of the libraries use the same property stamp "UNIVERSITY OF HAWAII LIBRARY." This situation can be confusing since all University of Hawai'i libraries could use this term. The Manoa campus was the first UH campus that started using this stamp, but there was no distinction between the libraries at UH Manoa. All of the other campuses have a campus-specific stamp, which makes it easy to determine where the book belongs.

### Example:

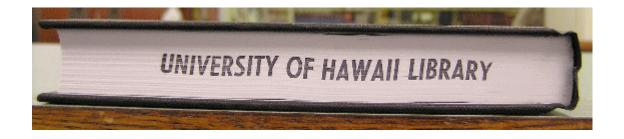
### **List of Library Property Stamps**

PROPERTY STAMP	OWNING LIBRARY
UNIVERSITY OF HAWAII LIBRARY	UH Manoa
HAWAII STATE PUBLIC LIBRARY	Hawaii Public Library
LEEWARD COMMUNITY COLLEGE	Leeward Community College Library
KAUAI COMMUNITY COLLEGE	Kauai Community College Library
WEST OAHU UNIVERSITY	UH West Oahu Library

**Practice: 2.** Which book property stamp listed below is an example of a UH Manoa property stamp?

- a. UNIVERSITY OF HAWAII LIBRARY
- b. UNIVERSITY OF HAWAII AT MANOA LIBRARY
- c. UNIVERSITY OF HAWAII COMMUNITY COLLEGE
- d. UNIVERSITY OF HAWAII OAHU COMMUNITY COLLEGE

As you've already learned, call numbers are an indication that the book is a library book. In addition, you learned that each institution has its own property stamp for identification, which is printed on the outside edge of the pages of the book. Books without call numbers are most likely personal items and do not belong to the library. These items need to be delivered to Lost and Found. So in order for a book to be a library book belonging to a UH Manoa library, it must have a call number, usually found on the bottom part of the spine, and it must have a "UNIVERSITY OF HAWAII LIBRARY" property stamp. One of the jobs of a shelver is to separate out the books belonging to UH Manoa library from other items.



**Practice: 3.** Circle to indicate the books that **<u>DO</u>** belong to UH Manoa.

d. b. c. UNIVERSITY OF HAWAII LIBRARY HAWAII STATE PUBLIC LIBRARY WEST OAHU UNIVERSITY Gregg Geary Sinc MT 47.8 ML .P3 800.91 10 v. 1 .B241 1999 1942

## CHAPTER 2 RETRIEVING AND COUNTING BOOKS

Upon successful completion of this chapter, you will be able to retrieve books from throughout the library, transport them safely, separate them by ownership and record statistics about where they came from.

You probably don't know that library workers spend time daily walking through the library building collecting books that have been left behind. Libraries do not want patrons to re-shelve their own books for several reasons: libraries want to record statistics to identify which items are being used in the library but are not checked out; and libraries want to help keep the stacks in order since books are so easily shelved incorrectly. Library shelvers look all over the library to find books that have been used by patrons and left on tables, etc. Areas that do not need to be searched are the bathrooms and "Library Staff Only" areas. If books are left in the bathrooms, custodians will bring them to the circulation counter to make sure they are not checked out. Library staff will return books left in the "Library Staff Only" areas. There are some areas where books are typically used and left.

Example: Common areas where books are left include the following:

### PICK-UP AREAS

- > copy machines (1<sup>st</sup> and 3<sup>rd</sup> floors)
- book trucks designated for used materials (all floors near sorting areas)
- > study tables (all floors)
- book areas (all floors)
- lanais (all floors)

<u>Non-Example:</u> Areas where pick up is not done: bathrooms, staff offices, staff only areas, outside the library building.

Practice: 4. Indicate which place a shelver should **NOT** go to look for books.

- a. near copy machines.
- b. book areas
- c. bathrooms
- d. study tables

There are many ways that books can be put on a book truck. There are several concerns about how to <u>safely</u> transport books in a way that also allows you to easily read the call

numbers. The way that is recommended is to arrange books on a book truck with call number facing up and heading from left to right. This is depicted in the picture to the right. This makes the books very stable on the cart, so if the cart goes over a bump or makes a turn, the materials will stay in place. The other advantage is that it is much easier to read the call



numbers if they are facing toward you. The disadvantage of this method is that it can damage or break the spine if the books stay this way for a long time. So, books are temporarily arranged this way for **immediate** shelving.

**Practice: 5.** Which picture depicts the correct way to place books on a book truck to be **immediately** sorted and taken to the shelves?









The library uses a Pick-up Log to record statistics. These numbers are used to learn what areas of the building patrons use our materials. The locations listed on the log are where the books are found or picked up. The areas are very large and general. Reserves is the study room on the first floor. It includes the Diamond Head side of the first floor, which is on your left as you walk in the front door of Sinclair Library. The Reserves pick-up area includes the computer alcove and the lanai. The other pick-up areas are the rest of the first floor, the second floor, including lanais, and the third floor, including Wong Audiovisual Center, but not including Industrial Relations.

First, search the whole area, picking up the materials and arranging them correctly on the book trucks. Don't forget to separate out those items that do not belong to Sinclair Library. Next, record the number of books picked up. To record the number, take the sheet for the current month from the Circulation Counter. If it is the first day of a new month, fill in the current month on the log sheet. Under the correct location, list the number of books found. When you finish for the day, sign your initials in the INITIALS box.

# Example:

Let's say Howdy Doody picked up books on June 2<sup>nd</sup>. He found eight books in the RESERVES. On the correct log for June, he found the line for the June 2<sup>nd</sup> and the column for the RESERVES. Under the RESERVES column, he recorded the number of items he had found. Howdy repeated this process for all of the areas that he had time to search and to pick-up books. The only other place he found books was the third floor where he found two more books. When he finished, he signed the first letters of his first and last name under *INITIALS* for the current day.

Remember! You are recording <u>where</u> the book was <u>found</u>, not where it is going.

BOOK PICK-UP LOG					
MONTH OF: J	MONTH OF: JUNE				
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS
1					
2	8			2	HD
3					

**Practice: 6.** Looking at the following Book Pick-up Log, interpret the information provided on the highlighted row. Write out your answer below.

 $\longrightarrow$  Record your answer on this Book pick-up log.

BOOK PICK-UP LOG					
MONTH OF: J	MONTH OF: JUNE				
DATE	DATE RESERVES 1ST FL 2ND FL 3RD FL INITIALS				
1					
2	5		3	1	BB
3					

The numbers recorded on the log need to be written so that they are easily added. They need to be written clearly and as Arabic numerals. Initials should also be written clearly so if there is a question later it will be possible to ask the shelver.

## A HANDY REMINDER

- 1. Use the Pick-Up Log for the current month and year.
- 2. On the left side of the page, find the line for the current date.
- 3. Under the correct section of the library, record the number of items found. Do not use stick marks (||||) or write out the numbers as words like "five".
- 4. Repeat this for all the areas you have time to search and to pick up.
- 5. When you are done with what you can complete, sign your initials in under "INITIALS" for that day.

<u>Example</u>: Below is an example of a log for items picked up on June 2<sup>nd</sup> in RESERVES and 3<sup>rd</sup> floor by Betty Boop. Betty was really busy on the 2<sup>nd</sup>. She found twenty-five items in the Reserve Book Room and another forty-three on the third floor. In addition, she signed her initials in the right place!

BOOK PICK-UP LOG					
MONTH OF: J	IUNE				
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS
1					
2	25			43	BB
3					

Remember! You are recording  $\underline{\text{where}}$  the book was  $\underline{\text{found}}$ , not where it is going.

What not to do: For items picked up on June 2<sup>nd</sup> in RESERVES and 3<sup>rd</sup> floor by Betty Boop.

Note that in the example below, Betty used a sheet for the wrong month and wrote some information for the first rather than the second day. She incorrectly used ||||| stick marks and wrote out the number "3" as a word. Betty also initialed the wrong line here. I guess Betty was having a bad day!

BOOK PICK-UP LOG					
MONTH OF: N	MONTH OF: MAY				
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS
1					
2				three	
3					BB

**Practice: 7.** Betty went out to do her job as a new shelver on the morning of June 3<sup>rd</sup>. She found four books left in study area on the second floor and five more on the third floor.

Please fill in the Book Pick-up Log below for Betty.

	BOOK PICK-UP LOG				
MONTH OF: J	MONTH OF: JUNE				
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS
1					
2					
3					

## CHAPTER 3

#### THOSE PESKY CALL NUMBERS

Upon completion of this chapter, you will know how to divide a call number into parts. You will be able to identify the four parts of a Library of Congress call number and you will know the rules for sorting them.

<u>First Part:</u> The first part of the call number is a word or series of letters. It could be any of the following abbreviations found in the list. Sometimes the first part is assumed and not printed on the book. This makes your job a little harder because you will then have to look at the next part of the call number to interpret the location.

# Example:

## **Sinclair Library Locations**

First Part of the call number on a book

First 1 art of the can number on a book
Sinc, SL, or Sinclair
(Sinc, SL, or Sinclair) Ref or Reference
(Sinc, SL, or Sinclair) F
(Sinc, SL, or Sinclair) FF
(Sinc, SL, or Sinclair) Mini
(Sinc, SL, or Sinclair) Per
Sinc Closed
Reserves
This information applies to the following call
<b>number locations.</b> The bottom part of the call
number may have a date. If the date is pre-1975
for bound periodicals* they may then be the
Hamilton Library books which are temporarily
housed in Sinclair Library. These items will have
call numbers A-L and N-Z. Pre-1975 bound
periodicals are shelved in Sinclair Library.
Haml, HL, or Hamilton
(Haml, HL, or Hamilton) East
(Haml, HL, or Hamilton) Asia
(Haml, HL, or Hamilton) F
(Haml, HL, or Hamilton) FF
*A bound periodical is multiple issues of a magazine or journal in a single book.

<u>Second Part:</u> The second part of the call number is alphanumeric. A capital letter or letters are followed by a whole number. The numbers may or may not have a decimal point. Sometimes this part is all on one line and sometimes it is divided between the letters and the whole numbers and shown as two lines.

## Example:

HD 1234.23	HD	ML 475.9	ML
	1234.23		475.9

<u>Third Part:</u> The third part of the call number has to be read in two ways, first alphabetically, then numerically. This time the number should be read as a decimal!

## Example:

.P76	.F248	.Z87	.BF9422
	P2		

<u>Fourth Part:</u> There may be a fourth part of the call number. It could look like any of the following examples. However, call numbers do not necessarily have a fourth part.

## Example:

1998	v. 2	2001	2005
v.2		v. 8	
c. 2			

**Practice: 8.** Circle and label each part of the following call number. Label them "first part", "second part", "third part", and "fourth part."

Sinc

ML

432

.P89

1999

v. 2

Now let's look at each part of the call number more closely. The first line of a call number indicates the location within the library where the materials will be shelved. Did you know that libraries might have several locations where you can find the same call numbers? Library materials are selected by librarians who create specialized collections. These collections are housed in various locations within the library. For example "Reference Collection" is a location for general purpose books in all subject areas that do not circulate. They are located together labeled as Ref or Reference. A collection such as the Asia Collection may have materials in all subject areas, which are related to Asia. The Pacific Collection may also have materials in all subject areas. As a result, there might be several locations within a library where you can find a particular call number. When shelving it is critical to read and decipher the location indicator that is the first line in the call number and then determine where this area is physically located.

The first column in the Shelving Locations Chart listed below shows you what is actually printed on the book. It appears as the first part of the call number. You need to know that from time to time, you might encounter a book whose first part of the call number does <a href="MOT">NOT</a> exactly match this chart. The reason for this inconsistency is technology and policy changes that have caused these abbreviations to be changed over time. However, you will most likely be able to figure out where it fits in the chart.

## **Shelving Locations Chart**

Use this chart by comparing the book to the first part of the call number. Then use the columns to the right to determine its location within the library. Sometimes this part may not be printed on the book.

First Part of the Call	Location in Sinclair	Floor
Number on book	Library	
Sinc, SL, or Sinclair	Music Collection	3 <sup>rd</sup>
	MMT	
(Sinc, SL, or Sinclair) Ref	Ref. Stacks	3 <sup>rd</sup>
or Reference		
(Sinc, SL, or Sinclair) F	Music Folio	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) FF	Music Folio	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) Mini	Music Scores	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) Per	Sinc Periodical	3 <sup>rd</sup>
Sinc Closed	Closed	1 <sup>st</sup>
Reserves	Reserves	3 <sup>rd</sup>
This information applies to	the following call number loca	<b>itions.</b> The bottom part of
the call number may have a de	ate. If the date is pre-1975 for be	ound periodicals* they are
the Hamilton Library books w	which are temporarily housed in	Sinclair Library. These
items will have call numbers.	A-L and N-Z. Pre-1975 bound p	periodicals are shelved in
Sinclair Library. All other A-	L and N-Z call numbers are t	found at Hamilton Library
Haml, HL, or Hamilton	Periodical Room	1 <sup>st</sup>
Haml, HL, or Hamilton	Periodicals	2 <sup>nd</sup>
(Haml, HL, or Hamilton)	East Asia, Asia	2 <sup>nd</sup>
Asia		
(Haml, HL, or Hamilton) F	Folio	2 <sup>nd</sup>
(Haml, HL, or Hamilton)	Folio	2 <sup>nd</sup>
FF		

**Please note** – This first part of the call number is sometimes not actually printed on the book.

**Practice: 9.** The Shelving Locations Chart indicates where collections are found in Sinclair library. Which group is found on the third floor?

- a. Sinclair, Sinc Mini, Sinc Ref
- b. Haml FF, F, Haml F.
- c. Sinclair, Closed Shelves, Haml Asia
- d. Sinc FF, Sinclair, Haml

You must sort books in order from the top of the call number down. Start with the first part of the call number and separate by locations. Then move on to the next step and sort by the second part. When sorting always sort the letters first. If there are two letters, the

single letters are sorted first: Q, QA, R, RR, S, SB, ST. So "Q245" would be shelved before "QA1" and "M 486.9" would be shelved long before "MT2".

The NUMBERS in the first part of the call number are sorted as WHOLE numbers. Remember that this part of the call number lists letters first, then followed by numbers, which may have a decimal point.

## Example:

QA	QA	QA	QA	QA	QA
50	55	76	76.1	76.15	76.73

**NICE TO KNOW**: For your general information below is a brief guide to the Library of Congress Classification System. If you are interested in finding out more about the Library of Congress classification system, an outline can be found at the following URL: <a href="http://lcweb.loc.gov/catdir/cpso/lcco/lcco.html">http://lcweb.loc.gov/catdir/cpso/lcco/lcco.html</a>

- A General works (Encyclopedias, dictionaries etc.)

  B Philosophy, Psychology, Religion

  C F History

  G Geography, Anthropology

  H Social Sciences (Statistics, Economics, Business, Sociology etc.)

  J Political Science

  K Law

  L Education

  M Music
- N Fine Arts
- **P** Language and Literature
- **Q** Science (including Mathematics, Computer Science)

R – Medicine
S - Agriculture - plant and animal
T – Technology
U - Military Science
V – Naval
<b>Z</b> – Bibliography and Librarianship

**Practice: 10.** Review the following list showing the second part of a call number. Which group shows the correct alphanumeric order?

a.	GV45	AM	G524
		89	
b.	ML	ML8	ML3
	621.2		
c.	ML	M58	MT
	345		337.2
d.	Z421	ZA	ZZ431
		423.4	

The third part of the call number sorts alphabetically and then numerically but the numbers are decimals numbers. This part of the call number is called a cutter and is a coded representation of a more specific subject or of an author's last name. Once again, regard the cutter number alphabetically and then numerically. However, the number in this third part is <u>ALWAYS</u> read as a decimal.

**NICE TO KNOW:** Sometimes if the subject area is very broad, a second letter/number combination is added to further define the subject area. ". T6" in a call number would reference the fact that the book is about tools. ".H25" would indicate that the specific subject of the book has something to do with George Frederic Handel.

How can this part of the call number represent an author's last name? The cutter number of ".B64" tells us that the book was written by Bruce Bolt. ".D55" indicates that the book was written by Charles Dickens.

Let's look at a specific example and see how the cutter, the third part of the call number, works in conjunction with the first two parts. The third line of the following example tells

us that the book is about Johann Sebastian Bach, while the fourth line (the second line of the cutter) tells us that the book was written by an author with the last name of Wohlfarth.

When sorting always sort the letters first, remember that nothing or a space files before a letter. So, .B8 files before .BA1.

Even though there is no decimal point before the "W763" in the following chart, because it comes after the decimal in ".B1", the number "763" is still considered a decimal.

<u>Example:</u> Have a look at how the third part of the call number works with the first and second part in the example below.

Sinc	First Part	This part of the call number tells you the book is located at Sinclair Library.
ML410	Second Part	This part of the call number tells you the book is a music book and is a bibliography.
.B1	Third Part - Cutter	This line of the cutter tells us it is a book about Johann Sebastian Bach.
W763	Third Part - Cutter	This line of the cutter tells us the book was written by Hansdieter Wohlfarth.

# Example:

The following letters (after the decimal point) are alphabetical.	KF456 .A43 E45 1993	KF456 . <b>B</b> 99 1990	KF456 . <b>K</b> 99 1987	KF456 .L70 G92 1990
	L901 .C <b>25</b>	L901 .C <b>26</b>	L901 .C <b>263</b>	L901 .C <b>27</b>
.C263 comes between .C26 and .C27.	1977	1993	1988	1976

**Practice: 11.** Identify the list of individual cutters that are in correct alphanumeric decimal order.

a. .M13 .M35 .H135

b. .C12 .C52 .C161

c. .L4 .L25 .L245

d. .H432 .H44 .H458

The fourth part of the call number distinguishes books that use the exact same call number with the distinction that they are separate volumes or copies or have different publication dates.

Volume and issue or part numbers, copy numbers, and other annotations are shelved by basic alphabetization. The year of publication is listed first, followed by the volume (v.) or part (p.) or copy (c.). The year is treated as a whole number. If the library receives more than one copy (c.) of an item, copies are marked with a copy number except for the first copy. This forms the last line of the call number. You need to know that this part of the call number, the fourth part, is **not on most books**. If there are no volumes in a series, new editions, or extra copies of a book, then this information will not be part of the call number. When the fourth part is not present, it just makes your job as a shelver easier! The following example will illustrate what you might expect to see on various books.

## Example:

Q 10	QD 1	QD 1	QD 1	QD 1				
C 3	C 3	C 3	C 3	C 3	A 5	A 5	A 5	A 5
	1933	1990	1996	1996	v. 1	v. 2	v. 2	v. 3
			c. 1	c. 2	c.5		c.3	c. 2

**Practice: 12.** Which list shows the correct order for the fourth part of the call number?

a.	QD 1				
	.A 5	.A5	.A 5	.A 5	.A 5
	v. 2	v.8	v. 3	v. 2	v. 1
		c. 2	c. 2	c.3	c.5
b.	M 10				
	.C 3				
	1933	1990	1995	1995	1998
			c. 3	c. 2	v. 1
					c.5
c.	BF23	BF23	BF23	BF23	BF23
	.A5	.A 5	.A 5	.A 5	.A 5
	1996	1996	1996	1996	1996
		v. 1	v. 2	v. 3	v. 3
		c.5		c.3	c. 2
d.	Q 10				
	.C3	.C3	.C3	.C3	.C3
	1996	1997	1998	1998	1998
	c. 3	c. 2	c.5		v. 2
	C. 3	0. 2	0.5		V . Z



At this point you now know all the parts of the call number and the ways that they sort. So, you will now take one step further. You will learn how to read and sort the whole number.

Handy Hint: Call numbers are read from left to right and from the top down. In order to sort books to be shelved, you want to group them by the parts. You group by the first part - the location, then by the second part, - the broader subject, the third part - the cutter, and finally the optional fourth part - the year and volume or copy number.

The next sections will give you instruction on how to group and sort by each of the first three parts of the call number.

Did you know that libraries might not print the first part of the call number if it is the general location? This makes your job as a shelver even harder! The practice of most libraries is to **NOT** indicate a location if it is the general location. In the case of the UH Manoa libraries this practice has varied over time. At one time, there was only one library on the Manoa campus. However, now we have several libraries, the largest of which are Hamilton Library and Sinclair Library.

It is important to understand the Shelving Location Chart. We have to make sure that books and library items are sent to the correct library to be placed in their specific locations on the shelves. Many times the actual location of the book is printed on the spine with the call number; however, if it is not, you will have to use your special intuition (and the Shelving Location Chart) to figure out exactly where the book belongs. Please note that sometimes there is **NO** location listed in the call number. You will need to look at the second part of the call number to figure out which location. Shelvers really need to be call number "detectives" to figure out exactly where and in which library an item needs to be placed! (Note: there is a large version of this chart at the end of the module)

#### **Shelving Locations Chart**

Use this chart by comparing the book to the first part of the call number. Then use the columns to the right to determine its location within the library. Sometimes this part may not be printed on the book.

First Part of the Call	Location in Sinclair	Floor				
Number on book	Library					
Sinc, SL, or Sinclair	Music Collection	3 <sup>rd</sup>				
	MMT					
(Sinc, SL, or Sinclair) Ref	Ref. Stacks	3 <sup>rd</sup>				
or Reference						
(Sinc, SL, or Sinclair) F	Music Folio	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) FF	Music Folio	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) Mini	Music Scores	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) Per	Sinc Periodical	3 <sup>rd</sup>				
Sinc Closed	Closed	1 <sup>st</sup>				
Reserves	Reserves	3 <sup>rd</sup>				
This information applies to the Hamilton call number locations. The bottom part of						
the call number may have a d	ate. If the date is pre-1975 for b	ound periodicals* they are				
the Hamilton Library books w	which are temporarily housed in	Sinclair Library. These				
items will have call numbers	A-L and N-Z. Pre-1975 bound p	periodicals are shelved in				
Sinclair Library. All other A-	L and N-Z call numbers are fou					
Haml, HL, or Hamilton	Periodical Room	1 <sup>st</sup>				
Haml, HL, or Hamilton	Periodicals	2 <sup>nd</sup>				
(Haml, HL, or Hamilton)	East Asia, Asia	2 <sup>nd</sup>				
Asia						
(Haml, HL, or Hamilton) F	Folio	2 <sup>nd</sup>				
(Haml, HL, or Hamilton)	Folio	2 <sup>nd</sup>				
FF						

**Practice: 13.** The following list of call numbers represent books found at the UH Manoa libraries. Decipher the first part of the call number utilizing the shelving locations chart. Which call number does **NOT** represent a book found at **Sinclair** Library?

a.	b.	c.	d.
Haml	ML	BF	Sinc
HD2	3	.C5	ML
3758	.M6	S5	.T68
.M6	S5	v. 26	1953
S5	1933	2003	
1954			

You will recall that in the beginning of this chapter we talked about the second part of the call number. We saw how the second part begins with letters and is followed by numbers and that this represents the general subject area.

Remember that call numbers can have a single letter, or a letter combination. If you see an "M" and an "ML" on two books, the single letter "M" would be shelved before the "ML" books. The number part of the call number ranges from 1 to 9999 and may have a decimal point subdivision. It is really important to remember that THESE NUMBERS ARE ARRANGED AS WHOLE NUMBERS. Remember that this part of the call number always lists letters first followed by numbers.

**Practice: 14.** The following groups of alphanumeric items represent the second part of a call number. Indicate the correct alphanumeric order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

Q	Q 76	QA	QD	QA	QA
15		76.5	76	76.6	76.8

You will remember that we have already identified the third part of the call number. It gives us even more detailed information about a book. This part of the call number is called a cutter and is a coded representation of either a more specific subject or of an author's last name. We are now going to sort them. First, we sort the letters alphabetically. Then the items with the same letters are sorted by the decimal number that follows.

Remember that you need to regard the cutter number alphabetically and then by the decimal number. The important thing to keep in mind is that the number in this third part of the call number is read as a **decimal**.

Let's look again at the examples we saw a little earlier.

Example:

The following letters (after the decimal point) are alphabetical.	KF456 . <b>A</b> 43 E45 1993	KF456 . <b>B</b> 99 1990	KF456 . <b>K</b> 99 1987	KF456 .L70 1990
Note that because these are in decimal order	L901 .C <b>25</b>	L901 .C <b>26</b>	L901 .C <b>263</b>	L901 .C <b>27</b>
.C263 comes between .C26 and .C27.	1977	1993	1988	1976

**Practice: 15.** The following groups of alphanumeric items represent the third part of a call number. Label them in correct order for the third part of the call number. Indicate the proper order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

BF	BF 5	BA	BF	HF	HF
52		512	121	576	323

Remember that call numbers are the addresses for where books can be found within a library. The first section is the location. The second section of the call numbers can begin with one, two, or three letters:

QE 534.2

The first letter of a call number represents one of the 21 major divisions of the LC System. In the example, the subject "Q" is Science. The second letter "E" represents a subdivision of the sciences, Geology.

The first set of numbers in a call number help to define a book's subject. "534.2" in the example teaches us more about the book's subject. The range QE 500-625 contains books about "Dynamic and Structural Geology."

This leads us to the next segment of the call number, the cutter number. Some books have two Cutters; the first one is usually a further breakdown of the subject matter. For example,

QA76.76 .H94 M88

is a book located in the Mathematics section of the Q's.

QA 76 is about Computer Science. The ".76" indicates Special Topics in Automation. What is the special topic? ".H94" tells us that this is a book about HTML, and the M88 represents the first last name of the first author listed last name, Musciano. The book is *HTML: The Definitive Guide*.

Recall that call numbers arrange material by location and then by subject. The first part of the call number is the location. The second part of the call number that is alphanumeric with whole numbers represents the subject of the book. The third part is the letter-and-decimal section of the call number often represents a more specific subject and then the

author's last name. As you probably recall, the fourth part of a call number is often the date of publication and might include the volume or part or copy numbers.

## Example:

**Title** What You Need to Know about Developing Study Skills, Taking Notes and Tests, Using Dictionaries and Libraries **Author** Coman, Martha J.

Call Number SL Ref

LB 2395

.C65

1991

The **first** part indicates the collection in Sinclair Library is the Reference Collection.

The **second** part of the call number describes the subject of the book.

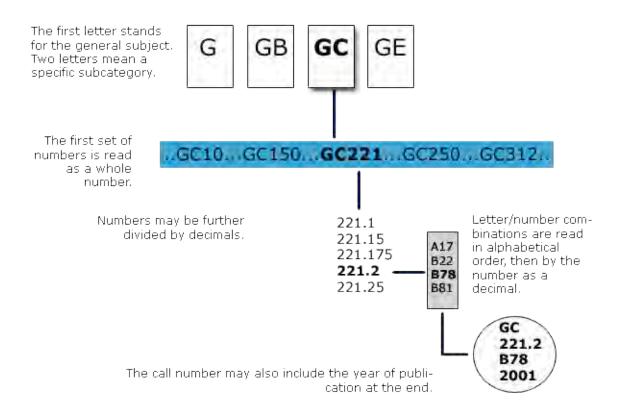
LB 2395 = Methods of study in higher education

The **third** part often is a further breakdown of the subject or represents the author's last name.  $.C65 = \underline{C}$ oman

The fourth **part** represents the year of publication.

## Example:

Here is a graphic that may help you remember the sorting rules for the  $2^{nd}$ ,  $3^{rd}$  and  $4^{th}$  parts of the call number.



**Practice: 16.** Indicate the correct call number order. Indicate the proper order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

SL	Sinclair	Sinc	SL	M	SL
M	MT	M	ML	1002	ML
1002	1002	1001	100	.P451	1002
.P415	.P445	.P415	.P45	1945	.P5
1945	D4	1945	D1		1945
	1945		1945		

#### **CHAPTER 4**

## SHELVING BOOKS HAVE STATISTICS, TOO!

Upon completion of this chapter, you will know how to interpret a Shelving Log as well as use the log to record the statistics for books shelved in Sinclair Library.

The library uses the shelving log statistics as a way of learning what library books are being used and then re-shelved. This includes items which have been checked out and then returned from circulation as well as items used in within the library and not checked out. The locations listed on the log are where the books are shelved and are listed in the Shelving Log Abbreviation Chart below.

## **Shelving Log Abbreviations Chart**

Ref - the third floor reference stacks area. They are near the reference desk and are labeled "Reference".

Closed – Closed Shelves located in Room 106

BP 1<sup>st</sup> - Bound periodicals found on the first floor on the Makua side of the glassed walls

 $BP\ 2^{nd}\,$  - Bound periodicals found on the second floor, including the folios but not including the items in the caged area

Music – M – Books on the third floor with an "M" call number, <u>NOT</u> including folios and mini and reference items

Music – ML – Books on the third floor with an "ML" call number, <u>NOT</u> including folios, mini, and reference items

Music – MT – Books on the third floor with an "MT" call number, <u>NOT</u> including folios, mini, and reference items

Misc – Books not found in the other categories, including but not limited to folios and mini

# Example:

	SHELVING LOG									
MONTH OF:										
			BP	BP	MUSIC-	MUSIC-	MUSIC-			
Date	REF	CLOSED	1ST	2ND	M	ML	MT	MISC	INITIALS	
1										
2										
3										

If you were to take a new log sheet for the beginning of the month, it would look like the example above. There is a section to fill in for the month, if it is the first day of a new month. Otherwise, the month should already be filled in. The individual days are listed in the left column. You will need to remember what the abbreviations stand for in the top row. They're fairly easy to understand once you have looked at the Shelving Log Abbreviation Chart above. Of course, you will need to add your initials to the log when you have finished shelving for the day.

**Practice 17.** Below is a list of abbreviations found on a Shelving Log. Write out what they mean on the line following the abbreviation.

a.	REF
b.	CLOSED
c.	BP 2 <sup>ND</sup>
d.	MISC

Now that you know how to interpret the Shelving Log, let's look at how you record the shelving statistics. First, you will sort all the books that you will be shelving by the collection locations listed. Then count the items on the cart. To record the numbers, first find the Sheet for the current month or fill in the current month on a blank sheet. On the line for the current date, under the appropriate locations, record the number of items that you found. Then sign your initials in under the heading **INITIALS** for the correct day. It's that simple!

Remember! What you are recording is <u>where</u> the books will be shelved - <u>NOT</u> where they were picked up.

## **QUICK REFERENCE**

- 1) Sort the books to be shelved.
- 2) Use the Shelving LOG for the current month and year.
- 3) Down the left side of the page, find the line for today's date.
- 4) Under the correct section of the library, record the number of items. Use an Arabic number such as "1", "2", "43", or "10". Do not use stick marks (||||) or write out the numbers as words.
- 5) Repeat this for all the areas you have time to shelve.
- 6) When you are done with what you can complete, write your initials in the appropriate column for that day.

## Example:

In this example Betty Boop, our newest shelver, was working on June 1<sup>st</sup>. She shelved two reference books, three closed shelves books, one second floor bound periodical, six books with the "M" call number, and twelve miscellaneous books that included some music folio and mini scores. Then she recorded her initials.

	SHELVING LOG										
MONTH OF: JUNE											
			BP	BP	MUSIC-	MUSIC-	MUSIC-				
Date	REF	CLOSED	1ST	2ND	M	ML	MT	MISC	INITIALS		
1	2	3		1	6			12	BB		
2											
3											

## Common mistakes: Statistics for June 1st

Note that Betty used a sheet for the wrong month and wrote some information on the second and third rather than just the first. Do not use || stick marks or write out the numbers as words, such as "four". Betty also initialed the wrong line below.

	SHELVING LOG										
MON	MONTH OF: May										
				BP	MUSIC-	MUSIC-					
Date	REF	CLOSED	BP 1ST	2ND	M	ML	MUSIC-MT	MISC	INITIALS		
1	2										
2	two						6 + 6				
3								six	BB		

**Practice: 18.** Betty is going to try again. Yesterday was a bad day for her. During the afternoon of June 4<sup>th</sup>, Betty makes her rounds. She picks up books and logs that information, she sorts the books she has found and is ready to record the information on the Shelving Log. She notes that she will need to shelve six Reference books, one bound periodical from the second floor, and five miscellaneous items. Fill in the chart for Betty.

	SHELVING LOG										
MON	MONTH OF: JUNE										
			BP		MUSIC-						
Date	REF	CLOSED	1ST	BP 2ND	M	MUSIC-ML	MUSIC-MT	MISC	INITIALS		
1											
2											
3											
4											

#### CHAPTER 5

#### FINDING OUR WAY IN THE MAZE OF SHELVES

Upon successful completion of this chapter, you will be able to find your way through the maze of shelves, sections, ranges and stacks of books in the library, thereby being able to transport a book back to its home on the correct shelf.

The library uses hundreds of bookshelves to accommodate its collections. You'll need to know the terms that differentiate this shelving. The term "book stacks" or "stacks" is used to refer to all the shelving and to all the areas within a library where books are shelved. So, when you enter a library and look around, you are looking at the book stacks.

The stacks are made up of individual bookcases that are referred to as "sections." These sections are connected to each other in long rows, which are called "book ranges" or "ranges."

**Example:** Stacks in a university library showing two ranges and numerous sections



**Practice: 19.** Fill in the blanks in the sentences below using the most appropriate terminology: **ranges**, **sections**, **stacks**.

Sunny w	alked into the library, looked around and was amazed at the number of
	she saw everywhere. Walking over to one
long	she began to peruse each
	just looking at the books.

Libraries shelve books on a similar topic together. The library is constantly getting new books that must be shelved with existing books. To facilitate this process, libraries leave room for more books on each shelf. At some point, even though space has been allowed, some parts of the stacks will become completely full and books must be moved or shifted to make room for new books. This is done to even out the number of books shelved in the stacks.

Books are shelved in one section at a time with space left at the end of each shelf. This means that the books are shelved within one section before moving on to the next section. Once the bottom of a section is filled, the books go on the top shelf of the section to the right. Books are placed in call number order on the shelf and read from left to right, top to bottom. You would place books following down the shelves until reaching the bottom of the section. At this point, you would begin again at the top of the next section to the right.

Example: Here is an example of what a part of a section should look like. Notice that the shelves are only about 3/4 full.

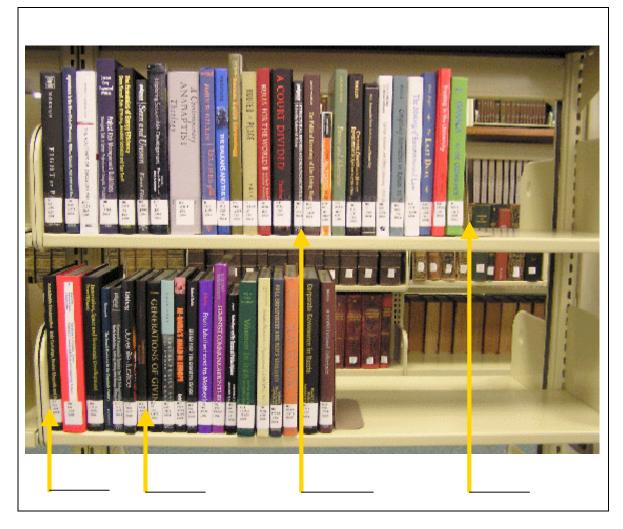


# **Helpful Hint**

A shelving sequence starts on the left hand side at the top shelf of a section of books and continues from left to right moving down each shelf of that section. When you reach the bottom right-hand side of the section, the sequence should continue at the left-hand side of the top shelf of the next section of shelving to your right.

Each shelf should be no more than 3/4 full.

**Practice: 20.** See the book on the very right-hand side of the top shelf below? A shelver needs to shelve a book whose call number comes directly after that book. Put an "X" on the line below that indicates where best the shelver should place the book.



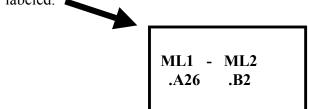
You've already learned some of the terms for the bookshelves in a library. You will recall that sections are connected to each other in long rows, which are called "book ranges" or "ranges." Each range is labeled at both ends. Sometimes the label is attached flush to the side of the top of the range and sometimes the range label is a little sign attached to the top. But, no matter its appearance, a shelf range label indicates the first and the last call

numbers that are found on that side of the book range. This allows a shelver to identify what range to enter when shelving books. It is a great time saver and basically serves as an index to the shelves. These labels are updated when the stacks are shifted.

Example: Below is an example of a shelf range label found at Sinclair Library.



Books, with call numbers between ML1 .A26 and ML2 .B2, are found in this range labeled.



# Non-example:

You would <u>NOT</u> find a book with call number ML2 .C45 in the above range. It might be found in a range or two over from the above range.

**Practice: 21.** Using the shelf range label below, indicate which call number would be shelved within that range.

a. MT16	b. MT	c. MT	d. ML
.P94	213.5	452	199
v. 2	.T16	.W99	.J45
	1998	v.3	2003
		2003	

Each book with an LC call number has a unique location in the library, which is determined by the location and call number information. When books are misshelved, they are lost to library patrons. One way of finding misshelved books is to shelf read. It is

critical to do a bit of shelf reading before you shelve books to make sure that books in the general area where you are shelving are already in correct order. Shelf reading is checking the books on the shelves to ensure that they are in the right call number sequence. This is done **BEFORE** you re-shelve individual books.

If you see a shelf like this TAKE ACTION!



## HELPFUL HINTS TO MAKE THE SHELVES LOOK NEAT

- ➤ Line the books 1/2 inch from the edge of the shelf.
- > Push bookends to a snug position.
- Shift books up or down a shelf when you find a given shelf that has reached its full capacity.

## HELPFUL HINTS TO WEED OUT INCORRECT CALL NUMBERS

- > Two books with the same call number
- ➤ Call numbers that look strange
- ➤ Call numbers that do not belong in Sinclair Library



#### HELPFUL HINTS FOR LOST BOOKS

- Lost books drop to the back or bottom of shelves.
- ➤ Hidden books are books hidden by patrons who hide them from others.

## HELPFUL HINTS ABOUT FULL SHELVES

- ➤ Be aware of shelves that are too full.
- > Shift books before a shelf fills up.

**Practice: 22.** Use the graphic of misshelved books below to determine which group of books are **BOTH** out of order.

1.	2.	3.	4.	5.	6.	7.
Sinc	Sinc	Sinc	Sinc	Sinc	Sinc	Sinc
ML456	ML45	ML456	ML456	ML465	ML456	M456
.A43	.B99	.K99	.L70	.P78	.L70	.L70
E45	1990	1987	1990	2000	2001	2004
1993						

- a. 2., 5.
- b. 2., 4.
- c. 4., 5.
- d. 3., 4.

This brings us to the final step, the culmination of all the pieces. Through this self-instruction module, you have developed an understanding of how to shelve books through interpreting the Library of Congress call number system, collecting books, identifying ownership, identifying their shelf location within the library, and recording statistical data. At this point, we will provide you with a practice scenario that reviews what you have learned.

Practice 23. Fatima Jones is new to the shelving business. She was recently hired by Sinclair Library as a student employee and has already gone through the library orientation session, completing the excellent shelving self-instruction module. So on this beautiful June 2<sup>nd</sup> morning, Fatima arrives at Sinclair ready to tackle her new job with confidence. Her supervisor greets her with the news that a particularly unruly group of music students had gathered in the location of the music collection and had not been particularly neat and tidy in their research of the material. Grabbing a book Pick-up Log and a Shelving Log, Fatima begins her day.

G. Shocked but unruffled at such unlibrary-like behavior, Fatima immediately hurries to which floor of the library?

- a. 1<sup>st</sup> Floor
- b. 2<sup>nd</sup> Floor
- c. 3<sup>rd</sup> Floor

Alas her supervisor's words were true. There on the tables are veritable piles of books and materials. Undaunted, Fatima grabs a book truck and rushes forth to begin placing the items on the book truck. She remembers that there is a correct way to arrange books on the book truck.

H. Choose the image below that best shows how Fatima arranged the books on the book truck.









As Fatima begins arranging the books on the book truck, she quickly realizes that a number of these items in fact do **NOT** belong to UH Manoa libraries.

I. List the two indicators which tell Fatima that a book does, indeed, belong to the UH Manoa libraries?

a.	
b.	

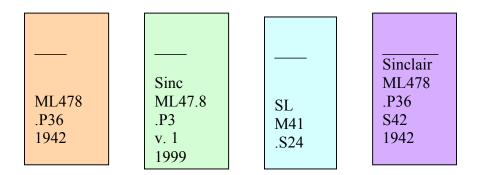
Just as Fatima finishes picking up all of the items left by the unruly students, Howdy Doody walks by on his way to Lost and Found. Fatima gives him those books that appear to be personal items and turns to tackle the next step of her job. Counting all of the books on her cart she realizes that she has just retrieved twenty-three items and that five of them came from the second floor. Fatima is now ready to fill out the book Pick-up Log for her morning's work.

D. Fill out the Pick-up Log for Fatima.

BOOK PICK-UP LOG									
MONTH OF:									
DATE	RBR	1ST FL	2ND FL	3RD FL	INITIALS				
1									
2									
3									

Since most of the books belong on that floor, Fatima decides to sort them right on the cart in call number order before moving on to the next step of her job. There were four books that gave Fatima a hard time in shelving correctly.

E. Help Fatima put these books in correct call number order by indicating on the line in the book if they would be placed 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> on the shelf.



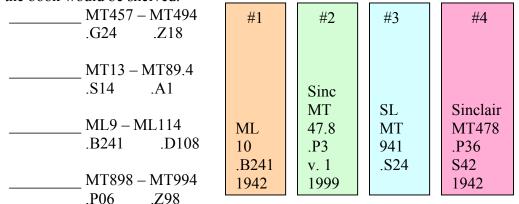
Once she has sorted all of the books, she begins to fill out the Shelving Log. She realizes that of the eighteen books from the third floor, five are from the "ML" section, five from the "MT" section, and the remaining eight are from the "M" section. The five books from the second floor are all from the "BP" or bound periodical collection.

F. Fill out the Shelving Log for Fatima.

SHELVING LOG									
MONTH OF	:								
			BP	BP	MUSIC-	MUSIC-	MUSIC-		
Date	REF	CLOSED	1ST	2ND	М	ML	MT	MISC	INITIALS
1									
2									
3			·						

Finally, Fatima is ready to wheel the books off to their correct places on the shelves. Remembering that reading the stack range labels will make her job go faster, she looks up and begins to read the range labels.

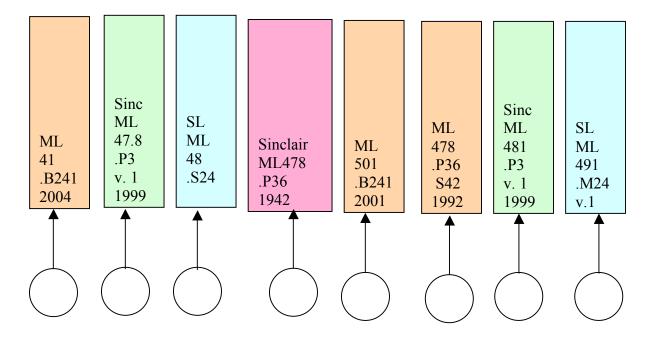
G. Place the number for each book below on the line next to the stack range label where the book would be shelved.



Once Fatima finds the correct range, she begins looking for the right section to place the books. When she thinks she's found the right section, she begins to look more closely at the call numbers on the shelf. She shakes her head because she notices that some books are out of order. Why she even finds two books from a completely different section that appear to be hidden behind one shelf! I'd like to give that patron a piece of my mind, she thinks as she works to straighten up the shelf.

Finally she is really ready to put the books on the shelf. Help Fatima complete this task by completing the next activity.

H. Write the number for the call numbers below in the space where the book would be shelved.



Congratulations! You have just completed the *Shelving Books with Library of Congress Call Number* instructional module. We hope that you are now enlightened library users. You should be prepared not only to tackle those shelves finding the books of your dreams but also be ready to work as a expert and adept library shelver.

## Congratulations!

You have just completed the *Shelving Books with Library of Congress Call Number* instructional module. We hope that you are now enlightened library users. You should be prepared to not only tackle those shelves finding the books of your dreams but also be ready to work as an expert and adept library shelver.

## **COPYRIGHT**

The work presented here is original work created by the authors. There is one non-original graphic. This is the picture of books on a shelf used in Chapter 1. Permission to use this graphic for any purpose with credit was obtained via email from Caroline Thompson, Librarian, at the University of West Florida Library.

This work follows the Creative Commons Attribution License. To view a copy of this license, visit http://creativecommons.org/licenses/by/1.0/ or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA

# **Shelving Locations Chart**

Use this chart by comparing the book to the first part of the call number. Then use the columns to the right to determine its location within the library. Sometimes this part may not be printed on the book.

First Part of the Call	Location in Sinclair	Floor
Number on book	Library	a rd
Sinc, SL, or Sinclair	Music Collection	3 <sup>rd</sup>
	MMT	
(Sinc, SL, or Sinclair) Ref	Ref. Stacks	3 <sup>rd</sup>
or Reference		
(Sinc, SL, or Sinclair) F	Music Folio	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) FF	Music Folio	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) Mini	Music Scores	3 <sup>rd</sup>
(Sinc, SL, or Sinclair) Per	Sinc Periodical	3 <sup>rd</sup>
Sinc Closed	Closed	1 <sup>st</sup>
Reserves	Reserves	3 <sup>rd</sup>

**This information applies to the following call number locations.** The bottom part of the call number may have a date. If the date is pre-1975 for bound periodicals\* they are the Hamilton Library books which are temporarily housed in Sinclair Library. These items will have call numbers A-L and N-Z. Pre-1975 bound periodicals are shelved in Sinclair Library. All other A-L and N-Z call numbers are found at Hamilton Library

Haml, HL, or Hamilton	Periodical Room	1 <sup>st</sup>
Haml, HL, or Hamilton	Periodicals	2 <sup>nd</sup>
(Haml, HL, or Hamilton)	East Asia, Asia	2 <sup>nd</sup>
Asia		
(Haml, HL, or Hamilton) F	Folio	2 <sup>nd</sup>
(Haml, HL, or Hamilton)	Folio	2 <sup>nd</sup>
FF		

<sup>\*</sup>A bound periodical is multiple issues of a magazine or journal in a single book.

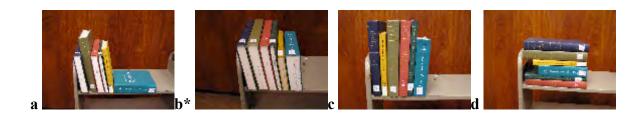
## Chapter 1

- 1. Which of the following features identifies a library book?
  - a. Incorrect. ISBN is the International Standard Book Number, which is a ten-digit number.
  - b. Incorrect. The barcode is a printed horizontal strip of vertical bars used for identifying specific items.
  - c. Correct. A call number identifies a book as a library book and not a personal book.
  - d. Incorrect. A UPC is the Universal Product Code, which is a printed horizontal strip of vertical bars used for identifying specific items.
- 2. Which book property stamp listed below is an example of a UH Manoa property stamp?
  - a. Correct. This is an example of a University of Hawaii Library property stamp.
  - b. Incorrect. This property stamp indicates the wrong institution.
  - c. Incorrect. This property stamp indicates the wrong institution.
  - d. Incorrect. This property stamp indicates the wrong institution.
- 2. Circle to indicate the books that **<u>DO</u>** belong to UH Manoa.
  - a. Correct. The book has both a call number and the necessary property stamp for a UH Manoa library book.
  - b. Incorrect. Though it has a call number, it does not have the UNIVERSITY OF HAWAII property stamp.
  - c. Incorrect. In order for it to be a library book, it must have a call number. Since someone's name is written on the book, it is obviously private property.
  - d. Incorrect. Though it is a library book, it does not have the UNIVERSITY OF
  - e. HAWAII property stamp.

#### Chapter 2

- 4. Indicate which place a shelver should **NOT** go to look for books.
  - a. Incorrect. Books are often left here to be re-shelved.
  - b. Incorrect. Books are left in many areas to be re-shelved.
  - c. Correct. Books are rarely left here. If they are left in the bathrooms, the custodians will bring them to the circulation counter to make sure they are not checked out.
  - d. Incorrect. Books are often left here to be re-shelved.

Practice: 5. Which picture depicts the correct way to place books on a book truck to be sorted and taken to the shelves?



- a. Incorrect. These books are very unstable, and the call numbers are arranged in different directions, making them hard to read.
- b. Correct. The books are stable and the call numbers are easily read.
- c. Incorrect. These books are very unstable, and the shelver has to bend over to see the call numbers.
- d. Incorrect: These books are very unstable, and the shelver has to bend over and turn his or her head to see the call numbers.

# 6. Looking at the following Book Pick-up Log, interpret the information provided on the highlighted row.

BOOK PICK-UP LOG								
MONTH OF: JUNE								
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS			
1								
2	5		3	1	BB			
3				·				

Answer: The BOOK PICK-UP LOG shows that on June 2<sup>nd</sup>, five books were picked up in the Reserve Book Room, three books were picked up on the 2<sup>nd</sup> floor, and one book was picked up on the 3<sup>rd</sup> floor by someone whose first and last name starts with a B. Maybe it was Betty Boop!

7. Betty went out to do her job as a new shelver on the morning of June 3<sup>rd</sup>. She found four books left in study area on the second floor and five more on the third floor. Please fill in the Book Pick-up Log below for Betty.

BOOK PICK-UP LOG								
MONTH OF: JUNE								
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS			
1								
2								
3			4	5	BB			

Betty noted that she picked up four (4) books from the second floor and that she picked up five (5) from the third floor for the day of June 3<sup>rd</sup>. It doesn't matter where these books will be shelved. It only matters where they were found. Then she signed her initials on the correct line.

#### Chapter 3

8. Circle and label each part of the following call number. Label them "first part", "second part", "third part" and "fourth part."

Sinc ------First Part

ML -----Second Part
432

.P89 -----Third Part

1999 -----Fourth Part
v. 2

- a. The first part is the line that reads "Sinc" and designates that the book belongs to Sinclair Library.
- b. The second part is actually two lines here: "ML" and "432." Sometimes this appears on one line as well. But they both refer to the general subject area.
- c. The third part of the call number is ".P89" and refers to the cutter. You'll learn more about that in a few minutes.
- d. The fourth part of the call number here is actually two lines. The "1999" indicates the date of publication, and the "v. 2", also part of the fourth part, indicates that it is volume two.

- 9. The Shelving Locations Chart indicates where collections are found in Sinclair library. Which group is found on the third floor?
  - a. Correct. By looking at the chart you can see that all are located on the third floor
  - b. Incorrect. These collections are located on the second floor.
  - c. Incorrect. Sinclair is indeed on the third floor; however, Closed Shelves is located on the first floor, while Haml Asia is found on the second floor.
  - d. Incorrect. While Sinc FF and Sinclair are located on the third floor, Haml is found on the first and second floor
- 10. Review the following list showing the second part of a call number. Which group shows alphanumeric order?
  - a. Incorrect. AM89, G524, GV45 is the correct order
  - b. Incorrect. ML3, ML8, ML621 is the correct order
  - c. Incorrect. M58, ML345, MT337 is the correct order.
  - d. Correct. The letters first alphabetically and then numerically sort as whole numbers with a decimal part.
- 11. Identify the list of individual cutters that have correct alphanumeric decimal examples.
  - a. Incorrect. .H135, .M13. .M35 is the correct order.
  - b. Incorrect. .C12, .C52, .C161 is the correct order.
  - c. Incorrect. .L245, .L25, .L4 is the correct order.
  - d. Correct. All of the letters are the same and the numbers are sorted decimally.

# 12. Which list shows the correct order for the fourth part of the call number?

a.	QD 1 .A 5 v. 2	QD 1 .A5 v.8 c. 2	QD 1 .A 5 v. 3 c. 2	QD 1 .A 5 v. 2 c.3	QD 1 .A 5 v. 1 c.5
b.	M 10 .C 3 1933	M 10 .C 3 1990	M 10 .C 3 1995 c. 3	M 10 .C 3 1995 c. 2	M 10 .C 3 1998 v. 1 c.5
c.	BF23 .A5 1996	BF23 .A 5 1996 v. 1 c.5	BF23 .A 5 1996 v. 2	BF23 .A 5 1996 v. 3 c.3	BF23 .A 5 1996 v. 3 c. 2
d.	Q 10 .C3 1996 c. 3	Q 10 .C3 1997 c. 2	Q 10 .C3 1998 c.5	Q 10 .C3 1998	Q 10 .C3 1998 v. 2 c.3

## v. Incorrect. The correct order is

QD 1	QD 1	QD 1	QD 1	QD 1
.A 5	.A 5	.A 5	.A 5	.A5
v. 1	v. 2	v. 2	v. 3	v.8
v. 1 c.5		c.3	c. 2	c. 2

## vi. Incorrect. The correct order is

| M 10 |
|------|------|------|------|------|
| .C 3 |
1933	1990	1995	1995	1998
		c. 2	c. 3	v. 1
				c.5

### c. Incorrect. The correct order is

BF23	BF23	BF23	BF23	BF23
.A5	.A 5	.A 5	.A 5	.A 5
1996	1996	1996	1996	1996
	v. 1	v. 2	v. 3	v. 3
	c.5		c.2	c. 3

## d. Correct.

13. The following list of call numbers represent books found at the UH Manoa libraries. Decipher the first part of the call number utilizing the shelving locations chart. Which call number does **NOT** represent a book found at **Sinclair** Library?

Shelving Locations Chart						
Use this chart by comparing the	book to the first part of the call	number. Then use the				
columns to the right to determine	ne its location within the library.	Sometimes this part may not				
be printed on the book.						
First Part of the Call	Location in Sinclair	Floor				
Number on book	Library	a rd				
Sinc, SL, or Sinclair	Music Collection	3 <sup>rd</sup>				
	MMT	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) Ref	Ref. Stacks	314				
or Reference		o rd				
(Sinc, SL, or Sinclair) F	Music Folio	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) FF	Music Folio	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) Mini	Music Scores	3 <sup>rd</sup>				
(Sinc, SL, or Sinclair) Per	Sinc Periodical	3 <sup>rd</sup>				
Sinc Closed	Closed	1 <sup>st</sup>				
Reserves	Reserves	3 <sup>rd</sup>				
This information applies to	the Hamilton call number loca	tions. The bottom part of				
the call number may have a da	ate. If the date is pre-1975 for bo	ound periodicals* they are				
the Hamilton Library books w	which are temporarily housed in	Sinclair Library. These				
items will have call numbers	A-L and N-Z. Pre-1975 bound p	periodicals are shelved in				
Sinclair Library. All other A-l	and N-Z call numbers are four					
Haml, HL, or Hamilton	Periodical Room	1 <sup>st</sup>				
Haml, HL, or Hamilton	Periodicals	2 <sup>nd</sup>				
(Haml, HL, or Hamilton)	East Asia, Asia	2 <sup>nd</sup>				
Asia						
(Haml, HL, or Hamilton) F	Folio	2 <sup>nd</sup>				
(Haml, HL, or Hamilton)	Folio	2 <sup>nd</sup>				
FF						

\*A bound periodical is multiple issues of a magazine or journal in a single book.

- a) Incorrect. This example may take more time to figure out. If you look all the way at the end of the "Shelving Locations" chart, you will see the last entry talks about "Any call number for Pre-1975 bound periodical". Well there you are this example is a "periodical" and since it was bound in 1954 that is certainly "pre-1975", so we are going to keep this item in Sinclair.
- b) Incorrect. This book is found in the music collection in Sinclair on the third floor. You know this because of the "ML" part of the call number. If you look at the Shelving Locations Chart, it indicates that "ML" is found in Sinclair on the third floor.
- c) Correct. Normally you would not be given information about why an answer was correct. But frankly, this stuff is so tricky that we want to tell you anyway. The give-away is the "BF" part of the call number. Since the "location" part of the call number is a blank, you have to go to the second part: "BF".

If you look at the great Shelving Location Chart you will note that you cannot find anything with that call number designation. Therefore, you will then notice that there is a section of the chart that states, "**This information applies to the Hamilton call number locations."** The bottom part of the call number may have a date. If the date is pre-1975 for bound periodicals, they are the Hamilton Library books which are temporarily housed in Sinclair Library. These items will have call numbers A-L and N-Z. Pre-1975 bound periodicals are shelved in Sinclair Library. All other A-L and N-Z call numbers are found at Hamilton Library

Therefore, we now know that the book with the call number beginning with "BF" and has a 2003 date needs to be shipped off to Hamilton Library. Let them deal with shelving it!

- d) Incorrect. This book is found in the music collection in Sinclair on the third floor. You know this because of the "ML" part of the call number. If you look at the Shelving Locations Chart, it indicates that "ML" is found in Sinclair on the third floor
- 14. The following groups of alphanumeric items represent the second part of a call number. Indicate the correct alphanumeric order?

These items are sorted first by the letter and then numerically for the items sharing the same letters.

1_ Q	_ <b>2</b> _ Q 76	_ <b>3</b> QA	_6_ QD	4_ QA	<b>5</b> _ QA
15		76.5	76	76.6	76.8

15. The following groups of alphanumeric items represent the third part of a call number. Label them in correct order for the third part of the call number.

_ <b>4</b> BF	3BF 5	1 BA	_2BF	_6HF	_ <b>5</b> HF
52		512	121	576	323

16. Indicate the correct call number order.

SL	_5Sinclair	1 Sinc	4SL	3 M	4 SL
M	MT	M	ML	1002	ML
1002	1002	1001	100	.P451	1002
.P415	.P445	.P415	.P45	1945	.P5
1945	D4	1945	D1		1945
	1945		1945		

#### Chapter 4

17. Below is a list of abbreviations found on a Shelving Log. Write out what they mean on the line following the abbreviation.

e.	REF	Reference
f.	CLOSED	Closed Shelves
g.	BP 2 <sup>ND</sup>	Bound periodicals found on the second floor
h.	MISC	Books not found in the other categories

18. Betty is going to try again. Yesterday was a bad day for her. So during the afternoon of June 4<sup>th</sup>, Betty makes her rounds. She picks up books and logs that information, she sorts the books she has found and is ready to record the information on the Shelving Log. She notes that she will need to shelve six reference books, one bound periodical from the second floor and five miscellaneous items. Fill in the chart for Betty.

	SHELVING LOG									
MON	MONTH OF: JUNE									
			BP		MUSIC-					
Date	REF	CLOSED	1ST	BP 2ND	M	MUSIC-ML	MUSIC-MT	MISC	INITIALS	
1										
2										
3										
4	6			1				5	BB	

You should check that the correct month, June, has been listed. Also make sure that all of the entries on the log are for the 4<sup>th</sup> day. You should have placed a number "6" under REF for reference books, a number "1" under the BP 2<sup>nd</sup> column. That's because she picked up one item from the bound periodicals from the second floor. You should also have placed a number "5" in the MISC column because she found five miscellaneous items. Finally you should have added Betty's initials BB under the last column on the log.

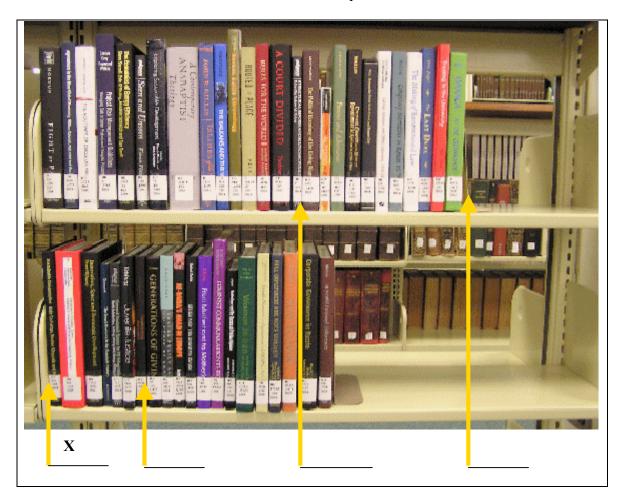
### Chapter 5

19. Fill in the blanks in the sentences below using the most appropriate terminology: ranges, sections, stacks.

Sunny walked	into the library, l	looked around	l and was	amazed	at the	numl	er of	•
stacks	she saw everyw	vhere. Walkin	g over to	one long	,			

<u>range</u> she began to peruse each <u>section</u> just looking at the books.

- •Stacks or book stacks are all of the shelving and all of the areas within a library where books are shelved.
- Sections are individual bookcases in the rows or ranges of books.
- •Ranges are made up of the sections and become long rows of books.
- a. 20. See the very last book on the very right-hand side of the top shelf? A shelver needs to shelve a book whose call number comes directly after that book. Put an "X" on the line below that indicates where best a shelver should place the book.



You should have marked the first line. A shelver should only fill the shelf up about <sup>3</sup>/<sub>4</sub> full. Since the top shelf in the picture is that full, the next book should be placed in the very first position on the second shelf.

21. Using the shelf range label below, indicate which call number would be shelved within that range.

b. MT16	b. MT	c. MT	d. ML
.P94	213.5	452	199
v. 2	.T16	.W99	.J45
	1998	2003	2003
		v.3	

- a. MT16 Incorrect. "MT 16" is shelved before "MT 18". .P94 v. 2
- b. MT Correct. This falls within the shelf range.

213.5 .T16 1998

c. MT452 Incorrect. "ML" is shelved before the "MT" section.

.W99 2003

v.3

d. ML Incorrect. "ML" comes well before "MT."

199

.J45 2003

22. Use the graphic of misshelved books below to determine which 2 call numbers represent books that are both out of order.

1.	2.	3,	4.	5.	6.	7.
Sinc	Sinc	Sinc	Sinc	Sinc	Sinc	Sinc
ML456	ML45	ML456	ML456	ML465	ML456	M456
.A43	.B99	.K99	.L70	.P78	.L70	.L70
E45	1990	1987	1990	2000	2001	2004
1993						

- vii. 2., 5. Correct. The second example should be in first place order. The fifth example should be at the end of this group of books.
- viii. 2., 4. Incorrect. The second example is out of order, but the fourth example is in correct order.
- ix. 4., 5.Incorrect. The fourth example is in correct order, but the fifth example should be at the end of this group of books.

- x. 3., 4. Incorrect. The third and fourth examples are both in correct call number order
- 23.
- J. Shocked but unruffled at such unlibrary-like behavior, Fatima immediately hurries to which floor of the library?
  - a. 1<sup>st</sup> Floor Incorrect, music books are found on the third floor.
  - b. 2<sup>nd</sup> Floor Incorrect, music books are found on the third floor.
  - c. 3<sup>rd</sup> Floor Correct, music books are found on the third floor.
- K. Choose the image below that best shows how Fatima arranged the books on the book truck.









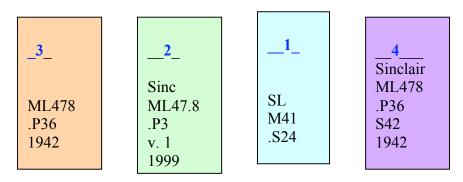
- a. Incorrect. These books are very unstable and the call numbers go in different directions.
- b. Correct. The books are all stable and call numbers easily read.
- c. Incorrect. These books are very unstable and the shelver has to bend over to see the call numbers.
- d. Incorrect: These books are very unstable and the shelver has to bend over and turn their head to see the call numbers.
  - L. List the two indicators which tell Fatima that a book does, indeed, belong to the UH Manoa libraries?
    - a. \_\_\_\_\_Call number \_\_\_\_b. \_\_\_\_UNIVERSITY OF HAWAII LIBRARIES property stamp\_\_\_

Counting all of the books on her cart she realizes that she has just retrieved twenty-three items and that five of them came from the second floor. Fatima is now ready to fill out the book Pick-up Log for her morning's work.

D. Fill out the Pick-up Log for Fatima.

BOOK PICK-UP LOG								
MONTH OF:								
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS			
1								
2				23	FJ			
3								

E. Help Fatima put these books in correct call number order by indicating on the line in the book if they would be placed 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> on the shelf.



She realizes that of the eighteen books from the third floor, five are from the "ML" section, five from the "MT" section, and the remaining eight are from the "M" section. The five books from the second floor are all from the "BP" or bound periodical collection.

F. Fill out the Shelving Log for Fatima.

	SHELVING LOG									
MONT	MONTH OF: JUNE									
Date	BP BP MUSIC- MUSIC- MUSIC-									
1										
2				5	8	5	5			FJ
3										

G. Place the number for each book below on the line next to the stack range label where the book would be shelved.



H.Indicate the order for shelving the below books. Write 1<sup>st</sup>, 2<sup>nd</sup>, etc. in the circle.

	1		2	3	4	8	5		6	7
			inc IL	SL	g: 1:		ML		Sinc	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	т		7.8	ML	Sinclair		478		ML	SL
M					ML478	ML	.P36	- 1	481	ML
41			23	48	.P36	501	S42	- 1	.P3	491
.B	241	$\mathbf{V}$ .	. 1	.S24	1942	.B241	1992	١	v. 1	.M24
20	004	1	999			2001	1992		1999	v.1

#### **PRETEST**

INSTRUCTIONS: Circle, write-in or check off the correct answer. If you are not sure of the correct answer, circle answer "e. I don't know," and go on to the next question.

EL1. Which of the following do you recognize as a library call number?

a	b	c	d	e.
ML 3758 .M6 S5 2001	o 28000 48600 s	ISBN 0- 8108-4003- 0	UNIVERSITY OF HAWAII LIBRARY	I DON'T KNOW

EL2. Which list is in correct alphabetical order?

- a. M, ML, M, MT
- b. A, AA, AP, AB
- c. B, BP, M, CA
- d. G, GX, M, ML
- e. I don't know

EL3. Which list is in correct numerical order?

- a. 278, 287, 299, 298
- b. 89, 988, 989, 999
- c. 35, 42, 521, 52
- d. 375, 38, 381, 39
- e. I don't know

EL4. Which list is in correct numerical order?

- a. .278, .4, .123, .234
- b. .89, .988, .989, .98
- c. .35, .42, .521, .52
- d. .375, .38, .381, .39
- e. I don't know

EL5. Which list of dates is in the correct chronological order?

- a. 1982, 1979, 1981, 1968
- b. 1974, 1961, 2001, 1998
- c. 2000, 2003, 2004, 2001

- d. 1987, 1997, 1998, 1999
- e. I don't know
- a. Examine a book from the book truck. What feature identifies it as a library book?
  - a. ISBN
  - b. call number
  - c. UPC
  - d. Barcode
  - e. I don't know
- b. Which property stamp is an example of a UH Manoa property stamp?
  - a. LEEWARD COMMUNITY COLLEGE
  - b. WEST OAHU UNIVERSITY
  - c. UNIVERSITY OF HAWAII LIBRARY
  - d. KAUAI COMMUNITY COLLEGE
  - e. I don't know
  - 3. Select the description for a UH Manoa book. The book has
    - a. a call number and UNIVERSITY OF HAWAII property stamp.
    - b. call number and HAWAII STATE PUBLIC LIBRARY property stamp.
    - c. no visible call number but has someone's name written on the front inside cover.
    - d. a call number and WEST OAHU UNIVERSITY.
    - e. I don't know
  - 4: Which of the following is **NOT** a place to pick up books for re-shelving?
    - a. bathrooms
    - b. book areas
    - c. near copy machines
    - d. study tables
    - e. I don't know
  - 5. Which picture depicts the correct way to place books on a book truck to be sorted and taken to the shelves?









Practice: 6. Looking at the following Book Pick-up Log, interpret the information provided on the highlighted row. If you don't know how to complete this question, please write "I don't know" next to Answer.

# → Record your answer here.

BOOK PICK-UP LOG								
MONTH OF: J	MONTH OF: JUNE							
DATE RESERVES 1ST FL 2ND FL 3RD FL INITIALS								
1								
2		3	45		HD			
3	3							

7. Betty Boop went out to do her job as a new shelver on the morning of June 3<sup>rd</sup>. She found four books left in study area on the second floor and later found five more on the third floor. Please fill in the Book Pick-up Log below for Betty.

BOOK PICK-UP LOG								
MONTH OF: JUNE								
DATE RESERVES 1ST FL 2ND FL 3RD FL INITIALS								
1								
2	2							
3								

If you don't know how to complete this question, please write "I don't know" on the example log.

8. Circle and label each part of the following call number. Label them "first part", "second part", "third part" and "fourth part."

Sinc

ML

432

.P89

1999

v. 2

- 9. Use the Shelving Locations chart in the packet to determine which locations are found on the third floor of Sinclair library?
  - a. Sinclair, Closed Shelves, Haml Asia
  - b. Sinclair, Sinc Mini, Sinc Ref
  - c. Haml FF, F, Haml F,
  - d. Sinc FF, Sinclair, Haml
  - e. I don't know
- 10. Which list showing the second part of a call number is in correct alphanumeric order?

a.	GV45	AM	G524
		89	
b.	ML	ML8	ML3
	621		
c.	ML	M58	MT
	345		337
d.	Z42	ZA	ZZ421
		423	
e.	I don't	know	

11. Which group of cutters (the third part of the call number) shows the correct alphanumeric decimal order?

a.	.A125	.B52	.AC16
b.	.H13	.B1	.B4
c.	.L4	.F25	.K245
d.	.M332	.M34	.M358
e.	I don't	know	

12. Which list shows the correct order for the fourth part of the call number?

a.	QD 1				
	.A 5	.A5	.A 5	.A 5	.A 5
	v. 2	v.8	v. 3	v. 2	v. 1
		c. 2	c. 2	c.3	c.5
b.	M 10				
	.C 3				
	1933	1990	1995	1995	1998
			c. 3	c. 2	v. 1
					c.5
c.	BF23	BF23	BF23	BF23	BF23
	.A5	.A 5	.A 5	.A 5	.A 5
	1996	1996	1996	1996	1996

		v. 1 c.5	v. 2	v. 3 c.3	v. 3 c. 2
d.	Q 10 .C3 1996 c. 3	Q 10 .C3 1997 c. 2	Q 10 .C3 1998 c.5	Q 10 .C3 1998	Q 10 .C3 1998 v. 2 c.3
e.	I don't know				

13. The following list of call numbers represent books found at the UH Manoa libraries. Decipher the first part of the call number utilizing the shelving locations chart. Which call number does **NOT** represent a book found at **Sinclair** Library?

#### **Shelving Locations Chart** Use this chart by comparing the book to the first part of the call number. Then use the columns to the right to determine its location within the library. Sometimes this part may not be printed on the book. First Part of the Call **Location in Sinclair** Floor Number on book Library Sinc, SL, or Sinclair Music Collection M-----MT (Sinc, SL, or Sinclair) Ref Ref. Stacks or Reference Music Folio (Sinc, SL, or Sinclair) F 3<sup>rd</sup> (Sinc, SL, or Sinclair) FF Music Folio 3<sup>rd</sup> (Sinc, SL, or Sinclair) Mini Music Scores (Sinc, SL, or Sinclair) Per Sinc Periodical 3<sup>rd</sup> Sinc Closed Closed Reserves Reserves This information applies to the Hamilton call number locations. The bottom part of the call number may have a date. If the date is pre-1975 for bound periodicals\* they are the Hamilton Library books which are temporarily housed in Sinclair Library. These items will have call numbers A-L and N-Z. Pre-1975 bound periodicals are shelved in Sinclair Library. All other A-L and N-Z call numbers are found at Hamilton Library Haml, HL, or Hamilton Periodical Room Haml, HL, or Hamilton Periodicals (Haml, HL, or Hamilton) East Asia, Asia (Haml, HL, or Hamilton) F Folio (Haml, HL, or Hamilton) Folio FF

a.	b.	c.	d.	e.
AP2	ML	BF	ML	I
3758	3758	.M6	.T68	don't

\*A bound periodical is multiple issues of a magazine or journal in a single book.

.M6	.M6	S5	1953	know
S5	S5	v. 26		
1954		2003		

14. The following groups of alphanumeric items represent the second part of a call number. Indicate the correct alphanumeric order? Write 1<sup>st</sup>, 2<sup>nd</sup>, etc. Skip this item if you don't know.

BF	BF 5	BA	BF	HF	HF
52		512	121	576	323

15. The following groups of alphanumeric items represent the third part of a call number. Indicate the correct sort for these. If you don't know how to do this, skip this item.

B2	F55	H5	F5	B112	H981

16. Put these rows in correct call number order. Write 1<sup>st</sup>, 2<sup>nd</sup>, etc. If you don't know how to do this, skip this item.

SL	Sinclair	Sinc	SL	M	SL
M	MT	M	ML	1002	ML
1002	1002	1001	100	.P451	1002
.P415	.P445	.P415	.P45	1945	.P5
1945	D4	1945	D1		1945
	1945		1945		
I don't know.	•				

17. Below is a list of first part of the call number found on a Shelving Log. Write out what they mean on the line following the abbreviation or check the "I don't know" line.

i.	REF
j.	CLOSED
k.	BP 2 <sup>ND</sup>
1.	MISC
m.	I don't know

18. Betty Boop is going to try again. Yesterday was a bad day for her. So during the afternoon of June 3<sup>rd</sup>, Betty makes her rounds. She picks up books and logs that information, she sorts the books she has found and is ready to record the information on the Shelving Log. She notes that she will need to shelve six Reference books, one bound

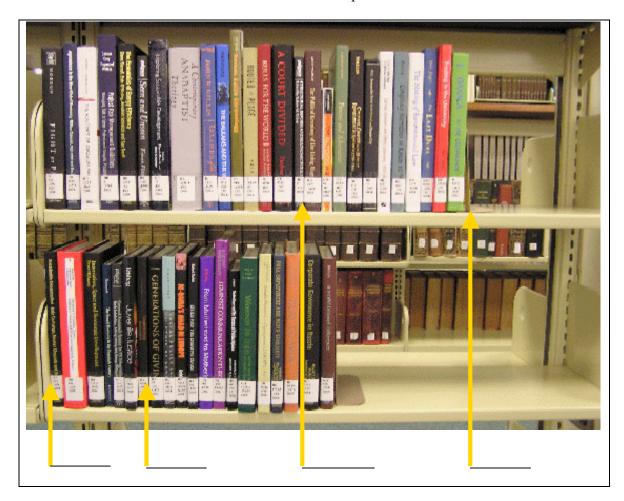
periodical from the second floor and five miscellaneous items. Fill in the chart for Betty. If you don't know the answer, write "I don't know" at the bottom of the Shelving Log.

	SHELVING LOG										
MON	MONTH OF: JUNE										
			BP		MUSIC-						
Date	REF	CLOSED	1ST	BP 2ND	M	MUSIC-ML	MUSIC-MT	MISC	INITIALS		
1											
2											
3											

19. Fill in the blanks in the sentences below using the most appropriate terminology: range, section, stacks. Write "I don't know" if you are uncertain of an answer.

Sunny wa	lked into the library, looked around and was amazed at the number of
	she saw everywhere. Walking over to one
long	she began to peruse each
	just looking at the books.

20. See the last book on the very right-hand side of the top shelf below? A shelver needs to shelve a book whose call number comes directly after that book. Put an "X" on the line below that indicates where best the shelver should place the book.



21. Using the shelf range label below, indicate which of the following call numbers would be shelved within that range.

MT18 - MT214 .B26 .G2

a.	MT16	b.	MT	c.	MT	d.	ML
	.P94		213.5		452		199
	v. 2		.T16		.W99		.J45
			1998		v.3		2003
					2003		

22. Use the graphic of misshelved books below to determine which group of books are **BOTH** out of order.

1.	2.	3,	4.	5.	6.	7.
Sinc	Sinc	Sinc	Sinc	Sinc	Sinc	Sinc
ML456	ML45	ML456	ML456	ML465	ML456	M456
.A43	.B99	.K99	.L70	.P78	.L70	.L70
E45	1990	1987	1990	2000	2001	2004
1993						

- a. 2, 5.
- b. 2, 4.
- c. 4, 5.
- d. 3, 4.
- e. I don't know.
- 23. Fatima Jones is new to the shelving business. She was recently hired by Sinclair Library as a student employee and has already gone through the library orientation session, completing the excellent shelving self-instruction module. So on this beautiful June 2<sup>nd</sup> morning, Fatima arrives at Sinclair ready to tackle her new job with confidence. Her supervisor greets her with the news that a particularly unruly group of music students had gathered in the location of the music collection and had not been particularly neat and tidy in their research of the material. Grabbing a book Pick-up Log and a Shelving Log, Fatima begins her day.
  - M. Shocked but unruffled at such unlibrary-like behavior, Fatima immediately hurries to which floor of the library?
    - a. 1<sup>st</sup> Floor
    - b. 2<sup>nd</sup> Floor
    - c. 3<sup>rd</sup> Floor
    - d I don't know

Alas her supervisor's words were true. There on the tables are veritable piles of books and materials. Undaunted, Fatima grabs a book truck and rushes forth to begin placing the items on the book truck. She remembers that there is a correct way to arrange books on the book truck.

N. Choose the image below that best shows how Fatima arranged the books on the book truck.









As Fatima begins arranging the books on the book truck, she quickly realizes that a number of these items in fact do **NOT** belong to UH Manoa libraries.

Ο.	List the two	indicators	which te	ell Fatima	that a	book	does,	indeed,	belong	to
	the UH Man	oa libraries	s?							

a.			
b.			

Just as Fatima finishes picking up all of the items left by the unruly students, Howdy Doody walks by on his way to Lost and Found. Fatima gives him those books that appear to be personal items and turns to tackle the next step of her job. Counting all of the books on her cart she realizes that she has just retrieved twenty-three items and that five of them came from the second floor. Fatima is now ready to fill out the book Pick-up Log for her morning's work.

### D. Fill out the Pick-up Log for Fatima.

BOOK PICK-UP LOG									
MONTH OF: JUNE									
DATE	DATE RESERVES 1ST FL 2ND FL 3RD FL INITIALS								
1									
2									
3									

Since most of the books belong on that floor, Fatima decides to sort them right on the cart in call number order before moving on to the next step of her job. There were four books that gave Fatima a hard time in shelving correctly.

E. Help Fatima put these books in correct call number order by indicating on the line in the book if they would be placed 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> on the shelf.

ML 478 .P36 1942	Sinc ML 47.8 .P3 v. 1 1999	SL ML 41 .S42	Sinclair ML478 .P36 .S42 1942
---------------------------	---	------------------------	---

Once she has sorted all of the books, she begins to fill out the Shelving Log. She realizes that of the eighteen books from the third floor, five are from the "ML" section, five from the "MT" section, and the remaining eight are from the "M" section. The five books from the second floor are all from the "BP" or bound periodical collection.

F. Fill out the Shelving Log for Fatima.

SHELVING	SHELVING LOG									
MONTH OF	MONTH OF: JUNE									
			BP	BP	MUSIC-	MUSIC-	MUSIC-			
Date	REF	CLOSED	1ST	2ND	М	ML	MT	MISC	INITIALS	
1										
2										
3										

Finally, Fatima is ready to wheel the books off to their correct places on the shelves. Remembering that reading the stack range labels will make her job go faster, she looks up and begins to read the range labels.

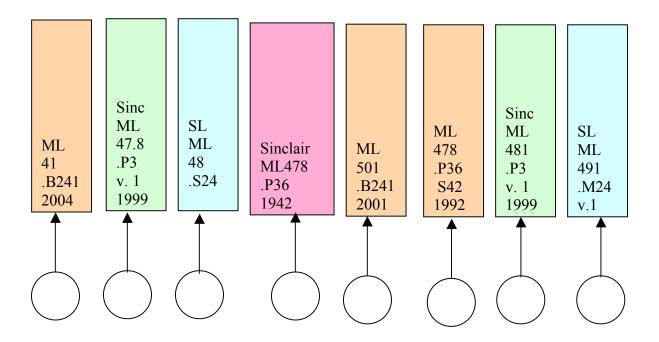
G. Place the number for each book below on the line next to the stack range label where the book would be shelved.

MT457 – MT494				
.G24 .Z18	#1	#2	#3	#4
MT13 - MT89.4				
.S14 .A1				
		Sinc		
ML9 – ML114		MT	SL	Sinclair
.B241 .D108	ML	47.8	MT	MT478
	10	.P3	941	.P36
MT898 – MT994	.B241	v. 1	.S24	S42
P06 .Z98	1942	1999		1942

Once Fatima finds the correct range, she begins looking for the right section to place the books. When she thinks she's found the right section, she begins to look more closely at the call numbers on the shelf. She shakes her head because she notices that some books are out of order. Why she even finds two books from a completely different section that appear to be hidden behind one shelf! I'd like to give that patron a piece of my mind, she thinks as she works to straighten up the shelf.

Finally she is really ready to put the books on the shelf. Help Fatima complete this task by completing the next activity.

H. Indicate the order for shelving the below books. Write 1<sup>st</sup>, 2<sup>nd</sup>, etc. in the circles. Write "I don't know" if you don't know the correct order.



Thanks for taking the Pretest! You are now ready to move to the module.

INSTRUCTIONS: Circle, write in or check off the correct answer.

Please help us make improve this test. Write freely in the margins of this paper. Include any comments.

- 1. Which of the following features identifies a library book?
  - a. ISBN
  - b. UPC
  - c. barcode
  - d. call number
- 2. Which book property stamp listed below is an example of a UH Manoa property stamp?
  - a. UNIVERSITY OF HAWAII LIBRARY
  - b. HAWAII COMMUNITY COLLEGE
  - c. LEEWARD COMMUNITY COLLEGE
  - d. MAUI PUBLIC LIBRARY
- 3. Select the description for a UH Manoa library book. The book has
  - a. a call number and WEST OAHU UNIVERSITY.
  - b. call number and HAWAII STATE PUBLIC LIBRARY property stamp.
  - c. no visible call number but has someone's name written on the front inside cover.
  - d. a call number and UNIVERSITY OF HAWAII property stamp.
- 4. Indicate which place a shelver should **NOT** go to look for books.
  - a. bathrooms
  - b. book areas
  - c. Paradise Palms
  - d. study tables
- 5. Circle the letter showing the correct way to arrange books on a book truck.









6. Looking at the following Book Pick-up Log, interpret the information provided on the highlighted row. Write out your answer below.

Answer:

BOOK PICK-UP LOG								
MONTH OF: MAY								
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS			
1	4	35	1	3	HD			
2								
3								

7. Betty Boop went out to do her job as a new shelver on the morning of June 2nd. She found two books left in study area on the second floor and later two more on the third floor. Please fill in the Book Pick-up Log below for Betty.

BOOK PICK-UP LOG								
MONTH OF: JUNE								
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS			
1								
2								
3								

8. Circle and label each part of the following call number. Label them "first part", "second part", "third part" and "fourth part."

SL

MT

892

.B189

2001

v.1 c. 4

- 9. The Shelving Locations Chart indicates where collections are found in Sinclair library. Which group is found on the third floor?
  - a. Haml Asia, Sinclair, Oversize
  - b. Sinclair F, Sinc Mini, Sinc Ref
  - c. Asia F, Archives, Hawn
  - d. Sinc FF, Sinclair, Haml
- 10. Please indicate the correct list showing the second part of a call number in correct alphanumeric order.

a.	M45	M	G524
		89	
b.	ML	ML18	ML32.4
	621		
c.	M	M58	MT
	345		337
d.	M42	NA	Z421
		423	

11. Below is a table with groups of cutters (the third part of the call number). Which group shows all examples in the correct alphanumeric decimal order?

a.	.H432	.H44	.H444
b.	.H13	.B41	.B4
c.	.L4	.L25	.L245
d.	.C25	.C52	.C166

12. Look at the following examples showing the fourth part of a call number. Which list shows the correct order for the fourth part of the call number?

a.	SINCLAIR QD 1	SINCLAIR QD 1	SINCLAIR QD 1	SINCLAIR QD 1	SINCLAIR QD 1
	.A 5 1997 v. 2	.A5 1996 c. 2	.A 5 1995 v. 3 c. 2	.A 5 1996 v. 2 c.3	.A 5 1996 v. 1 c.5
b.	M 10 .C 3 1933	M 10 .C 3 1990	M 10 .C 3 1995 c. 2	M 10 .C 3 1995 c. 3	M 10 .C 3 1998 v. 1 c.5

c.	BF23 .A5 1996 c. 2	BF23 .A 5 1994 v. 1 c.5	BF23 .A 5 1996 v. 2	BF23 .A 5 1996 v. 2 c.3	BF23 .A 5 1996 v. 3 c. 2
d.	SINCLAIR Q 10 .C3 1996 c. 3	SINCLAIR Q 10 .C3 1997 c. 2	SINCLAIR Q 10 .C3 1998 v. 3 c.5	SINCLAIR Q 10 .C3 1998 v. 2	SINCLAIR Q 10 .C3 1998 v. 1 c.3

13. The following list of call numbers represent books found at the UH Manoa libraries. Decipher the first part of the call number utilizing the shelving locations chart. Which call number does <u>NOT</u> represent a book found at <u>Sinclair</u> Library?

Beware that this is a difficult question, and don't worry if it takes a little time to figure out the answer. Use the Shelving Locations Chart.

a.	b.	c.	d.
Haml	ML	QD	Sinc
AP2	3758	.M6	ML
3758	.M6	S5	.T68
.M6	S5	v. 26	1953
S5		2003	
1954			

14. The following groups of alphanumeric items represent the second part of a call number. Indicate the proper order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

M	M	MT	ML	MT	ML
1002	102	1022	12	1002	1002

15. Sort the following third part of the call number. Indicate the proper order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

F2	F55	H5	F15	H112	H981

16. Sort the call numbers in the correct order. Indicate the proper order by writing  $1^{st}$ ,  $2^{nd}$ , etc.

Sinc	SL	BF	BF	Sinclair	HF
BF	HF	51	521	BF	3231
52	576	.K4	.K45	5	.G55
.J67	.B5	1988	1969	.K45	1992
1901	D26			1975	

17. Below is a list of abbreviations found on a Shelving Log. Write out what they mean on the line following the abbreviation.

n.	REF
0.	BP 1 <sup>st</sup>
p.	MUSIC-ML
q.	MISC

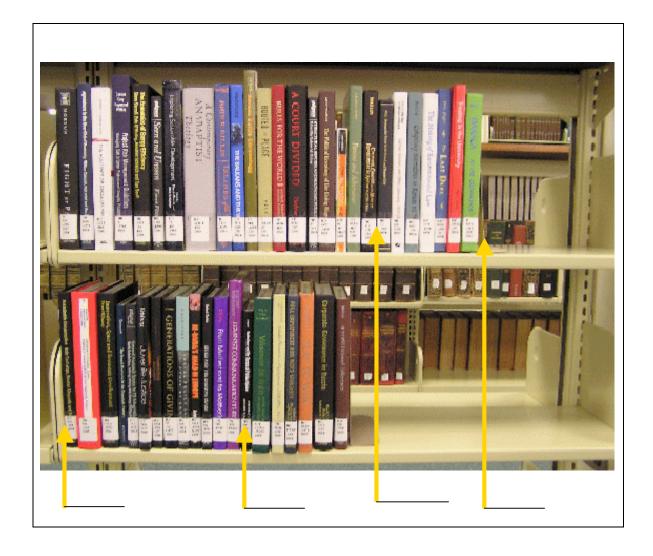
18. Betty Boop is ready for work. So during the afternoon of June 1<sup>st</sup>, Betty makes her rounds in Sinclair. She picks up books and logs that information, she sorts the books that she has found and is ready to record the information on the Shelving Log. She notes that she will need to shelve four closed shelves books, three bound periodical from the first floor and ten items from the M collection on the third floor. Fill in the chart for Betty.

	SHELVING LOG								
MON	MONTH OF: JUNE								
			BP		MUSIC-				
Date	REF	CLOSED	1ST	BP 2ND	M	MUSIC-ML	MUSIC-MT	MISC	INITIALS
1									
2									
3									
4									

19. A Fill in the blanks in the sentence	s below	using	the most	appropriate	terminology
range, section, stacks.					

Each and every	of shelves that make up a complete
	must be regularly checked for overcrowding of
books. Librarians at Sincle	air are proud of the overall
and want to keep them in	order.

20. See the first book on the very left-hand side of the bottom shelf below? A shelver needs to shelve a book whose call number comes directly before that book. Put an "X" on the line below that indicates where best the shelver should place the book.



21. Using the shelf range label, indicate which of the following call numbers would be shelved within that range.

M214 - M218 .B26 .G2

a. MT214	b. M	c. M	d. M
.P94	23.9	217.8	21
v. 2	.T16	.G16	.J45
	1998	1998	2003

22. Use the graphic of misshelved books below to determine which group of books are **BOTH** out of order.

1.	2.	3.	4.	5.	6.	7.
Sinc	Sinc	Sinc	Sinc	Sinc	Sinc	Sinc
ML456	ML456	ML456	ML564	ML456	ML456	M456
.A43	.B99	.A19	.L70	.J78	.L70	.L70
E45	1990	1987	1990	2000	2001	2004
1993						

- a. 1, 2.
- b. 2, 4.
- c. 4, 5.
- d. 3, 4.

23. Howdy Doody is new to the shelving business. He was recently hired by Sinclair Library as a student employee and has already gone through the library orientation session, completing the excellent shelving self-instruction module. So on this beautiful June 3<sup>nd</sup> morning, Howdy arrives at Sinclair ready to tackle his new job with confidence. Her supervisor greets him with the news that a particularly unruly group of students had gathered in Reserves and had not been particularly neat and tidy in their research of the material. Grabbing a book Pick-up Log and a Shelving Log, Howdy begins his day.

- P. Shocked but unruffled at such unlibrary-like behavior, Howdy immediately hurries to which floor of the library?
  - a. 1<sup>st</sup> Floor
  - b. 2<sup>nd</sup> Floor
  - c. 3<sup>rd</sup> Floor

Alas his supervisor's words were true. There on the tables are veritable piles of books and materials. Undaunted, Howdy grabs a book truck and rushes forth to begin placing the items on the book truck. He remembers that there is a correct way to arrange books on the book truck.

Q. Choose the image below that best shows how Howdy arranged the books on the book truck.









As Howdy begins arranging the books on the book truck, He quickly realizes that a number of these items in fact do **NOT** belong to UH Manoa libraries.

R.	List the two identifiers that can be seen on the book which tell Howdy that a
	book does, indeed, belong to the UH Manoa libraries

a.	
----	--

b.	

Just as Howdy finishes picking up all of the items left by the unruly students, Fatima Jones walks by on her way to Lost and Found. Howdy gives her those books that appear to be personal items and turns to tackle the next step of his job. Counting all of the books on his cart he realizes that he has just retrieved thirty items and that three of them came from the second floor. Howdy is now ready to fill out the book Pick-up Log for his morning's work.

D. Fill out the Pick-up Log for Howdy.

BOOK PICK-UP LOG							
MONTH OF: J	MONTH OF: JUNE						
DATE	RESERVES	1ST FL	2ND FL	3RD FL	INITIALS		
1							
2							
3							

Since most of the books belong on that floor, Howdy decides to sort them right on the cart in call number order before moving on to the next step of his job. There were four books that gave Howdy a hard time in shelving correctly.

E. Help Howdy put these books in correct call number order by indicating on the line in the book if they would be placed 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> on the shelf.

	Sinc		
ML	ML	SL	Sinclair
478	47.8	M	ML478
.P36	.P3	41	.P36
1942	v. 1	.S24	S42
	1999		1942

Once he has sorted all of the books, he begins to fill out the Shelving Log. He realizes that of the thirty books twenty-five are from the third floor, twelve are from the "ML" section, five from the "MT" section, and the remaining eight are from the "M" section. The five books from the first floor are all from the "BP" or bound periodical collection.

F. Fill out the Shelving Log for Howdy.

SHELVING LOG														
MONTH OF: JUNE														
Date	REF	CLOSED	BP 1ST	BP 2ND	MUSIC- M	MUSIC- ML	MUSIC- MT	MISC	INITIALS					
1														
2														
3														

Finally, Howdy is ready to wheel the books off to their correct places on the shelves. Remembering that reading the stack range labels will make his job go faster, he looks up and begins to read the range labels.

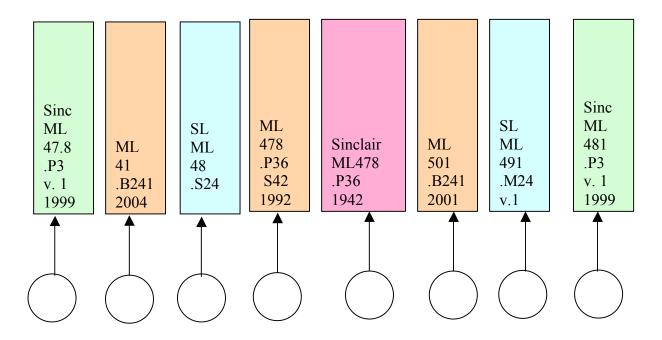
G. Place the number for each book below on the line next to the stack range label where the book would be shelved.

			_			
#1		#2.		#3		#4
,, <u>1</u>				,,,,,		•
		Sinc				
		MT		SL		Sinclair
ML		67.8		MT		MT41
20		.P3		941		.P36
.B241		v. 1		.S24		S42
1942		1999				1942
	20 .B241	ML 20 .B241	Sinc MT 67.8 .P3 .B241 v. 1	Sinc MT 67.8 .P3 .B241 v. 1	Sinc MT SL 67.8 MT 20 .P3 941 .B241 v. 1 .S24	Sinc MT SL 67.8 MT 20 .P3 941 .B241 v. 1 .S24

Once Howdy finds the correct range, he begins looking for the right section to place the books. When he thinks he's found the right section, he begins to look more closely at the call numbers on the shelf. He shakes his head because he notices that some books are out of order. Why he even finds two books from a completely different section that appear to be hidden behind one shelf! I'd like to give that patron a piece of my mind, he thinks as he works to straighten up the shelf.

Finally he is really ready to put the books on the shelf. Help Howdy complete this task by completing the next activity.

H. Indicate the order for shelving the below books. Write  $1^{st}$ ,  $2^{nd}$ , etc. in the circles.



Congratulations! You're finished with the module and tests and are ready to hit the stacks. Good luck! Don't forget to ask a Library Staff member if you aren't sure about shelving a book.