## Description of the Instructional Problem

In most public libraries volunteers play an important role in supporting staff. The volunteer services can be varied, some involve Friends of the Library book sales and others are directly in the library such as re-shelving books. Volunteers can range from high school students to retirees; some are familiar with library services while others are not. Some tasks are more critical than others. The re-shelving of books, for example, must be done correctly or items will become lost in the collection. Staff who supervise volunteers need to provide training about re-shelving but often have little time due to other priorities.

## Learner analysis

My learner analysis is done keeping in mind my problem statement, i.e., how to have volunteers staff be able to successfully re-shelve books using the Dewey Decimal system. I imagine a scenario where this group of learners (members of our class) needs to acquire this skill in order to instruct their audience how to locate a book they may need in the local public library. The knowledge of how to re-shelve of book is easily transferrable to the knowledge of how to locate a book already on the shelf with some additional conceptual understanding of Dewey classification.

The primary audience is librarians in an academic setting who are interested in instructional design. From the survey data we can describe them as follows:

## General Characteristics

- A large majority of learners work in an academic library
- Most participants have experience with online course content and course management systems.
- Great majority are proficient in a number of technology skills
- The spectrum of ages is weighted more towards under 49 years than the general population which is not surprising given the job duties described
- There is a fairly wide range of length of time in their current position
- Almost all are interested in undertaking further training to sharpen job skills


## Entry Characteristics

- Almost all learners indicate that they are or will be involved in designing instructional content for bibliographic instruction of one kind or another
- No specific mention of Library of Congress classification or Dewey Decimal as part of topics covered in bibliographic instruction but it is reasonable to assume some familiarity with one or both given the need to instruct students in them as part of bibliographic instruction and that classification is a standard topic in Library Schools.
- As almost all work in an Academic library; LC familiarity is probably much stronger than DDC.


## Contextual Characteristics

- Academic librarians may consider public library resources as less valuable or even inappropriate for undergraduate or graduate audiences.
- A clear case needs to be made as to the value of utilizing public library resources. Specific examples need to be given that illustrate their value and effectiveness as an adjunct to academic library resources.
- Comments on survey indicate heavy instruction workload and need for effective instruction. Content about Dewey classification must be brief, practical and fun!
- If content is delivered electronically then the use of audio should be considered carefully. Most libraries do not offer headphones for public workstations and may not for staff workstations.
- Content that is available in tablet as well as computer format may provide more options for delivery.


## Instructional Objectives and Presentation Strategies

- Given a main class number $(100,200,300$, etc) the student will be able to describe the main class topics for at least five of the ten classes.

Presentation of explanation main class numbers, their use and topics with examples [Strategy:Fact]

Game play with main class numbers and topics [Strategy:Fact]


- Given a book with a call number using Dewey Decimal Classification (DDC) and cutter the student will be able to place the book in correct order on a shelf with other books.

Presentation of explanation about class number and cutter arrangement
Multiple choice quiz on procedure step [Strategy:Rule]


Virtual shelving exercise using books with call number and cutter, no matching cutters [Strategy:Rule]

- Given a set of books with the same class number and cutter student will be able to demonstrate how to arrange books sequentially.

Presentation of explanation about shelving rules using title words when class and cutter number are the same [Strategy:Rule]
Multiple choice quiz on procedure step [Strategy:Rule]
Virtual shelving exercise with books that have matching call numbers and cutter. [Strategy:Rule]

## Task Analysis

For initial task analysis the book type is limited to non-fiction titles. The task analysis is structured to be generic for applicability to public libraries in general as the content will be made available online to any library.

Tasks:

1) Report to circulation area to obtain shelving cart.
2) Arrange books to be shelved on shelving cart in order using Dewey Decimal Classification (DDC)
a) Read call number letters and digits left to right
b) Arrange books numerically according to the letters and digits to the left of the decimal point.
c) If two or more books have the same letters and numbers to the left of the decimal point then
i) Arrange in order of the number to the right of the decimal point; add an imaginary zero to match arrangement of other call numbers if needed.
(1) If all the numbers match then
(a) Use the letters (beginning of author's last name) beneath the call number to place on shelf alphabetically
(i) If the letters beneath the call number all match (same author) then

## 1. Place in order by title alphabetically

d) $\boldsymbol{C} \boldsymbol{U} \boldsymbol{E}$ All books should have a readable spine label with a properly structured call number. Set aside any book that does not meet these criteria.
3) Take shelving cart to shelf area that matches the beginning of the call number of the first item on the cart.
4) Locate the specific shelf for book needing shelving comparing the call number on the spine of each book with books already on the shelf.
5) Scan spine labels on books already on the shelf closely matching book in hand needing shelving.
6) Determine specific location for book within items already on shelf, insert book, spine facing out, onto shelf.
7) If you notice books that are damaged then
a) Remove them and take them to the circulation area once you are finished re-shelving.
8) Shelve books on the shelf according to the call number left to right from top to bottom. If there is no space available at the right end of shelf then
a) Follow local practice for shelf shift issues regarding breaks in book placement for shelves above or below preceding or following call numbers. $\boldsymbol{C} \boldsymbol{U} \boldsymbol{E}$ There should be extra space left on the shelf to allow for easy removal and re-shelving.
9) Arrange books so that the spines all line up against the edge of the shelf.
10) If a patron needs to access books on the shelf you are using then
a) Move the cart out of the way and if possible continue shelving elsewhere. Return to the bay when the patron is finished.
11) When finished re-shelving return cart to circulation area. Inform circulation supervisor of any problems or unusual situations; ask questions if additional guidance is needed on tasks.

## Instructional Strategies

- How will you introduce the content (preinstructional strategy)?
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The content will begin with an overview of the Dewey Decimal Classification system with a focus on its use within the library by both patrons and staff to locate books. We'll also describe the utility of having books on similar subjects grouped together. A graphic of a spine label will be displayed with accompanying text and pointers describing the parts of the call number.


Next we will list and explain the instructional objectives, then describe the flow of the course and how the student may navigate their way through the content. Each screen will have an interactive table of contents:

Dewey Background
Shelving Rules
Number Order
After the Decimal
Cutter Line
Duplicate Dewey and Cutter
Video Shelving Demo
Exercise Explanation
Exercise One
Exercise Two
Exercise Three
DDC Matching Game
Assessment Tests

## Instructional Strategy

- What is the best way to implement your instructional strategies?
- What technique(s) will you use to cue the learner to the most important information?
- Will you utilize pictures, clip art and/or other graphics? Why or why not?

The instructional strategy will utilize text and representational graphics to explain the structure of the DDC (overview) and its use in call numbers. A series of exercises that focus on varying shelving decisions will reinforce the text and graphics information.

Important information will use highlighted text as well as graphic elaboration. Graphics will be used in the virtual shelving exercises (drag and drop) and assessment test.


The assessment within the learning content will be of two types, one a series of four multiple choice questions about call number knowledge and shelving knowledge, the other another virtual shelving interaction. This final interaction will not provide hints upon incorrect placement; students must complete the placement of all books then submit their arrangement. Ten points will be awarded for each correct multiple choice answer, fifty points for correct arrangement of the virtual bookshelf. To receive a digital certificate the student must have a score of eighty points or above.

## Formative Evaluation

Observation of learners using the online module will be used to identify the clarity and responsiveness of interactive features to flow through the course.

The time to compete the course, quiz results and final scores will be measured and compared among learners.

Comments from learners about the course will be captured and analyzed; changes will be made to the course


## Summative Evaluation

The online module will include instruments to gather data on students' evaluation of the course content and effectiveness of instruction. Likert scale questions as well as text responses will be used to provide feedback.


Longer term evaluation could involve responses from students and supervisors while on the job in the public library. Response from supervisors is especially important as the intent of the program is to reduce the time and effort required to train volunteers on the shelving task. Supervisors will be asked specifically if the time they spend training a volunteer has been reduced by the use of the online program. If possible an initial use of the program will be done with one group of volunteers while another similar group is trained in person. A comparison will be done between the groups to measure mastery of the objectives, time needed for the training and also feedback on the training itself.

## Cumulative Evaluation

Shelfing and cataloging practices may change over time. These might require changes in the training content so modifications would need to be made. An important component of the software developed for the training is documentation about the development tool, use of variables and branching logic. It would also be helpful to note the method used to create course graphics. Copyright issues need to be made clear in the program so that future changes to the program adhere to any restrictions or license.

