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University of Utah
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NTC Quarterly Report
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Table of Contents

- Executive Summary..... 3
- Training Events..... 7
- Cancellations..... 8
- Self-paced e-learning Products..... 9
- NTC Web site..... 14
- MLA Educational Clearinghouse Activities..... 15
- Collaboration with NN/LM staff..... 16
- Marketing and Promotional Activities..... 17
- Other..... 18

Executive Summary

STAFF CHANGES

None.

CLASSES TAUGHT

PUBMED® CLASSES

NTC taught two sessions of the hybrid class PubMed for Trainers; the in-person locations were: Portland, OR and Aurora, CO. NLM taught one session of PubMed for Trainers in Bethesda, MD. The Aurora and Bethesda classes featured a significant format change (see "class development" below for details).

NTC delivered one complete series of the online class "PubMed for Librarians" in August 2014. PubMed for Librarians consists of five 90-minute segments taught via Adobe Connect; participants can choose to attend any of the segments that interest them. The five segments are: "Introduction to PubMed"; "Medical Subject Headings (MeSH)"; "Automatic Term Mapping (ATM)"; "Building and Refining Your Search"; and "Customization - My NCBI."

CLASS DEVELOPMENT

PUBMED FOR TRAINERS

NLM and NTC trainers agreed to change the format of the "PubMed for Trainers" class based on feedback received from previous class participants during Option Year 2. The changes were implemented in October 2014 for the Aurora, CO and Bethesda, MD classes.

From the earlier evaluations, we learned that some of the previous participants appreciated the instructional design component of the class; others, who had prior experience with instructional design or who work mainly one-on-one with patrons, did not think it was a good use of their time. To address these needs, the instructional design component of PubMed for Trainers was separated into an optional 3-credit hour module. In order to keep the schedule the same as advertised, the synchronous online sessions were adjusted to include 90 minutes of required PubMed content, followed by a 30-minute optional instructional design session. Those participating in the instructional design sessions were also required to complete three homework assignments and submit them via Moodle. Instructors provided feedback on the homework assignments using the grading module in Moodle.

The content of the optional instructional design sessions was as follows:

Session 1:

- *Introduction to instructional design models, with the ADDIE model as an example
- *Assessment methods
- *Training specific audiences
- *Prioritizing learning goals
- *Assignment: Define your audience; Create learning goals for a 1-hour or less PubMed class for the audience of your choice

Session 2:

- *Writing meaningful course objectives
- *Using a class design template

*Assignment: Write course objectives and fill out the class design template for one learning goal for a 1 hour or less PubMed class

Session 3:

*Methods for engaging users

*Assignment: Share ideas for engaging users

The PubMed content of the online sessions did not change from previous sessions. During the in-person session, a "discovery exercise" related to My NCBI was added to the agenda. The in-person session covered PubMed content only.

In order to receive credit for the optional instructional design module, participants were required to attend all three of the online 30-minute sessions and to complete the three homework assignments.

The MLA continuing education credits changed from 15 for the previous class format to 13 for those who completed only the PubMed portion of the class, and 16 for those who completed both the PubMed content and the optional instructional design module.

In addition to the format change, we used Adobe Connect breakout rooms rather than the Premiere telephone conferencing system to handle small group discussions. The breakout rooms automatically move the participants' telephone audio into the breakout session; the process is much easier for the participant than using the telephone conferencing system.

Based on the initial class evaluations, we believe the format change was a success. We will continue to monitor feedback received from the classes in the future and make adjustments as necessary.

DISCOVERING TOXNET®

During the second quarter, NTC instructors finished updating the content of the online TOXNET class, "Discovering TOXNET." The updated content reflected the major TOXNET redesign from May 2014. The class was also updated to use a modular format; participants choose the databases or resources that interest them and receive MLA CE credit based on the modules they complete. The class, previously taught in two separate modules, is now taught in one 4-week asynchronous session. The first session using the modular format began on October 20, 2014, and will conclude on November 14, 2014. Each module earns 0.5 – 2.0 MLA CE credits. To receive credit for a module, participants must complete pre- and post-tests, view a tutorial or video, and submit a discovery exercise. The instructors review the submitted discovery exercises and provide feedback to the participants.

NCBI DATABASE CLASS

Planning began for the 2015 offering of the "Librarian's Guide to NCBI" in-person 5-day workshop and the online pre-course "Fundamentals of Bioinformatics and Searching." Completion of the pre-course is required for participants to attend the in-person workshop. The 5-day workshop will be taught in Bethesda, MD from March 9-13, 2015; the online pre-course will be taught from January 12 – February 13, 2015.

Potential participants are required to fill out an online application form and to submit a supervisor's statement of approval. Applicants must specify what they hope to gain from the class and commit to the time needed to complete the coursework.

An announcement that the class was open for applications was published in the NLM Technical Bulletin on September 29, 2014. Announcements were also sent to the MLA MEDLIB-L listserv and to the NN/LM regions for publications in their blog. Applications

opened on September 29, 2014; the deadline for applications is November 17, 2014.

TECHNICAL CHALLENGES

The NTC trainers experienced minimal technical difficulties during the online sessions of "PubMed for Trainers" in this quarter. NLM trainers experienced problems with Adobe Connect during the October Bethesda session, including dropped audio and content disappearing from the Adobe Connect room the morning of the class.

During the "PubMed for Librarians" online sessions, the NTC trainers used Voice over IP (VoIP) for the first time. Most participants chose to use VoIP in "listen only" mode, and ask questions through chat. At the beginning of one of the sessions, a few participants using VoIP reported that the audio was breaking up, but for the most part there were no audio difficulties with VoIP or the telephone.

OTHER ACTIVITIES

PUBMED FOR TRAINERS USERS' GROUP

During the second quarter of the contract year for Option Year 3, the PubMed for Trainers Users' Group met three times. Rebecca Brown facilitated the sessions.

In addition to the NTC trainers attending the session, several NLM staff members attended. We find their presence a great selling point for the Users' Group because they provide additional background information and support for attendees.

Rebecca Brown began polling the attendees during each session using the built-in poll feature in Adobe Connect Pro. We plan to use the results to inform class development.

In the August 22, 2014 session with 20 attendees, we asked, "What is your favorite PubMed tip to share with people?" Answers included My NCBI highlighting and e-mail notification features, MeSH, phrase searching, and publication types.

In the September 26, 2014 session with 29 attendees, we asked, "What would you say if a novice PubMed user asked you the following question: How do you suggest I start a search in PubMed? What's a good strategy?" Answers included starting a search by typing in keywords as well as using the MeSH search builder. We also asked, "What do you consider to be an advanced PubMed feature?" Answers included MeSH, field tags, evidence based medicine searches, clinical queries, and combining searches.

In the October 24, 2014 session with 23 attendees, we asked, "Does your institution fund travel for continuing education?" Eight participants (88.8%) answered yes and 1 participant (11.1%) answered no. We asked an additional question: "What is your preferred way to participate in continuing education classes?" Two participants (18.1%) said "online"; 2 (18.1%) said "in-person"; and seven (63.6%) said "hybrid of in-person and online."

TEACHING TECHNIQUES WEBINAR

On September 9, 2014, the NTC trainers presented a webinar called "Adding to Your Teaching Toolkit" for the NN/LM Middle Atlantic Region (MAR) as part of their "Boost Box" series. Sharon Dennis discussed possibilities for applying gamification principles as a tool to motivate class participants. Jessi Van Der Volgen shared four strategies for adding meaningful interaction to online or in-person classes, and examples of each. Rebecca Brown presented free tools you can use to develop a class and a social media alternative to a course discussion board; in addition, she discussed information she learned at the August 2014 "Distance Learning and Teaching Conference" in Madison, WI, related to brain-based teaching and learning strategies.

One hundred and nineteen participants attended the webinar.

FOLLOW-UP EVALUATION QUESTIONNAIRES

NTC and NLM trainers designed two follow-up questionnaires to assess the success of two of our classes: "PubMed for Trainers" (PMT) and "PubMed for Librarians" (PML). The PMT questionnaire was based on a follow-up questionnaire sent to PMT participants in January 2013, with some modifications. The questionnaires are intended to elicit information about behavioral changes, such as teaching improvement or more efficient searching, as a result of completing the classes. Respondents can complete the questionnaire in 10-15 minutes.

After creating a SQL query in the NTRP, Matthew Steadman created a list of class participant names and e-mails for those who completed PMT and PML in the time period from January 2013 through April 2014. If participants took both PMT and PML, they were removed from the PML list so they would not receive two e-mail requests. The participant information was loaded into SurveyMonkey.

On October 20, 2014 e-mails were sent to participants using the SurveyMonkey questionnaire invitation feature. We sent 261 invitations for PMT and 625 invitations for PML. The questionnaire will be open until November 21, 2014.

The information gleaned from the questionnaire will be used to gauge the long-term success of NTC's classes, as well as to inform future training offerings.

Training Events

TABLE 1. Training Sessions

Session Content	Start Date	End Date	City/State	Trainers	Activity Conducted In-person	Activity Conducted Remotely	# Participants
PubMed for Librarians - Customization - My NCBI	8/27/2014 12:00:00 AM	8/27/2014 12:00:00 AM	Online	Rebecca Brown	N	Y	31
PubMed for Trainers	9/4/2014 12:00:00 AM	9/18/2014 12:00:00 AM	Portland, OR	Sharon Dennis, Rebecca Brown, Jessi Van Der Volgen	Y	Y	18
PubMed for Trainers	9/29/2014 12:00:00 AM	10/17/2014 12:00:00 AM	Aurora, CO	Sharon Dennis, Rebecca Brown, Jessi Van Der Volgen	Y	Y	14
PubMed for Trainers	10/21/2014 12:00:00 AM	10/30/2014 12:00:00 AM	Bethesda, MD	NLM Trainers	Y	Y	8
PubMed for Librarians - Introduction to PubMed	8/19/2014 12:00:00 AM	8/19/2014 12:00:00 AM	Online	Rebecca Brown	N	Y	31
PubMed for Librarians - MeSH	8/20/2014 12:00:00 AM	8/20/2014 12:00:00 AM	Online	Rebecca Brown	N	Y	37
Adding to Your Teaching Toolkit: Webinar for Middle Atlantic Region	9/9/2014 12:00:00 AM	9/9/2014 12:00:00 AM	Online	Sharon Dennis, Rebecca Brown, Jessi Van Der Volgen	N	Y	119
PubMed for Librarians - Automatic Term Mapping	8/21/2014 12:00:00 AM	8/21/2014 12:00:00 AM	Online	Rebecca Brown	N	Y	26
PubMed for Librarians - Building and Refining Your Search	8/26/2014 12:00:00 AM	8/26/2014 12:00:00 AM	Online	Jessi Van Der Volgen	N	Y	31

Cancellations

No classes were canceled this quarter.

Self-paced e-learning Products

All of the videos and tutorials for the "Discovering TOXNET" class were updated during this quarter, and were added to NTC's "Tutorials and Recordings" page of the NTC web site. A recording of the "Adding to Your Teaching Toolkit" webinar was also added to the NTC "Tutorials and Recordings" page.

PUBMED FOR TRAINERS CLASS

A 20 question pre and post-test was administered for the "PubMed for Trainers" class. The average scores for all classes are listed below.

NTC PubMed for Trainers classes:

*Pre-test: 67%

*Post-test: 84%

NLM PubMed for Trainers class:

*Pre-test: 76%

*Post-test: 85%

PUBMED FOR LIBRARIANS CLASS

A short three or four question pre and post-test was administered for the "PubMed for Librarians" class. The average scores are listed below.

NTC PubMed for Librarians class:

*Pre-test: 66%

*Post-test: 91%

NTC PUBMED FOR TRAINERS EVALUATION RESULTS

In the second quarter, NTC taught two PubMed for Trainers classes. A total of 35 participants registered; 30 of them took both the pre and post-tests; and 25 filled out the evaluation. The PubMed for Trainers Portland, OR class used the previous format (15 MLA CE hours for both required PubMed and instructional design content). The Aurora, CO class was taught using the new format (required PubMed content that earned 13 MLA CE hours; an optional instructional design module that earned 3 MLA CE hours).

Eleven people from the Aurora PubMed for Trainers class attended the Instructional Design sessions. Eight of those participants completed all the material and earned the additional CE credit.

The evaluation results for the second quarter are as follows:

PubMed for Trainers Portland (previous format)

Twelve participants filled out the evaluation.

Instructor knowledge, preparation, presentation skills and responsiveness to questions:
High (78%); Good (15%), Fair (6%); Low(2%)

Participants rating of whether they acquired knowledge and skills they can use:
Agree (92%); Somewhat Agree (0%); Somewhat Disagree (8%)

Problems with technology:

No problems (92%); Trouble seeing the screen (8%)

Length of Adobe Connect Sessions:

About the right length (67%); Somewhat too long (33%)

Felt encouraged to participate in remote sessions:

True (92%); False (8%)

Most Helpful Parts of the Course

*Online format

*Instructors receptive to questions

Least Helpful Parts of the Course

* Moodle page difficult to navigate.

*In-person session too long

Additional Comments

*"Rebecca and Jessi were wonderful. The presentations were clear and informative. The atmosphere they created in the in-person class was perfect. We were encouraged to share and ask questions. I learned a lot and I'm planning to check out other update and class opportunities and participate in those on a regular basis. Very helpful!"

*"Perhaps create an Advanced PubMed course for those who have experience with it and really focus the sessions around digging into tools/features."

Overall Rating: "A" (75%); "B" (17%); "C" (8%)

PubMed for Trainers Aurora, CO class with Optional Instructional Design Module

Thirteen participants filled out the evaluation.

Instructor knowledge, preparation, presentation skills and responsiveness to questions:
High (88%); Good (12%)

Participants rating of whether they acquired knowledge and skills they can use:

Agree (100%)

Most Helpful Parts of the Course

* Learning about the PubMed back end

* Networking with others to search

* Pharmacologic actions

* Pre-fabricated searches

Least Helpful Parts of the Course

* Breakout small group exercises and breaking into pairs during the in-person

* More time for the My NCBI discovery exercise

Additional Comments

* "Thank you. I will now look for additional courses at NCBI and also try to join the monthly users group meeting. This was my first and definitely not going to my last. I loved the technology (the phone, Moodle, homework, polls, quizzes, chat boxes, timers, emails etc.) and the efficiency of all the trainers and staff. Very smooth and no hitches at all! Kept us informed and on task. Friendly and flexible trainers. I didn't think the Face to face meeting was as lively as I thought it would be. I think this may have to do with the time constraint and the amount of material to be covered. The class room at Aurora was fantastic. Great location and excellent facilities for such an event."

"I'm glad the instructional design was optional for those who may not have been as interested. I think I also would have benefited with more reading about the different theories (not too in-depth but maybe an article or webpage on 2-3 different ones) Would be great if NTC could offer certification in Instructional Design."

Overall Rating: "A" (100%)

Optional Instruction Design Module evaluations:

Instructional design module participation:

Completed all (61.5%); completed some (15.4%); did not participate (23.1%)

Reasons for starting participation but not completing the module:

Time constraints (100%)

Percentage of the information presented during the instructional design module will you use on your job: 92.4%

Ideas or techniques from the instructional design module will you be applying to your future teaching:

- * Engagement techniques and active learning
- * Planning process
- * ADDIE model
- * Setting up objectives

NLM PUBMED FOR TRAINERS EVALUATION RESULTS

In the second quarter, NLM taught one PubMed for Trainers class with the optional instructional design module. A total of 8 participants registered; 7 of them took both the pre and post-tests; and 7 filled out the evaluation. Three participants completed the optional instructional design module.

The evaluation results for the second quarter are as follows:

Instructor knowledge, preparation, presentation skills and responsiveness to questions: High (86%); Good (14%)

Participants rating of whether they acquired knowledge and skills they can use: Agree (100%)

Most Helpful Parts of the Course

*Instructors responsive to questions

Least Helpful Parts of the Course

*Examples could be geared toward real-life patron situations.

Additional Comments

*"For someone who uses PubMed almost every day, I learned so many new things. I really appreciate all the time the instructors spent on this course."

Overall Rating: "A" (100%)

NTC PUBMED FOR LIBRARIANS EVALUATION RESULTS

NTC taught one series of the PubMed for Librarians online synchronous class during the second quarter. The class was taught in five independent segments. The classes had an average attendance rate of 57%. A total of 275 participants registered for at least one segment; 156 participants attended the segment they registered for; and 128 filled out the evaluation questionnaire for the segment.

The evaluation results for the second quarter are as follows:

Instructor knowledge, preparation, presentation skills, and responsiveness to questions: High (90%); Good (9%); Fair (1%)

Participants rating of whether they acquired Knowledge and skills they can use: Agree (90%); Somewhat Agree (10%)

Most Helpful Parts of the Course:

- * Great information applied to real-life work.
- * Very calm, methodical presenter who was very attentive to questions
- * Seeing the complicated searches done
- * Hands-on questions and alternating between instruction and time to do exercises

Least Helpful Parts of the Course:

- * Introduction too basic
- * Trouble following exercises with a second screen
- * All caps for the caption transcript is distracting
- * Need more time for exercises

Additional Comments:

- * "Maybe follow up scenarios (with text answers we could review after we try on our own.)"
- * "Very useful information as I'm preparing a lecture for our pharmacy 2nd year

students. I have learned things about MeSH I didn't know about before. Thanks much!"

* "Great presentation. Thanks!"

Overall Rating: "A" (84%); "B" (16%)

NTC Web site

No activity this quarter beyond normal maintenance of the web site.

MLA Educational Clearinghouse Activities

No activity this quarter.

Collaboration with NN/LM staff

Matthew Steadman completed the development programming for the Moodle / NTRP integration project, which links the registration system to the Moodle registration so that participants will automatically be registered for Moodle after signing up for a class using the NTRP. The system is live on the development server. He presented the system at the Web-STOC meeting on September 11, 2014, and received helpful feedback from the NN/LM coordinators. He also convened a group of beta testers from the technology coordinators' group to assist him with testing various use cases for the Moodle / NTRP integration. Beta testing will begin the third quarter.

Additional activities related to the National Training Registration Page (NTRP) system in this quarter included:

- * Worked on creating a multi-step registration process, so that additional questions could be asked of the registrants during the registration process.
- * Fixed a bug in the detailed list report so that the column headers line up correctly with the data.

Marketing and Promotional Activities

During the second quarter, NTC published 26 blog posts, on target for the goal of two posts per week. Blog posts covered class announcements, teaching tools and tips for online and in-person environments, presentation tips, changes to MeSH, and other NLM resource news. During the quarter, there were 8,257 views of the blog, an average of 89.3 views per day. This is an increase of 20 views per day over the same quarter in 2013.

At the end of the quarter, NTC had 164 likes on Facebook (up from 150 in July), and 284 followers on Twitter (up from 248 in July). This indicates that our followers have more than doubled since this quarter last year, when a new schedule for Twitter was implemented. On Twitter, @nlnmntc has been retweeted 52 times, mentioned 15 times, and had tweets favorited 25 times this quarter. Links shared on Twitter are often clicked on, especially those that mention @NCBI.

Other

August 12-14, 2014: Sharon Dennis, Jessi Van Der Volgen, and Rebecca Brown attended the Annual Conference on Distance Teaching and Learning, sponsored by the University of Wisconsin-Madison in Madison, WI.

October 12, 2014: Jessi Van Der Volgen developed the class "Innovation and LEAN Process Improvement Demystified" for the Quint Chapter Meeting of the Medical Library Association in Denver, CO. The class was worth 6.0 MLA CE credits. Ms. Van Der Volgen was unable to attend the class in-person; the class was taught by her co-developers.

October 22, 2014: Jessi Van Der Volgen attended the MLA webinar entitled, "Beyond the Search I: Protocol Development and Methodology for Systematic Reviews," broadcast at the University of Utah Spencer S. Eccles Health Sciences Library in Salt Lake City, UT. The webinar was worth 1.5 MLA CE credits.

October 23, 2014: Rebecca Brown attended a half-day workshop about the principles of plain language and how to make health information clear, understandable and targeted to readers. The hands-on workshop was part of a larger health literacy conference put on by Health Literacy Missouri in Kansas City, MO.