

# OpenNJ: Collaborative Development, Usability Testing and Enhancement of an OER Repository

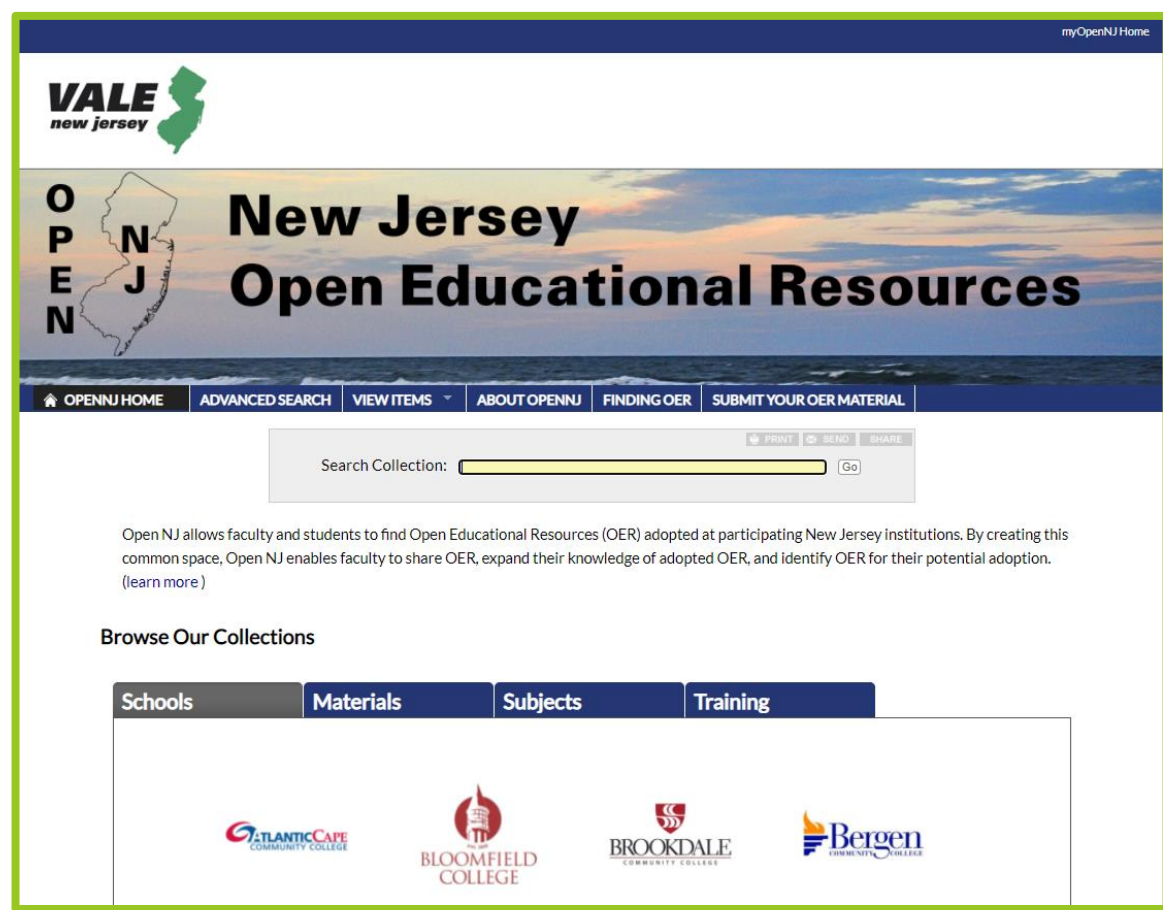


Laura Bishop - Director of Library and Media Center, The Hun School of Princeton, NJ – [bishopla@merrimack.edu](mailto:bishopla@merrimack.edu)  
 Alison Cole - Scholarly Communications & Outreach Librarian, Felician University, NJ – [colea@felician.edu](mailto:colea@felician.edu)  
 Marilyn Ochoa - Director for Library Services, Middlesex College, NJ – [mochoa@middlesexcc.edu](mailto:mochoa@middlesexcc.edu)  
 Mark Sullivan - SobekCM Programmer, OpenNJ – [mark.v.sullivan@sobekdigital.com](mailto:mark.v.sullivan@sobekdigital.com)

## Abstract

Among the most successful collaborative projects of New Jersey higher education institutions is the development and use of an open-source statewide repository for hosting and increasing visibility of adopted open educational resources (OER). While many institutions maintain their own OER through institutional or OER repositories, OpenNJ allows institutions without the capacity to manage and host OER. Also, OpenNJ is valuable to build a community of practice around OER, allowing educators to learn what is used already, so they may consider using them too. Whether original or adopted, OER or training tools for OER advocacy, the full text and links to external OER that OpenNJ holds are helpful towards increased state collaborations.

This poster reports on usability testing and describes recommended changes to functionality including enhancements to browse, search interfaces, and personalization features. A major enhancement is customization around creating new OER; the researchers are updating OpenNJ to incorporate a new Open Publishing platform with content creation, versioning, peer review, and interoperability with other learning tools.



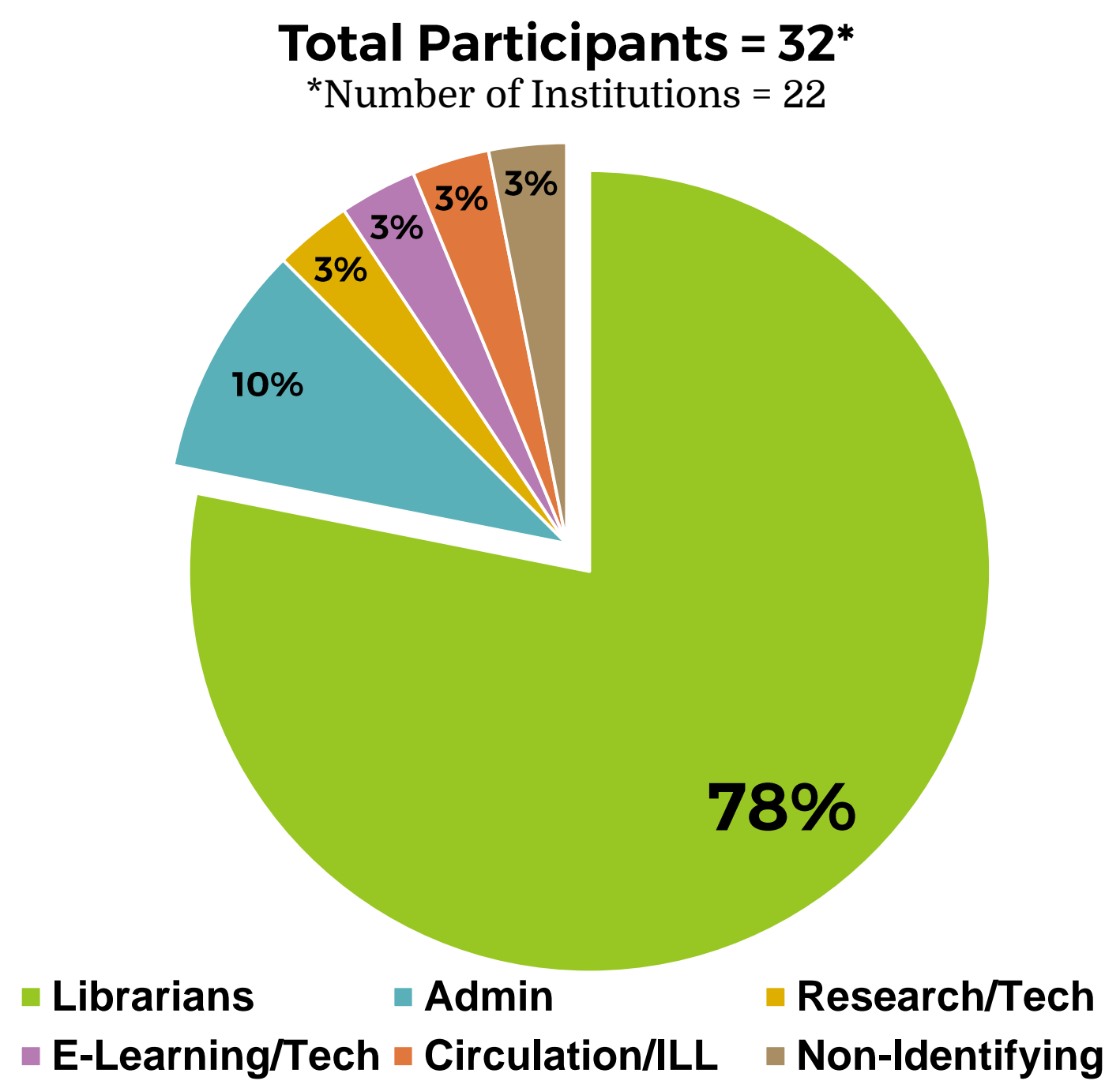
## Background

**Research Question**  
 Is the OpenNJ repository organized in a clear, understandable and usable manner?

**Purpose**  
 To gather user feedback on OpenNJ for usability and iterative design.

- Basic Assumptions**  
 Developers of OpenNJ assume it will offer users the following benefits:
- Provision of a statewide community of practice for educators interested in OER adoption
  - Grants the ability to identify resources adopted or created for use in NJ
  - Representation of all VALE institutions' OER content without institutional overhead
  - Fosters familiarity with a repository system which useful for other digital library collections

## Participant Demographics



Years of Experience with OER Materials	
None	1
<1	5
1-5	13
6-10	5
>10	3
No answer	5

Years of Experience with Digital Repositories	
None	1
<1	5
1-5	13
6-10	5
>10	3
No Answer	5

Experience Level Using Digital Repositories	
Novice	10
Moderate	19
Expert	2
No Answer	1

## Methodology

**Testing Site:**  
 VALE Users' Conference  
 Long Branch, New Jersey

**Testing Date:**  
 January 8th, 2020

**Testing Duration:**  
 60 minutes

Participants were randomly assigned on of the three strategy groups upon entry.

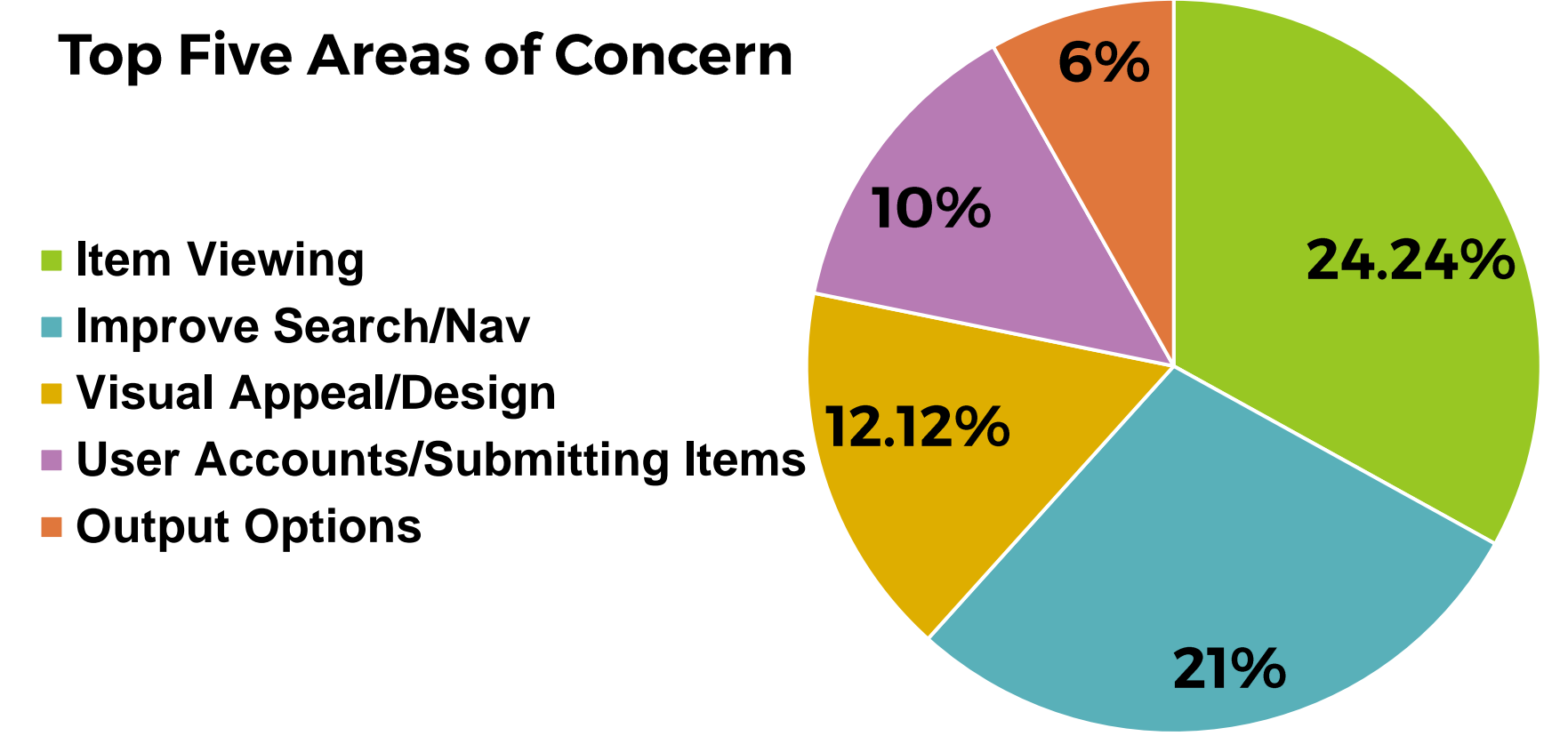
Participation in the session was self selected.

3-Pronged Approach to Data Collection and Usability Testing		
Strategy	Purpose	Focus Attributes
Focus Groups	Identify user attitudes, reactions, and desires via moderated discussion	Whole website, repository name, submission options, other functions
Task-Based Scenarios	Reveal desirable content types and functionality; assess ease of use, based on user behavior when completing tasks	Search functionality and institutional homepage
Card Sorting	Evaluate information architecture, site organization; discover placement preferences: labels, and general navigation	Homepage, item records

## Data Analysis Process

Data was aggregated from the various testing types. Two cycles of coding--Process Coding and Pattern Coding-- were implemented resulting in emergent themes from participant feedback.

## Findings



## Recommendations by Strategy

Strategy	Item Viewing	Improve searching and navigation	Visual appeal and homepage design	User accounts and submission of items	Output options
Task based scenarios Focus groups Card sort	<ul style="list-style-type: none"> <li>• Viewing options should stand out more</li> <li>• Augment metadata options</li> <li>• Add ePub file format for accessibility</li> <li>• Change item record to include external links &amp; highlight licensing</li> <li>• Implement versioning of content</li> </ul>	<ul style="list-style-type: none"> <li>• Develop searching help resources for OpenNJ</li> <li>• Recategorize Materials tab content and add resource types</li> <li>• Browsing and filtering options should be improved</li> </ul>	<ul style="list-style-type: none"> <li>• Update the homepage interface with fewer links</li> <li>• Add contacts and links to items on subcollection homepage</li> </ul>	<ul style="list-style-type: none"> <li>• Consider "instructors only" login requirement</li> <li>• Allow for editing of items inside OpenNJ</li> <li>• Clarify submission instructions</li> <li>• Improve visibility of usage statistics</li> </ul>	<ul style="list-style-type: none"> <li>• Create customizations to display in LMS</li> <li>• Add integration options via Learning Tools Interoperability</li> <li>• Implement sharing options</li> <li>• Add recommended citations</li> </ul>
Card sort Task based scenarios					
Focus groups Card sort					
Focus groups Task based scenarios					
Task based scenarios Focus groups					

## Next Steps

- Site updates and functionality improvements are ongoing.
- The most significant changes will be made through the **Open Textbook Collaborative (OTC) project**.
  - See more: <http://bit.ly/OpenTextCollabNJ>.
- OTC is funded through the US Department of Education's *Fund for the Improvement of Postsecondary Education*, January 2021.
- The statewide project will focus on the LTI schema and development, development of an OpenPublishing tools for increased customization, and instructors only segment of the OpenNJ.
- Additional usability testing using Focus Group strategy for next steps programming.