AMSER: The Applied Math and Science Education Repository

- One of the first Pathways projects
- Started from scratch in 2004
- Focused on community and technical colleges
C\mbox{WIS}: A Turnkey Collection Development/Portal Toolbox

- Open source
- Runs in standard PHP and MySQL
- Developed for NSDL by Internet Scout
- Turnkey: up and running in less than 10 minutes
CWIS Feature List

METADATA TOOL
- completely configurable schema
- 14 fundamental data types
- comes with fully-qualified Dublin Core
- field viewability and editability may be set per-user
- one-click vocabulary and taxonomy import
- one-click controlled vocabulary export
- multi-modal term selection interface

SEARCHING
- keyword searching
- fielded searching
- synonym support
- saved searches
- one-click searching
- REST-compliant search URLs
- field weighting
- phrase support
- “My Searches” feature
- term exclusion

BROWSING
- dynamically-generated browse UI
- multiple taxonomy support
- resource count per classification
- breadcrumb navigation

RSS
- configurable RSS feed export
- multiple RSS feed import
- context-based RSS feed display

OAI
- OAI 2.0 export with qualifiers
- configurable CWIS/OAI field mapping
- configurable CWIS/OAI qualifier mapping
- any controlled field usable as OAI sets
- OAI-SQ (search via OAI) support

USER PARTICIPATION
- resource rating
- resource commenting/discussion
- tracking of recent comments
- user account import and export
- integrated usage tracking support

RECOMMENDER SYSTEM
- Amazon.com-style recommendations
- content-based recommender
- field weighting support
- configurable on a per-field basis

ACCESSIBILITY
- W3C/WAI compliant interface
- accessibility wizard
- ACCLIP metadata field support
- “Access Match” resource highlighting

TECHNOLOGY
- a turnkey package
- PHP/MySQL based
- integrated SQL caching to reduce DB load
- root/sysadmin server access not required
- Linux, Solaris, OS X supported

USER INTERFACE
- support for multiple custom interfaces
- complete PHP/HTML separation
- hooks for functionality customization
- user interfaces assignable on a per-user basis
- built-in customization guide and tools
- multiple pre-packaged subject-oriented “themes”

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Integrating Resources into AMSER

- Diverse sources (NSDL, ATE, Scout, other online collections)
- Diverse schemas and vocabularies
- Normalization challenges
- Cataloging challenges
Things We’ve Learned

• “Sandboxes” can save substantial time and effort
• Fielded search is at least as important for collection development as it is for users
• Powerful collection tools save time but also result in higher-quality metadata