Design and Development of Scaffolded Online OER Databases: Research Findings

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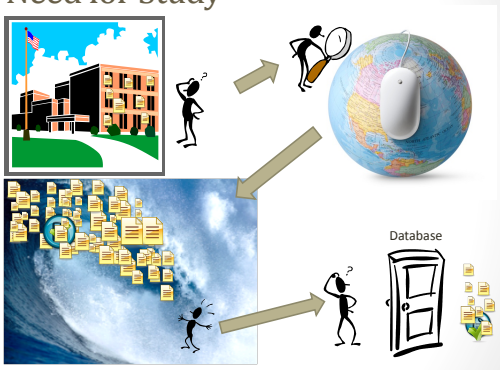
AECT Annual Convention, Louisville, KY Nov. 2, 2012

Need for Study



Need for Study – Design and Development

Needs Assessment

MARKET ANALYSIS

TEACHER SURVEY

Identify the discrepancy

Need for Study – Design and Development

Needs Assessment

Market Analysis

- What's out there
- Identify types of scaffolding for secondary social studies teachers
- Identify search engine functions and interface design

Methodology – Phase one

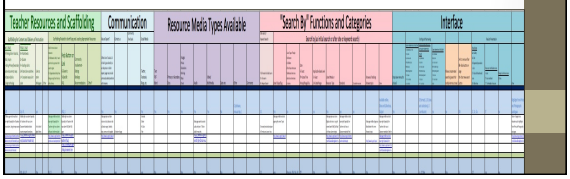
- Design: Content analysis of social studies OER databases
- Sample:
  - Used *purposive sampling* to identify 11 websites with databases
  - Used *snowball sampling* to enlarge sample to 24
  - Eliminated 11 websites
    - 6 for lack of database
    - 3 because of fee-based databases.
    - 2 because scaffolding not tailored to secondary social studies teachers but general to all users
  - Yielded sample of 13 websites with social studies OER databases

Methodology – Phase one (cont'd)

- Instrumentation
  - Created and revised database analysis spreadsheet
  - Began with 5 categories and 40 subcategories.
    - Based on current literature + preliminary reviews
- Analyses
  - Determine characteristics and prevalence of
    - Various search functions
    - Types of OERs offered
    - Kinds of scaffolding available to users
  - Generated descriptive stats (Quantitative)
    - Details in online conference paper

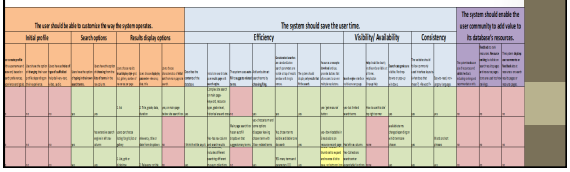
Methodology – Phase two

1. Derived 3 overarching principles for scaffolded database design (Qualitative).
   - Analysis of initial categories and subcategories
   - Plus incorporating
     - Instructional design principles
     - Principles for design of scaffolding



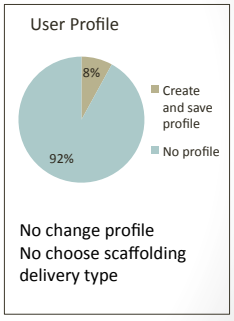
Methodology – Phase two

1. Derived 3 overarching principles for scaffolded database design (Qualitative)
2. Reanalyzed using spreadsheet organized around these 3 principles and 23 subcategories.
   - Types of expected evidence for principle implementation
   - Ratings for levels of implementation (Green, Yellow, Red)



Principle 1 – The user should be able to customize the way the system operates.

Expected Evidence
User control of:
- lasting changeable profile with scaffolding delivery options



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Expected Evidence
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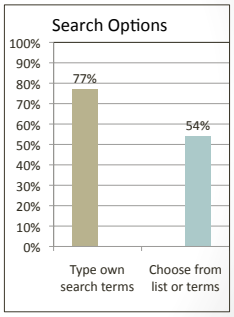

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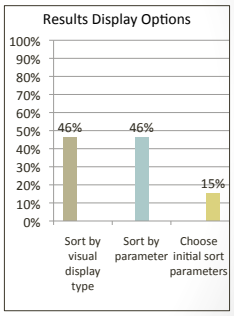
- results display options



Principle 1 – The user should be able to customize the way the system operates.

Expected Evidence
User control of:
- lasting changeable profile with scaffolding delivery options
- search options
- results display options

Findings
1. No lasting preferences

Pattern Observed

Sampled databases do not allow users to create profiles.
- No lasting preferences for how system should operate.
- Not customized to match user search preferences.

Principle 1 – The user should be able to customize the way the system operates.

Expected Evidence
User control of:
- lasting changeable profile with scaffolding delivery options
- search options
- results display options

Findings
1. No lasting preferences
2. Less-efficient one-time options

Pattern Observed

Most sampled databases allowed some one-time customization in:
- Search functions.
- Result sorting.

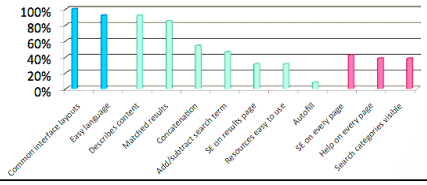
Users need to redo these manually every time they come back, however.

Principle 2 – The system should save the user time.

Expected Evidence
- Consistent interface. Easy, non-jargony language.
- Efficient search engine functions.
- Visible search engine functions & help on every page.

Findings
3. While almost all databases sampled use familiar interfaces and avoid jargon, few offer users functions likely to save time.
4. Users needing help on how to use system may have to search for help, though it may be available.

Time-Saving Characteristics

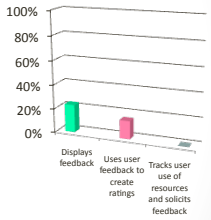


Principle 3 – The system should enable the user community to add value to database's resources.

Expected Evidence
- Tracks user use of resources and solicits feedback.
- Uses user feedback to create visible ratings
- Displays user comments or feedback.

Findings
5. Some databases displayed voluntary user feedback. None tracked use of resources. None actively solicited feedback to create ratings.

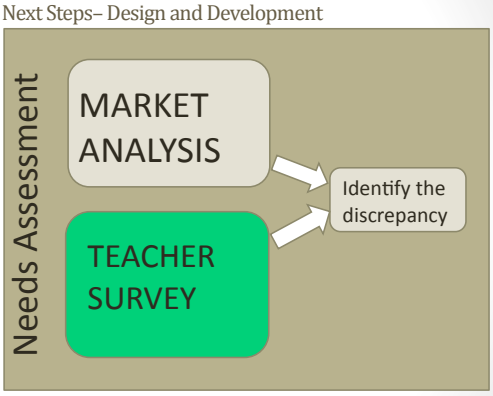
User Ratings and Feedback



Conclusions –

1. The whole is more than its parts.
2. Conceptually, discrepancy between what logically would be most helpful to users and what appears to be out there now.
3. Content is king.
4. Sampled databases do not take full advantage of value user community might add.
5. Novice database users may have difficulty finding what they seek.
   - If they do, not much support on how to use system well.

Next Steps– Design and Development



Questions & Discussion

For further information

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