TITLE: Education Information: Lessons Learned in Supporting K-12 Education
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ABSTRACT: This presentation covers over 10 years of serving the K-12 population on the Internet through such projects as AskERIC, AskNSDL, the Gateway to Educational Materials and the Virtual Reference Desk. A special emphasis is put on the information needs of teachers and education professionals.
KEYWORDS: K-12, education, libraries, museum, standards
Education Information
Lessons Learned in Supporting K-12 Education

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Lessons

• Lesson 1: Educators Seek Synthesis
  – 1.a. Educators Seek Language Arts
• Lesson 2: Students Seek Science
• Lesson 3: Digital Libraries Need Infrastructure
• Lesson 4: The K-12 Domain Provide a Differentiating Context
  – 4.a. The Domain is Highly Regulated
Foundation of Lessons

- Information Institute of Syracuse
  - né: ERIC Clearinghouse on Information Resources 1977
- AskERIC
  - 11 years, 225,000 Unique Users/Week
- Education Digital Library
  - GEM, VRD
- ERIC/IT
- NSDL
  - Virtual Reference Desk for the NSDL, Core Integration, Question Triage
- Digital Reference Education Initiative
  - IMLS
Lesson 1: Educators Seek Synthesis

• Began AskERIC Virtual Library
  – 1/3 of hits (~2 million/week, 8,250 unique users) in AskERIC are for Lesson Plans

• Became Gateway to Educational materials
  – Teachers “Cherry Pick”…Define Quality by Context
  – Topic Most Important, Followed by Grade Level
Lesson 1.a: Educators Seek Lang. Arts

- Subjects: 31%
- Ed Levels: 15%
- Ed Management: 11%
- Spec Populations: 9%
- Teaching: 7%
- Ed Tech: 5%
- Gen Ed: 4%
- Family Life: 4%
- Reference: 3%
- ERIC: 2%
- Librarianship: 1%
- Counseling: 1%
- Evaluation: 7%

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Lesson 1.a: Educators Seek Lang. Arts

- Language Arts: 32%
- Foreign Languages: 15%
- Social Studies: 10%
- Math: 8%
- Arts: 5%
- Character Education: 5%
- Health: 4%
- Science: 11%
- Integrated Approach: 2%
- Information Literacy: 1%
- Religion: 1%
- Voc Ed: 2%
- General LP: 2%
- Phys Ed: 2%

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Lesson 1.a: Educators Seek Lang. Arts

• Possible Reasons:
  – More Science on the Web
  – More Teacher Discretion, and Less Guidance in Language Arts Area
  – Less Synthesis of Online Language Arts Materials
Lesson 1.a: Educators Seek Lang. Arts

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Lesson 2: Students Seek Science

- Data Built on 2 Digital Reference Services
  - KidsConnect, AASL, Microsoft
  - Virtual Reference Desk, Dept. of Education
- Following Data Represents a “Subject Line Analysis”
  - First pass from incoming subject lines…body of the message used for disambiguation
Lesson 2: Students Seek Science

- science: 45%
- social st.: 22%
- math: 3%
- lang. arts: 3%
- lib/ref: 6%
- other: 4%
- biographies: 5%
- health: 8%
- vocational: 1%
- art: 4%
- vocational: 1%
- math: 2%
- other: 4%
- social st.: 22%

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Lesson 2: Students Seek Science

Animals/insects: 30%

Health/anatomy: 13%

Earth science: 11%

Science fair: 4%

Inventions: 13%

Chemistry: 10%

Biomes: 1%

Astronomy: 8%

Botany: 4%

Gen. biology: 6%
Lesson 3: Digital Libraries Need Infrastructure

• Infrastructure Consisting of Hard and Soft Tools and Staff
  – Hard Tools: Hardware, Software (code)
  – Soft Tools: Policies, Information Architecture (metadata)
  – Staff: Strategic, Operational, Tactical Levels

• Sustained
• Proactive
• Open
Lesson 4: The K-12 Domain Provide a Differentiating Context

• Structurally
  – 50 Different U.S. Education Systems, DOD Schools, Protectorates, Home Schooling, Private Schooling, GED, etc.

• Legally
  – CIPA, E-Rate Filtering Mandates, Privacy

• Focus on Constant Information Delivery, and Periodic Information Acquisition
  – 30 minute planning periods
  – Continuing Education for Certification
Lesson 4.2: The Domain is Highly Regulated

• Academic Standards
• High-Stakes Testing
• Need for “Information Approval” and Conformance to Process
• Rather than Being a Sponge that will readily soak up information from digital libraries, K-12 has a hard crust of bureaucracy, regulation and practice than must be both enticed to seek information, and greatly rewarded when it does so