

# The Digital Reference ~~Transition~~ *evolution*

R. David Lankes

<http://www.DavidLankes.org>

# Agenda

- A Quick Trip Through the AskA World
- The AskERIC Case
- What Libraries can Learn from AskAs
- Digital Reference Evolution
- Evolving from Deduction to Induction, or Dave Visits Left Field



# Some Definitions

- Digital Reference: The use of human intermediation to answer questions in a digital environment
- AskA Service: A non-library affiliated digital reference service (normally not for profit)



# The Google Answers Exception

- We're not Going to Talk about Google Answers
  - Not Enough is Known
- “Earnings and Ratings at Google Answers”
  - Benjamin Edelman, Harvard University
    - <http://cyber.law.harvard.edu/people/edelman/pubs/GoogleAnswers-011404.pdf>



# Have Libraries put AskA Services Out of Business?



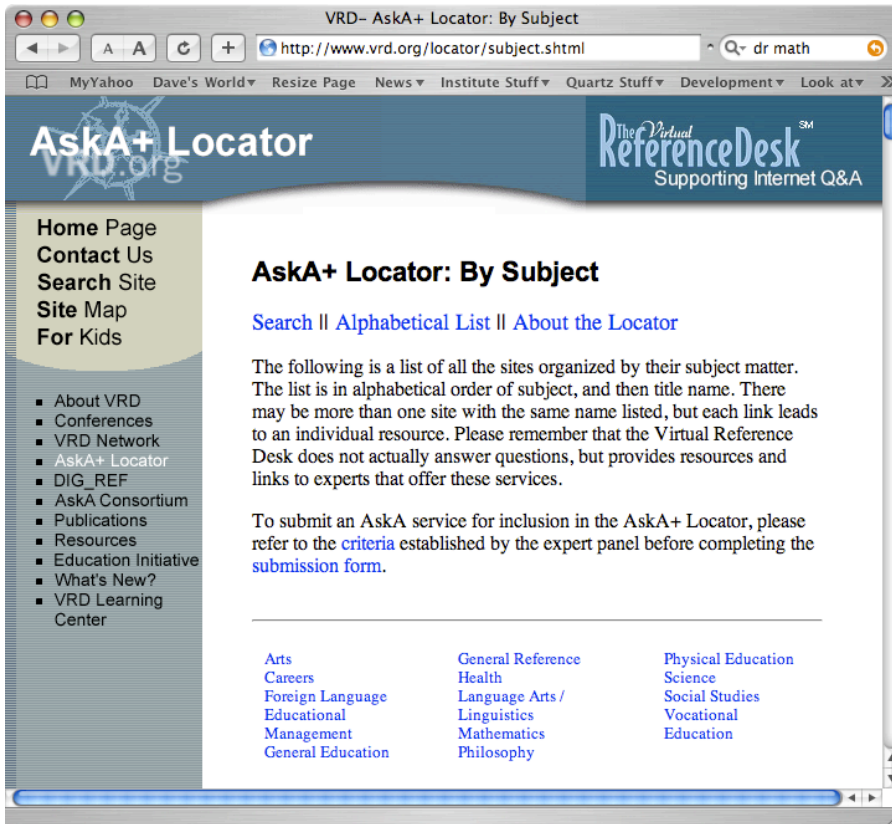
# Some AskA Stories

- The Dr. Math Case
  - NSF, WebCT (.com), NSF/Drexel
- The IPL Case
  - Class Project, Library Poster Child, Class Project?



# The AskA Locator

- ~90 Services
- Constant Range for 5 Years



The screenshot shows a web browser window with the URL <http://www.vrd.org/locator/subject.shtml>. The page title is "VRD- AskA+ Locator: By Subject". The browser's address bar shows "dr math". The page features a navigation menu on the left with links: Home Page, Contact Us, Search Site, Site Map, For Kids, and a list of site sections including About VRD, Conferences, VRD Network, AskA+ Locator, DIG\_REF, AskA Consortium, Publications, Resources, Education Initiative, What's New?, and VRD Learning Center. The main content area is titled "AskA+ Locator: By Subject" and includes a search bar, a list of subjects (Arts, Careers, Foreign Language, Educational Management, General Education, General Reference, Health, Language Arts / Linguistics, Mathematics, Philosophy, Physical Education, Science, Social Studies, Vocational Education), and a paragraph explaining the list's purpose and a link to the submission form.



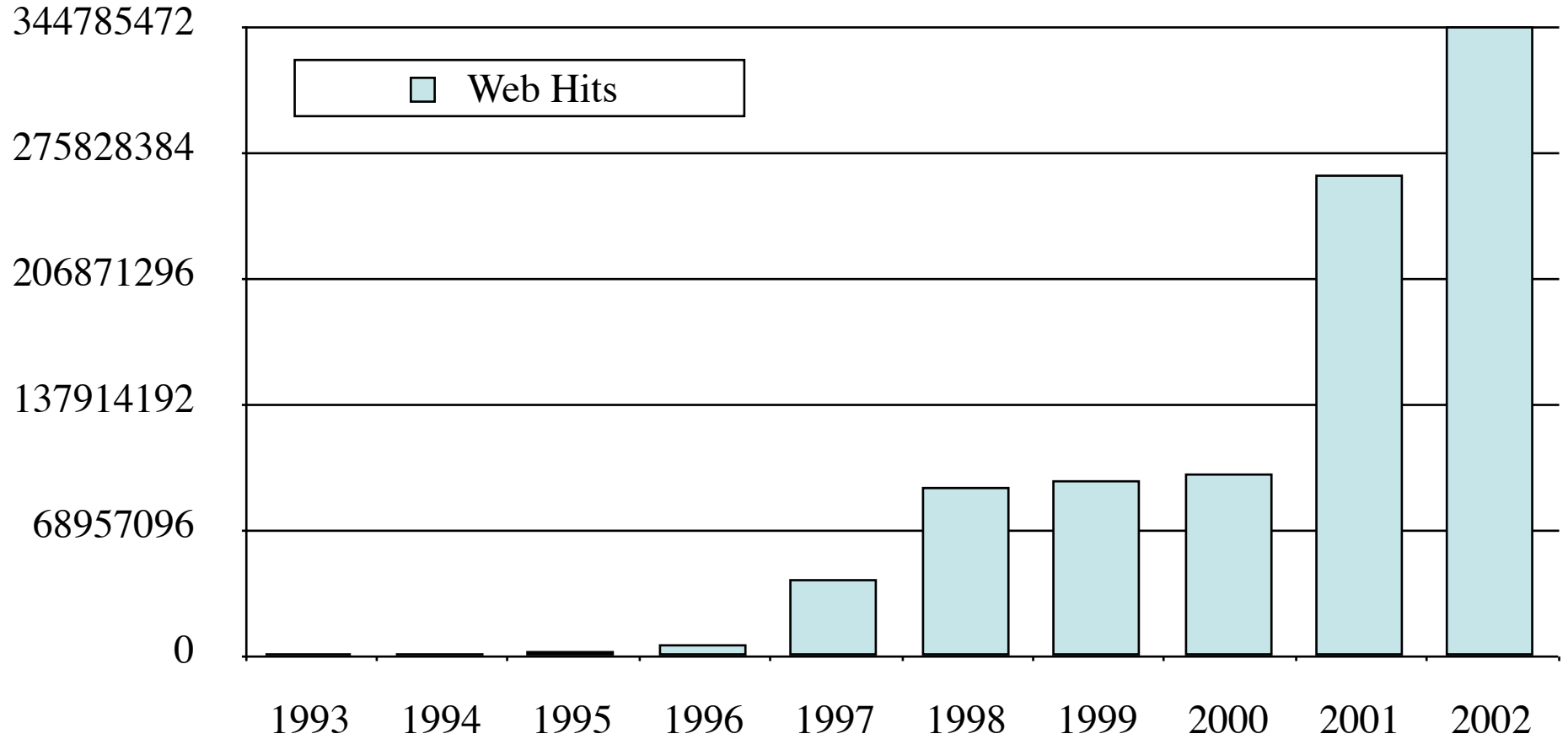
# The AskERIC Case



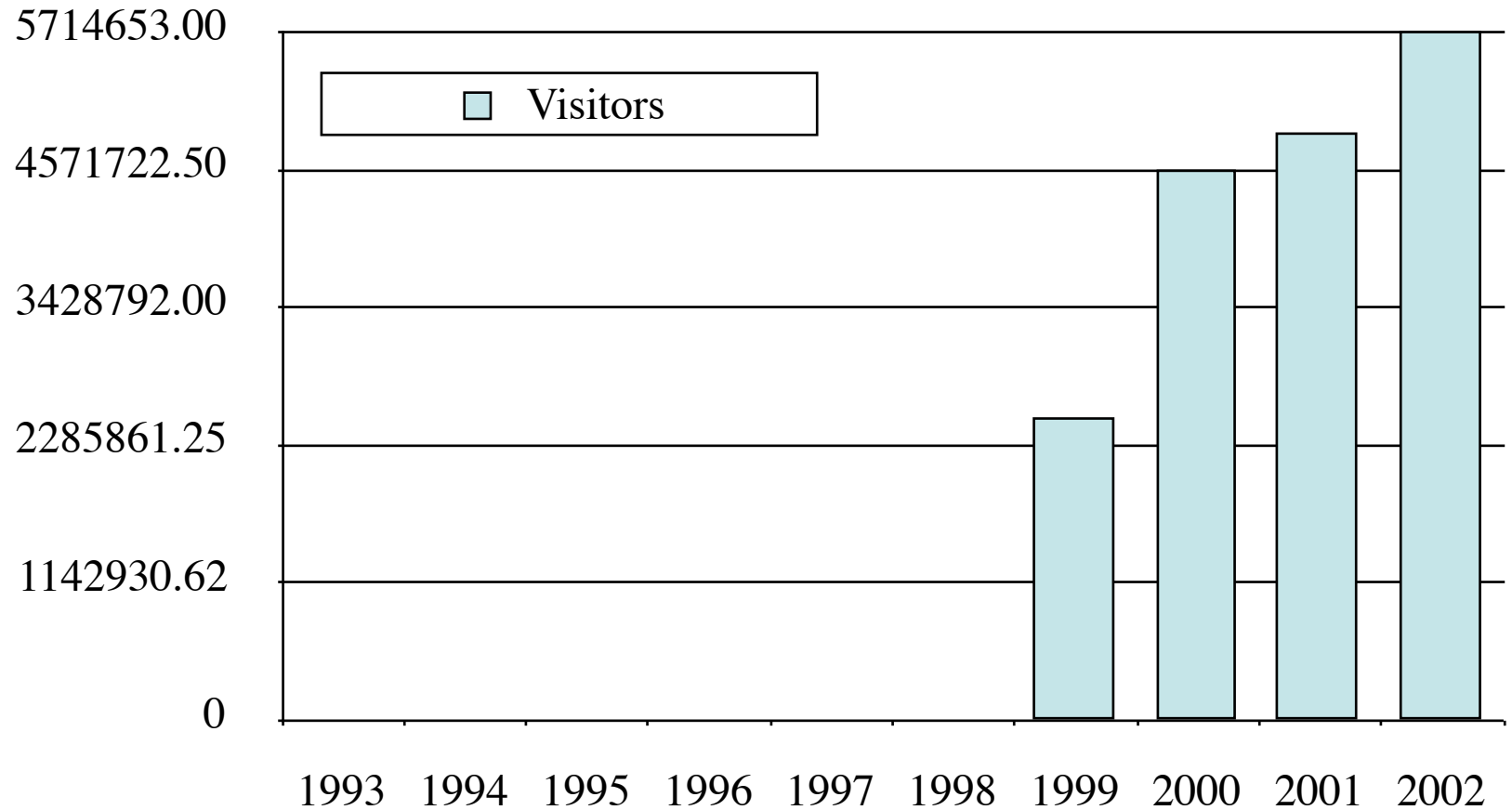
**AskERIC**  
A Decade of Answers



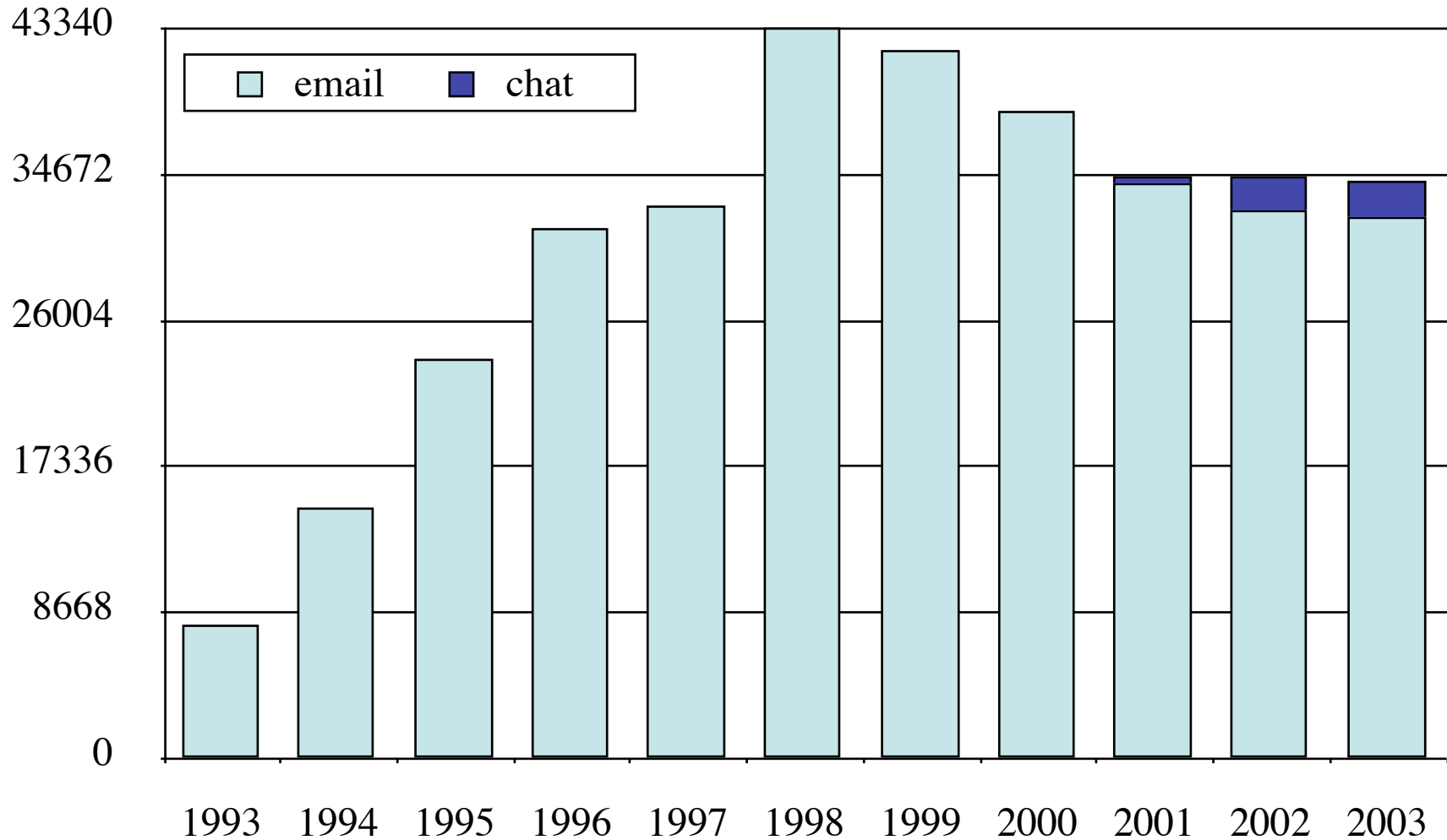
# AskERIC Collections (Hits)



# AskERIC Collections (Visits)



# AskERIC Questions



# AskERIC at the End

- 11 Years
- First 100 Gopher Sites, First 100 Web Sites, First U.S. Department of Education Site
- Over 300,000 Digital Reference Questions Answered
- 17,648,218 Unique Visitors
- 948,441,778 Web Hits



# So Why Did it Go Away?

- Resources Shifted to Database Building
  - Direct Support Costs Reduced
- Focus of ERIC Shifted to Education Research
  - “High-Quality”
- ERIC Brand Confusion



# Object Lessons

- Success is a Multivariate Phenomena
  - just because one user population likes you, not all do
- The Education Community is Looking for Synthesis
  - Now on the Shoulders of the Library Community



# AskERIC and Adaptation

- Arrival at Cost of Question through Market Forces
- Use of Banners to Control Question Load
- Inductive Collection Development
  - Not Field of Dreams Model
    - “Let Them Come and *THEN* Build Like Crazy”



# Have Libraries put AskA Services Out of Business?

No, In Fact we Can Learn  
From Them



# Advantages/Disadvantages

	<b>AskA</b>	<b>Library</b>
<b>Scope</b>	Subject Oriented	General
<b>Size</b>	Small (and Agile)	Institutional
<b>Provenance</b>	Born Digital	Hybrid
<b>Staffing</b>	Subject Experts	Process Experts
<b>Approach</b>	Inductive	Deductive



# Some Object Lessons

- Libraries Need to Act more like AskAs...but
- No Digital Reference Business Model
  - AskA Services have shorter life cycles because they often exist at the periphery
  - AskAs only highlight this issue...exists in libraries too
    - Economic, “Value Equation”
- Look to AskAs for Other Learning: Induction



# Induction versus Deduction

- Induction
  - Where the whole is unknown until it is made up by interactions of component parts
- Deduction
  - Where the component parts are placed or controlled in relation to the whole



# Induction in Digital Reference

- AskA Services that Stand on their own have short life-cycles
- Networks and Volunteer services actually have long life spans
  - IPL and Dr. Math are Still Answering Questions
  - Inductive Organizations



# Induction in DR Knowledge Bases

- Building an Inductive Knowledgebase as a Complex System
  - Treating Transcripts as Agents in a Space
    - Each Agent has Static and Dynamic Attributes
      - Questioner, Answerer, Date, References, Subject
    - Cluster by “Similarity” of Agents



# Induction in Digital Libraries

- Building a Collection through Digital Reference
- Pomerantz - Accretion Model
- Make a Collection More or Less Representative of the Users?



# Induction in the Library

- Floating Collections
- Readers Advisory
- Cataloging/Metadata Development



# Conclusions

- Libraries Live in an Ambiguous Environment
  - Complex Adaptive Environment
- Causes Great Stress, but Also Presents Great Opportunities
- Time for Libraries to Re-Inject Science into Library Science
  - Instead of Fretting over Data, Embrace It
    - Bibliomining, Inductive Systems
  - Use Technology to Preserve Values and Gain Greater Understanding of our Users.





1. Distrust



2. Excitement



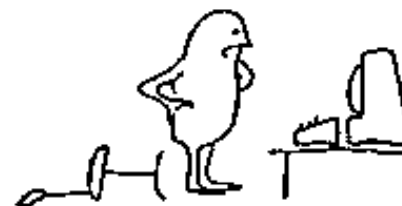
3. Astonishment



4. Enthusiasm



5. Love



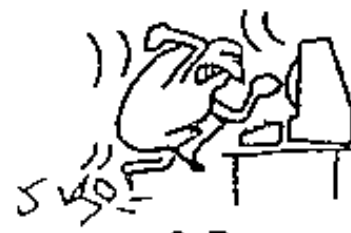
6. Disillusionment



7. Fright



8. Horror



9. Fury



10. Frustration



11. The End

