NEW SKILLS

DIGITAL ERA

Richard Pearce-Moses

Arizona State Library, Archives and Public Records
Phoenix, Arizona

Setting the Stage

- Shift in the fundamental nature of records and publication

- Explosive growth in quantity of materials

Presidential Initiative

- My concern
  - Slow response from the professions
  - We can't wait, or records will be lost
  - If we don't step up to the plate, others will
- My response
  - Keynotes at Southwest Archivists, Inter-Mountain Archivists, American Archivists
  - Columns in *Archival Outlook*
  - Papers at http://rpm.lib.az.us/

The Colloquium

- To identify practical, technical skills needed to work as easily with electrons as with paper.
- Sixty librarians, archivists, records managers
- Opening keynotes by Margaret Hedstrom, University of Michigan, and Stuart McKee, Microsoft
- Eleven case studies
- Small-group discussions, with reporters
- Blogged by Geof Huth
- Extensive comments by Peter Wilkerson

Thanks

- Allen Weinstein
  Archivist of the United States

- David McMillen
  Assistant to the Archivist and co-convener

- GladysAnn Wells
  Director and State Librarian
  Arizona State Library and Archives

Proceedings

- With Susan Davis
  University of Maryland

- Finding organized into three major sections
  - Knowledge
  - Technical skills
  - Soft skills
  - Although categorized, skills often used in many different areas

Basic observations

- "New Skills" is a misnomer
  - Fails to recognize the contribution of pioneers

- What do we call ourselves?
  - "Information Professionals"

- Curation v. Preservation

- Knowledge versus skills
  - Craftsmanship ~ Carefully executed practice coupled with experience and knowledge to create an elegant product

Knowledge ~ Information Ecosystem

- Information architecture
- Standards
- Open Archival Information System
- Trend spotting
- Ethnography and anthropology

Knowledge ~ Information Studies

- What is a record?

- How do publications and records differ?

- How are the fundamental principles of the disciplines transformed in virtual space?
  - Classification or original order
  - Provenance
  - Authenticity

Knowledge ~ Documentary Forms

- The affordances of digital information

- Forms of digital information
  - Text, numbers, still and moving images
  - Databases

- Encoding
  - Binary, ASCII, Unicode
  - Vector v. raster graphics
  - Markup languages

Management Skills
General administrative skills

- Budgeting
- Contracting
- Planning
- Policy development

Management Skills Evaluation

- Cost-benefit analysis
- Performance audits
- Qualitative and quantitative analysis
- Quality assurance
- Risk analysis and risk management

Management Skills Process

- Business process reengineering
- Managing expectations
- Project management
- Scheduling
- Training
- Workflows

Technical Skills
Records Management

- Recordkeeping systems
  - Content management systems
  - Document management systems
  - Imaging systems
- Systems analysis
- Systems design
- Modeling and prototyping
- Classification and metadata

Technical Skills
Selection and Appraisal

- Macro appraisal
- Functional analysis
- Computer-assisted appraisal
  - Artificial intelligence tools
  - Natural language processing tools
- Surveying records in electronic recordkeeping systems

Technical Skills Acquisition

- Digitization
- File transfer
- Validation
- Middleware
- Harvesting software
  - Web harvesting

Technical Skills Processing

- Arrangement
  - SQL queries rather than physical order

- Description
  - EAD, MARC
  - Automated processing techniques

- Storage
  - Encapsulated objects
  - Backups
  - Distributed, redundant storage

Technical Skills ~ Preservation

- Media refreshing, format migration
- Preserving authenticity
- Hash values and digital signatures
- Verified backups
- Disaster and business continuity plans
- Network and data center security

Technical Skills ~ Reference and Access

- Discovery in a disintermediated environment

- Importance (and benefits) of the Web
  - Web markup and design

- User interface design

- Embracing Web 2.0

Soft Skills

- Technological solutions are the easy part.

- People are the problem.

Soft Skills ~ Thinking

- Abstract thinking
- Conceptual thinking
- Analytical thinking
- Strategic thinking
- Judgment

Soft Skills ~ Attitudes

- Comfort with ambiguity and the unknown
- Adaptability
- Flexibility
- Decisiveness
- Know what you don't know
- Commitment to continuing education

Soft Skills ~ Creativity

- Innovation
- Curiosity
- Intuition

Soft Skills ~ Communication

- Advocacy and outreach
- Collaboration and team building
- Communicating across boundaries (translation)
- Relationships
- Social networks
- Sharing turf
- Managing change

Some conclusions

- Digital curation and craftsmanship demand more than technical skills
  - "Soft skills" are more important than ever

- The "next generation" of information professionals may have grown up with computers, but their skills as consumers of applications, creating documents, are not the same skills needed to curate a collection

- A next step
  - Colloquium what more thematic than specific
  - Analysis of work diaries that record the specific tools

■ Richard Pearce-Moses
Director of Digital Government Information
Arizona State Library, Archives and Public Records

rpm@lib.az.us
http://rpm.lib.az.us/