

Declaration of Sylvia Hall-Ellis, Ph.D.
Petition for *Inter Partes* Review of
U.S. Patent No. 8,209,634

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FACEBOOK, INC., INSTAGRAM, LLC, and WHATSAPP INC.,
Petitioners

v.

BLACKBERRY LIMITED
Patent Owner

U.S. Patent No. 8,209,634 B2
Issue Date: June 26, 2012

Title: PREVIEWING A NEW EVENT ON A SMALL SCREEN DEVICE

DECLARATION OF SYLVIA HALL-ELLIS, PH.D.

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I, Sylvia D. Hall-Ellis, Ph.D., declare as follows:

I. INTRODUCTION

1. My name is Sylvia D. Hall-Ellis. I have been retained as an expert by Facebook, Inc., Instagram LLC, and WhatsApp Inc., who I am informed are Petitioners to this IPR proceeding.

2. I have written this report at the request of the Petitioners to provide my expert opinion regarding the public availability of certain books and journal articles, identified below. My report sets forth my opinions in detail and provides the basis for my opinions regarding the public availability of these books and journal articles.

3. I reserve the right to supplement or amend my opinions, and bases for them, in response to any additional evidence, testimony, discovery, argument, and/or other additional information that may be provided to me after the date of this report.

4. I am being compensated for my time spent working on this matter at my normal consulting rate of \$300 per hour, plus reimbursement for any additional reasonable expenses. My compensation is not in any way tied to the content of this report, the substance of my opinions, or the outcome of this litigation. I have no other interests in this proceeding or with any of the parties.

5. All of the materials that I considered and relied upon are discussed explicitly in this declaration.

II. QUALIFICATIONS

6. I am currently an Adjunct Professor in the School of Information at San José State University in San José, California. I obtained a Masters of Library Science from the University of North Texas in 1972 and a Ph.D. in Library Science from the University of Pittsburgh in 1985. Over the last forty-five years, I have held various positions in the field of library and information resources. I was first employed as a librarian in 1966, and have been involved in the field of library sciences since, holding numerous positions.

7. I am a member of the American Library Association (ALA) and its Association for Library Collections & Technical Services (ALCTS) Division, and I served on the Committee on Cataloging: Resource and Description (which wrote the new cataloging rules) and as the chair of the Committee for Education and Training of Catalogers and the Competencies and Education for a Career in Cataloging Interest Group. I also served as the Chair of the ALCTS Division's Task Force on Competencies and Education for a Career in Cataloging. Additionally, I have served as the Chair for the ALA Office of Diversity's Committee on Diversity. Currently I serve as a member of the Editorial Board for the ALCTS premier cataloging journal, *Library Resources and Technical Services*.

8. I have also given over one hundred presentations in the field, including

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several on library cataloging systems and Machine-Readable Cataloging (“MARC”) standards. My current research interests include library cataloging systems, metadata, and organization of electronic resources.

9. My full curriculum vitae is attached hereto as **Exhibit A**.

III. PRELIMINARIES

A. Scope of Declaration and Legal Standards

10. I am not an attorney and will not offer opinions on the law. I am, however, rendering my expert opinion on the authenticity of the documents referenced herein and on when and how each of these documents was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, could have located the documents before the dates discussed below with respect to the specific documents.

11. I am informed by counsel that a printed publication qualifies as publicly accessible as of the date it was disseminated or otherwise made available such that a person interested in and ordinarily skilled in the relevant subject matter could locate it through the exercise of ordinary diligence.

12. While I understand that the determination of public accessibility under the foregoing standard rests on a case-by-case analysis of the facts particular to an

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individual publication, I also understand that a printed publication is rendered “publicly accessible” if it is cataloged and indexed by a library such that a person interested in the relevant subject matter could locate it (*i.e.*, I understand that cataloging and indexing by a library is sufficient, though there are other ways that a printed publication may qualify as publicly accessible). One manner of sufficient indexing is indexing according to subject matter category. I understand that the cataloging and indexing by a single library of a single instance of a particular printed publication is sufficient, even if the single library is in a foreign country. I understand that, even if access to a library is restricted, a printed publication that has been cataloged and indexed therein is publicly accessible so long as a presumption is raised that the portion of the public concerned with the relevant subject matter would know of the printed publication. I also understand that the cataloging and indexing of information that would guide a person interested in the relevant subject matter to the printed publication, such as the cataloging and indexing of an abstract for the printed publication, is sufficient to render the printed publication publicly accessible.

13. I understand that routine business practices, such as general library cataloging and indexing practices, can be used to establish an approximate date on which a printed publication became publicly accessible.

B. Persons of Ordinary Skill in the Art

14. I am told by counsel that the subject matter of this proceeding generally relates to electronic messaging and wireless communication devices.

15. I have been informed by counsel that a “person of ordinary skill in the art at the time of the inventions” is a hypothetical person who is presumed to be familiar with the relevant field and its literature at the time of the inventions. This hypothetical person is also a person of ordinary creativity, capable of understanding the scientific principles applicable to the pertinent field.

16. I am told by counsel that a person of ordinary skill in this subject matter or art would typically be someone who possessed at least a bachelor’s degree in software engineering, computer science, computer engineering, or electrical engineering with at least two years of experience in software application development, including development of graphical applications on wireless devices, such as development of associated user interface features and functionality (or equivalent degree or experience). I have been further informed by counsel that a person of ordinary skill in the art would have been familiar with and able to understand the information known in the art relating to these fields, including the publications discussed in this declaration.

C. Use of Authoritative Databases

17. In preparing this report, I used authoritative databases, such as the OCLC bibliographic database and the Library of Congress Online Catalog, to confirm citation details of the various publications discussed.

1. Indexing

18. A researcher may discover material relevant to his or her topic in a variety of ways. One common means of discovery is to search for relevant information in an index of periodical and other publications. Having found relevant material, the researcher will then normally obtain it online, look for it in libraries, or purchase it from the publisher, a bookstore, a document delivery service, or other provider. Sometimes, the date of a document's public accessibility will involve both indexing and library date information.

19. Indexing services use a wide variety of controlled vocabularies to provide subject access and other means of discovering the content of documents. The formats in which these access terms are presented vary from service to service.

20. Online indexing services commonly provide bibliographic information, abstracts, and full-text copies of the indexed publications, along with a list of the documents cited in the indexed publication. These services also often provide lists of publications that cite a given document. A citation of a document is evidence that

the document was publicly available and in use by researchers no later than the publication date of the citing document.

D. Summary of Opinions

21. I am informed by counsel that the priority date for the patent at issue is December 1, 2003. As I will explain below, it is my opinion that the printed publications discussed in my Declaration were publicly accessible before the December 1, 2003 priority date.

IV. LIBRARY CATALOGING PRACTICES

A. MARC Records and OCLC

22. I am fully familiar with the library cataloging standard known as the MARC standard, which is an industry-wide standard method of storing and organizing library catalog information. MARC was first developed in the 1960's by the Library of Congress. A MARC-compatible library is one that has a catalog consisting of individual MARC records for works made available at that library.

23. Since at least the early 1970s and continuing to the present day, MARC has been the primary communications protocol for the transfer and storage of bibliographic metadata in libraries.¹ As explained by the Library of Congress:

¹ A complete history of the development of MARC can be found in *MARC: Its History and Implications* by Henrietta D. Avram (Washington, DC: Library of Congress, 1975) and available online from the Hathi Trust

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You could devise your own method of organizing the bibliographic information, but you would be isolating your library, limiting its options, and creating much more work for yourself. Using the MARC standard prevents duplication of work and allows libraries to better share bibliographic resources. Choosing to use MARC enables libraries to acquire cataloging data that is predictable and reliable. If a library were to develop a “home-grown” system that did not use MARC records, it would not be taking advantage of an industry-wide standard whose primary purpose is to foster communication of information.

Using the MARC standard also enables libraries to make use of commercially available library automation systems to manage library operations. Many systems are available for libraries of all sizes and are designed to work with the MARC format. Systems are maintained and improved by the vendor so that libraries can benefit from the latest advances in computer technology. The MARC standard also allows libraries to replace one system with another with the assurance that their data will still be compatible.

Why Is a MARC Record Necessary? LIBRARY OF CONGRESS,
<http://www.loc.gov/marc/umb/um01to06.html#part2> (last visited March 18, 2019).

24. Thus, almost every major library in the world is MARC-compatible. See, e.g., *MARC Frequently Asked Questions (FAQ)*, LIBRARY OF CONGRESS,

(<https://babel.hathitrust.org/cgi/pt?id=mdp.39015034388556;view=1up;seq=1>; last visited March 18, 2019).

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<https://www.loc.gov/marc/faq.html> (last visited March 18, 2019) (“MARC is the acronym for MACHine-Readable Cataloging. It defines a data format that emerged from a Library of Congress-led initiative that began nearly fifty years ago. It provides the mechanism by which computers exchange, use, and interpret bibliographic information, and its data elements make up the foundation of most library catalogs used today.”). MARC is the ANSI/NISO Z39.2-1994 standard (reaffirmed in 2016) for Information Interchange Format. The full text of the standard is available from the Library of Congress at <http://www.loc.gov/marc/bibliographic/> (last visited March 18, 2019).

25. A MARC record comprises several fields, each of which contains specific data about the work. Each field is identified by a standardized, unique, three-digit code corresponding to the type of data that follow. *See, e.g.,* <http://www.loc.gov/marc/umb/um07to10.html> (last visited March 18, 2019); <http://www.loc.gov/marc/bibliographic/> (last visited March 18, 2019). For example, a work’s title is recorded in field 245, the primary author of the work is recorded in field 100, a work’s International Standard Book Number (“ISBN”) is recorded in field 020, and the publication date is recorded in field 260 under the subfield “c.”

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*Id.*² If a work is a periodical, then its publication frequency is recorded in field 310, and the publication dates (e.g., the first and last publication) are recorded in field 362, which is also referred to as the enumeration/chronology field. *See* <http://www.loc.gov/marc/bibliographic/bd3xx.html> (last visited March 18, 2019).³

26. The library that initially created the MARC record is reflected in field 040 in subfield “a” with that library’s unique library code. *See, e.g.,* <http://www.loc.gov/marc/umb/um07to10.html> (last visited March 18, 2019); <http://www.loc.gov/marc/bibliographic/> (last visited March 18, 2019). Once a MARC record for a particular work is originally created by one library, other libraries can use that original MARC record to then create their own MARC records for their own copies of the same work. These other libraries may modify or add to

² In some MARC records, field 264 is used rather than field 260 to record publication information. *See* <http://www.loc.gov/marc/bibliographic/bd264.html> (last visited March 18, 2019) (“Information in field 264 is similar to information in field 260 (Publication, Distribution, etc. (Imprint)). Field 264 is useful for cases where the content standard or institutional policies make a distinction between functions”).

³ Upwards of two-thirds to three-quarters of book sales to libraries come from a jobber or wholesaler for online and print resources. These resellers make it their business to provide books to their customers as fast as possible, often providing turnaround times of only a single day after publication. Libraries purchase a significant portion of the balance of their books directly from publishers themselves, which provide delivery on a similarly expedited schedule. In general, libraries make these purchases throughout the year as the books are published and shelve the books as soon thereafter as possible in order to make the books available to their patrons. Thus, books are generally available at libraries across the country within just a few days of publication.

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the original MARC record as necessary to reflect data specific to their own copies of the work. However, the library that created the original MARC record would still be reflected in these modified MARC records (corresponding to other copies of the same work at other libraries) in field 040, subfield “a”. The modifying library (or libraries) is reflected in field 040, subfield “d”. See <http://www.loc.gov/marc/bibliographic/bd040.html> (last visited March 18, 2019).

27. I consulted the Directory of OCLC Libraries (<http://www.oclc.org/contacts/libraries.en.html>) in order to identify the institution that created or modified the MARC record. Moreover, when viewing the MARC record online via Online Computer Library Center’s (“OCLC”) bibliographic database, which I discuss further below, hovering over a library code in field 040 with the mouse reveals the full name of the library. I also used this method of “mousing over” the library codes in the OCLC database to identify the originating and modifying libraries for the MARC records discussed in this report.

28. MARC records also include one or more fields that show information regarding subject matter classification. For example, 6XX fields are termed “Subject Access Fields.” See <http://www.loc.gov/marc/bibliographic/bd6xx.html> (last visited March 18, 2019). Among these, for example, is the 650 field; this is the “Subject Added Entry – Topical Term” field. See

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<http://www.loc.gov/marc/bibliographic/bd650.html> (last visited March 18, 2019).

The 650 field is a “[s]ubject added entry in which the entry element is a topical term.” *Id.* These entries “are assigned to a bibliographic record to provide access according to generally accepted thesaurus-building rules (e.g., *Library of Congress Subject Headings* (LCSH), *Medical Subject Headings* (MeSH)).” *Id.*

29. Further, MARC records can include call numbers, which themselves contain a classification number. For example, a MARC record may identify a 050 field, which is the “Library of Congress Call Number.” *See* <http://www.loc.gov/marc/bibliographic/bd050.html> (last visited March 18, 2019). A defined portion of the Library of Congress Call Number is the classification number, and “source of the classification number is *Library of Congress Classification* and the *LC Classification-Additions and Changes*.” *Id.* Thus, the 050 field may be used to show information regarding subject matter classification.

30. Each item in a library has a single classification number. A library selects a classification scheme (e.g., the Library of Congress Classification scheme just described or a similar scheme such as the Dewey Decimal Classification scheme) and uses it consistently. When the Library of Congress assigns the classification number, it appears as part of the 050 field, as discussed above. For MARC records created by libraries other than the Library of Congress (e.g., a

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university library or a local public library), the classification number may appear in a 09X (e.g., 090) field. See <http://www.loc.gov/marc/bibliographic/bd09x.html> (last visited March 18, 2019).

31. When a MARC-compatible library acquires a work, it creates a MARC record for its copy of the work in its computer catalog system in the ordinary course of its business. This MARC record (for the copy of a work available at the particular library) may be later accessed by researchers in a number of ways. For example, many libraries, including the Library of Congress, make their MARC records available through their website. As an example, the MARC record for the copy of *The Unlikely Spy*, by Daniel Silva,⁴ available at the Library of Congress can be viewed through the Library of Congress website, at <https://catalog.loc.gov/vwebv/staffView?searchId=20265&recPointer=1&recCount=25&bibId=2579985> (last visited March 18, 2019). One could, of course, always physically visit the library at which the work is available, and request to see that library's MARC record for the work. Moreover, members of the Online Computer Library Center ("OCLC") can access the MARC records of other member institutions through OCLC's online bibliographic database, as I explain further

⁴ *The Unlikely Spy* is a 1996 novel written by Daniel Silva, who happens to be one of my favorite authors.

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below.

32. The OCLC was created “to establish, maintain and operate a computerized library network and to promote the evolution of library use, of libraries themselves, and of librarianship, and to provide processes and products for the benefit of library users and libraries, including such objectives as increasing availability of library resources to individual library patrons and reducing the rate of rise of library per-unit costs, all for the fundamental public purpose of furthering ease of access to and use of the ever-expanding body of worldwide scientific, literary and educational knowledge and information.”⁵ Among other services, OCLC and its members are responsible for maintaining the WorldCat database (<http://www.worldcat.org/>), used by independent and institutional libraries throughout the world. All libraries that are members of OCLC are MARC-compatible. See, e.g., https://help.oclc.org/Metadata_Services/OCLC-MARC_records/About_OCLC-MARC_records (last visited March 18, 2019) (“OCLC-MARC records describes records produced since November 1993.”); <https://www.oclc.org/support/services/worldcat/documentation/cataloging/electron>

⁵ Third Article, Amended Articles of Incorporation of OCLC Online Computer Library Center, Incorporated (available at <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>; last visited March 18, 2019).

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icresources.en.html (last visited March 18, 2019) (“Like the two superseded OCLC documents, this revised set of guidelines is intended to assist catalogers in creating records for electronic resources in WorldCat, the OCLC Online Union Catalog. These guidelines pertain to OCLC-MARC tagging (that is, content designation). Cataloging rules and manuals (such as AACR2) govern the content of records. You should implement these guidelines immediately.”).

33. When an OCLC member institution acquires a publication, like the other MARC-compatible libraries discussed above, it creates a MARC record for this publication in its computer catalog system in the ordinary course of its business. MARC records created at the Library of Congress are tape-loaded into the OCLC database through a subscription to MARC Distribution Services daily or weekly. Once the MARC record is created by a cataloger at an OCLC member library or is tape-loaded from the Library of Congress, the MARC record is then made available to any other OCLC members online, and thereby made available to the public. Accordingly, once the MARC record is created by a cataloger at an OCLC member library or is tape-loaded from the Library of Congress, any publication corresponding to the MARC record has been cataloged and indexed according to its subject matter such that a person interested in that subject matter could, with reasonable diligence, locate and access the publication through any library with

access to the OCLC bibliographic database or through the Library of Congress.

1. Fields 008, 005, and 955 in MARC Records as Indicators of Public Accessibility

34. When a MARC-compatible library creates an original MARC record for a work, the library records the date of creation of that MARC record in **field 008**, characters 00 through 05, in the ordinary course of its business. *See* <http://www.loc.gov/marc/bibliographic/bd008a.html> (last visited March 18, 2019). For OCLC member institutions that use OCLC software to create original MARC records, the date of creation in field 008 is automatically supplied by the OCLC software. The MARC record creation date in field 008 thus reflects the date on which, or shortly after which, a work was first acquired and cataloged by the library that created the original MARC record.

35. When other MARC-compatible libraries subsequently acquire their own copies of the same work, as mentioned, they create MARC records in their own computer catalog systems for their copies in the ordinary course of business.⁶ They may use a MARC record previously created for that work (by another MARC-compatible library) to create their own MARC records for their own copies of that

⁶ Initial contributions to the bibliographic database for a work are called “master records.”

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same work.⁷ The previously created MARC record used by subsequently-acquiring libraries to create MARC records for their own copies may be obtained through the OCLC bibliographic database, as described above. If, when creating a MARC record to represent its own copy of the work, the subsequently-acquiring library uses the master MARC record in its original form, the subsequently-acquiring library cannot reenter data into the 008 field; therefore, the date in the 008 field will continue to reflect the date the MARC record was initially created by the originating library. On the other hand, if the subsequently-acquiring library modifies the previously created MARC record when creating its own MARC record for its own copy of the work, the subsequently-acquiring library may enter into the 008 field of its own MARC record the date its own MARC record was created.⁸ But the library that created the original MARC record used by the subsequently-acquiring library would still be reflected in the MARC record of the subsequently-acquiring library in field 040, subfield “a”. Thus, the work identified by any MARC record possessed by any

⁷ When a local library uses a master record in OCLC and produces (or downloads) it to the in-house system, the three-character symbol for the subsequent library is added to the holdings for the work.

⁸ This practice is not required by, but is nevertheless consistent with, the MARC standard. Many MARC records exist today whose 008 fields indicate when the first original MARC record for a work was created, rather than when a derivative record was created based on the original MARC record by a subsequently-acquiring library for its own computer catalog system.

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MARC-compatible library would have been accessible to the public at least as of the date shown in the 008 field, or shortly thereafter, either from the library that possesses the MARC record itself, or from the originating library indicated in field 040, subfield “a”. As discussed, a MARC-compatible library in the ordinary course of its business creates a MARC record in its own catalog system for a work when it acquires a copy of that work.

36. Moreover, when a MARC record is created by a library for its own copy of a work, **field 005** is automatically populated with the date that MARC record was created in year, month, day format (YYYYMMDD). *See* <http://www.loc.gov/marc/bibliographic/bd005.html> (last visited March 18, 2019).⁹ Thereafter, the library’s computer system may automatically update the date in field 005 every time the library updates the MARC record (*e.g.*, to reflect that an item has been moved to a different shelving location within the library). *Id.*¹⁰ Thus, the work identified by any MARC record possessed by any MARC-compatible library would have been accessible to the public at least as of the date shown in the 005 field, or

⁹ Some of the newer library catalog systems also include hour, minute, second (HHMMSS).

¹⁰ Field 005 is visible when viewing a MARC record via an appropriate computerized interface. But when a MARC record is printed directly to hardcopy from the OCLC database, the “005” label is not shown. The date in the 005 field instead appears next to the label “Replaced”.

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shortly thereafter, from the library that possesses the MARC record itself. As noted, because the 005 field may be updated each time the library updates its MARC record, the work identified by the MARC record may, in fact, have been accessible to the public from that library much earlier than the date indicated in the 005 field.

37. Moreover, MARC records for copies of works available at the Library of Congress can have a **955 field**. *See* http://www.loc.gov/cds/PDFdownloads/dcm/DCM_2007-03.pdf (last visited March 18, 2019). The 955 field in MARC records obtained from the Library of Congress provides Local Tracking Information, which is a record of internal steps in the cataloging process followed by the Library of Congress. *Id.* Entries in the 955 field for a particular work are generated by Library of Congress staff as the work progresses through the cataloging process. *Id.* One of the mandatory fields that library staff must enter for each step is the date (in the form of “yyyy-mm-dd” or “yy-mm-dd”) the step was taken. *Id.* Thus, the work identified by a MARC record possessed by the Library of Congress would have been accessible to the public at least as of the earliest date shown in the 955 field, or shortly thereafter, from the Library of Congress.

38. Based on my personal experience as a professional librarian using the MARC and OCLC resources, it has been my experience that both of these resources

were continuously operational and available since at least 1992. Indeed, in the course of my work, I have regularly used both of these resources over the past 30+ years, and I have consistently found the information contained within these resources to be complete and reliable. I have never found the date of accessibility as indicated in fields 008, 005, or 955 to be incorrect. And in only a minute number of cases have I found any errors at all in these records – none of which affected my ability to render an accurate opinion as to accessibility, indexing, or subject headings.

B. Journals

39. Catalogers can create MARC records for all types of print, online, and digital resources. For example, MARC records cover serial publications, including both serially-published monographs and journals. OCLC hosts MARC records for more than 320 million serial publications. Serial publications are those publications that have the same collective title but are intended to be continued indefinitely with enumeration such as a volume or issue number (*e.g.*, magazines, journals, etc.). In the OCLC Connexion database, the first issue of the serial publication is typically cataloged (*i.e.*, a corresponding MARC record is created), but the date is left open-ended with the use of a punctuation mark such as a dash. OCLC serial publication MARC records represent the entire run of the serial title. With knowledge of the first issue published, future issues can be predicted based on the information

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provided in the MARC record, for example in field 362. In my extensive professional experience, is it highly unusual for a library to stop collecting and shelving a serial publication prior to the end of its publication run. If a subscription to a serial publication ends its run or is cancelled before the end of its run, the library will denote that it has stopped receiving new volumes by filling in the end date in the MARC record.

40. The handling of printed journal subscriptions is shown on the covers of individual issues. As was the best practice among libraries, issues arrived at a central facility and were immediately received, verified as part of a subscription, checked in, and stamped with the institution's name and date. Determining that the issue was part of the library subscription ensured that the entire set of publications for the year had been received so that they could be professionally bound and retained. This process also verified that all of the published issues arrived so that the library staff did not have to request or claim an issue that did not arrive as expected. In large public libraries with branches and multi-campus libraries within academic institutions, the journals were sorted and delivered to the subscribing unit. The issues were frequently stamped again to acknowledge receipt. The new issue was placed in the public area; the older issue was stored so that it remained available.

41. The foregoing process has been standard library practice longer than I

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have been working in the profession. I first learned the steps in the process in the late 1970s and later supervised it. Although the checking in process has become automated and now links electronically to holdings records for the MARC record for each serial title, the manual stamping and placing the issue in a public area has not changed for 50 years. Unless I note otherwise below in reference to a specific serial publication, it is my expert opinion that this standard protocol was followed for all of the serial publications discussed below.

V. PUBLICATIONS IN THIS PROCEEDING

A. Dvorak [Exhibit B]

42. Exhibit B attached to my Declaration is a journal article, “Scarier than Spam” by John C. Dvorak (hereafter “Dvorak”) which was published in Volume 18, Number 2 of the journal *PC Magazine*. The Dvorak article appears on page 87 of this issue dated January 19, 1999. Exhibit B is a true and correct copy of the *PC Magazine* containing the Dvorak article. Exhibit B is a true and correct copy of the issue cover, table of contents, and the article (page 87). It is my opinion that Dvorak was publicly accessible as early as January 6, 1999, and in any event, more than one year before the December 1, 2003 priority date, as I explain below.

43. I obtained this copy of Dvorak via counsel from the Library of Congress and made via counsel the copies which comprise Exhibit B. Specifically, the text of

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the journal is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to the next. Ex. B was found within the custody of a library – a place where, if authentic, a copy of this journal would likely be. Ex. B is a true and correct copy in a condition that creates no suspicion about its authenticity.

44. As described above, standard procedure was to apply a stamp at the time of receipt and processing of a periodical. The stamp on the fourth page of Ex. B shows that the issue was received no later than January 6, 1999, and verified and made available to the public at the Library of Congress by January 6, 1999 or shortly thereafter.

45. The MARC record corresponding to issues of *PC Magazine* available at the Library of Congress is attached to my Declaration as Exhibit C. I obtained this MARC record through the Library of Congress website (<https://catalog.loc.gov/vwebv/staffView?searchId=25687&recPointer=7&recCount=25&bibId=11314730>; last accessed March 27, 2019). The library code “DLC” appears in field 040, subfield “d” multiple times, which means that the MARC record shown in Exhibit C was modified by the Library of Congress on multiple separate occasions, and thus copies of the periodical were cataloged at the Library of Congress. Field 362 indicates a sequential designation “Vol. 5, no. 2 (Jan. 28,

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1986)-v. 28, no. 1 (Jan. 2009),” thus confirming that the issue corresponding to Exhibit B, whose cover indicates that it is “VOL. 18 NO. 2,” is among the issues cataloged at the Library of Congress.

46. The journal ceased the print version after the January 2009 issue; the journal continues as an online publication, as shown in the second field 776. The Field 321 entries of Exhibit D indicate that the frequency varied: biweekly (except July and August), biweekly (except one issue in Jan. and July, 3 issues in Oct., 2003), semimonthly (with occasional exceptions, 2005-2007), and monthly, 2008-2009. Accordingly, the MARC record in Exhibit C corresponds to those issues of the journal *PC Magazine* from January 1986 until the print edition ceased publication at the end of January 2009.

47. The MARC record attached as Exhibit C further includes an entry in field 050 (“QA76.8.I1015 |b P38”). As described above, this includes a subject matter classification number consistent with the Library of Congress Classification System. Exhibit C also includes an entry in field 082 (“004.165”). As described above, this is consistent with the Dewey Decimal Classification System. Exhibit C further includes at least two English language field 650 entries reading “IBM microcomputers |v Periodicals” and “Microcomputers |v Periodicals.” Thus, as of its cataloging, *PC Magazine*, which is the publication corresponding to the MARC

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record attached hereto as Exhibit C, was indexed according to its subject matter by virtue of at least three independently sufficient classifications: the field 050 entry, the field 082, and the field 650 entries.

48. I also obtained a MARC record for *PC Magazine* from the OCLC bibliographic database, and it is attached to my Declaration as Exhibit D. As confirmed by the “Entered” date in Exhibit D (“19860514”), a MARC record for the periodical *PC Magazine* would also have been accessible through any library with access to the OCLC bibliographic database or the online catalog at a library that subscribed to the serial as of May 14, 1986.

49. Therefore, Dvorak (Exhibit B) was publicly accessible as early as January 6, 1999, and in any more than one year before the December 1, 2003 priority date, because by that time it had been received, cataloged, and indexed at the Library of Congress and made part of the OCLC bibliographic database.

B. Strom [Exhibit E]

50. Exhibit E attached to my Declaration is a journal article, “Three New Wireless E-mail Devices” by David Strom (hereafter “Strom”) which was published in Volume 33, Number 45 of the journal *Computerworld*. The Strom article appears on page 63 of this issue dated November 8, 1999. Exhibit E is a true and correct copy of *Computerworld* containing the Strom article. Exhibit E is a true and correct

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copy of the issue cover, table of contents, and the article (page 63). It is my opinion that Strom was publicly accessible as early as November 9, 1999, and in any event, more than one year before the December 1, 2003 priority date, as I explain below.

51. I obtained this copy of Strom from the Business Library at the University of Wisconsin – Madison. Specifically, the text of the article is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to the next. Exhibit E was found within the custody of a library – a place where, if authentic, a copy of this journal would likely be. Exhibit E is a true and correct copy in a condition that creates no suspicion about its authenticity.

52. As described above, standard procedure was to apply a stamp at the time of receipt and processing of a periodical. The stamp on the third page of Ex. E shows that the issue was received no later than November 9, 1999, and verified and made available to the public at the Business Library at the University of Wisconsin – Madison by November 9, 1999 or shortly thereafter.

53. Attached hereto as Exhibit F is a true and correct copy of the MARC record for the journal *Computerworld* at the Business Library at the University of Wisconsin – Madison. The library ownership is indicated by the presence of the library's code (UW) in the fourth 035 field. Exhibit F also shows that the *Computerworld* periodical was catalogued with descriptor terms “Computer

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industry |v Periodicals,” “Electronic digital computers |v Periodicals,” “Computers |v Periodicals,” and “Electronic data processing |v Periodicals” in the 650 fields.

54. Based on finding a print copy of Exhibit E in the Business Library at the University of Wisconsin – Madison and MARC record in its online library catalog attached as Exhibit F, it is my opinion that the article “Three New Wireless E-mail Devices” by Strom published in the journal *Computerworld* was available in the Business Library at the University of Wisconsin – Madison on or shortly after November 9, 1999.

55. Attached hereto as Exhibit G is a true and correct copy of the MARC record for the journal *Computerworld* obtained from the OCLC bibliographic database. As can be seen in the “Entered” field in the MARC record for this exhibit, a cataloger created OCLC record number 2259660 on June 20, 1976. The “BLvl” entry in Exhibit G is “s,” which indicates that the journal *Computerworld* is a serial publication. Field 310 of Exhibit I reads “Semimonthly, <Sept. 2009-.” The journal ceased the print version after the June 23, 2014 issue; the journal continues as an online publication, as shown in the field 785. The Field 321 entries of Exhibit G indicate that the frequency varied: Weekly (except last week in Dec. & first week in Jan.), \$b <1967>-Aug. 2009. Accordingly, the MARC record in Exhibit G

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corresponds to those issues of the journal *Computerworld* from January 1967 until the print edition ceased publication at the end of June 2014.

56. Exhibit G further includes an entry in field 050 (“QA76 ‡b .C5816”)—as described above, this includes a subject matter classification number consistent with the Library of Congress classification system (analogous to the Dewey Decimal System). Exhibit I further includes an entry in field 082 (“001.64”), a subject matter consistent with the Dewey Decimal classification system. Exhibit I further includes three English language field 650 entries reading “Computers ‡v Periodicals” (see Exhibit J, Library of Congress subject heading sh2008101482), “Computer industry ‡v Periodicals” (see Exhibit K, Library of Congress subject heading sh2008101481), and “Electronic data processing ‡v Periodicals” (see Exhibit L, Library of Congress subject heading sh2008102641). Thus, as of its cataloging, the publication corresponding to the MARC record attached hereto as Exhibit G was indexed according to its subject matter by virtue of at least three independently sufficient classifications: the field 050 entry, the field 082 entry, and the field 650 entries. Further, as of June 20, 1976, the MARC record attached hereto as Exhibit G was accessible through any library with access to the OCLC bibliographic database or the online catalog at a library that subscribed to the serial.

57. Therefore, Strom (Exhibit E) was publicly accessible as early as November 9, 1999, and in any event more than one year before the December 1, 2003 priority date, because by that time it had been received, cataloged, and indexed at the Business Library at the University of Wisconsin – Madison and made part of the OCLC bibliographic database.

C. Schwartz [Exhibit H]

58. Exhibit H attached to my Declaration is a book, *The Complete Idiot's Guide to Online Dating and Relating* by Joe Schwartz (hereafter “Schwartz”) and published by QUE. Exhibit H is a true and correct copy of the cover, title page, verso of the title page, and table of contents. I obtained via counsel this copy of the book from the Library of Congress and made via counsel the copies which comprise Exhibit H. Specifically, the text is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to the next. Exhibit H was found within the custody of a library – a place where, if authentic, a copy of this book would likely be. Exhibit H is a true and correct copy in a condition that creates no suspicion about its authenticity.

59. It is my opinion that Schwartz was publicly accessible as early as May 10, 1999, and in any event, more than one year before the December 1, 2003 priority date, as I explain below.

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60. The MARC record corresponding to the copy of Schwartz available at the Library of Congress is attached to my Declaration as Exhibit I. I obtained this MARC record through the Library of Congress website (<https://catalog.loc.gov/vwebv/staffView?searchId=1988&recPointer=0&recCount=25&searchType=1&bibId=203700>; last accessed March 27, 2019). Field 040, subfield “d”, shows the library code “DLC,” which means that the MARC record for this book was modified by the Library of Congress, and thus a copy of the book was cataloged at the Library of Congress.

61. As can be seen in field 008 (“990510”), a cataloger created the MARC record on May 10, 1999. As can be seen in field 955 (“09-29-00”), one or more steps in the cataloging process was performed by the Library of Congress on September 29, 2000.

62. Exhibit I further includes an entry in field 050 (“a HQ801 |b .S43974 2000”). As described above, this includes a subject matter classification number consistent with the Library of Congress Classification System. Exhibit I further includes two English language field 650 entries reading “Dating (Social customs) |x Computer network resources” and “Interpersonal relations |x Computer network resource.” Thus, as of its cataloging, Schwartz, which is the publication corresponding to the MARC record attached hereto as Exhibit I, was indexed

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according to its subject matter by virtue of at least two independently sufficient classifications: the field 050 entry and the field 650 entries.

63. I also obtained a MARC record for Schwartz from the OCLC bibliographic database, and it is attached to my Declaration as Exhibit J. As confirmed by the “Entered” date in Exhibit J (“19990510”), a MARC record for Schwartz would also have been accessible through any library with access to the OCLC bibliographic database as of May 10, 1999.

64. Therefore, Schwartz (Exhibit H) was publicly accessible as early as May 10, 1999, and in any event more than one year before the December 1, 2003 priority date, because by that time it had been received, cataloged, and indexed at the Library of Congress and made part of the OCLC bibliographic database.

D. McPherson [Exhibit K]

65. Exhibit K attached to my Declaration is a book, *How to Do Everything with Your Pocket PC*, 2nd edition, by Frank McPherson (hereafter “McPherson”) and published by McGraw-Hill/Osborne. Exhibit K is a true and correct copy of the cover, title page, verso of the title page, dedication, and table of contents. I obtained via counsel this copy of the book from the Library of Congress and made via counsel the copies which comprise Exhibit K. Specifically, the text is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to

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the next. Exhibit K was found within the custody of a library – a place where, if authentic, a copy of this book would likely be. Exhibit K is a true and correct copy in a condition that creates no suspicion about its authenticity.

66. It is my opinion that McPherson was publicly accessible as early as April 3, 2002, and in any event, more than one year before the December 1, 2003 priority date, as I explain below.

67. The MARC record corresponding to the copy of McPherson available at the Library of Congress is attached to my Declaration as Exhibit L. I obtained this MARC record through the Library of Congress website (<https://catalog.loc.gov/vwebv/staffView?searchId=2288&recPointer=0&recCount=25&searchType=1&bibId=12729376>; last accessed March 27, 2019). As previously noted, the library that originally creates a MARC record is recorded in field 040, subfield “a”, with a unique library code. For Exhibit L that library code is “DLC,” which means that the MARC record for this book was originally created by the Library of Congress, and thus a copy of the book was cataloged at the Library of Congress. As further shown in field 040, subfield “d”, the same library (Library of Congress) also modified the MARC record shown in Exhibit C after it was originally created.

68. As can be seen in field 008 (“020403”), a cataloger created the MARC

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record on April 3, 2002. As can be seen in field 955 (“2002-04-03”), one or more steps in the cataloging process was performed by the Library of Congress on April 3, 2002, the same day the MARC record was created.

69. Exhibit L further includes an entry in field 050 (“a QA76.5 |b .M37 2002”). As described above, this includes a subject matter classification number consistent with the Library of Congress Classification System. Exhibit L further includes two English language field 650 entries reading “Pocket computers” and “Portable computers.” Thus, as of its cataloging, McPherson, which is the publication corresponding to the MARC record attached hereto as Exhibit K, was indexed according to its subject matter by virtue of at least two independently sufficient classifications: the field 050 entry and the field 650 entries.

70. I also obtained a MARC record for McPherson from the OCLC bibliographic database, and it is attached to my Declaration as Exhibit M. As confirmed by the “Entered” date in Exhibit M (“20011204”), a MARC record for McPherson would also have been accessible through any library with access to the OCLC bibliographic database as of December 4, 2001.

71. Therefore, McPherson (Exhibit K) was publicly accessible as early as April 3, 2002, and in any event more than one year before the December 1, 2003

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priority date, because by that time it had been received, cataloged, and indexed at the Library of Congress and made part of the OCLC bibliographic database.

E. Crumlish [Exhibit N]

72. Exhibit N attached to my Declaration is a book, *The ABCs of the Internet* by Christian Crumlish (hereafter “Crumlish”) and published by Sybex. Exhibit N is a true and correct copy of the cover, title page, verso of the title page, acknowledgements, and table of contents. I obtained via counsel this copy of the book from the Library of Congress and made via counsel the copies which comprise Exhibit N. Specifically, the text is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to the next. Exhibit N was found within the custody of a library – a place where, if authentic, a copy of this book would likely be. Exhibit N is a true and correct copy in a condition that creates no suspicion about its authenticity.

73. It is my opinion that Schwartz was publicly accessible as early as April 30, 1996, and in any event, more than one year before the December 1, 2003 priority date, as I explain below.

74. The MARC record corresponding to the copy of Crumlish available at the Library of Congress is attached to my Declaration as Exhibit O. I obtained this MARC record through the Library of Congress website

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(<https://catalog.loc.gov/vwebv/staffView?searchId=2376&recPointer=0&recCount=25&searchType=1&bibId=693513>; last accessed March 27, 2019). Field 040, subfield “d”, shows the library code “DLC,” which means that the MARC record for this book was modified by the Library of Congress, and thus a copy of the book was cataloged at the Library of Congress.

75. As can be seen in field 008 (“960430”), a cataloger created the MARC record on April 30, 1996. As can be seen in field 955 (“04-30-96”), one or more steps in the cataloging process was performed by the Library of Congress on April 30, 1996, the same day the MARC record was created.

76. Exhibit O further includes an entry in field 050 (“a TK5105.875.I57 |b C778 1996”). As described above, this includes a subject matter classification number consistent with the Library of Congress Classification System. Exhibit O further includes an English language field 650 entry reading “Internet.” Thus, as of its cataloging, Crumlish, which is the publication corresponding to the MARC record attached hereto as Exhibit O, was indexed according to its subject matter by virtue of at least two independently sufficient classifications: the field 050 entry and the field 650 entry.

77. I also obtained a MARC record for Crumlish from the OCLC bibliographic database, and it is attached to my Declaration as Exhibit P. As

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confirmed by the “Entered” date in Exhibit P (“19960430”), a MARC record for Crumlish would also have been accessible through any library with access to the OCLC bibliographic database as of April 30, 1996.

78. Therefore, Crumlish (Exhibit N) was publicly accessible as early as April 30, 1996, and in any event more than one year before the December 1, 2003 priority date, because by that time it had been received, cataloged, and indexed at the Library of Congress and made part of the OCLC bibliographic database.

VI. CONCLUSION

79. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

80. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

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Dated: March 31, 2019

Respectfully submitted,

A handwritten signature in cursive script that reads "Sylvia D. Hall-Ellis". The signature is written in dark ink and is positioned above a short horizontal line.

Sylvia D. Hall-Ellis, Ph.D.

EXHIBIT A

**CURRICULUM VITAE
SYLVIA D. HALL-ELLIS**

EDUCATION

Ph.D., University of Pittsburgh, Pittsburgh, Pennsylvania, 1985
M.P.S., University of Denver, Denver, Colorado, 2014
Post Graduate Studies, University of Texas – San Antonio, Texas, 1975-1976
M.L.S., University of North Texas, Denton, Texas, 1972
B.A., Rockford University, Rockford, Illinois, 1971

PROFESSIONAL EXPERIENCE

- 1981-** **Consultant for higher education, non-profit organizations, and corporations.**
- 2002-** **Adjunct Professor, School of Information, San José State University, San José, California.** Serve as part-time faculty member teaching graduate students in technical services (cataloging, bibliographic control, classification), “core courses,” and special topics.
- 2014-2016** **Director, Grants and Resource Development, Colorado Community College System.** Provided leadership and vision to foster the continued growth of rigorous scholarship, innovative projects, and creative work for statewide system, 13 campuses, and 50 teaching sites serving 155,000 students. Responsible for leadership and ensured efficient functioning of contract and grants in compliance with state & federal requirements and successful implementation and management. Served as a subject matter expert and liaison for college Grant Directors for all issues relating to grants and subcontracts.
- 2010-2014** **Senior Grant Administrator, Morgridge College of Education, University of Denver (Colorado).** Provided leadership and vision to foster continued growth of rigorous scholarship, innovative research, and creative work in the Morgridge College of Education. Ensure that contract and grants processes function effectively and efficiently for 60 faculty and researchers with a focus on the successful progression and efficient management of grants totaling \$13M. Worked effectively and collegially with Department Chairs and Program Coordinators on operational grant-related management activities and with a broad range of internal and external constituencies. Supported the dissemination and promotion of faculty research and scholarship to outside constituents at conferences and through publications. Assisted Principal Investigators and grant project teams by coaching, mentoring, and financial management.
- 2011-2013** **Interim Director & Assistant Dean, Westminster Law Library, Sturm College of Law, University of Denver.** Planned, organized, and directed all administrative activities for the library serving students, faculty, and alumni; oversaw the employment, retention, promotion, transfer and termination of library personnel; represented the library at professional conferences and public meetings; created and promoted a climate and culture of acceptance for new programs and services, a positive high-quality image of the law library, and that reflect the organization’s values, encourage excellent performance, and reward high productivity and innovation; provided leadership and set strategic direction of the organization; ensured that the library provided excellent customer service through solution-oriented staff response to patron needs and by responsiveness and continuous improvement of the organization; promoted, developed, and maintained positive working relationships with colleagues and customers including key stakeholders and groups, higher education institutions, the legal community, other regional libraries and districts statewide, and national library organizations.
- 2007-2014** **Associate Professor, Library & Information Science, Morgridge College of Education, University of Denver (Colorado).** Served in leadership role and worked collaboratively in program, college, campus and community environments. Advised and supervised students, taught core and specialized courses at the graduate level in an integrative, student-centered

learning environment. Served on LIS, College, and University committees, and maintained working relationships with colleagues in other academic units and information professionals in the Rocky Mountain region and beyond. Served on and chair doctoral student dissertation committees. Oversaw and facilitated the College and LIS graduate student association.

2002-2007 **Assistant Professor, Library & Information Science, College of Education, University of Denver (Colorado).** Served as tenure-track faculty member teaching graduate students in “core courses,” resource description and access, service learning, and independent studies. Advised graduate students, participate on LIS and College committees, and serve on doctoral student dissertation committees. Oversaw and facilitated the LIS graduate student association and alumni association.

2000-2002 **Affiliate Faculty, Library & Information Science, College of Education, University of Denver (Colorado).** Served as part-time faculty member teaching graduate students in technical services (cataloging, bibliographic control, classification), “core courses,” and special topics. Oversaw and facilitated the LIS graduate student association and alumni association.

2000-2001 **Special Assistant to the Secretary’s Regional Representative, U.S. Department of Education, Region VIII, Denver, Colorado.** Served as the principal advisor and representative of the U. S. Secretary of Education’s Regional Representative (SRR). Ensured the implementation of major goals of the SRR and the Secretary. Provided leadership on behalf of the SRR in contacts with high-level officials in Region VIII requiring sensitive policy interpretation in communication with senior Department officials to solve problems and resolve issues raised by State and local education officials. Served as the primary contact for School-to-Work/Career, Children’s Health Insurance Program, and Safe and Drug-Free Schools. Delivered technical assistance to local education agencies and institutions of higher education in technology, professional development, and school construction.

1999-2000 **Catalog Librarian, Jefferson County Public Library, Lakewood, Colorado.** Performed original, copy cataloging and classification of library materials (English and Spanish) using standard library protocols; completed original descriptive cataloging and subject analysis; enhanced brief catalog and authority records in III.

1997-1999 **Development Officer, McREL International, Aurora, Colorado.** Served as senior member of corporate management team in strategic planning, development of proposals and contracts, implementation, and evaluation of new services, products, and programs for educational agencies. Provided creative leadership to corporate committees to solicit ideas, identify goals and objectives, plan, develop, present, and evaluate professional development opportunities.

1995-1997 **Education Specialist, Education Service Center, Region One, Edinburg, Texas.** Served as member of Administrative Cabinet team in strategic planning, development of proposals and contracts, implementation, and evaluation of telecommunications capabilities, services, products, and programs for 40 school districts serving 283,000 students in 7 counties. Provided creative leadership to regional and state committees to solicit ideas, identify strategic goals and objectives, plan, develop, present, and evaluate funding opportunities and professional development for 400 librarians.

1993-1996 **Assistant Professor of Library Science, Sam Houston State University, Huntsville, Texas.** Served a faculty member teaching 400 graduate students in technical services (cataloging, bibliographic control, classification), automation, and networking. Participated in distance education program and coordinated annual conference. Conducted university and Texas Library Association-funded field research focused on library collection development and academic achievement.

- 1992-1993** **Head Librarian, Rocky Mountain College of Art & Design, Denver, Colorado.**
Responsible for the daily operation, selection and acquisition of materials, formulation of policies for library operations, media center, and photography/slides archives. Designed and implemented library automation and delivery of electronic resources to college community.
- 1981-1985** **Development Officer, PRLC, Inc., Pittsburgh, Pennsylvania.** Served as senior member of corporate management team in strategic planning, development of proposals and contracts, implementation, and evaluation of new services, products, and programs for 100 institutional member organizations. Coordinated the development of proposals and contracts totaling \$4,000,000 annually. Provided creative leadership to corporate committees to solicit ideas, identify goals and objectives, plan, develop, present, and evaluate professional development opportunities.
- 1981** **Director of Library Development, Pennsylvania Department of Education, Harrisburg, Pennsylvania.** Responsible for statewide development, technical assistance, professional development, resource sharing, children's services, institutional library services, networking, and state aid program for all libraries throughout the Commonwealth. Functioned as liaison to Governor's Advisory Council, LSCA Advisory Council, District Administrators, private colleges, universities, consortia managers, and network directors. Supervised \$14,000,000 formula-based state aid program and \$3,000,000 grant awards to individual libraries, consortia, and networks.
- 1978-1981** **Assistant Director, Southern Tier Library System, Corning, New York.** Coordinated operation of system-wide programs (technical assistance, professional development, resource sharing, technical services, outreach) to 40 public libraries in 5 counties serving 500,000 residents. Solicited ideas, identified goals, sponsored, and evaluated professional development opportunities and technical assistance sessions.
- 1976-1978** **Division Librarian for Technical Services, Corpus Christi Public Libraries, Corpus Christi, Texas.** Provided leadership in acquisitions, cataloging, serials control, and processing for main library and 4 branches serving 250,000 residents. Participated as senior member of library management team. Compiled and prepared technical evaluations, reports, and statistical analyses of Division operations to measure the achievement and cost of annual goals, objectives, and staff performance.
- 1975-1976** **System Coordinator, San Antonio Major Resource Center, San Antonio, Texas.** Served as senior member of the management team for District X Office, charged to provide technical assistance, resource sharing, media services, and professional development to librarians and staff representing 30 public library jurisdictions in 21 counties serving 1,500,000 residents. Functioned as liaison to System Director, staff, and members of governing bodies with the System Board of Directors and the Texas State Library and Historical Commission. Prepared LSCA grant applications and monitored awards totaling \$1,100,000 annually.
- 1973-1975** **Bilingual Branch Librarian, San Antonio Public Library, San Antonio, Texas.** Worked as librarian providing reference, information, and readers' advisory services in branch serving 50,000 Spanish-speaking residents in southwest San Antonio. Participated in collection development and resource acquisition activities, specializing in children's work, Spanish language resources, and multicultural studies.
- 1972-1973** **Librarian, Holding Institute, Laredo, Texas.** Worked as high school librarian serving 500 boarding students in Spanish-speaking environment of private school. Provided reference, research assistance, and library instruction to students and 35 faculty members.
- 1966-1971** **Rockford Public Library, Rockford, Illinois.** Worked in branches as part-time as a Library Assistant, Clerk, and Page in city library serving 150,000 residents.

PUBLICATIONS

Editor-reviewed Monographs (Completed and in Progress)

- Hall-Ellis, Sylvia D., and Mary Beth Weber. *Contemporary Cataloging in an RDA Environment: A Handbook for Students and Practitioners*. Chicago, IL: American Library Association. Under contract & In development.
- RDA Testing: Lessons Learned and Challenges Revealed*. Sylvia D. Hall-Ellis and Robert O. Ellett, Jr., eds. Binghamton, N.Y.: Haworth, 2012. 128 p.
- Hall-Ellis, Sylvia D., Stacey L. Bowers, Christopher D. Hudson, and M. Claire Williamson. *Librarian's Handbook for Seeking, Writing, and Managing Grants*. Santa Barbara, Calif.: Libraries Unlimited, 2011. 315 p.
- Hall-Ellis, Sylvia D., with Ann Jerabek, and Merrie W. Valliant. *Contemporary Cataloging: A Handbook for Practitioners and Students*. Open access text. Athens, GA: University of Georgia System Regents, 2011. 767 p.
- Grealy, Deborah S. and Sylvia D. Hall-Ellis. *From Research to Practice: The Scholarship of Teaching and Learning in LIS Education*. Westport, Conn.: Libraries Unlimited, 2009. 175 p.
- Hall-Ellis, Sylvia D. with J. Ann Jerabek. *Grants for School Libraries*. Westport, Conn.: Libraries Unlimited, 2003. 197 p.
- Hall-Ellis, Sylvia D., Doris Meyer, Frank W. Hoffmann, with J. Ann Jerabek. *Grant Writing for Small Libraries and School Library Media Centers*. Boulder, Colo.: NetLibrary, 2001. 173 p.
- Hall-Ellis, Sylvia D., Doris Meyer, Frank W. Hoffmann, with J. Ann Jerabek. *Grant Writing for Small Libraries and School Library Media Centers*. Englewood, Colo: Libraries Unlimited, 2000. 173 p.
- ### Editor-reviewed Chapters (Completed and In Progress)
- Hall-Ellis, Sylvia D. "Grant Writing and Sponsored Research Funding for Academic Librarians." In *The New Librarianship*. Vol. 4. Bradford Lee Eden, ed. New York: Scarecrow Press, 2015. (pp. 163-174)
- Hall-Ellis, Sylvia D. "Organizing Information: Technical Services." In *Information Services Today: An Introduction*. Sandra Hirsch, ed. Lanham, Md.: Rowman and Littlefield, 2015. (pp. 139-148)
- Hall-Ellis, Sylvia D. "Metadata, MARC, and More." In *Rethinking Technical Services, Considering Our Profession and Ourselves: What's the Future of Our Profession?* Mary Beth Weber, ed. Lanham, Md.: Rowman and Littlefield, 2015. (pp. 29-55)
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- Martínez, Rubén. *Crossing Over: A Mexican Family on the Migrant Trail*. Metropolitan: Holt, 2001. 0-8050-4908-8, \$26.00 [*Library Journal*, 2001]
- Guevara, Ernesto "Che." *The African Dream: the Diaries of the Revolutionary War in the Congo*. Translated from the Spanish by Patrick Camiller. With an introduction by Richard Gott and a foreword by Aleida Guevara March. New York: Grove Press, 2001. 0-8021-3834-9, \$13.00 [*Library Journal*, 2001]
- Cooper, Gail and Garry Cooper. *New Virtual Field Trips*. Englewood, Colo.: Libraries Unlimited, 2001. 1-56308-887-8, \$27.50 [*Colorado Libraries*, 2001]

NATIONAL SERVICE & PROFESSIONAL AFFILIATIONS

American Library Association

Association for Library Collections & Technical Services
Cataloging, Classification, and Metadata Section
ALCTS Editorial Board, Member, 2015-
Committee on Cataloging: Description and Access, Member, 2008-2012
Test Site for RDA, Manager, 2009-2011
Nominating Committee, Member, 2007-2008
Committee for Education and Training of Catalogers, Chair, 2006-2007, Member, 2003-2007
Competencies & Education for a Career in Cataloging Interest Group, Chair, 2010-2012; Member, 2010-
President's Program Committee, 2015-2016
Education Committee, Member, 2005-2007
Task Force on Competencies and Education for a Career in Cataloging, Chair, 2007-2009
2007 Annual Meeting Pre-conference, "What They Don't Teach in Library School: Competencies,
Education and Employer Expectations for a Career in Cataloging," Steering Committee Chair
Fundraising Committee, Member, 2004-2006
Office of Diversity
Committee on Diversity, Chair, 2010-2011
Diversity Research Advisory Committee, Member, 2009-2010
Spectrum Scholar Mentor, 2009
Diversity Grants Review Committee, Member, 2007, 2010, 2012
Office of Statistics and Research
Research and Statistics Committee, Member, 2005-2007; Intern, 2003-2005
Library Research Round Table
Board of Directors, Member At-Large, 2009-2012
Member, 2003-
Office of Accreditation
Accreditation Panel Member (training completed 2004)
Accreditation Review Panel Member (training completed 2004)

REFORMA

National Board of Directors, 2005-2013
National Fundraising Chair, 2005-2013
National Recruiting and Mentoring Committee, 2008-2010
Colorado Chapter, Secretary, 2004-2005
Colorado Chapter Liaison to National Board of Directors, 2004-2013

Online Audiovisual Catalogers Association (OLAC)

American Association of Law Libraries (AALL)

Colorado Association of Law Librarians (CoALL)

Association for Library and Information Science Education (ALISE)

University of Denver ALISE Representative, 2003-2008; 2010-2011
Membership Advisory Committee, 2007-2010
Technical Services Education Special Interest Group, 2003-
Garfield Doctoral Dissertation Award Reviewer, 2012
Garfield Doctoral Dissertation Scholarship Reviewer, 2014

American Association of University Professors (AAUP), 2006-

American Grant Writers Association, 2014-

Grant Professionals Institute, 2016-

National Grants Management Association, 2014-

Grant Reviewer (National and Regional Team Leader), U.S. Department of Education, 1998-
Grant Reviewer, Broadband Technologies Opportunity Program, U.S. Department of Commerce, 2009

Grant Reviewer, Institute of Museum and Library Services, 1998-2000
Grant Reviewer, Colorado Department of Education, 2014-
Grant Reviewer, Colorado State Library, 1998-
Grant Reviewer, American Association of Community Colleges *Working Connections* program, 1999
Peer Reviewer, *Journal for Library and Information Science Education*, 2005-
Peer Reviewer, *Journal of Library Metadata*, 2009
Peer Reviewer, *International Journal of Library and Information Science*, 2011
Regular Columnist, *The Bottom Line*, 2013-2016
Book Reviewer, *Library Journal*, 2001
Book Reviewer, *Criticas*, 2002-2009
Book Reviewer, *Colorado Libraries*, 2000-2012

REGIONAL SERVICE & PROFESSIONAL AFFILIATIONS

Mountain Plains Library Association

Professional Development Grants Committee, Member, 2005-2006
Professional Development Policy and Guidelines Sub-committee Chair, 2006

Colorado Association of Libraries

“Student Voices” Column Editor, *Colorado Libraries*, 2005-2006
Conference Planning Committee, Member, 2002
Technical Services and Automation Division, Chair, 2002-2003; Member, 2000-
Academic Libraries Division, Peer Review Conference Papers Committee, Member, 2007-2009
Education Committee, Member, 1988-1993
Diverse Populations Committee, Member, 2009-2013

SERVICE TO THE UNIVERSITY OF DENVER

Center for Teaching and Learning Faculty Advisory Board, 2007-2008; 2010-2012
Center for Community Engagement and Service Learning Advisory Board, 2007-2012
Faculty Senate
Executive Committee, 2008-2013
Nominations, Rules & Credentials Committee, Chair, 2008-2013; Member 2007-2013
Appointment, Promotion, and Tenure Revision Committee, 2010-2012
Grievance Policy Committee Member, 2007-2010
Law Library Director Search Committee Chair, 2012-2013
PROF Grant Review, College Representative to the University Review Team, 2006, 2008
Project Homeless Connect Evaluations, Principal Investigator, 2006-2009
University Technology Council, 2007-2009
University of Denver Hyde Interviews for Incoming Freshmen, 2003-2012

SERVICE TO THE MORGRIDGE COLLEGE OF EDUCATION

Appointment, Tenure & Review Committee
Member, voting, 2003-2005; 2007- 2009
Chair, Clinical Faculty Promotion & Tenure Policy Subcommittee, 2008-2009
Member, Community Engagement Subcommittee, 2007-2009
Member, Tenure Review Panel, 2003
Advancement and Alumni Relations Committee, Chair, 2003-2007; Member, 2002-2007
College Building Committee Member, 2004-2010
College of Education Student Association, Faculty Advisor, 2004-2007; 2009-2010
Faculty Senator, 2007-2013
Research and Scholarship Committee, Chair, 2008-2009; Member, 2002-2003, 2008-2009
Research and Grant Mentoring Committee, Chair, 2009-2010
Research Task Force Member, 2010-2012
Search Committee Member, Assistant Professor for Curriculum & Instruction, 2010-2011
Workload Task Force Member, 2010-2011

SERVICE TO THE LIBRARY & INFORMATION SCIENCE PROGRAM

Library and Information Science Student and Alumni Association, Faculty Advisor, 2002-2008
ALA Student Chapter, Faculty Advisor, 2005-2008
Beta Phi Mu Phi Chapter, Faculty Advisor, 2004-2014
Steering Committee Member, Accreditation by the American Library Association, 2001-2004
Search Committee Member, Associate Professor for LIS, 2006
Search Committee Chair, Assistant Professors for LIS, 2003, 2005, 2006, 2007
Search Committee Ex-Officio Member, Director for LIS, 2004

SERVICE TO SAM HOUSTON STATE UNIVERSITY

Rio Roundup: South Texas Literature Conference, Conference Coordinator, 1993
External Relations, Fund Raising, Grants Committee, Chair, 1993-1995
Advisory Council Committee, Chair, 1993-1995
Students, Admissions, and Advisement Committee, Chair, 1994
Institutional Effectiveness Committee, Member, 1993-1995

SERVICE TO THE COLLEGE OF EDUCATION AND APPLIED SCIENCE

Faculty Affairs Committee, Member, 1993-1995
Curriculum Committee, Member, 1993-1995
Continuing Education Committee, Member, 1993-1995

SERVICE TO THE COMMUNITY

Denver/Boulder Games 2022, Board of Directors, Secretary-Treasurer, 2015-2018
United Way Campaign Committee, College of Education, 2006
Arapahoe County, Election Judge for the County Clerk and Recorder, 2000-2005
Arthritis Foundation, Rocky Mountain Chapter, Certified Educator & Trainer, 1999-2008
Bonfils Blood Center, Silver Level Donor, 2000-2016
Denver Museum of Natural History, Docent, 1992
Tech Prep of the Lower Rio Grande Valley, Inc. (Harlingen, Texas) Board of Directors, 1995-1997
Executive Committee, 1996-1997; Chair, Development Committee, 1995-1997; Chair, Fiscal Agency
Committee, 1995-1996; Chair, Colleges and Universities Committee, 1996-1997
Gilpin County (Colorado) Public Library Board of Trustees, 1986-1989; Vice President, 1987-1989
City of Central (Colorado) Economic Development Committee, 1987-1989
Columbine Family Health Centers, Inc. (Nederland and Black Hawk, Colorado) Board of Directors, 1988-1989

CERTIFICATION

Permanent Public Librarian Certificate - Pennsylvania, New York, Texas
Westlaw Expert Witness, 2008-
Certified Grant Writer[®], 2016-

AWARDS AND HONORS

Advanced Practitioner for Service Learning and Community Engagement, University of Denver, 2011
Platinum Star Alumnae, College of Information, Library Science & Technologies, University of North Texas, 2009
Commendation for Integration of Technologies in Teaching & Learning Environment, University of Denver, 2006
Outstanding Adjunct Faculty Member Award, College of Education, University of Denver, 2002
Beta Phi Mu, Pi, University of Pittsburgh, 1985
Alpha Lambda Sigma, University of North Texas, 1972

Albert Nelson Marquis Lifetime Achievement Award, Who's Who in America; Who's Who in American Women; Who's Who of Women Executives; Dictionary of International Biography; Who's Who in the East; Who's Who in the South and Southwest; Who's Who in the World; Who's Who of Online Professionals; Who's Who in Library and Information Science; 2,000 Notable Women; Who's Who of Emerging Leaders; Who's Who in Professional and Executive Women; Who's Who in American Education; International Who's Who of Professional and Business Women; International Leaders in Achievement; International Educator of the Year; Who's Who in Finance and Industry; Who's Who in Finance and Business

Invited International and National Conference Presentations

- Hall-Ellis, Sylvia D. *Invest in Me -- I'm Your Future: Succession Planning for Libraries*. Keynote presentation delivered at the ALCTS President's Symposium, Boston, Mass., January 8, 2016.
- Seidel, Kent E. and Sylvia D. Hall-Ellis. *Making Grants Work for You: Strategies for Doctoral Students and Early Career Scholars*. Presentation delivered at the University Council for Educational Administration, Early Career Scholars Session, Indianapolis, Ind., November 9, 2013.
- Hall-Ellis, Sylvia D. *So You Want to be a Manager; Leadership Skills and Competencies for Technical Services Managers and Administrators*. Presentation delivered at the 138th Annual Conference, American Library Association, Chicago, Ill., June 29, 2013.
- Seidel, Kent E., Karen S. Riley, Lyndsay Agans, Susan Korach, and Sylvia D. Hall-Ellis. *Making Grants Work for You (Instead of Just Working for Grants)*. A panel discussion delivered at the University Council for Educational Administration, Early Career Scholars Session, Denver, Colo., November 17, 2012.
- Hall-Ellis, Sylvia D. *After the Great TS Reorganization: The Westminster Law Library*. Presentation delivered at the 137th Annual Conference, American Library Association, Anaheim, Calif., June 23, 2012.
- Hall-Ellis, Sylvia D. *Conversations with Catalogers in the 21st Century*. A panel discussion sponsored by the ALCTS Competencies for a Career in Cataloging Interest Group, delivered at the 137th Annual Conference, American Library Association, Anaheim, Calif., June 22, 2012.
- Hall-Ellis, Sylvia D., moderator. *Mid-Career Leaders Program*. A panel discussion sponsored by the ALA Committee on Diversity delivered at the 136th Annual Conference, American Library Association, New Orleans, La., June 26, 2011.
- Hall-Ellis, Sylvia D., moderator. *Diversity Town Hall*. A community conversation sponsored by the ALA Committee on Diversity delivered at the 136th Annual Conference, American Library Association, New Orleans, La., June 24, 2011.
- LaBarre, Kathryn, Sylvia D. Hall-Ellis, Karen Anderson, Rick Hasenyager, Christopher Cronin, and Penny Baker. *Briefings from RDA Test Participants*. A panel discussion delivered at the Midwinter Conference, American Library Association, San Diego, Calif., January 7, 2011.
- Miksa, Shawne, Marjorie Bloss, and Sylvia D. Hall-Ellis. *Educating the Next Generation of Catalogers: Teaching RDA*. A panel discussion delivered at the 97th Annual Conference, Association for Library and Information Science Education, San Diego, Calif., January 7, 2011.
- Hall-Ellis, Sylvia D., Robert Maxwell, John Hostage, and George Prager. *RDA Panel: What Cataloging Managers Need to Know*. Presentation delivered at the 103rd Annual Conference, American Association of Law Librarians, Denver, Colo., July 12, 2010.
- Hall-Ellis, Sylvia D. and Stacey L. Bowers. *Catalogers in the RDA Environment: Skill Sets, Expectations and Challenges*. Presentation delivered at the 103rd Annual Conference, American Association of Law Librarians, Denver, Colo., July 11, 2010.
- Hall-Ellis, Sylvia D. *Comfortable in Your Cataloging and Metadata Specialist Skin? Or, So You Want to Hire a Cataloger*. Presentation delivered to the ALCTS Research Group at the 134th Annual Conference, American Library Association, Chicago, Ill., July 11, 2009.
- Perez, Megan, Sylvia D. Hall-Ellis, and Denise Anthony. *From Novice to Expert: Collaboration for Succession Planning*. A "hot topic" presentation delivered at the 14th ACRL Conference, Seattle, Wash., March 13, 2009.

- Hall-Ellis, Sylvia D. *Cataloging in the RDA Environment: Skill Sets, Expectations and Challenges*. Presentation delivered to the ALCTS Research and Publications Committee at the Midwinter Conference, American Library Association, Denver, Colo., January 24, 2009.
- Hall-Ellis, Sylvia D. *LIS Cataloging Education for the 21st Century: Expectations and Challenges*. A panel discussion held at the 95th Annual Conference, Association for Library and Information Science Education, Denver, Colo., January 23, 2009.
- Chu, Clara, Sylvia D. Hall-Ellis, and Mark Winston. *The Doctoral Degree & Building a Career*. A panel discussion delivered at the ALA Office of Diversity Spectrum Doctoral Fellows E.J. Josey Leadership Institute, Midwinter Conference, American Library Association, Denver, Colo., January 20, 2009.
- Hall-Ellis, Sylvia D. and Robert O. Ellett, Jr. *Fundamentals of Cataloging Course: An Overview of the ALCTS Online Course*. Presentation delivered to the ALCTS Big Heads Group, 133rd Annual Conference, American Library Association, Anaheim, Calif., June 30, 2008.
- Hall-Ellis, Sylvia D. *Employers' Expectations for Technical Services Librarians: What We Don't Know*. Presentation delivered to the ALCTS Research and Publications Committee Program, 133rd Annual Conference, American Library Association, Anaheim, Calif., June 28, 2008.
- Hall-Ellis, Sylvia D., Virginia R. Maloney, and Mary Stansbury. *Institutional Responses to Engaged Scholarship: The Carnegie Foundation Engaged University Classification at Two Universities*. Presentation delivered to the 94th Annual Conference, Association for Library and Information Science Education, Philadelphia, Pa., January 11, 2008.
- Hall-Ellis, Sylvia D. *Puzzles, Problems, and Predicaments*. Presentation delivered to the ALCTS Research Discussion Group, 132nd Annual Conference, American Library Association, Washington, D.C., June 23, 2007.
- Hall-Ellis, Sylvia D. *Cataloging Education: A New Emphasis for the Library and Information Science Curriculum*. Presentation delivered to the ALCTS Pre-conference, 132nd Annual Conference, American Library Association, Washington, D.C., June 22, 2007. <http://www.loc.gov/catdir/cpsocareercat.html>
- Ellett, Jr., Robert O. and Sylvia D. Hall-Ellis. *Copy Cataloging Done Smarter*. Presentation delivered to the International Conference on Interdisciplinary Information Sciences and Technologies (InSciT2006), October 25-28, 2006.
- Hall-Ellis, Sylvia D. and Robert O. Ellett, Jr. *Cooperative Cataloging: Challenges and Opportunities for Defense Libraries*. Presentation delivered to the 1st Annual Conference of Defense Libraries, Spanish Ministry of Defense, Madrid, Spain, July 7, 2006.
- Hall-Ellis, Sylvia D. *Cataloger Competencies: Do the Employers Require What the Professors Teach?* Presentation delivered to the ALCTS CCS Heads of Cataloging Discussion Group, 131st Annual Conference, American Library Association, New Orleans, La., June 26, 2006.
- Grealy, Deborah S. and Sylvia D. Hall-Ellis. *From Research to Practice: The Scholarship of Teaching and Learning in LIS Education*. Presentation delivered to the at the 92nd Annual Conference, Association for Library and Information Science Education, San Antonio, Tex., January 18, 2006.
- Hall-Ellis, Sylvia D. *Employers' Expectations for Entry-Level Catalogers: What Position Announcement Data Indicate*. Research paper delivered to the Technical Services Special Interests Group, 91st Annual Conference, Association for Library and Information Science Education, Boston, Mass., January 12, 2005.
<http://dlist.sir.arizona.edu/>

Hall-Ellis, Sylvia D. *Common Errors in MARC Records Prepared by LIS Students: What Does It Mean?* Research paper delivered to the ALCTS CCS Cataloging Norms Discussion Group, Mid-Winter Conference, 90th American Library Association, San Diego, Calif., January 10, 2004.

Hall-Ellis, Sylvia D. *Visual Arts as Foundation for Successful Library Automation: The Rocky Mountain College of Art & Design Experience*. Paper delivered at the 6th Annual Conference of Higher Education, Charleston, S. C., 1993.

Hall, Sylvia D. *Design Elements for Bibliographic Databases: An Overview*. Paper delivered at the 14th Online National Conference, New York, 1983.

Invited Regional Conference Presentations

Hall-Ellis, Sylvia D., Hudson, Christopher D., Brittany Cronin, and Kathryn Michaels. "The Colorado Law Project: Meeting the Public's Need for Legal Information." Panel discussion delivered at the Mountain Plains Library Association Conference, Billings, Mont., April 9, 2011.

Grealy, Deborah S. and Sylvia D. Hall-Ellis. *Education for Information Professionals in New Mexico: Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the New Mexico Library Education Summit, Las Vegas, N.M., September 26, 2005.

Hall-Ellis, Sylvia D. *Public Library-School Library Partnerships*. Presentation delivered at the 3rd Annual Colorado Association of Libraries Conference with the Mountain Plains Library Association, Denver, Colo., October 22, 2004.

Hall-Ellis, Sylvia D. *Learn All You Can – Educational Partnership Opportunities for the Lewis and Clark Bicentennial Commemoration*. Paper delivered at the 3rd Annual Lewis and Clark Bicentennial Council National Planning Conference, Bismarck, N.D., April 26, 1998.

Invited State Conference Presentations

Grealy, Deborah S. and Sylvia D. Hall-Ellis. *Academic Library Leadership Changes: Using Succession Planning and Mentoring*. Presentation delivered at the Minnesota Library Education Conference, St. Cloud, Minn., October 10, 2013.

Hall-Ellis, Sylvia D., Merrie Valliant, and Melissa Powell. *RDA: What Is It and What Do You Need To Do With It At Your Library?* Presentation delivered at the Colorado Library Consortium Spring Conference, Ft. Morgan, Colo., April 26, 2013.

Hall-Ellis, Sylvia D. *Service Learning and the Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 4th LEADS Scholars Orientation, Denver, Colo., August 5, 2009.

Hall-Ellis, Sylvia D. *Service Learning: Enhancement to Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 3rd LEADS Scholars Orientation, Denver, Colo., June 2008.

Hall-Ellis, Sylvia D. *Law Librarianship: A Community Conversation*. Sponsored by the Colorado Association of Law Libraries. Paper delivered at the Colorado Supreme Court Library, Denver, Colo., May 14, 2008.

Hall-Ellis, Sylvia D. *Opportunities and Challenges in Law Librarianship: A Community Conversation*. Presentation delivered at the Sturm College of Law, Denver, Colo., November 7, 2007.

Hall-Ellis, Sylvia D. *Grant Writing Resources for Nursing Professionals*. Presentation delivered at the Presbyterian / St. Luke's Health One Medical Center 1st Annual Research Symposium, Denver, Colo., October 17, 2007.

- Hall-Ellis, Sylvia D. *Project Homeless Connect 4 Event Evaluation – Insights and Lessons Learned*. Presentation delivered at the Homelessness Research Symposium: What is DU Doing about Homelessness in Denver, Denver, Colo., September 14, 2007.
- Hall-Ellis, Sylvia D. *Service Learning and the Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 2nd LEADS Scholars Orientation, Denver, Colo., August 10, 2007.
- Hall-Ellis, Sylvia D. *Education for Information Professionals in a Digital Environment: Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 15th Spring Mountains and Plains Parapros Conference, Denver, Colo., February 24, 2007.
- Hall-Ellis, Sylvia D. *Public Library Service to Spanish-Speaking and Latino Residents in Denver: A Case Study*. Presentation delivered at the 4th Annual Colorado Association of Libraries Conference, Denver, Colo., November 10, 2005.
- Hall-Ellis, Sylvia D. *Education for Information Professionals in a Digital Environment: Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 14th Annual Mountains and Plains Parapros Conference, Aurora, Colo., July 29, 2005.
- Hall-Ellis, Sylvia D. *Educational Opportunities: Library & Information Science Graduate Education at the University of Denver*. Presentation delivered at the 13th Annual Mountains and Plains Parapros Conference, Centennial, Colo., August 6, 2004.
- Hall-Ellis, Sylvia D. *Library Education & Training: Focus on the West: An LIS Faculty Member's Personal Response*. Presentation delivered at the 1st Annual Colorado Association of Libraries Conference, Keystone, Colo., October 18, 2002.
- Hall-Ellis, Sylvia D. *Grant Writing for School Librarians*. Presentation delivered at the 2002 Annual Colorado Education Media Association Conference, Colorado Springs, Colo., February 15, 2002.
- Hall-Ellis, Sylvia D. *Grants – Opportunities for the Future*. Paper delivered at the Southeast Regional Accountability Annual Conference, Lamar, Colo., November 12, 1998.
- Hall-Ellis, Sylvia D. *The Texas Library Connection and Interlibrary Loan: An Experiment in Resource Sharing*. Paper delivered at the Texas Computer Educators' Association Annual Conference, Austin, Tex., February 6, 1997.
- Hall-Ellis, Sylvia D. *Finding Grant Sources on the Internet: A Guide for Librarians*. Paper delivered at the 2nd Annual Institute for School Library Personnel, Pharr-San Juan-Alamo North High School, Pharr, Tex., July 29, 1996.
- Hall-Ellis, Sylvia D. *Mathematical and Logical Thinking: A Critical Intelligence*. Paper delivered at the 3rd Annual Paraprofessional Conference at the University of Texas - Pan American, Edinburg, Tex., March 8, 1996.
- Hall-Ellis, Sylvia D. *Cataloging Trends and Issues: Update Session*. Paper delivered at the 1st Annual Institute for School Library Personnel, South Texas Community College, McAllen, Tex., July 19, 1995.
- Hall-Ellis, Sylvia D. *Grant Writing: Tips and Encouragement for School Librarians*. Paper delivered at the 1st Annual Institute for School Library Personnel, South Texas Community College, McAllen, Tex., July 18 and 19, 1995.
- Hall-Ellis, Sylvia D. *How to Become an Expert Grant Writer*. Paper delivered at the 3rd Annual High School Principals' Academy, South Padre Island, Port Isabel, Tex., June 19, 1995.

- Hall-Ellis, Sylvia D. *Texas Library Study: Results from Regions I and II*. Paper delivered at the 3rd Annual Technology Conference, Texas A&M University, College Station, Tex., November 18, 1994.
- Hall-Ellis, Sylvia D. *Academic Achievement and Middle School Students*. Paper delivered at the 8th Annual Young Adult Conference, Sam Houston State University, Huntsville, Tex., November 5, 1994.
- Hall-Ellis, Sylvia D. *Multimedia Resources for Library Leaders*. Paper delivered at the Institute for Librarians in A Multicultural Environment, Sam Houston State University, Huntsville, Tex., June 10, 1994.
- Hall-Ellis, Sylvia D. *Finding the Resource: Empowering the User, or, the Case for Curriculum Based Subject Access to Learning Resource Center Collections*. Paper delivered at the 81st Annual Texas Library Association Conference, Corpus Christi, Tex., April 12-16, 1994.
- Hall-Ellis, Sylvia D. and William H. Pichette. *Sam Houston State University Makes Use of OCLC/AMIGOS Collection Analysis CD*. Paper delivered at the 81st Annual Texas Library Association Conference, Corpus Christi, Tex., April 12-16, 1994.
- Hall, Sylvia D. *Funding and Library Development in Pennsylvania: A Symbiotic Relationship*. Paper delivered at the Annual Graduate Student Colloquia, University of Pittsburgh, School of Library and Information Science, 1982.
- Hall, Sylvia D. *Leadership for Public Library Trustees*. Paper delivered for the Trustees Division, Pennsylvania Library Association Annual Conference, Lancaster, Penn., 1981.

Seminar and Professional Development Presentations

- Taylor, Meredith, and Sylvia D. Hall-Ellis. *Talent Management and Succession Planning*. ALCTS eForum, held March 22, 2017.
- Hirsh, Sandra, Heather O'Brien, Michelle Holschuh Simmons, Michael Krasulski, and Sylvia D. Hall-Ellis. *Information Services Today: An Introduction. Part 3: Information Services: Roles in the Digital Age*. Rowan and Littlefield in partnership with Library Journal webinar, recorded February 5, 2015.
- Hall-Ellis, Sylvia D. and Jennifer Sweda. *Copy Cataloging in an RDA Environment*. ALCTS eForum, held May 14 and 15, 2013.
- Hall-Ellis, Sylvia D. *Law Librarianship: A Community Conversation*. Sponsored by the Colorado Association of Law Libraries, presented at the Colorado Supreme Court Library, Denver, Colo., May 14, 2008.
- Hall-Ellis, Sylvia D. and Beatrice Z. Gerrish. *Reading and Libraries: Recent Research in Reading*. Presentation at the Ricks Center for Gifted Education, Denver, Colo., March 4, 2008.
- Hall-Ellis, Sylvia D. *Cataloger Competencies: Do the Employers Require What the Professors Teach?* Presentation for the School of Library and Information Science, San José State University, February 12, 2008.
- Hall-Ellis, Sylvia D. and Robert O. Ellett, Jr. *Cooperative Cataloging: Rules, Tools, and Conventions for Building a Multi-institutional Catalog*. Sponsored for the Spanish Ministry of Defense, Madrid, Spain, July 10, 2006.
- Hall-Ellis, Sylvia D. *Cash for Kids: Grant Writing Opportunities for Youth Services Librarians*. Sponsored by the Colorado Young Adult Librarians; presented at Bemis Memorial Library, Littleton, Colo., November 13, 2002.
- Hall-Ellis, Sylvia D. *MARC Records and Authority Control: Planning for Bibliographic Database Migration*. Sponsored and held at the Douglas County Public Library, Castle Rock, Colo., May 28, 2002.

- Hall-Ellis, Sylvia D. *Grant Writing: A Refresher for Librarians*. Sponsored by Library and Information Science Program, College of Education, University of Denver; presented at University Center at Chaparral, August 12, 2000.
- Hall-Ellis, Sylvia D. *Shaking the Money Tree – Basic Grant Writing for Colorado Educators*. Sponsored by the Office of Educational Telecommunications of the Colorado Department of Education.
Pikes Peak Community College, Colorado Springs, Colo., November 16, 1998.
Pueblo School District 60, Pueblo, Colo., November 12, 1998.
University of Northern Colorado, Greeley, Colo., November 10, 1998.
United Technology Educational Partnership, Grand Junction, Colo., November 9, 1998.
- Hall-Ellis, Sylvia D. *Cataloging Multimedia, Kits, Globes and Map Materials in USMARC*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., April 24, 1997 and December 12, 1996.
- Hall-Ellis, Sylvia D. *New Standards for School Library Media Centers*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., April 15, 1997.
- Hall-Ellis, Sylvia D. *The School Library Media Specialist in the 21st Century: Visions for the Future*. Sponsored and hosted by Pharr-San Juan-Alamo Independent School District, Pharr, Tex., April 4, 1997.
- Hall-Ellis, Sylvia D. *Cataloging Sound Recordings and Audio Materials in USMARC*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., March 20, 1997 and November 21, 1996.
- Hall-Ellis, Sylvia D. *Evaluating and Selecting CD-ROMS for School Library Media Collections*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., March 18, 1997.
- Hall-Ellis, Sylvia D. *Cataloging Audiovisual Materials in USMARC*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., February 27, 1997, November 7, 1996 and October 24, 1996.
- Hall-Ellis, Sylvia D. *Introduction to Dialog: Basic Searching Strategies*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., February 14, 1997.
- Hall-Ellis, Sylvia D. *Cataloging Books in USMARC*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., January 30, 1997, October 10, 1996, September 26, 1996 and August 8, 1996.
- Hall-Ellis, Sylvia D. *Advanced Internet Searching Techniques for Librarians*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., January 21, 1997.
- Hall-Ellis, Sylvia D. *Texas Library Connection Full-Text Searching*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., December 13, 1996 and October 25, 1996.
- Hall-Ellis, Sylvia D. *Developing Evaluation Strategies for Grants and Proposals*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., December 10, 1996.
- Hall-Ellis, Sylvia D. *Developing Needs Assessment for Grants and Proposals*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., November 12, 1996.
- Hall-Ellis, Sylvia D. *Texas Library Connection Union Catalog Searching*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., November 8, 1996 and September 6, 1996.
- Hall-Ellis, Sylvia D. *Grant Resources on the Internet*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., October 23, 1996.

- Hall-Ellis, Sylvia D. *Preparing a Response to the Telecommunications Infrastructure Fund Board: Needs Assessment, Professional Development Framework, and Evaluation Strategies*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., October 16, 1996.
- Hall-Ellis, Sylvia D. *Texas Library Connection: Building the Districtwide Bibliographic Database*. Sponsored and hosted by Mercedes Independent School District, Mercedes, Tex., September 13, 1996 and August 8, 1996. Sponsored and hosted by Los Fresnos Consolidated Independent School District, Los Fresnos, Tex., August 12, 1996.
- Hall-Ellis, Sylvia D. *School-to-Work and Special Education: An Inclusive Partnership for Success*. Sponsored and hosted by the Office of Special Education, Region One Education Service Center, Edinburg, Tex., September 11, 1996.
- Hall-Ellis, Sylvia D. *Telecommunications Infrastructure Fund Board: An Overview of Funding for Secondary Schools*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., August 31, 1996.
- Hall-Ellis, Sylvia D. *Cataloging Books, Multimedia, and Realia in USMARC*. Sponsored and hosted by Edinburg Consolidated Independent School District, Edinburg, Tex., August 6, 1996.
- Hall-Ellis, Sylvia D. *Internet Resources for Grant Writers*. Sponsored and hosted by Region One Education Service Center, Edinburg, Tex., April 20, 1996.
- Hall-Ellis, Sylvia D. *Enhanced Grant Writing Skills for Mathematics Educators: Writing Skills for Campus Teams*. Sponsored and hosted by the Office of General Education, Region One Education Service Center, Edinburg, Tex., March 22, 1996.
- Hall-Ellis, Sylvia D. *Internet Resources for Grant Writers*. Sponsored and hosted by the College of Education and Applied Science, Sam Houston State University, Huntsville, Tex., March 9, 1996.
- Hall-Ellis, Sylvia D. *Grant Writing for Mathematics Educators: A Development Process for Campus Teams*. Sponsored and hosted by the Office of General Education, Region One Education Service Center, Edinburg, Tex., March 4, 1996.
- Hall-Ellis, Sylvia D. *Shaking the Money Tree: Preparing Successful Technology Grant Applications*. Sponsored and hosted by the Office of Technology and Media Services, Region One Education Service Center, Edinburg, Tex., February 29, 1996 and April 29, 1996.
- Hall-Ellis, Sylvia D. *District-wide Technology Planning: Technical Assistance for the Texas Education Agency Initiative*. Sponsored and hosted by the Office of Technology and Media, Region One Education Service Center, Edinburg, Tex., February 2, 1996.
- Hall-Ellis, Sylvia D. *Enhanced Grant Writing Skills*. Sponsored and hosted by Pharr-San Juan-Alamo Independent School District, Pharr, Tex., January 27, 1996.
- Hall-Ellis, Sylvia D. *United States Copyright Act of 1976, Video Transmissions, Computer Software and the Internet*. Sponsored and hosted by the Office of Technology and Media, Region One Education Service Center, Edinburg, Tex., January 24, 1996.
- Hall-Ellis, Sylvia D. *The Grant Writing Development Process*. Sponsored and hosted by Pharr-San Juan-Alamo Independent School District, Pharr, Tex., January 20, 1996.
- Hall-Ellis, Sylvia D. *MARC Cataloging of Materials for Library Media Centers*. Sponsored and hosted by the Office of Media Services, Region One Education Service Center for the Donna Independent School District, Donna, Tex., August 17, 1995.

Hall-Ellis, Sylvia D. *Classification*. Sponsored by AJ Seminars, Rockville, Maryland; presented at University Hilton Hotel, Houston, Tex., May 10, 1995.

Hall-Ellis, Sylvia D. *Library Technical Services*. Sponsored by AJ Seminars, Rockville, Maryland; presented at University Hilton Hotel, Houston, Tex., April 26, 1995.

Hall-Ellis, Sylvia D. *Grant Writing: An Introduction for Public School Administrators*. Sponsored and hosted by the Office of Administrative Services, Region One Education Service Center, Edinburg, Tex., April 19, 1995.

Hall-Ellis, Sylvia D. *The School Library Media Specialist in the 21st Century: Visions for the Future*. Sponsored and hosted by the United Independent School District, Laredo, Tex., March 31, 1995.

Hall-Ellis, Sylvia D. *Using USMARC*. Sponsored by AJ Seminars, Rockville, Maryland; presented at University Hilton Hotel, Houston, Tex., March 29, 1995.

Hall-Ellis, Sylvia D. *Library Media Center Policies and Guidelines: How to Prepare for School Board Adoption*. Sponsored and hosted by the Office of Technology and Media Services, La Joya Independent School District, La Joya, Tex., March 10, 1995.

Hall-Ellis, Sylvia D. *Developing District-wide Policies and Guidelines for Library Media Centers*. Sponsored and hosted by the Office of Technology and Media Services, La Joya Independent School District, La Joya, Tex., January 10, 1995.

Hall-Ellis, Sylvia D. *MARC Cataloging of Audiovisual Materials for Library Media Centers*. Sponsored and hosted by the Office of Library Media and Technology Services, Cypress-Fairbanks Independent School District, Houston, Tex., December 1, 1994.

Hall-Ellis, Sylvia D. *The School Library Media Specialist in the 21st Century: Visions for the Future*. Sponsored and hosted by United Independent School District, Laredo, Tex., October 14, 1994.

Hall-Ellis, Sylvia D. *The School Library Media Specialist in the 21st Century: Visions for the Future*. Sponsored and hosted by the Laredo Independent School District, Laredo, Tex., October 7, 1994.

Hall-Ellis, Sylvia D. *MARC Cataloging for Library Media Centers*. Sponsored by the Office of Library Media and Technology Services, Cypress-Fairbanks Independent School District, Houston, Tex., October 5, 1994.

Hall-Ellis, Sylvia D. *Jump to the Head of the Class: Undergraduate Library Resources Available at Sam Houston State University*. Sponsored by the Office of the Associate Vice President for Student Services, Sam Houston State University, Huntsville, Tex., October 4, 1994.

Hall-Ellis, Sylvia D. *CD-ROMs - 1994's Newest and the Best for Secondary Level Media Centers*. Sponsored and hosted by Clear Lake Independent School District, Houston, Tex., June 3, 1994.

Hall-Ellis, Sylvia D. *Introduction to Classification*. Sponsored by AJ Seminars, Rockville, Maryland; presented at Holiday Inn, Market Center, Dallas, Tex., May 18, 1994.

Hall-Ellis, Sylvia D. *Basic Descriptive Cataloging*. Sponsored by AJ Seminars, Rockville, Maryland; presented at University Hilton Hotel, Houston, Tex., May 4, 1994.

Hall-Ellis, Sylvia D. *Shaking the Money Tree - Part II: Writing Successful Grant Applications*. Sponsored by Donna Independent School District, Donna, Texas, and Region One Education Service Center Edinburg, Texas; presented at South Texas Community College Library, McAllen, Tex., April 29, 1994.

Hall-Ellis, Sylvia D. *Using MARC*. Sponsored by AJ Seminars, Rockville, Maryland; presented at Holiday Inn, Market Center, Dallas, Tex., April 6, 1994.

Hall-Ellis, Sylvia D. *Automated Authority Control*. Sponsored by AJ Seminars, Rockville, Maryland; presented at University Hilton Hotel, Houston, Tex., March 23, 1994.

Hall-Ellis, Sylvia D. *Automating the District School Library Media Centers: Choices and Opportunities*. Sponsored and hosted by the Office of Technology and Library Media Services, Fort Bend Independent School District, Sugar Land, Tex., March 4, 1994.

Hall-Ellis, Sylvia D. *Shaking the Money Tree - Part I: Preparing Successful Grant Applications*. Sponsored and hosted by the Office of Library Media Services, Donna Independent School District, Donna, Tex., February 4, 1994.

GRADUATE COURSES TAUGHT

San José State University, School of Library and Information Science

- INFO 249 – Advanced Cataloging and Classification (Fall 2015, 2016; Summer 2016)
- INFO 287 – Special Topics in Cataloging and Classification (Spring 2017, 2018, 2019)
- LIBR 248 – Beginning Cataloging and Classification (Summer 2002, 2003, 2004, 2005, 2006)
- LIBR 249 – Advanced Cataloging and Classification (Summer 2003; Fall 2014; Summer 2015)

University of Denver, Morgridge College of Education

- HED 5991 – Grant Writing in Higher Education (Spring 2011)
- LIS 4010 – Organization of Information (Fall 2002, 2003, 2004, 2005, 2006, 2009; Winter 2005; Spring 2004, 2005, 2006)
- LIS 4020 – Professional Principles and Ethics (Summer 2000)
- LIS 4040 – Management of Libraries and Information Centers (Fall 2010; Spring 2003, 2009 (DS); Winter 2005)
- LIS 4070 – Cataloging and Classification (Winter 2008, 2009, 2010, 2011, 2012; Fall 2009 (DS))
- LIS 4321 – Collection Management (Spring 2005)
- LIS 4326 – LIS Research (Winter 2009 (DS); Spring 2009 (DS))
- LIS 4350 – Adult Materials and Services (Summer 2006, 2009)
- LIS 4379 – Social Sciences Resources (Spring 2009)
- LIS 4400 – Cataloging and Classification (Spring 2000, 2001; Winter 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009; Summer 2005, 2006 – course renumbered LIS 4070, September 2007)
- LIS 4401 – Descriptive Cataloging (Winter 2001; Spring 2002, 2003, 2006, 2007, 2008, 2009; Summer 2005)
- LIS 4402 – Subject Cataloging (Spring 2001, 2009; Summer 2005, 2006, 2007, 2008)
- LIS 4403 – Classification Schemes (Fall 2007, 2008, 2009 (DS))
- LIS 4405 – Authority Control (Winter 2009)
- LIS 4510 – Materials and Services for Children (Winter 2004; Summer 2005)
- LIS 4620 – Grant Writing and Fundraising (Summer 2000, 2002, 2004, 2010; Winter 2006; Fall 2006, 2007, 2008, 2009)
- LIS 4700 – Seminar in Technical Services (Fall 2001)
- LIS 4700 – Seminar in Public Libraries (Summer 2002)
- LIS 4804 – Management of Electronic Records (Spring 2004; Fall 2005)
- LIS 4902 – Capstone Projects (Winter 2003, Spring 2008, 2009, 2011)
- LIS 4910 – Independent Study (every quarter Winter 2000 through Spring 2011)
- LIS 4920 – Service Learning (every quarter Summer 2004 through Spring 2011)
- RMS 4954 – Grant Writing (Summer 2013, 2014)
- RMS 4959 – Content Analysis Methodology (Spring 2015)
- QRM 4978 – Grant Writing (Summer 2011, 2012)

Rutgers University, School of Communication and Information

- SC&I 522 – Cataloging and Classification (Summer 2013)

University of Arizona, College of Behavioral and Social Sciences

- LIS 602 – Cataloging and Classification (Summer 1995)
- LIS 612 – Advanced Online Search and Retrieval (Summer 1995)

Sam Houston State University, College of Education & Applied Science

- LIS 532 - Cataloging and Classification (Fall 1993, 1994, 1995)
- LIS 563 - Advanced Cataloging and Classification (Summer 1994)
- LIS 567 - Research Methods (Spring 1994, Spring 1995)
- LIS 591 - Educational Technology (Spring 1994, 1995)
- LIS 596 - Networking and Computer Technologies in Education (Fall 1993, Summer 1994, Fall 1995)

Dissertations at the University of Denver

- Bowers, Stacey L. *Library Anxiety of Law School Students: A Study Utilizing the Multidimensional Library Anxiety Scale*. Chair, May 5, 2010.
- Fattor, Melissa M. *Student Engagement Differences by Ethnicity and Scale for Ninth Grade Students*. Chair, November 1, 2010.
- Fulton, Roseanne. *A Case Study of Culturally Responsive Teaching in Middle School Mathematics*. Kent Seidel, Chair, June 18, 2009, Outside Chair.
- Grealy, Deborah S. *Tribes and Territories in Library and Information Studies Education*. Bruce Uhrmacher, Chair, June 10, 2008, Committee Member.
- McCord, J. Michael. *Developing a Standard of Care for Educational Malpractice*. Chair, April 15, 2011.
- Priebe, Sarah J. *Distinguishing Effects of Domain and General Knowledge on Passage Fluency and Comprehension*. Jan Keenan, Chair. July 21, 2011, Outside Chair.
- Snyder-Mondragon, Sandra M. *Institutional Factors that Impact the Retention of Graduate Students of Color in Schools of Library and Information Science: A Metaregression of Accredited Library School Statistics on Student Retention and Graduation Rates*. Kathy Green, Chair, July 24, 2009, Committee Member.
- Taylor, Karen Pickles. *Effective Teaching*. Elinor Katz, Chair, July 15, 2009, Outside Chair.
- Thompson, Jennifer. *Distinguishing a Western Women's College: A History of the Curriculum and Student Experience at Colorado Women's College*. Edith W. King, Chair, July 16, 2010, Committee Member.
- Walker, Emelda. *Influence of Organizational Factors on Job Satisfaction of Disability Service Providers at Postsecondary Institutions*. Chair, April 29, 2010.

Dissertation Proposals at the University of Denver

- Bowers, Stacey L. *Library Anxiety of Law School Students: A Study Utilizing the Multidimensional Library Anxiety Scale*. Chair, November 5, 2009.
- McCord, J. Michael. *Developing a Standard of Care for Educational Malpractice*. Edith W. King, Chair. April 23, 2010.
- Thompson, Jennifer. *History of Colorado Women's College*. Edith W. King, Chair, October 30, 2008. Committee Member.
- Walker, Emelda. *Influence of Organizational Factors on Job Satisfaction of Disability Service Providers at Postsecondary Institutions*. Chair, July 21, 2009.

Dissertations at Other Institutions

- Rodríguez-Mori, Howard. *The Information Behavior of Puerto Rican Immigrants to Central Florida, 2003-2009: Grounded Analysis of Six Case Studies Use of Social Networks during the Migration Process*. Kathleen Burnett, Chair, April 10, 2009, Florida State University, Committee Member.
- Schwartz, Brian *More than a Look-up Skill: Medical Information Literacy Education in Osteopathic Medical Schools*. D. Mirah Dow, Chair, July 18, 2017. Emporia State University, Committee Member.

Snow, Karen. *A Study of the Perception of Cataloging Quality among Catalogers*. Shawne D. Miksa, Chair, August 1, 2011. University of North Texas, Committee Member.

Dissertation Proposals at Other Institutions

Schwartz, Brian *More than a Look-up Skill: Medical Information Literacy Education in Osteopathic Medical Schools*. D. Mirah Dow, Chair, December 4, 2015. Emporia State University, Committee Member.

Snow, Karen. *A Study of the Perception of Cataloging Quality among Catalogers*. Shawne D. Miksa, Chair, May 11, 2010. University of North Texas, Committee Member.

Master's Thesis at the University of Denver

Hemingson, Jeff. *Recital Paper*. Lamont School of Music, February 2010, Outside Chair.

Capstones at the University of Denver

Anthony, Alisa. *Correlation of Library and Information Science Program outcomes and Vacant Position Qualifications Listed on the Colorado State Library Jobline by Employers During the Period September 1, 2000 through August 31, 2002*. Chair, Winter Quarter, 2003.

Borden, Donna M. *Improving Emergency Communications Systems: Is a Radio Communications Network the Answer?* Fall Quarter, 2014.

Bowden, Heather L.M. *Exploring Biological Models for Long-term Data Preservation*. Chair, Spring Quarter, 2008.

Casenada, Cassandra Y. *Challenges to the Recruitment, Education, and Retention of Librarians of Color*. Chair, Spring Quarter, 2008.

Chang, Jennifer C. *Legal Research Practice and Preference: A Law Firm Perspective*. Chair, Spring Quarter 2011.

Ellis, Megan S. Fitzgerald. *Design of a Public Library Adult Volunteer Recruitment Program and Training Curriculum*. Chair, Winter Quarter, 2003.

Kircher, Kathy. *Development of a Library Pathfinder for Exobiology and Posting it on the Internet*. Chair, Winter Quarter, 2003.

Melhado, Loretta. *Design of St. John's Episcopal Church Library*. Chair, Spring Quarter, 2008.

Radcliff, Kathy. *Original Cataloging of Archival materials in the HERS Collection in Penrose Library*. Chair, Winter Quarter, 2003.

Sass, Carol Ann. *ACT Periodical Index: Access to Catholic Thinking Periodical Index: Web Index to Select Catholic Periodicals*. Spring Quarter 2000.

Stone, Sergio D. *Conducting Community Analysis for the Bemis Public Library (Littleton, Colorado) Using 2002 U.S. Census Data and the Online Outcome-Based Evaluation Toolkit*. Chair, Winter Quarter, 2003.

Tureson, Tamara. *Design and Use of an Information Audit Tool for Use in a Law Library*. Chair, Winter Quarter, 2003.

Tweed, Beth. *Evaluation of Email Reference Service in a Consumer Health Library Environment*. Chair, Winter Quarter, 2003.

GRANTS AND CONTRACTS

Student Learning in Agriculture STEM through Teacher Professional Development. Research team: Stanton Gartin (PI) and Cyndi Hofmeister, Northeast Junior College; Jeff Cash, Cheryl Sánchez, Anne-Marie Crampton, Lamar Community College; Suzanna Spears, Morgan Community College; Jack Wiley, Kerry Gabrielson, Trinidad State Junior College; Michael J. Miller, Colorado State University; Michael Womochil (Co-PI), Casey Sacks, and Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Agriculture, Agriculture and Food Research Initiative, Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative, \$404,460 (2017-2020)

Leading and Achieving: the Colorado Agriculture Regional Consortium. Research team: Jack Wiley (PI), Kerry Gabrielson, Trinidad State Junior College; Jeff Cash (PI), Cheryl Sánchez, Anne-Marie Crampton, Lamar Community College; Suzanna Spears, Morgan Community College; Cyndi Hofmeister, Northeast Junior College; Michael Womochil (Co-PI), Casey Sacks, and Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Agriculture, Hispanic Serving Institutions Education Grants Program, \$504,414 (2017-2020)

Cyber Prep Program Planning Grant. Research team: Debbie Sagen (PI), Brenda Lauer, Pikes Peak Community College; Gretchen Martin, Koiosa Insights; and, Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Commerce, Regional Alliances and Multi-stakeholder Partnerships to Stimulate (RAMPS) Cybersecurity Education and Workforce Development, \$199,681 (2016-2018)

Career and Technical Education in Colorado: Pathways to Education and Employment. Research team: Heather McKay (PI), Rutgers University; Sarah Heath, Casey Sacks, Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Education, Institute of Education Sciences, \$1,400,000 (2017-2021)

Pre-Alliance Planning Grant Colorado Community College Alliance. Research team: Victor Vialpondo (PI) and Janel Highfill, Community College of Aurora; Heidi Loshbaugh (Co-PI), Community College of Denver; Rick Reeves, Bill McGreevy, Liz Cox, and Kristin Aslin, Red Rocks Community College; Cathy Pellish, Front Range Community College; Samuel DeVries, Arapahoe Community College; Sylvia D. Hall-Ellis, Colorado Community College System. National Science Foundation, Louis Stokes Alliance for Minority Participation (LSAMP), \$86,817 (2016-2017)

Towards Scalable Differentiated Instruction Using Technology-enabled, Competency-based, Dynamic Scaffolding. Research team: Karen Wilcox (PI) and Vijay Kumar, Center for Computational Engineering, Massachusetts Institute of Technology; Flora McMartin, Broad-based Knowledge; Quinsigamond Community College; and, Casey Sacks, and Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Education, First in the World Developmental Grant, \$2,891,882 (2015-2019)

Colorado Strategic Partnerships Emergency Grant. Research team: Elise Lowe-Vaughn (PI), Amy Hodson, Celia Hardin, Barbara McBride, James Newby, Christopher Dewhurst, Nina Holland, Kate Anderson, MaryAnn Roe, Chrystalynn Chrystalynn, Elaine Edon, Mona Barnes, Tom Morgan, Rob Hanni, and Marie Valenzuela, Colorado Department of Labor and Employment; Steve Anton, Joelle Brouner, and, Katie Griego, Colorado Department of Human Services; Rebecca Holmes, Judith Martinez, and Jennifer Jirous, Colorado Department of Education; Emily Templin Lesh, Colorado Workforce Development Council; Cory Everett, Colorado Department of Regulatory Agencies; and, Casey Sacks and Sylvia D. Hall-Ellis, Colorado Community College System. U.S. Department of Labor, Strategic Partnerships Emergency Grant, \$5,000,000 (2015-2017)

CAEL Jump Start Program: Competency-Based Education. Research team: Jerry Migler (PI), Casey Sacks, Debra Cohn, Thomas Hartman, and Sylvia D. Hall-Ellis, Colorado Community College System; Matt Jamison, Front Range Community College; Mike Coste, Red Rocks Community College; Amanda Corum, Pueblo Community College; Janet Colvin, Pikes Peak Community College; and, MaryAnn Matheny, Community College of Denver. Council for Adult and Experiential Learning, \$15,000 (2015)

Summit on the Redesign of Developmental Education. Research team: Jerry Migler (PI), Casey Sacks, and Sylvia D. Hall-Ellis, Colorado Community College System; Chip Nava, Pueblo Community College; Kim Moultny, Arapahoe Community College; Debbie Ulibarri, Trinidad State Junior College; and, Kris Bernard, Front Range Community College. American Association of Community Colleges, \$15,000 (2015-2016)

Equity in Excellence at Colorado Community Colleges. Research team: Keith Howard (PI) and Sylvia D. Hall-Ellis, Colorado Community College System; Estela Mata Bensimon, Center for Urban Education, University of Southern California; and Kerry Gabrielson, Trinidad State Junior College. Colorado Department of Higher Education, Colorado Opportunity Scholarship Program, \$150,000 (2015-2016)

MBA High School of Business in Colorado. Research team: Laurie Urich (PI) and Sylvia D. Hall-Ellis, Colorado Community College System; Rudolph Sumpter and Beatrice Gerrish, Boulder Valley Schools; Keith Curry Lance, RSL Research Group. Colorado Department of Higher Education, Colorado Opportunity Scholarship Program, \$501,295 (2015-2016)

Fullbridge Program in Colorado. Research team: Keith Howard (PI) and Sylvia D. Hall-Ellis, Colorado Community College System; Suzanna Spears, Fort Morgan Community College; and, Cheryl Sánchez and Anne-Marie Compton, Lamar Community College. Colorado Department of Higher Education, Colorado Opportunity Scholarship Program, \$300,000 (2015-2017)

Colorado Community College System Alternative Credit Program. Research team: Jerry Migler (PI), Keith Howard, and Sylvia D. Hall-Ellis, Colorado Community College System. American Council on Education, \$13,000 (2015)

Internationalization in Higher Education. Researcher: Samuel D. Museus. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$8,000 (2014-2015)

International Perspectives on Bilingual Education. Researcher: Sharolyn Pollard-Durodola. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$3,700 (2014-2015)

Cultivating Culturally Relevant and Responsive Curriculum and Pedagogy in College. Researcher: Samuel Museus. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, iRise Grant, \$5,000 (2014-2015)

Project EMERGE (Educational Model for Evaluation and Replicability in Gifted Environments). Research team: Norma Hafenstein (PI) and Bruce Uhrmacher. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Lynde and Harry Bradley Foundation, \$235,000 (2014-2015)

Collecting Asian American Refugee Stories. Researcher: Samuel Museus. Technical reviewer for MCE: Sylvia D. Hall-Ellis. American Educational Research Association, Research Grant, \$5,000 (2014-2015)

Developing Expertise in Teaching K-5 Mathematics. Research team: Julie Sarama (PI) and Douglas H. Clements (Co-PI), in partnership with the School of Education at the University of Michigan. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, \$130,344 (2013-2015)

Investigation of the Long-Term Outcomes for Special Education Students. Researcher: Antonio Olmos-Gallos. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Jefferson County School District, Office of Assessment, \$40,000 (2014)

Refugee Community Collaboration. Researcher: Vicki Tomlin (PI) in partnership with the African Community Center and Jewish Family Service. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, \$14,854 (2014-2015)

Access to Mathematics for All. Research team: Richard S. Kitchen (PI), Nicole M. Russell (Co-PI), and Terrence Blackman (Co-PI), Curriculum Studies and Teaching Program, Morgridge College of Education; Álvaro Árias (Co-PI, Department of Mathematics); and, James Gray (Co-PI), Department of Mathematics, Community College of Aurora. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, The Robert Noyce Scholarship Program, Capacity Building Project, \$349,926 (2014-2016)

Cognitive Test Battery for Intellectual Disabilities. Research team: Karen Riley (PI), Lyndsay Agans, Jessica Lerner, and Karin Dittrick-Nathan in partnership with David Hessel (PI), The MIND Institute at the University of California – Davis, and Elizabeth Berry-Kravis, Rush University Medical Center. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Institutes of Health, Outcome Measures for Use in Treatment Trials for Individuals with Intellectual and Developmental Disabilities (R01), \$2,499,996 (\$588,672 at DU) (2014-2019)

Broadening Participation in Engineering among Women and Latino/as: A Longitudinal, Multi-Site Study. Researcher: Patton Garriott (PI) in partnership with the University of North Dakota and the University of Missouri. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, HER Core Research, \$677,390 (\$69,992 at DU) (2014-2019)

Designing a Teacher Evaluation System to Improve Teacher Effectiveness for Culturally and Linguistically Diverse Learners. Research team: María del Carmen Salazar (PI), Jessica Lerner, and Kathy Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Professional Research Opportunities for Faculty, \$29,988 (2014-2016)

Developing a College-Going Culture in Latina/O Families: Exploring the Influence of Funds of Knowledge on Family Outreach Programs. Researcher: Judy Marquez Kiyama. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Professional Research Opportunities for Faculty, \$18,720 (2014-2016)

Assessment of Quality of Life in Neural Implantation Surgery for the Treatment of Parkinson's Disease. Researcher: Cynthia McRae. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$3,967 (2014-2015)

Pura Vida: Cloud Forest, Curriculum and Cross-Cultural Study. Research team: Norma Hafenstein (PI) and Bruce Uhrmacher (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$8,000 (2014-2015)

Online Course Development for Curriculum and Instruction. Researcher: Ruth Chao. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$3,000 (2014)

Online Course Development for Curriculum and Instruction. Researcher: María del Carmen Salazar. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$3,000 (2014)

Online Course Development for Curriculum and Instruction. Researcher: Jessica Lerner. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$3,000 (2014)

Online Course Development for Curriculum and Instruction. Researcher: Duan Zhang. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$3,000 (2014)

The Mathematics Education of African Americans, 1866 – 1954. Researcher: Nicole M. Russell. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Academy of Education, Spencer Foundation Postdoctoral Fellowship, \$55,000 (2014-2016)

- Early Childhood Care and Education Study*. Research team: Carrie Germeroth (PI), Melissa Mincic, and Douglas H. Clements. Technical reviewer for MCE: Sylvia D. Hall-Ellis. State of North Dakota, Department of Public Instruction, \$73,500 (2013-2014)
- Graduate Level Specialty in Addiction Counselor Training with Emphasis on Integration of Native American Specific Content*. Research team: Ruth Chao (PI) and Michael J. Faragher (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. The Galena Foundation, \$289,732 (2013-2016)
- The Collecting Asian American and Pacific Islander Refugee Stories (CARS) Project*. Researcher: Samuel Museus. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, \$15,000 (2014)
- Parents in Transition: A Multiple Case Study of Parent and Family Orientation Programs*. Researcher: Judy Marqu ez Kiyama. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Faculty Research Fund, \$1,500 (2014-2015)
- The Sistah Network: Black Women Graduate Students Supporting and Retaining Each Other*. Researcher; Nicole M. Russell. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Faculty Research Fund, \$2,708 (2014-2015)
- Evaluation of the Northeast Denver Babies Ready for College Program*. Research team: Carrie Germeroth (PI), Melissa Mincic, and Douglas H. Clements. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Mile High Montessori, \$9,922 (2013-2014)
- Developing Teaching Expertise in K-5 Mathematics*. Research team: Julie Sarama (PI) and Douglas Clements (University of Denver), in partnership with Timothy Boerst (PI), Meghan Shaughnessy, Deborah Ball, Hyman Bass (School of Education at the University of Michigan). Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, \$449,827 (\$130,344 at the University of Denver) (2013-2015)
- Early Learning Care and Education Study Program Grant for the State of North Dakota*. Research team: Carrie Germeroth (PI), Melissa Mincic, and Sheridan Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. State of North Dakota Department of Public Instruction, \$73,500 (2013-2014)
- Local Professional Learning Community for School Leaders*. Research team: Susan Korach (PI), Kristina Hesbol, and Rebecca McClure. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Education Development Center, \$10,950 (2013)
- Healthy Eaters, Lifelong Movers 2: Implementing Evidence-Based School Environment, Policy, and Curricular Changes to Increase Opportunities for Healthy Eating and Physical Activity in Low Income, Rural Colorado*. Research team: Elaine Berlansky, University of Colorado at Denver (PI), Nicholas Cutforth, University of Denver (Co-PI), and Allison Reeds. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Health Foundation, \$3,103,108 (2013-2017)
- Hughes Rare Books Library Room Renovation in the Sturm College of Law*. Project team: Patti H. Marks, Sylvia D. Hall-Ellis, and Leigh Elliott. Mabel T. Hughes Charitable Trust, \$34,000 (2013-2014)
- The Promise Center Partnership with the Marsico Institute for Early Learning and Literacy and the City and County of Denver*. Research team: Karen Riley (PI), Douglas H. Clements (Co-PI), and Sheridan Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. The Piton Foundation, \$223,468 (2013-2014)
- Center of Excellence for Problem Gambling*. Research team: Ruth Chao (PI) and J. Mike Faragher. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Department of Behavioral Health, \$68,021 (2012-2013)
- United Way Implementation and Validation Review*. Research team: Douglas H. Clements (PI), Amanda Moreno, and Sheridan Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Mile High United Way, \$19,737 (2013)

Math/Science Partnership in Rural Districts. Research team: Kristen Bunn (PI, Eagle County Schools), Paul Michalec (Co-PI), and Alegra Reiber. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Department of Education, Colorado's Mathematics and Science Partnership Program, \$750,000 (2013-2014)

Mathematics and Science Education of African Americans. Research team: Nicole Russell (PI), Sylvia D. Hall-Ellis, Steve Fisher (Penrose Library). Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Professional Research Opportunities for Faculty, \$29,994 (2013-2015)

Online Course Development for Curriculum and Instruction. Researcher: Nicole Russell. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$3,000 (2013)

Discourse and Opportunity: Undocumented Students and Higher Education Policy. Researcher: Ryan Gildersleeve. Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Academy of Education, Spencer Foundation Postdoctoral Fellowship, \$55,000 (2012-2014)

An Anthropological Study of the Latino Graduation Ceremony. Researcher: Ryan Gildersleeve. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Spencer Foundation, \$39,900 (2012-2013)

Fragile-X and Pharmaceutical Company: Clinical Trial of AFQ056. University of California – Davis Children's Hospital MIND Institute (Sacramento), Children's Hospital Denver, and Rush Children's Hospital at Rush University Medical Center (Chicago). Karen Riley, PI. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Novartis Pharmaceuticals Corporation, \$394,206 (2012-2014)

Project Engage, Phase 2, a DAPRA Grant in partnership with Total Immersion Systems, Inc., and Texas A&M University. Research team: Karen Riley (PI) and Lyndsay Agans (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. U.S. Department of Defense, \$60,000 (2011-2013)

International School Psychology Practicum Exchange. Researcher: Gloria L. Miller. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, \$14,951 (2012-2013)

Online Course Development for Curriculum and Instruction. Research team: Bruce Uhrmacher (PI) and Norma Hafenstein (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Teaching and Learning, \$18,193 (2012-2014)

Writers in the Schools. Research team: Karen Riley (PI) and Amanda Moreno (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Humanities, \$4,965 (2012-2013)

Learning Ecosystem Validation Grant. Research team: Karen Riley (PI), Lyndsay Agans, Kent Seidel, and Shimelis Assefa. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Bill & Melinda Gates Foundation, \$315,000 (2012-2013)

Project Words of Oral Reading and Language Development (WORLD). Research team: Jorge E. Gonzalez (PI), Texas A&M University; Laura Saenz (Co-PI), University of Texas – Pan American; and, Sharolyn Pollard-Durodola (Co-PI), University of Denver. Technical reviewer for MCE: Sylvia D. Hall-Ellis. U.S. Department of Education, Institute of Education Sciences, \$53,354 (2012-2015); award \$640,718, transfer from Texas A&M University

Increasing the Efficacy of an Early Mathematics Curriculum with Scaffolding Designed to Promote Self-Regulation. Research team: Douglas H. Clements (PI) and Julie Sarama (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. U.S. Department of Education, Institute of Education Sciences, \$1,445,315 (2008-2014); award \$4,541,975, transfer from University at Buffalo, The State University of New York

- Using Rule Space and Poset-based Adaptive Testing Methodologies to Identify Ability Patterns in Early Mathematics and Create a Comprehensive Mathematics Ability Test.* Research team: Douglas H. Clements (PI) and Julie Sarama (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, \$323,791 (2010-2014); award \$1,194,944, transfer from University at Buffalo, The State University of New York
- Comprehensive Postdoctoral Training in Scientific Education Research.* Researcher: Julie Sarama (PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. U.S. Department of Education, Institute of Education Sciences, \$133,458 (2010-2014); award \$613,353, transfer from University at Buffalo, The State University of New York
- Longitudinal Study of a Successful Scaling Up Project: Extending TRIAD.* Research team: Douglas H. Clements (PI), Julie Sarama (Co-PI), and Abt Associates (Carolyn Layzer, Fatih Unlu, Laurie Bozzi, Lily Fesler, Alina Martinez, Cristofer Price, James van Orden). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Institute of Education Sciences, \$384,940 (2011-2015; award \$1,250,286, transfer from University at Buffalo, The State University of New York
- Early Childhood Education in the Context of Mathematics, Science, and Literacy.* Research team: Julie Sarama (PI), Douglas H. Clements (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. National Science Foundation, \$990,020 (2010-2014; award \$2,285,228, transfer from University at Buffalo, The State University of New York
- Early Childhood Clearinghouse Information Center Redesign.* Research team: Karen Riley (PI) and Amanda Moreno (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Office of the Lt. Governor of Colorado, \$12,000 (2012-2013)
- Morgridge Rural Educational Leadership Initiative.* Research team: Lyndsay Agans (PI), Linda Brookhart (Co-PI), Susan Korach, and Rebecca McClure. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Morgridge Family Foundation, \$100,000 (2012-2014)
- Center of Excellence for Problem Gambling.* Research team: Patrick Sherry (PI) and J. Mike Faragher. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Department of Behavioral Health, \$55,000 (2012-2013)
- Intermodal Transportation Institute Research Initiatives.* Researcher: Patrick Sherry. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University Transportation Centers Program, Research and Innovative Technology Administration, U.S. Department of Transportation. \$600,000 (2012-2014)
- Mile High United Way Social Innovation Fund Early Literacy Initiative.* Gloria L. Miller, PI, Amanda Moreano, Kim Hartnett-Edwards, and Sheridan Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Mile High United Way, \$89,992 (2012-2013)
- International School Psychology Practicum Exchange.* Researcher: Gloria L. Miller. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, \$1,000 (2012-2013)
- Refugee Student Art Outreach.* Researcher: Karin Dittrick-Nathan. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Faculty Research Fund, \$3,000 (2012-2013)
- Resistance, Resilience, and Reciprocity: Centering the Voices of Black Doctoral Women with Faculty Aspirations.* Researcher: Nicole M. Russell. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Faculty Research Fund, \$2,965 (2012-2013)
- Assessing Learning through Student Notebooks.* Research team: Keith Miller, Nancy Sasaki, and Kathy Green. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Professional Research Opportunities for Faculty, \$30,000 (2012-2014)

International School Psychology Practicum Exchange. Researcher: Gloria L. Miller. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$2,000 (2012-2013)

ELO in Colorado. Research team: Cynthia Hazel and Duan Zhang. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Legacy Foundation, \$150,000 (2012-2013)

Creating Online LIS Courses. Research team: Mary C. Stansbury (PI), Shimelis Assefa, Denise Anthony, Xiao Hu, and Krystyna Matusiak. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Teaching and Learning, \$15,000 (2011-2013)

Maritime Piracy Seminar. Researcher: Ved Nanda, The Nanda Center, Sturm College of Law. Technical reviewer for Sturm College of Law: Sylvia D. Hall-Ellis. Arsenault Family Foundation, \$15,000 (2012-2013).

Early Childhood Librarianship: An Interdisciplinary, Experiential Learning MLIS. Researcher: Mary C. Stansbury (PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Laura Bush's 21st Century Librarians Program, Institute for Museums and Library Services, \$249,066 (2012-2014)

Learning Ecosystem Planning Grant. Research team: Karen Riley (PI), Lyndsay Agans, Kent Seidel, and Shimelis Assefa. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Bill & Melinda Gates Foundation, \$281,217 (2011-2012)

Advanced Service Learning Practitioner Faculty Grant, Sylvia D. Hall-Ellis, University of Denver, Center for Community Engagement and Service Learning, \$400 (2011)

Evaluating and Enhancing the EspeciallyMe Program. Research team: Lori D. Patton and Nicole Russell. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, Public Good Fellowship Grant, \$24,780 (2012)

Choosing Excellence: Let Every Child Bloom. Research team: Shimelis Assefa (PI) and Mary C. Stansbury (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Community Engagement and Service Learning, Public Good Grant, \$7,657 (2012)

K-8 STEM Content Specific Professional Development to Improve Elementary Student Achievement. Research team: Kent Seidel (PI), Nicole Russell (Co-PI), Kimberly Hartnett-Edwards, Paul Michalec, Jeff Farmer, Keith Miller, Alegra Reiber, and Nancy Sasaki. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Department of Education, Improving Teacher Quality Grant, (Title II ESEA), \$307,299 (2011-2012)

Building a Better Principal Pipeline to Boost Student Achievement. Researcher: Susan Korach. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Denver Public Schools; a subcontract from the Wallace Foundation Grant, \$170,000 (2011-2017)

Center of Excellence for Problem Gambling. Research team: J. Mike Faragher (Co-PI) and Bobbie Vollmer (PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Department of Behavioral Health, \$79,999 (2011-2012)

An Exploration of Novice Teachers' Core Competencies: Impacts on Student Achievement, and Effectiveness of Preparation. Research team: Kent Seidel (PI), Kathy Green (Co-PI), Kimberly Hartnett-Edwards, and Duan Zhang. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Institute of Education Sciences, Effective Teachers and Effective Teaching, \$990,987 (2012-2015)

Project Engage, a DAPRA Grant in partnership with Total Immersion Systems, Inc., and Texas A&M University. Research team: Karen Riley (PI) and Lyndsay Agans (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. U.S. Department of Defense, \$49,964 (2011-2014)

User-centered Evaluation of Music Search Engines. Researcher: Xiao Hu. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Faculty Research Fund, \$2,931 (2011-2012)

Educational Practicum in Vietnam and China to Promote the Inclusion of Young Children with Disabilities. Researcher: Gloria L. Miller. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Office of Internationalization, \$5,000 (2011-2012)

Evaluation of Colorado's Enhancing Quality in Infant-Toddler (EQIT) Initiative. Research team: Virginia R. Maloney and Amanda Moreno. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Buell Foundation, \$395,884 (2011-2013)

Creating Engaging Environments to Teach Pre-Algebra Mathematics to Elementary Students. Research team: Álvaro Arias, Mario López, María del Carmen Salazar, and Lyndsay Agans. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver Interdisciplinary Grant, \$60,000 (2011-2012)

Morgridge Education Technology Accessible (META) Resource Project. Research team: Lyndsay Agans (PI) and Shimelis Assefa (Co-PI). Technical reviewer for MCE: Sylvia D. Hall-Ellis. Morgridge Family Foundation, \$36,000 (2011)

MCE Connect: A 21st Century Framework for Faculty Development. Research team: Bruce Uhrmacher (PI), Shimelis Assefa (Co-PI), Lyndsay Agans (Co-PI), Kimberly Hartnett-Edwards, Norma Hafenstein, Xiao Hu, Paul Michalec (Co-PI), María del Carmen Salazar (Co-PI), and Sandra Snyder-Mondragon. Technical reviewer for MCE: Sylvia D. Hall-Ellis. University of Denver, Center for Teaching and Learning, \$22,355 (2011-2012)

Parent Education and Parent Leadership and Advocacy. Research team: Virginia Maloney (PI) and Amanda Moreno, Marsico Institute for Early Learning and Literacy. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Health Foundation, \$27,358 (2010-2011)

Intentional School Culture. Researcher: Cynthia Hazel. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Denver Public Schools, \$38,040 (2010-2011)

Healthy Eaters, Lifelong Movers: Implementing Evidence-Based School Environment, Policy, and Curricular Changes to Increase Opportunities for Healthy Eating and Physical Activity in Low Income, Rural Colorado. Research team: Elaine Berlansky, University of Colorado at Denver (PI), Nicholas Cutforth, University of Denver (Co-PI), and Allison Reeds. Technical reviewer for MCE: Sylvia D. Hall-Ellis. Colorado Health Foundation, \$1,683,277 (2011-2014)

Second Life Learning Community. Research team: Don McCubbrey (PI), Sylvia D. Hall-Ellis (Co-PI), Walter LaMendola, and Paul Novak. University of Denver, Center for Teaching and Learning, \$13,000 (2010-2011)

Reintroducing the Value of Law Librarians to Academic and Public Librarians in Colorado through the Identification and Use of Emerging Technologies. Research team: Sylvia D. Hall-Ellis (Co-PI), Stacey L. Bowers (PI), and Christopher Hudson, in partnership with Denver Public Library, Arapahoe Library District, and the Colorado State Supreme Court Library. University of Denver, Center for Community Engagement and Service Learning, \$5,773 (2010-11)

Reintroducing the Value of Law Librarians to Public Librarians through the Identification and Use of Emerging Technologies and Resources. Research team: Stacey Bowers (PI) and Sylvia D. Hall-Ellis (Co-PI). American Association of Libraries, Wolters Kluwer Law & Business Grant Program, \$2,725 (2010-2011)

Faculty Service Learning Pod. Research team: María del Carmen Salazar and Nicholas Cutforth (Curriculum and Instruction Program), Frank Tuitt (Higher Education Program), Cynthia Hazel and Gloria Miller (Child, Family, and School Psychology Program), and Sylvia D. Hall-Ellis (Library and Information Science Program). University of Denver, Center for Community Engagement and Service Learning, \$8,000 (2010-2011)

Lincoln Collaborative. Research team: Antonio Esquibel (Principal, Lincoln High School), María del Carmen Salazar (Curriculum and Instruction Program), and Sylvia D. Hall-Ellis. School Improvement Grant, Denver Public Schools, \$375,000 (2010-2012)

Future LEADers of America: Leaders III. Research team: Denver Public Library (Kristen Svendsen, PI), the University of Denver (Sylvia D. Hall-Ellis), the Colorado Chapter of REFORMA (Orlando Archibeque), and the Colorado Association of Libraries (Martin Garnar). Laura Bush's Recruiting Librarians for the 21st Century Program, Institute for Museums and Library Services, \$988,366 (2009-2012)

Teaching for Success in the Library Environment: LIS 4030 in Library 2.0. Research team: Deborah S. Grealy (PI) and Sylvia D. Hall-Ellis (Co-PI). University of Denver, Center for Teaching and Learning, \$ 9,350 (2009-10)

Writing Group Faculty Grant, Sylvia D. Hall-Ellis, University of Denver, Center for Community Engagement and Service Learning, \$750 (2008-2009)

Collaborative Learning Faculty Grant, Sylvia D. Hall-Ellis, University of Denver, Center for Teaching and Learning, \$1,500 (2008)

Connecting Information Literacy to Learning. Research team: Lori Micho, Merrie Valliant, Amanda Samland, and Sylvia D. Hall-Ellis. Colorado State Library, LSTA Discretionary Grant Program, \$19,548 (2008-2009)

Law Librarianship Fellows Program. Research team: Sylvia D. Hall-Ellis (PI), Stacey Bowers (Co-PI), and Christopher Hudson, Westminster Law Library. Laura Bush's 21st Century Librarians Program, Institute for Museums and Library Services, \$999,370 (2008-2012)

Grant Writing in a Cooperative Learning Environment. Sylvia D. Hall-Ellis. University of Denver, Center for Teaching and Learning, \$2,000 (2008-2009)

Project Homeless Connect 6 Event Evaluation. Research team: Sylvia D. Hall-Ellis and Duan Zhang. University of Denver Center for Community Engagement and Service Learning, \$9,785 (2008)

Project Ecuador: International Learning Service Libraries – A Faculty Development Experience in Ecuador. Sylvia D. Hall-Ellis, Office of Internationalization, University of Denver, \$600 (2007)

Project Ecuador: International Learning Service Libraries – A Faculty Development Experience in Ecuador. Sylvia D. Hall-Ellis, International Service Learning Office, University of Denver, \$400 (2007)

Project Homeless Connect 5 Event Evaluation. Research team: Sylvia D. Hall-Ellis and Duan Zhang. University of Denver Center for Community Engagement and Service Learning, \$1,000 (2007)

Project Homeless Connect 4 Event Evaluation. Research team: Sylvia D. Hall-Ellis and Duan Zhang. University of Denver Center for Community Engagement and Service Learning, \$4,595 (2007)

Future LEADers of America: Leaders II. Research team: Denver Public Library (Kristen Svendsen, PI), the University of Denver (Sylvia D. Hall-Ellis), and the Colorado Chapter of REFORMA (Orlando Archibeque). Laura Bush's Recruiting Librarians for the 21st Century Program, Institute for Museums and Library Services, \$988,518 (2007-2010)

Strategic Planning Assistance for the Denver Medical Library. Sylvia D. Hall-Ellis. Denver Medical Library, Inc., \$30,000 (2006-2007)

Destiny Software for JMAC Student Lab. Sylvia D. Hall-Ellis, gift from the Sagebrush Corporation, Minneapolis, Minnesota, \$10,000 (2006)

- Libraries: Tools for Education and Development Worldwide: A Faculty Development Experience in France.* Sylvia D. Hall-Ellis, Office of Internationalization, University of Denver, \$800 (2005)
- Denver Public Library: Opportunities for Change.* Sylvia D. Hall-Ellis, Colorado Community Based Research Network, \$2,000 (2005)
- Future LEADers of America.* Research team: Denver Public Library (Letty Icolari and Steve Taylor, PIs), Emporia State University (Jim Agee), and the University of Denver (Sylvia D. Hall-Ellis). Recruiting Librarians for the 21st Century Program, Institute for Museums and Library Services, \$670,315 (2005-2008)
- American Association of University Professors Summer Institute Professional Development Grant.* Sylvia D. Hall-Ellis, American Association of University Professors, \$300 (2005)
- Beta Phi Mu Alumni Tea.* Sylvia D. Hall-Ellis, gift from the Office of Alumni and Parent and Relations, University of Denver, \$2,000 (2005)
- Spectrum Software for LIS Student Lab.* Sylvia D. Hall-Ellis, gift from the Sagebrush Corporation, Minneapolis, Minnesota, \$5,000 (2005)
- Developing Research Capacity in Community Organizations and Residents through Training and Technical Assistance.* Nicholas J. Cutforth (PI) and Sylvia D. Hall-Ellis. Piton Foundation, \$25,000 (2005-2006)
- Libraries: Tools for Education and Development Worldwide: A Faculty Development Experience in Argentina.* Sylvia D. Hall-Ellis, Office of Internationalization, University of Denver, \$500 (2004)
- Developing Research Capacity in Community Organizations and Residents through Training and Technical Assistance.* Research team: Nicholas J. Cutforth (PI), Gary Lichtenstein and Sylvia D. Hall-Ellis, Piton Foundation, \$25,000 (2003-2004)
- Increasing Spanish-Speaking and Hispanic Diversity among Library and Information Science Students at the University of Denver: Development of a Student Recruitment Model.* Researcher: Sylvia D. Hall-Ellis (PI), Office of Multicultural Excellence, University of Denver, \$2,750 (2003-2004)
- Collection Development Enrichment to Support the Cataloging & Classification Specialization and School Librarianship within the Library & Information Science Program at the University of Denver.* Research team: Sylvia D. Hall-Ellis (PI) and Deborah S. Grealy. Women's Library Association, University of Denver, \$4,000 (2003)
- Collection Development Enrichment to Support the Library & Information Science Program at the University of Denver.* Research team: Deborah S. Grealy (PI) and Sylvia D. Hall-Ellis. Women's Library Association, University of Denver, \$4,000 (2001)
- Wireless LAN for Library Education.* Research team: Deborah S. Grealy (PI) and Sylvia Hall-Ellis. University of Denver, Center for Teaching and Learning, \$24,000 (2001-2002)
- Upward Bound – A Program for South Texas Youth.* Research team: Monte Churchill, Executive Director of Community Relations; Gary R. Saucedo, Outreach Coordinator; Raymond Hernandez, (PI) Associate Dean for Student Success; and Sylvia D. Hall-Ellis, South Texas Community College (McAllen, Texas). U.S. Department of Education, Office of Postsecondary Education, \$2,672,003 (1999-2003)
- Write Now! Improving Elementary Students' Writing Skills.* Research team: Caryl G. Thomason, Assistant Superintendent (PI); Karen Tankersley, Principal; and, Hal Anderson, Director of Technology, Cheyenne Mountain School District 12 (Colorado Springs, Colorado); and Sylvia D. Hall-Ellis. Colorado Department of Education, Educational Telecommunications Unit, \$189,453 (1999-2001)

Operation Quick Start -- Distance Learning in Rural Colorado. Research team: Randal Weigum, Technology Coordinator (PI); Bonnie Barns, Director of Federal Programs and Staff Development; and, Adam "Joe" Raskop, Executive Director, Southeastern Board of Cooperative Educational Services (Lamar, Colorado); and Sylvia D. Hall-Ellis. Colorado Department of Education, Educational Telecommunications Unit, \$400,000 (1999-2001)

Advanced Technological Training for Information Professionals for the 21st Century. Research team: Mario Reyna, Division of Business Director (PI) and Sylvia D. Hall-Ellis, South Texas Community College (McAllen, Texas). Phi Delta Kappa and the National Science Foundation, \$250,000 (1999-2001)

Working Connections – Training Information Technologies Professionals for the 21st Century. Research team: Mario Reyna, Division of Business Director (PI) and Sylvia D. Hall-Ellis, South Texas Community College (McAllen, Texas). Microsoft Corporation and the American Association of Community Colleges, \$1,147,775 (1999-2001)

The ROAD (Research Oriented Amplification of Development to Literacy) Program. Research team: Deborah J. Leong (PI), Metropolitan State University; Elena Bodrova, Metropolitan State University; Dmitri Semenov, Robert J. Marzano, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). Hewlett-Packard Foundation, \$25,000 (1998-1999)

Press to Literacy. Research team: Deborah J. Leong (PI), Metropolitan State University; Elena Bodrova, Metropolitan State University; Dmitri Semenov, Robert J. Marzano, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). The Denver Post and the Robert S. McCormick Foundation, \$49,818 (1998-1999)

International Telementor Center. Research team: David Neils, David B. Frost (PI), and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). Hewlett-Packard Philanthropy, \$100,000 (1998-1999)

America Reads: Providing Tutor Training for the America Reads Challenge. Research team: Louis F. Cicchinelli (PI) and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). U.S. Department of Education, Office of Educational Research and Improvement, \$306,000 (1998-1999)

Comprehensive School Reform. Research team: Louis F. Cicchinelli (PI), J. Timothy Waters, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). U.S. Department of Education, Office of Educational Research and Improvement, \$285,000 (1998-1999)

Sustainable Energy Education (SEE) Program for Grades 4-8: Preparing Today's Youth for Lifelong Learning and Responsible Actions in Energy Conservation. Research team: Mary Gromko, Colorado Department of Education; Gene McCarthy, Rocky Flats Field Office, U.S. Department of Energy; Gina Kissell, National Renewable Energy Laboratory; and Barbara L. McCombs (PI), Janet L. Bishop, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). State of Colorado Governor's Office for Energy Conservation, \$499,936 (1997-1999)

Review of Kansas Curriculum Standards in Mathematics and Language Arts. Research team: Robert J. Marzano (PI), John S. Kendall, David B. Frost, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). Submitted to the Kansas State Department of Education, \$25,903 (1998)

International Telementor Center. Research team: David Neils, John Kuglin, Chris Rapp, David B. Frost (PI), and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). Hewlett-Packard Company, \$54,752 (1998)

Genesis Mission: Education Public Outreach. Developed in partnership by the Jet Propulsion Laboratory, California Institute of Technology, Los Alamos National Laboratory, Lockheed Martin Astronautics, and the Mid-continent Regional Educational Laboratory (Aurora, Colorado). Research team: John T. Sutton (PI), Alice Krueger, Martha Henry, Greg Rawls, Shae Isaacs, Jeff Johnson, Deb Jordan, Arlene Mitchell, David B. Frost, Jana Caldwell, J. Timothy Waters, and Sylvia D. Hall-Ellis. National Aeronautics and Space Administration, \$139,700,000; subcontract award, \$4,750,000 (1997-2007)

North Dakota Mathematics Assessment Project. Developed in partnership by the North Dakota Department of Education and Mid-continent Regional Educational Laboratory (Mid-continent Regional Educational Laboratory). Research team: Ann Clapper, Clarence Bina, Greg Gallagher, North Dakota Department of Education; Don Burger (PI), Hillary Michaels, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). U.S. Office of Education, \$1,618,214; subcontract award, \$389,076 (1997-2001)

Pacific Resources for Education and Learning Distance Education: Project Evaluation. Developed in partnership by the Pacific Educational Community, the Pacific Resources for Education and Learning (PREL), and Mid-continent Regional Educational Laboratory (McREL). Research team: John W. Kofel (PI), Executive Director, PREL; J. Timothy Waters, Executive Director; Joan Buttram, Robert Keller, and Sylvia D. Hall-Ellis, Mid-continent Regional Educational Laboratory (Aurora, Colorado). U.S. Office of Education, Star Schools Program, \$10,000,000; subcontract award, \$500,000 (1997-2002)

Identification of Bilingual Gifted and Talented Children: A Comprehensive School Grants for Bilingual Education. Developed in partnership by Hidalgo (Texas) ISD, Los Fresnos (Texas) CISD, Progreso (Texas) ISD, University of Texas – Pan American (Edinburg, Texas), and Education Service Center, Region One (Edinburg, Texas). Research team: Hilda Medrano, Dean, College of Education, University of Texas – Pan American; Linda Phemister (PI), Janie Navarro, and Sylvia D. Hall-Ellis, Education Service Center, Region One. U.S. Department of Education, Office of Bilingual Education and Minority Languages Affairs, \$1,670,633 (1997-2002)

Academics 2000: First Things First -- The Texas Goals 2000. Developed for Jim Hogg (Hebbronville, Texas) County ISD, Mirando City (Texas) ISD, and San Isidro (Texas) ISD. Research team: Hilda Medrano, Dean, College of Education, University of Texas - Pan American (Edinburg, Texas); Angie Lehmann, Amy Mares, Ellen Gonzalez (PI), and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg, Texas). Texas Education Agency, \$339,987 (1997-2000)

Southwestern Bell's Learning Communities Initiative. Developed for Tech Prep of the Rio Grande Valley, Inc. (Harlingen, Texas); the Center for Professional Teacher Development, University of Texas – Brownsville; Teach for America – Rio Grande Valley (McAllen, Texas); and Education Service Center, Region One (Edinburg, Texas). Research team: Patricia G. Bubb, Executive Director (PI), Tech Prep of the Rio Grande Valley; Martin Winchester, Executive Director, Teach for America – Rio Grande Valley; Aileen Johnson, Director, School of Education, University of Texas – Brownsville; and Sylvia D. Hall-Ellis. Southwestern Bell Foundation, \$100,000 (1997-1998)

Texas School to Work: Regional Implementation. Developed for Tech Prep of the Rio Grande Valley, Inc. (Harlingen), South Texas Community College (McAllen), Texas State Technical College (Harlingen), Texas Southmost College (Brownsville), Empowerment Zone of the Rio Grande Valley (Mercedes), Project VIDA (Weslaco), Youth Fair Chance (McAllen), and Education Service Center, Region One (Edinburg). Research team: Patricia G. Bubb (PI), Tech Prep of the Rio Grande Valley; Stephen Vassberg, Texas State Technical College; Ellen Trevino, Youth Fair Chance; Wanda Garza, Project VIDA; Leonardo Olivares, University of Texas – Pan American; Michael Bell, South Texas Community College; and Sylvia D. Hall-Ellis. Texas Workforce Commission, \$4,250,000 (1997-2002).

Comprehensive Bilingual Education Grant for Hidalgo ISD and Roma ISD. Developed for Hidalgo (Texas) ISD, Roma (Texas) ISD, College of Education, University of Texas – Pan American (Edinburg, Texas), and Education Service Center, Region One (Edinburg, Texas). Research team: Tomas Thomas (PI), Director, Office of Bilingual Education and Sylvia D. Hall-Ellis. U.S. Department of Education, Office of Bilingual Education and Minority Languages Affairs, \$1,531,361 (1997-2002)

Lopez High School, Porter High School, Rivera High School, Central Middle School, and Perkins Middle School, Brownsville (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$1,473,611 (1997-1998)

Donna High School, Todd Middle School, and Solis Middle School, Donna (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$704,052 (1997-1998)

Memorial Middle School and Nellie Schunior Middle School, La Joya Independent School District (Texas). Telecommunications Infrastructure Fund Board, \$293,641 (1997-1998)

Martin High School, Christen Middle School, Cigarroa Middle School, Lamar Middle School, Laredo (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$1,200,000 (1997-1998).

Lasara Middle School, Lasara (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$246,210 (1997-1998)

Los Fresnos High School and Resaca Middle School, Los Fresnos (Texas) Consolidated Independent School District. Telecommunications Infrastructure Fund Board, \$500,000 (1997-1998)

Lyford Junior High School, Lyford (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$354,997 (1997-1998)

Travis Middle School, McAllen (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$269,139 (1997-1998)

Mission High School, Mission (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$297,010 (1997-1998)

Progreso High School, Progreso (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$300,000 (1997-1998)

San Perlita High School, San Perlita (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$293,490 (1997-1998)

Myra Green Junior High School, Raymondville (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$225,000 (1997-1998)

Rio Grande City High School, Ringgold Middle School, Gruella Middle School, Rio Grande City (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$809,934 (1997-1998)

Rio Hondo Junior High School, Rio Hondo (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$297,024 (1997-1998)

Roma High School, Roma (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$333,178 (1997-1998)

San Benito High School, Miller Jordan Junior High School, San Benito (Texas) Consolidated Independent School District. Telecommunications Infrastructure Fund Board, \$547,000 (1997-1998)

Santa Maria High School and Santa Maria Middle School, Santa Maria (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$400,000 (1997-1998)

Salvador High School, United Independent School District (Laredo, Texas). Telecommunications Infrastructure Fund Board, \$250,879 (1997-1998)

Weslaco High School, Cabaza Middle School, Cuellar Middle School, Weslaco (Texas) Independent School District. Telecommunications Infrastructure Fund Board, \$874,242 (1997-1998)

Principals' Assessment and Training Center. Developed for Education Service Center, Region One (Edinburg, Texas). Research team: Roberto Zamora, Leonel Barrera, William H. Parry, and Sylvia D. Hall-Ellis. Texas Principals' Leadership Initiative, Texas Association of Secondary School Principals, Texas Association of Elementary School Principals, and the Sid Richardson Foundation. \$461,439 (1996-1998)

The Texas Library Connection -- Integrating and Sharing Resources. Developed for Hidalgo County Library System (McAllen), Cameron County Library System (Brownsville), South Texas Community College (McAllen), the University of Texas - Pan American (Edinburg), University of Texas - Brownsville, and Education Service Center, Region One (Edinburg). Research team: William R. McGee, Coordinator, Hidalgo County Library System; Joe Garcia, Director, Cameron County Library System; Michael D. Bell, Library Director, South Texas Community College; Eleanor Folger Foster, University Library, University of Texas - Pan American; Jaime Vela (PI), Director of Instructional Technology and Media Services, Ron Pontius, Instructional Technology, and Fabiola Fuentes, Media Services, Education Service Center, Region One; and Sylvia D. Hall-Ellis. Office of Library Media Services, Technology Services, Texas Education Agency. \$8,000 (1996-1997)

Developing Leadership Communities for Improving Algebra I for All Students. Developed for a partnership of the Region One Statewide Systemic Initiative Team. Research team: Noel Villarreal (PI), Eduardo Cancino, and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Statewide Systemic Initiative for Reform in Mathematics, Science and Technology Education to The Charles A. Dana Center for Mathematics and Science Education, The University of Texas at Austin. \$25,000 (1996-1997)

Academics 2000: First Things First -- The Texas Goals 2000. Developed for Edinburg (Texas) CISD. Research team: Hilda Medrano, Dean, College of Education, University of Texas - Pan American (Edinburg); Helen Jones, Director (PI), Gifted and Talented Education, Edinburg CISD; and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Education Agency, \$750,000 (1996-2001)

Texas Teachers Empowered for Achievement in Mathematics (TEXTEAM) Institute for Algebra I. Developed for Hidalgo ISD, Jim Hogg (Hebbronville) County ISD, La Joya ISD, La Villa ISD, Lyford ISD, Mission CISD, Pharr-San Juan-Alamo ISD, Rio Hondo ISD, San Isidro ISD, San Perlita ISD, Santa Maria ISD, Santa Rosa, Sharyland ISD, Valley View ISD, Webb (Laredo) CISD, Weslaco ISD, and Zapata County (Zapata) ISD. Research team: Noel Villarreal (PI), Chuck McInteer, Ellen M. Gonzalez, Education Service Center, Region One (Edinburg); and Sylvia D. Hall-Ellis. Charles A. Dana Center for Mathematics and Science Education, University of Texas - Austin, \$15,975 (1996)

Community Learning Center for La Villa, Texas. Developed for Edcouch-Elsa Independent School District. Research team: Noe Gonzalez (PI), Assistant Superintendent, Edcouch-Elsa Independent School District, and Sylvia D. Hall-Ellis. Delta Region Subzone, Rio Grande Valley (Texas) Rural Empowerment Zone, \$325,000 (1996-1997)

Monte Alto (Texas) Community Learning Center. Developed for Monte Alto Independent School District. Research team: Homero A. Diaz (PI), Superintendent, Monte Alto Independent School District, and Sylvia D. Hall-Ellis. Delta Region Subzone, Rio Grande Valley (Texas) Rural Empowerment Zone, \$300,000 (1996-1997)

Community Learning Center for La Villa, Texas. Developed for La Villa Independent School District. Research team: Sam Gonzalez (PI), Assistant Superintendent, La Villa Independent School District; and Sylvia D. Hall-Ellis. Delta Region Subzone, Rio Grande Valley (Texas) Rural Empowerment Zone, \$325,000 (1996-1997)

Building Project for Taylor Elementary. Developed for Mercedes (Texas) Independent School District. Research team: Mrs. Denise Rivera, Librarian, and Eduardo Infante, Principal, Taylor Elementary School; Ismael S. Cantu (PI), Federal Programs Director, Mercedes Independent School District; and Sylvia D. Hall-Ellis, Delta Region Subzone, Rio Grande Valley (Texas) Rural Empowerment Zone, \$375,000 (1996-1997)

Border Education Network (BEN) - Distance Education through Cable Television. Developed for Edinburg (Texas) Consolidated Independent School District. Research team: Noe Torres (PI), Library Media Specialist, Magdalena Rosas, Library Media and Technology Coordinator, Edinburg Consolidated Independent School District; and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Edinburg (Texas) Consolidated School District, \$250,000 (1996-1997)

Multiservice One-Stop Open Enrollment Charter School. Developed for the Information Referral Resource Assistance, Inc. (McAllen, Texas). Research team: Pablo Perez and Aguié Pena (PI), Executive Director, Information Referral Resource Assistance, Inc.; Roberto Zamora and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Education Agency, \$3,066,000 (1996-2001)

Project OK: A Community Youth Opportunities Grant for Summer, 1996. Developed for McAllen (Texas) Independent School District, St. Joseph the Worker Catholic Church, and the Office of Adult Education, Education Service Center, Region One. Research team: Father Bart Flatt, St. Joseph the Worker Catholic Church; Noe Calvillo (PI), Office of Adult Education; Maria Louisa Garcia, McAllen Independent School District; and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Protective and Regulatory Agency through the Office of the Mayor, City of McAllen, \$350,000 (1996-2001).

Early Childhood: a Time of Discovery. Developed for a partnership of Lasara ISD, Rio Hondo ISD, San Perlita ISD, the School of Education, University of Texas - Brownsville, and Education Service Center, Region One (Edinburg). Research team: Hugo Rodriguez, Dean, School of Education, University of Texas - Pan American; Leonel Barrera and Jack Damron, Field Service Agents, Ellen M. Gonzalez (PI), Administrator for Student Instructional Services, Ruth Solis, Education Specialist in Special Education, and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Education Agency, \$722,090 (1996-2001)

Innovative Gifted and Talented Programs for Early Childhood and Elementary Education Students. Developed for a partnership of Edinburg (Texas) CISD, the School of Education, University of Texas - Pan American (Edinburg), and Education Service Center, Region One (Edinburg). Research team: Hilda Medrano, Dean, School of Education, University of Texas - Pan American; Helen de la Garza (PI), Director of Elementary Curriculum and Instruction, Edinburg CISD; and Sylvia D. Hall-Ellis. Texas Education Agency, \$750,000 (1996-2001)

Reading Recovery in Early Elementary Grades. Developed for a partnership of La Villa (Texas) ISD the School of Education, University of Texas - Pan American (Edinburg), and Education Service Center, Region One (Edinburg). Research team: Hilda Medrano, Dean, School of Education, University of Texas - Pan American; Marcario Salinas (PI), Supervisor of Elementary Curriculum and Instruction, La Villa ISD; and Sylvia D. Hall-Ellis, Education Service Center, Region One. Texas Education Agency, \$750,000 (1996-2001)

Connected Mathematics Project for Middle and Junior High Students. Developed for a partnership of Michigan State University, The Charles A. Dana Center for Mathematics and Science Education, The University of Texas at Austin and Region One Statewide Systemic Initiative Team. Research team: Jack Damron, Chuck McInter, Noel Villarreal (PI), and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). National Science Foundation through Michigan State University to the Charles A. Dana Center at the University of Texas - Austin, \$539,610 (1996-1999)

Sharing Resources: Testing the Interlibrary Loan Potential of the Texas Library Connection -- Integrating Media Resources. Developed under the sponsorship of the Hidalgo County Library System (McAllen) and Education Service Center, Region One (Edinburg). Research team: William H. McGee, Hidalgo County System Coordinator; Fabiola Fuentes, Library Media; Ronald Pontius (PI), Instructional Technology, Education Service

- Center, Region One; and Sylvia D. Hall-Ellis. Library Media Services Program, Office of Technology Services, Texas Education Agency, \$25,000 (1996-1997)
- State and Federal Adult Education JOBS Program.* Developed for Education Service Center, Region One (Edinburg). Research team: Noe Calvillo (PI), Director, Adult Education Program, and Sylvia D. Hall-Ellis. Adult Education Program, Texas Education Agency, \$532,846 (1995-1996)
- Creating Safe and Drug-Free Schools and Communities.* Developed for a partnership of the Region One Consortium for Safe and Drug-Free Education Environments. Research team: Clara Contreras (PI), Health Specialist, and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Education Agency, \$150,000 (1995-1996)
- Developing Leadership Communities for Improving Mathematics Performance for All Students on Title I Campuses.* Developed for a partnership of the Region One Statewide Systemic Initiative Team. Research team: Jack Damron, Chuck McInteer, Noel Villarreal (PI), and Sylvia D. Hall-Ellis, Education Service Center, Region One (Edinburg). Texas Statewide Systemic Initiative for Reform in Mathematics, Science and Technology Education to The Charles A. Dana Center for Mathematics and Science Education, The University of Texas at Austin, \$50,669 (1995-1996)
- The Impact of Library Resource Centers on Academic Achievement in Selected Public Schools in South Texas.* Sylvia D. Hall-Ellis (PI). Developed under the sponsorship of the Department of Library Science, College of Education and Applied Science, Sam Houston State University (Huntsville). Texas Association of School Librarians, Children's Services Round Table, and Young Adults Round Table (Austin, Texas), \$2,500 (1995)
- School Library Media Specialists Fellowship Program.* Sylvia D. Hall-Ellis (PI). Developed under the sponsorship of the Department of Library Science, College of Education and Applied Science, Sam Houston State University (Huntsville, Texas). U.S. Department of Education, HEA Title II-B, Library Education and Human Resource Development Program, \$44,000 (1995-1996)
- Planning for Educational Technology.* Research team: Ruth Ann Riggins (PI), Director of Library Media and Technology Services, Donna (Texas) Independent School District; Noe Torres, Education Service Center, Region One; Patricia G. Bubb, Tech Prep of the Rio Grande Calley, Inc; Michael D. Bell, South Texas Community College; and Sylvia D. Hall-Ellis, Sam Houston State University. Developed under the sponsorship of Donna (Texas) Independent School District, Education Service Center, Region One (Edinburg), Tech Prep of the Rio Grande Valley, Inc. (Harlingen), South Texas Community College (McAllen), and the Department of Library Science, Sam Houston State University (Huntsville). Funded through Infusion of Educational Technology Planning Grant Program (H.B. 18: Models). Texas Education Agency, \$18,000 (1993-1994)
- The Impact of Library Resource Centers on Academic Achievement in Selected Public Schools in South Texas.* Sylvia D. Hall-Ellis (PI) and Mary Ann Berry. Developed under the sponsorship of the Department of Library Science, College of Education and Applied Science, Sam Houston State University (Huntsville). Sam Houston State University Research Enhancement Fund, \$7,500 (1993-1994)
- Electronic Mail Resource Sharing System: Management and Operation of the Iowa Computer-Assisted Network.* State Library of Iowa, \$294,000 (1986-1993)
- The Iowa Locator: A CD-ROM Resource Sharing Tool.* State Library of Iowa, \$567,000 (1986-1992)
- Statewide Database Development: An OCLC Tape Analysis To Determine Feasibility.* State Library of South Dakota, \$15,000 (1987)
- The Iowa Locator: A Feasibility Study.* State Library of Iowa, \$50,000 (1986)
- Electronic Mail Resource Sharing System: A Feasibility Study for Libraries in the State of Iowa.* State Library of Iowa, \$5,000 (1985)

- Access Pennsylvania: A Feasibility Study.* State Library of Pennsylvania, \$50,000 (1984)
- Automating Library Administrative and Management Tasks: Procurement and Distribution of Microcomputer Systems for District Library Centers in the Commonwealth of Pennsylvania.* State Library of Pennsylvania, \$495,000 (1982)
- Sharing Serial Titles Resources: Procurement and Distribution of Microfiche Readers for 550 Libraries in the Commonwealth of Pennsylvania.* State Library of Pennsylvania, \$500,000 (1982)
- Electronic Mail System: A Pilot Project for Libraries throughout the Commonwealth of Pennsylvania.* State Library of Pennsylvania, \$125,000 (1982)
- Literacy Program for Adults in Rural Upstate New York State: Program Outreach and Evaluation - Phase 3.* Appalachian Regional Commission, \$50,000 (1981)
- Database Building: A Cooperative Project of the Finger Lakes Library System (Ithaca), Four County Library System (Binghamton), and the Southern Tier Library System (Corning).* New York State Library, \$450,000 (1980-1985)
- Faces of the Southern Tier: A Professional Photographer-in-Residence.* New York State National Endowment for the Humanities, \$25,000 (1980)
- Literacy Program for Adults in Rural Upstate New York State: Program Implementation - Phase 2.* Appalachian Regional Commission, \$50,000 (1980)
- Small Business Resources Center: A Pilot Project for Rural Public Libraries.* New York State Library, \$50,000 (1980)
- Media Programming: A Professional Development Program for Public Librarians in Upstate New York: A Program in Allegheny, Chemung, Schuylers, Steuben, and Yates Counties.* New York State Library, \$35,000 (1979)
- Information and Library Resources for Inmates and Prisoners in Selected Upstate New York Facilities: A Cooperative Program in Allegheny, Chemung, Schuylers, Steuben, and Yates Counties.* New York State Library, \$25,000 (1979)
- Library Resources for Homebound Adults in Upstate New York: An Outreach Program in Allegheny, Chemung, Schuylers, Steuben, and Yates Counties.* New York State Library, \$40,000 (1979)
- Literacy Program for Adults in Rural Upstate New York State: Program Initiation and Establishment - Phase 1.* Funded by the Appalachian Regional Commission. Awarded to the Corning (New York) Public Library, \$50,000 (1979)
- Information Reference Services to Homebound Adults.* New York State Library, \$31,000 (1978)
- Books-By-Mail Services to Homebound Adults.* New York State Library, \$31,000 (1978)
- System Headquarters Services and Programs for Public Libraries in District 10.* Funded through Library Services and Construction Act Title I. Texas State Library and Historical Commission, \$880,000 (1976)
- County Library Development Grant for Atascosita County.* Funded through Library Services and Construction Act Title I. Texas State Library and Historical Commission, \$15,000 (1976)
- Spanish Language Materials Collection Development Program.* Texas State Library and Historical Commission, \$40,000 (1975)

Establishment of System Headquarters for Alamo Regional Library System (District 10) Headquartered at the San Antonio (Texas) Public Library. Texas State Library and Historical Commission, \$800,000 (1975)

SELECTED CONSULTANTSHIPS

Project Strategic Planning & Funding Proposal Development

Walden University, 2015.

Pikes Peak Library District, 2014.

Douglas County Public Libraries, 2011-2012.

Denver School for Science and Technology, 2008-2011.

Johnson & Wales University, Denver Campus, 2007-2009.

Challenges, Choices, and Images K-12 Charter School, Denver Public Schools, 2007.

Denver Medical Library, Inc., 2006-2010.

Bemis Public Library (Littleton), Ergonomic Design and Facilities Enhancement Consultant, 2003.

Curtis Park Community Center (Denver), Community Technology Center Evaluation and Proposal Development Consultant, 2003.

Colorado Community Based Research Network (Denver), Funding Research Associate, 2002-

Our Lady of the Rosary Academy (Edgewater), Learning Resource Center Development Project Consultant, 2001-

University of Southern Colorado (Pueblo). Technology Integration and Curriculum Enhancement into Higher Education Learning Environment. Proposal Development Consultant, 2000.

Jefferson County Library System (Lakewood), 1999-2000.

Southeastern BOCES (Lamar, CO). Distance Learning Curriculum Content Development Project. Proposal Development Consultant, 1998-2004.

Cheyenne Mountain School District 12 (Colorado Springs, CO). Technology Integration into Elementary Writing Curriculum Project. Proposal Development Consultant, 1998.

Telecommunications Infrastructure Fund Board Round #2 Application, 1997. Technical assistance to the following: La Villa (Texas) Independent School District; Mirando City (Texas) Independent School District; Monte Alto (Texas) Independent School District; San Isidro (Texas) Independent School District.

Telecommunications Infrastructure Fund Board Round #1, 1996. Technical assistance to the following: Brownsville (Texas) Independent School District; Donna (Texas) Independent School District; Edinburg (Texas) Consolidated Independent School District; Harlingen (Texas) Consolidated Independent School District; Jim Hogg County Independent School District (Hebbronville, Texas); La Feria (Texas) Independent School District; La Joya (Texas) Independent School District; La Villa (Texas) Independent School District; Los Fresnos (Texas) Consolidated Independent School District; Progreso (Texas) Independent School District; Raymondville (Texas) Independent School District; Rio Hondo (Texas) Independent School District; San Benito (Texas) Independent School District; Sharyland Independent School District (Mission, Texas); Weslaco (Texas) Independent School District; Zapata (Texas) County Independent School District.

South Texas Community College (McAllen). Strategy Development to Meet the Technology Instructional Needs for Vocational, School-To-Work and Academic Programs, 1994-2000. Development Consultant.

Donna (Texas) Independent School District. Planning for the Infusion of Technology in Middle Schools Serving High At-Risk Students, 1994-1995. Research Associate.

Pettus (Texas) Independent School District. Planning for District-wide Automation in School Library Media Centers: Preparation of Data, and CD-ROM Hardware/Software Configuration Evaluation, 1994. Principal Investigator.

Fort Bend Independent School District (Sugar Land, TX). Planning for District-wide Automation in School Library Media Centers, Preparation of Data, and CD-ROM Hardware/Software Configuration Evaluation, 1994-1995. Principal Investigator.

Northern Waters Library Services (Ashland, WI). Professional Consulting Services to Make Recommendations on the Development of System-Wide Efforts of the Northern Waters Library Service, 1988-1989. Research Associate.

State Library of Iowa (Des Moines). The Iowa Locator Compact Disc to Support Multi-Type Libraries Resource Sharing including Database Design, Building, Production, and Distribution, 1986-1991. Project Director.

State Library of Iowa (Des Moines). Iowa Computer-Assisted Network Development, Enhancement, and Operation, 1985-1992. Technical Director.

State Library of South Dakota (Pierre). Statistical Sampling and Analysis of Multi-Institutional OCLC Archive Tape for Statewide Online Database Building, 1985-1986. Research Associate.

District of Columbia Public Library (Washington, DC). Planning Document for the Retrospective Conversion of Bibliographic Records and Automation Issues in the 1990's, 1984-1985. Research Associate.

State Library of Pennsylvania (Harrisburg). Database Development for High School Libraries, 1984-1985. Research Associate.

MINITEX (Minneapolis, MN). Workshops for Retrospective Conversion, Bar Coding, Library Statistics, and OCLC Serials Format, 1985. Presenter and Research Associate.

ABC Film Consortium (Altoona, Bellefonte, Johnstown, PA). Database Building, System Design, and Implementation of Online Film Booking System, 1983-1985. Database Manager.

Library Automation -- System Design & Implementation

Douglas County Library District (Castle Rock, CO). Library Automation Technical and System Performance Specifications, 2001.

Pharr-San Juan-Alamo Independent School District (Pharr, TX). Library Automation Technical and System Performance Specifications, 1997. Project Development Consultant.

Harlingen (Texas) Independent School District. Planning for District-wide Automation in Junior High School Library Media Centers: Preparation of Data, and CD-ROM Hardware/Software Configuration Evaluation, 1996. Principal Investigator.

Sharyland (Texas) Independent School District. Design and Construction of New Elementary School Library and Technology Resources Center, 1995-1996. Principal Investigator.

South Texas Independent School District (Mercedes, TX). Design and Construction of a New High School Library and Technology Resources Center, 1995-1996. Principal Investigator.

Citizens' Library (Washington, PA). Online Community Resources Files: Design and Implementation, 1984.
Research Associate.

Altoona (Pennsylvania) Hospital. Integrated Online System Upgrade Study, 1984. Research Associate.

State Library of South Dakota (Pierre). Automation Plan and State Database Development, 1982-1983. Principal Investigator.

State Library of Pennsylvania (Harrisburg). COM Production and Preparation of the Technical Specifications Document, Procurement, and Distribution of Microcomputers in the Commonwealth of Pennsylvania, 1983-1984. Research Associate.

Altoona (Pennsylvania) Area Public Library. Integrated System (Circulation/Online Catalog) Study, 1982-1983. Principal Investigator.

COPSCAULD (Council of Pennsylvania State College and University Library Directors, Edinboro, PA). Design of Online Media Catalog, 1982. Principal Investigator.

Erie (Pennsylvania) County Library System. Operations Research and Design for Automated Circulation, Hardware Upgrade and Re-Retrospective Conversion, 1982. Research Associate.

Michigan Library Consortium (Lansing, MI). Tape Management System Design and Implementation, 1982-1984. Research Associate.

State Library of Pennsylvania (Harrisburg). Preparation of the Technical Specifications Document, Procurement and Distribution of Microfiche Readers in the Commonwealth of Pennsylvania, 1982. Research Associate.

Community College of Allegheny County, Allegheny Campus (Pittsburgh, PA). Integrated Systems Study, 1981. Principal Investigator.

Community College of Allegheny County, South Campus (West Mifflin, PA). Retrospective Conversion Training Program for Handicapped Students, 1981. Technical Director.

Southern Tier Library System (Corning, NY). OCLC Acquisitions Subsystem Evaluation, 1981. Principal Investigator.

South Central Reference and Research Council (Ithaca, NY). South Central Regional Delivery System, 1980. Principal Investigator.

Southern Tier Library System (Corning, NY). Newspapers on Microfilm in the Chemung-Southern Tier Library System, 1979-1981. Principal Investigator.

Cataloging & Bibliographic Database Building

Challenges, Choices, and Images K-12 Charter School, Denver Public Schools, 2007.

Denver Medical Library, Inc., 2006-2010.

Ricks Gifted and Talented School Library, 2005-

American Humane Society (Englewood), 2004-2006.

Fisher Early Learning Center Library, 2004-

Colorado Community Based Research Network (Denver), 2004-

Boulder Valley School District (Boulder), 2002-2003.

Douglas Public Library District (Castle Rock), 2001-2002.

Bibliographic Center for Research, Inc. (Denver). Original Cataloging, 2001-2003 & 1992-1993. Professional Cataloger. Libraries include Arapahoe Library District (Centennial); Clarke College (Clarke, IA); Kaiser Permanente Center for Health Research (Portland, KS); Douglas County Library System (Carson City, NV); Grinnell College (Grinnell, IA); Kansas State University (Manhattan, KS); Kansas State Library (Topeka, KS); McPherson College (McPherson, KS); Newman University (Wichita, KS); Montana Technical University (Helena, MT); Montana State Library (Helena, MT); University of Texas Southwest Medical Center Library (Dallas, TX); Community College of Southern Nevada (Las Vegas, NV); Pikes Peak Library District (Colorado Springs); Mesa Community College (Grand Junction); Coe College (Cedar Rapids, IA); Briar Cliff College (Sioux City, IA); Tri-Care Health Systems (Aurora); The Penrose-St. Francis Healthcare System (Colorado Springs); Westminster Public Library (Westminster); Lutheran Medical Center Medical Library (Wheat Ridge); American Heritage Center, University of Wyoming (Laramie, WY); National Wildlife Research Center Library (Lakewood); University of Colorado Health Sciences Center, Denison Memorial Library (Denver); Water Resources Library, Denver District Office, Bureau of Land Management (Lakewood); Mesa State Community College Learning Resources Center (Pueblo); Front Range Community College Learning Resources Center (Westminster).

Colorado Historical Society Library (Denver). Original Cataloging of Serials for Multi-Institutional Union Listing Project, 1993. Technical Services Associate. Institutional partners: Denver Art Museum, Denver Museum of Natural History Library, and Denver Botanical Gardens Library.

Arapahoe Library District (Centennial). Original Cataloging of Major Media, 1991.

Original Cataloging Projects: Davis and Elkins College (Elkins, WV), 1989-1990; Waldorf College (Forest City, IA), 1989-1990; Kennametal Corporation (Latrobe, PA), 1984-1985; Pennsylvania Public Libraries Film Center (Harrisburg), 1982-1985.

Retrospective Conversion Projects: North Central Regional Library Service (Mason City, IA), 1987-1988; Southeastern Library Services (Davenport, IA), 1986-1987; Virginia Theological Seminary (Alexandria), 1984-1985; California University of Pennsylvania (California, PA), 1984-1985; Kennametal Corporation (Latrobe, PA), 1984-1985; West Virginia University (Morgantown), 1983-1985; Altoona Area Public Library (Altoona, PA), 1983-1984; George Washington University (Washington, DC), 1983-1984; Indiana University of Pennsylvania (Indiana, PA), 1983-1985; Health Education Center (Pittsburgh), 1983-1984; Central Pennsylvania District Library Center (Bellefonte, PA), 1982-1985; Duquesne University Law School Library (Pittsburgh), 1982-1983; Allegheny County Law Library (Pittsburgh), 1982-1984; Calgon Technical Information Center (Pittsburgh), 1982; Dow Corning Corporation, Technical Information Center (Midland, MI), 1982-1983; Tri-System Public Library Retrospective Conversion Project (Binghamton, Corning, and Ithaca, NY), 1978-1981, Technical Project Director.

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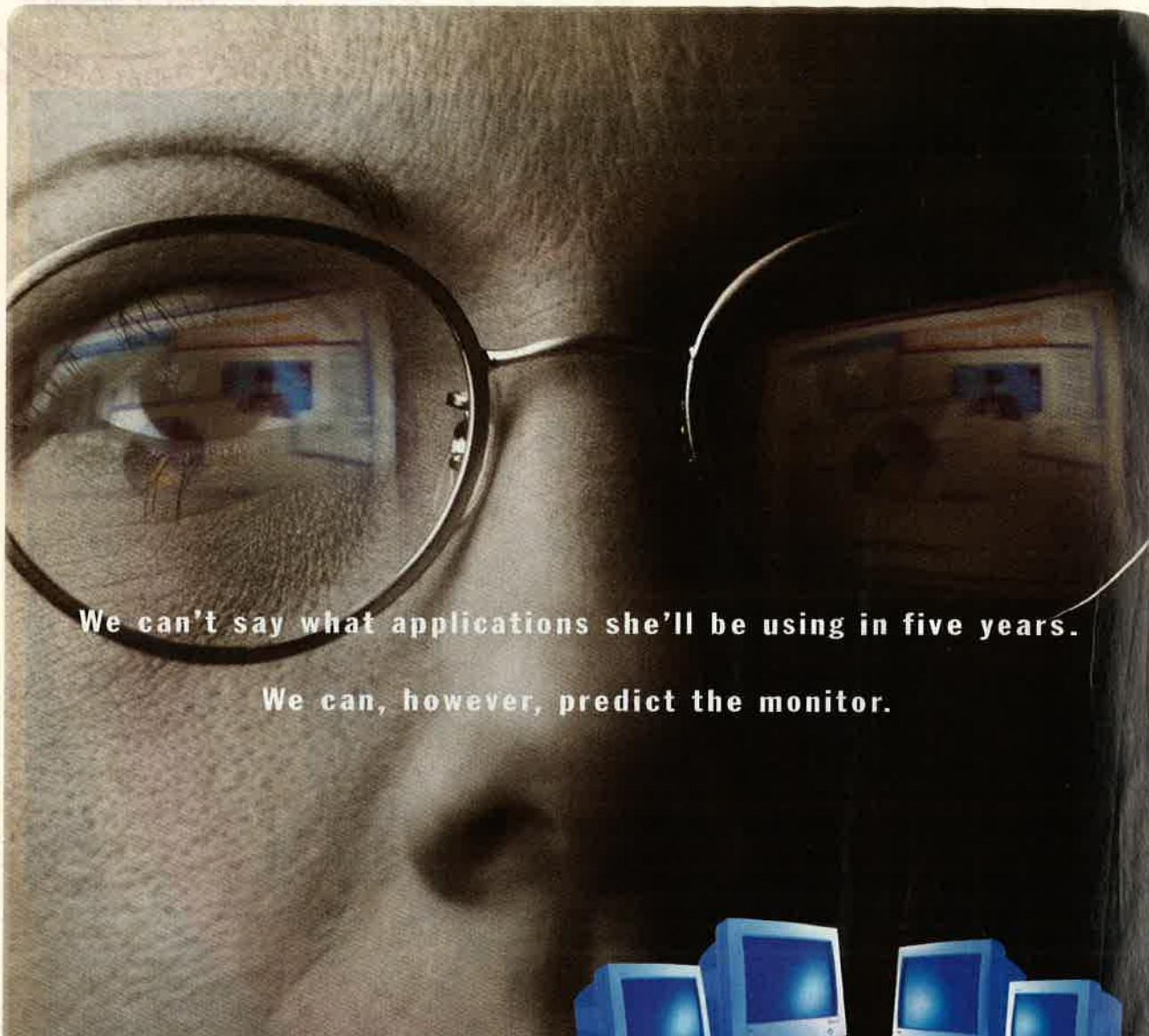


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Personal Multimedia

Remember when the promise of personal computers was just that—bringing computer power to individuals? People used PCs to create their own word processing documents and spreadsheets, things that automated processes done by hand or on large computers. Then, about ten years ago, we got desk-



top publishing applications and fonts and graphics in documents. Suddenly anyone could create professional-looking documents.

The same thing is happening now in multimedia applications, with software designed to let almost anyone create fancy graphics and even music. Such programs have been available for professionals for some time. Most of the publications and graphics you see are created in programs such as QuarkXPress, CorelDraw, or Adobe Photoshop or Illustrator. But for those of us who aren't graphics professionals, getting good-looking results from these programs is rather difficult.

On the other side of the spectrum, there are many template-driven and clip-art style programs that let you create graphics pretty easily but are aimed at home users.

Nowadays, many of us are creating our own Web sites and publications, and we want something unique but still professional looking. For those of us who aren't pros, this can be a challenge.

I recently met with a number of my colleagues to discuss some of the best software we've seen in the past year. The trend is clear: Many of the best programs are now trying to use the power of the PC to make it easier for anyone to create great multimedia elements.

This is particularly true in the graphics arena, where new applications aimed at typical business users—instead of graphics professionals—are the big trend. Among my favorites:

Microsoft PhotoDraw 2000 lets you start with your own photo or clip art and then format it for a document or a Web page. It offers basic photo-editing tools—for things like fixing red-eye—and lets you easily create compressed images that are the right size for putting on a Web site. It has a number of templates for logos and Web buttons, and was designed to fit in with the Microsoft Office suite.

Adobe ImageStyler is a bit more sophisticated

and is aimed specifically at people trying to create graphics for a Web site. You'd likely start with a photograph or clip-art image, but ImageStyler makes it very easy to create your own logos, graphics designs, and even Web buttons by applying predefined styles to your image. You can easily mix and match colors, textures, shading, and 3-D effects to create a unique image. And you can link graphics together, so that you can change them all at once, giving your site a consistent look. You can even attach things like specific HTML commands or roll-over text that pops up when you put your cursor on the graphic.

For those who want to get even more sophisticated, Macromedia Fireworks offers a vast array of

higher-end tools packaged in a way that even those of us who aren't designers can use. Along with symbols and templates, it adds features such as bundled animations, color corrections, and image slicing (so users can download parts of an image first). It is designed as a complete environment for creating Web graphics, suitable for both business and professional users.

And it's not just graphics that are moving this way. If you want unique music for your Web page, check out

Acid, from Sonic Foundry. Acid lets you start with its music clips or your own files and then mix them together to create a unique sound. By combining various clips from multiple instruments, changing the tempo or the pitch, adjusting the volume, and adding a variety of effects, you can easily make your own music.

Taken together these programs represent a range of new tools that let anyone create pages that look and sound both unique and professional. With these tools, a digital camera, and a simple Web-site creation tool, you can easily create a top-notch site.

Letting average users create things only professionals could before is one of the PC's hallmarks. It's good to see it continuing. **PC**

Letting average users create things only professionals could before is one of the PC's hallmarks.

More on the Web:
Editor-in-chief Michael J. Miller answers your computing questions every Tuesday, exclusively at PC Magazine Online.


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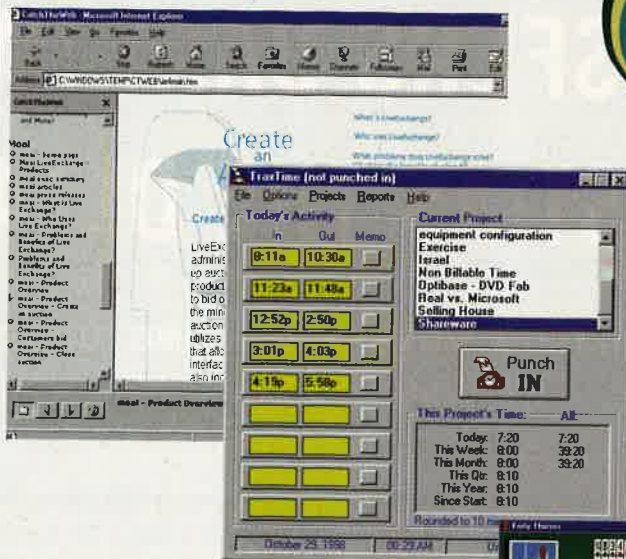
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BY GAIL SHAFFER

Downloading software. Besides sending e-mail, it's still our favorite thing to do online—especially if it's free or almost free! We scoured the Web and found a bunch of great programs for you that do all sorts of things. And we surveyed the best download sites so you can save some time the next time you're looking for something.....100



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Digital Cameras

BY DANIEL GROTTA AND SALLY WIENER GROTTA

They've come a long way (in a short time), baby. The latest generation of digital cameras delivers near-35-mm quality photos in larger sizes. Models range from \$300 to \$1,200 and vary in features, so we've awarded Editors' Choices in three market segments. For all that digital cameras offer, they're worth the price.....116



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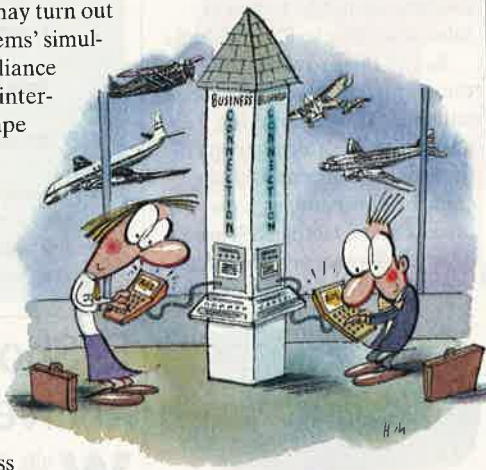
AOL Gazes at Sun

Now that AOL and Netscape have inked a deal for AOL to buy Netscape for \$4.2 billion, the far-reaching implications are becoming clear. It may turn out that Sun Microsystems' simultaneous strategic alliance with AOL is just as interesting as the Netscape side of the deal.

The AOL/Sun alliance is designed "to accelerate the growth of enterprise-class e-commerce, and to use Sun's Java technology to develop Internet devices that help Internet users access America Online brands from anywhere, anytime," according to an AOL statement. As part of the deal, Sun will become a primary systems and service provider to AOL.

AOL will get more than \$350 million in licensing, marketing, and advertising fees from Sun. AOL's big hope, though, is that Sun's vision of ubiquitous networking—incorporating everything from Internet-connected soda machines to conference room tables with plug-and-play networking—can help make

AOL ubiquitous. Thus your Java-smart hand-held device might connect easily to an airport Internet kiosk, bringing up AOL and Netscape's browser.



AOL CEO Steve Case has made clear that he has his eyes on Sun's hardware and software platforms as opportunities to marry AOL with enterprise e-commerce strategies. AOL and Netscape will continue development of the upcoming Netscape browser, called Communicator 5.0, and will add Version 1.2 of Sun's Java Development Kit to the browser. AOL will also embed Sun's scaled-down version of Java, PersonalJava, in all AOL clients.

The PC Proliferates

Low PC prices and the lure of the Internet drove almost 4 million buyers to purchase their first PCs in the first six months of 1998, according to data from ZD Market Intelligence. Some 50 million homes—almost half of U.S. households—now have at least one PC.

Declining prices have also led more lower-income families to buy PCs. Households with incomes of less than \$30,000 accounted for a third of all new PC purchases in the first half of 1998. Still,

households flush with cash are far more likely to house PCs than low-income households: Those earning less than \$30,000 constituted only a quarter of all homes owning PCs.

Household Income Is a Factor in PC Ownership



Thinking Thin

of respondents to a recent PC Magazine Online poll told us that they didn't expect to have a flat-screen display on their desktops until 2001. Another 30 percent said that they'd have one by 2000. Only 13 percent of those responding said that they'd have one by 1999. Seven percent of respondents told us they already had flat-panel displays.

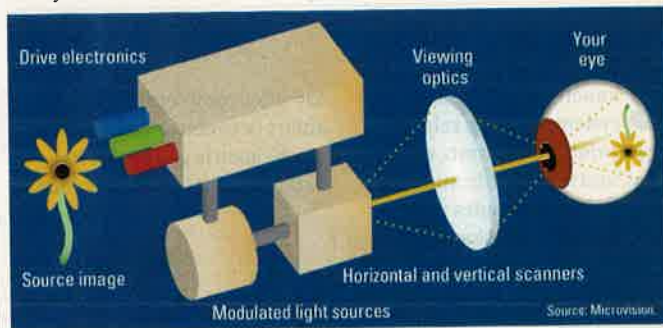
The Eye Is the Display

What's round, super-lightweight, ultraportable, low-cost, and long-lasting? It can support millions of colors at perfect resolution and comes in blue, green, or brown. It's your eye, of course, and it may be the ultimate display of the future.

Microvision, a developer based in Seattle, acquired rights to a technology known as Virtual Retinal Display (VRD) from the University of Washington Human Interface Technology Laboratory in 1993. A VRD device sends an encoded beam of light through the pupil to the retina, stimulating the receptors so you seem to see a high-quality image an arm's length away. It eliminates the need for any screen, letting the eye complete the function performed by a flat panel's matrix array.

Built into eyeglasses or goggles, VRD could display images that don't block one's view, useful in image-guided surgery. And in cellular phones and pagers, it could let you view e-mail, Web pages, faxes, and files as if on a full-size monitor.

Microvision says VRD poses no danger to the eye and adheres to safety standards.



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PIPELINE

Walking Web

Wireless tablets for Web surfing on the run are due to arrive in 1999. The WebPad, from the Conceptual Products Group at Cyrix, is one of the most talked-about tablets. Powered by the Cyrix MediaGX processor, the tablet is about the size of an Etch A Sketch and accesses the Internet wirelessly via a radio-frequency base station—a set-top box or standalone base station.



NO WIRES: The Cyrix WebPad.

The base station options provide for cable modem, ISDN, or 56-Kbps connections. Once you connect to the base station, you can roam wirelessly at a range of about 150 feet and use a pen and on-screen navigation buttons to surf the Web. Though the unit is only a prototype now, Cyrix is talking to manufacturers and expects units to start shipping early this year. Cyrix foresees the WebPad being popular for use with home networks. No pricing information is out yet.

Global Converging Technologies is also working on a wireless tablet for Web surfing, the Cendis Net Display, to arrive in the summer of 1999. It will be touch-sensitive and priced around \$500. The Cendis Net Display, unlike the Cyrix WebPad, will have a monochrome display.

Bio-Identities

Biometric identification systems—which rely on fingerprints, voice prints, retinal scans, and the identification of other unique attributes you carry around—are slowly making the transition out of the exotic stage and into the mainstream.

To move product development along, Microsoft and a group of software companies have come up with BioAPI (*API* stands for *application programming interface*), a tool that software developers can use to build support for all sorts of biometric devices right into their applications. Today developers need to write support for specific biometric devices and force their customers to use certain hardware.

A standard such as BioAPI

can offer complete interoperability between applications and any biometric gadget—a key ingredient that will help broaden



the market, says Karan Khanna, lead product manager for Windows Security at Microsoft. The proposal is only in the initial stages now, with product development a year away.

THIS ISSUE'S CONTRIBUTORS: Angela Hickman, Carol Levin, Sebastian Ruple, Don Willmott.

Personal Projection

Worldwide sales of ultra-portable projectors—models that weigh under 10 pounds—grew nearly 400 percent from 1997 to 1998, according to the market research firm Pacific Media Associates. The ultraportable market should nearly double by next year, reaching almost \$1 billion in sales, according to Pacific Media.

Key to this growth is that these projectors weigh less than half as much as competing designs, while offering many of the same features and, in some cases, brighter images. Low price is also a factor. Released nearly two years ago, the Lightware VP800 remains one of the



PRESENTING: The 6.8-pound InFocus LP425 is one of the lightest projectors you can buy.

best-selling projectors for professionals. Sales shot up last year when Lightware lowered the price to \$3,000—unprecedented in a market where most projectors were closer to \$10,000. The unit now sells for under \$2,000.

Soon you'll be able to carry a notebook and a projector that together will weigh less than a laptop did just a few years ago.

Top-Selling Retail Software

1 Sony MVC-FD71 (\$670)

2 Agfa ePhoto 307 (\$160)

3 Sony MVC-FD81 (\$790)

4 Kodak DC-50 (\$210)

5 Kodak DC-260 (\$940)

6 Sony MVC-FD51 (\$480)

7 Kodak DC-210+ (\$575)

8 Olympus D-800L (\$860)

9 Kodak DC-200 (\$390)

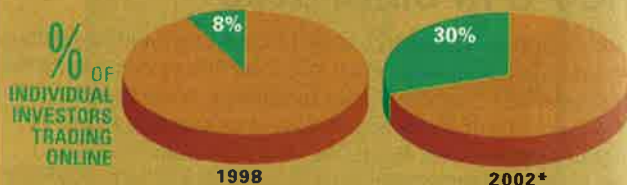
10 HP Photosmart C-20 (\$380)

Source: ZD Market Intelligence; data for October.

E-Shopping Arrives

While the final numbers won't be compiled for another couple of months, 1998 appears to have marked the arrival of big-time e-commerce revenues. According to CyberDialogue, a research firm, about 6.7 million adults shopped online in 1998. According to America Online, nearly 50 percent of its 14 million subscribers have shopped online, with the numbers sharply increasing during the last quarter of 1998. A big boost came during the holiday season as major retailers such as Nordstrom offered online shopping options.

Online Trading Rings Up Profits



As the number of online investors soars (it was up 73 percent in 1998 over 1997), full-service brokerage firms will face growing pressure to offer online trading and lower commissions to match Web start-ups, according to market research firm IDC. In 1998, online brokers collected \$1.28 billion in transaction-based revenue, and they're expected to generate over \$5 billion in commission fees in 2002.



* Projected.

Source: IDC, 1998.

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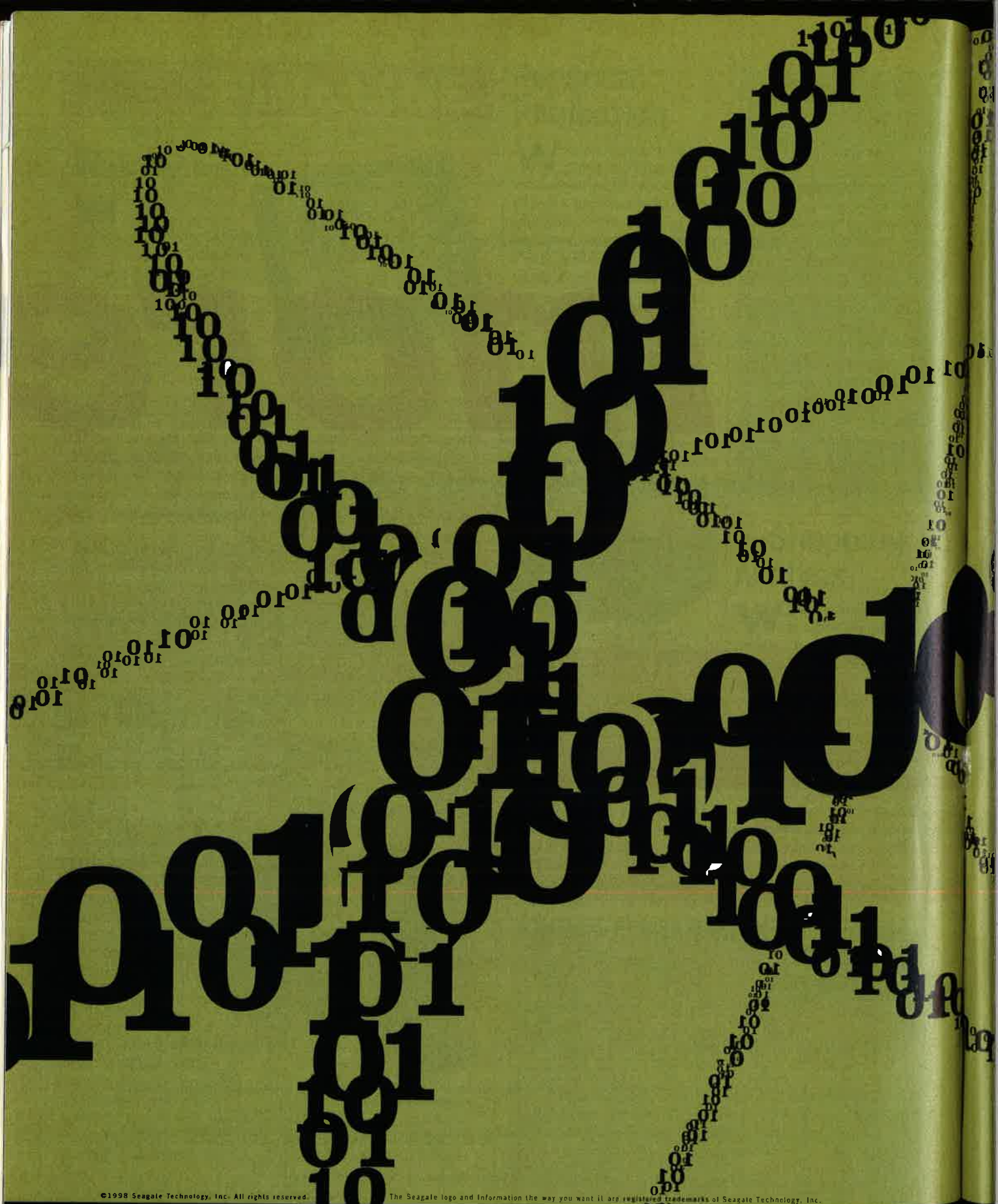
In a recent industry standard OLAP council benchmark, Oracle® Express® ran 250,000 queries against a data density of 5.0 and delivered an average response time of 0.07043 seconds. That's 50 times more data than the previous record.

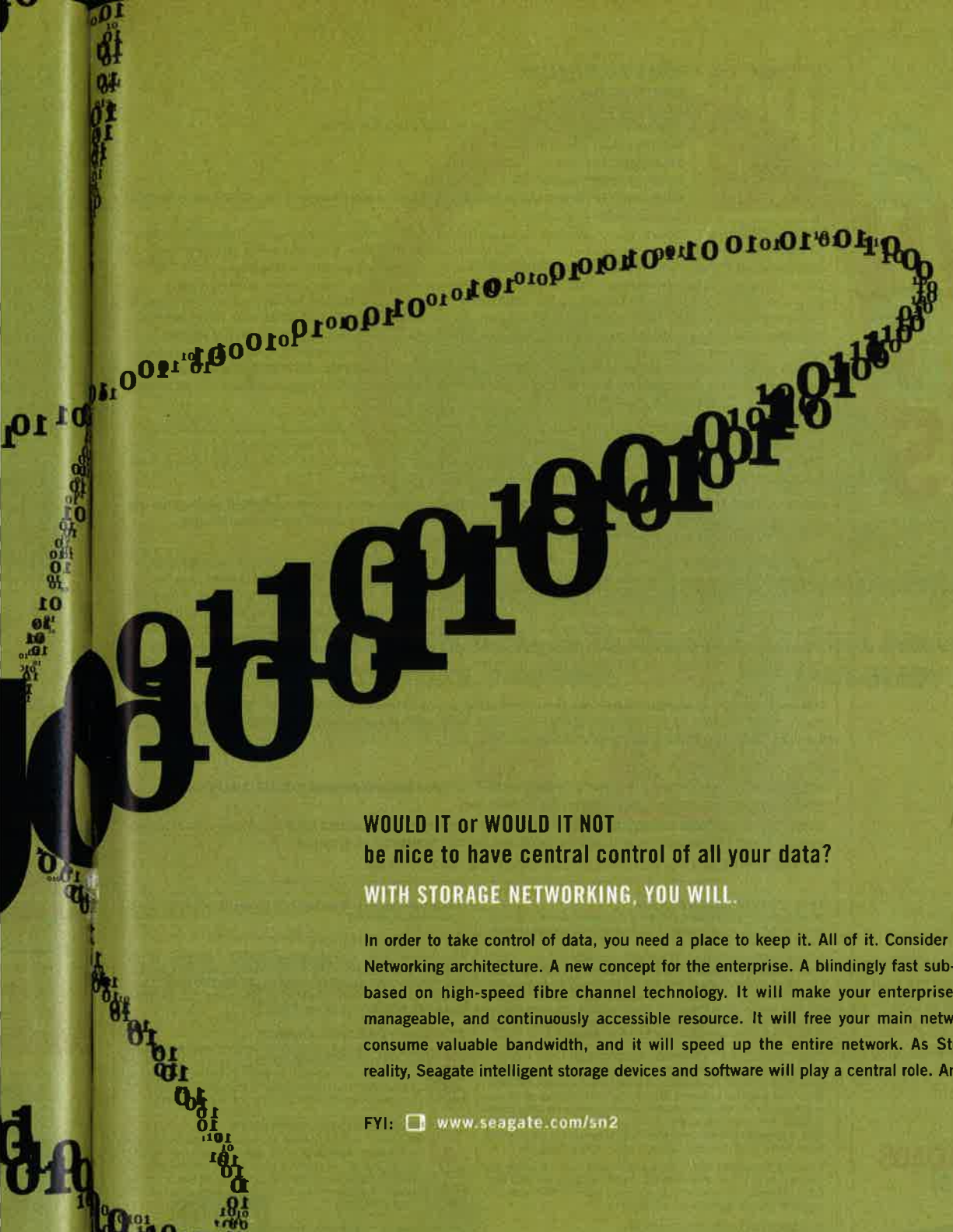
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Scarier than Spam

The entire antitrust case against Microsoft was bolstered by e-mail records, many of which were simply the outgrowth of sloppy business practices and the mess that the overreliance on e-mail has created. It's going to get worse, and I see no way out of it. And I'm not talking about the Microsoft case; I'm talking about

e-mail users and what they have to face daily.

There is some irony here, because I myself have been promoting the use of e-mail as the primary form of intercompany and interpersonal nonverbal communication since I first got involved with computers. Even back in the 1970s, it was apparent that e-mail was more efficient than anything else. E-mail would have been a worldwide standard earlier had not the cheap fax machine come along to dominate the 1980s and put e-mail on the back burner.

Many of us, during the dark ages of e-mail, were plugged into CompuServe Mail, or even better, MCI Mail. Internet mail was more difficult and less universally accepted, and it appeared as if proprietary systems would rule. MCI fostered AT&T Mail and other systems, which all languished. MCI Mail itself was never improved, and before you knew it AOL came up with its "You've got mail" message and dominated the scene, followed by what we have today, which is mostly Internet mail.

Then only a few people were using e-mail, and it was manageable. Now that everyone does, it's become a disaster. This is worsened by mediocre e-mail organizational tools and a lack of verification for standard Internet mail. Combine these problems with the ubiquitous HTML "mailto:" command and the "reply to all" command and what we have is nothing less than a monster no tool can easily fix. Let's examine just a few of the e-mail problems.

- *E-mail is too easy to send.* This is the primary problem. It's simply far too easy to send e-mail, whether you need to or not. The natural barriers that force an individual to make a compose-and-send decision (printing, cost of postage, and so on) have been removed. To make things worse, it's too easy to develop mailing lists that let people broadcast e-mail as if it were bulk mail. Sloppy practices don't help, either. For example, I get numerous e-mails that don't concern me from various Ziff-Davis departments sent to broadcast lists.

- *It's too easy to reply to e-mail.* On top of the ease with which mail can be sent, it's even easier to reply

to. And the reply often has the old message embedded for reference. You also have the "reply to all" function, which turns each recipient into a broadcaster and any e-mail into nothing less than a chain letter growing in distribution with each iteration.

- *Fear of nonreceipt.* I've always considered this the biggest headache with general Internet mail. I'm not the only one, since I'm often subjected to the solution to this problem: multiple sends. I know that some people have multiple e-mail boxes, usually to help them sort through mail by levels of importance. Because I can't be sure that mail is received, no matter how many safety nets are in place to notify me of problems, I'll send multiple copies.

- *Mail storms.* Often when a mail thread begins, people will feel the obligation to chime in for no good reason except to make their presence felt. Adding "Amen," "I agree with this idea," or other such blather and rebroadcasting the message does nobody any good. And getting into an e-mail argument that is broadcast company-wide quickly becomes a nightmare. I can't imagine what productivity losses occur when a simple argument develops into a mail storm.

- *Attachments.* The ease with which someone can attach a program to an e-mail message causes bandwidth and server problems as well as lengthy downloads. Then there are support issues, such as the Mac user who wants to run the Windows program. The program, of course, is some silly animation someone collected off the Web and sent around as today's humor.

- *Organization.* This is the subject of another column. But suffice it to say, we have poor tools to sort and organize (or even find) the mail we collect.

- *The pack-rat phenomenon.* This brings us back to Gates and company and all the mail they collected for no good reason.

Needless to say, there are a lot of problems developing with e-mail, and they're continuing to grow. I didn't even have to mention spam mail to swamp you with problems. And I see no easy cure for this situation except discipline. It will sink us if we don't try to do something. Starting with strict policies would help.



Combine all the other e-mail problems with the "mailto:" and "reply to all" commands and what we have is a monster.

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362 0_ |a Vol. 5, no. 2 (Jan. 28, 1986)-v. 28, no. 1 (Jan. 2009).

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CRUNCHTIME

THE \$20 MILLION ad campaign starts today. The Web site will be swamped. So IT staffers at online gift merchant Send.com have been working 15- and 20-hour days — bulletproofing servers, scrambling for bandwidth, polishing the home page. Last week, *Computerworld's* Steve Ulfelder observed Send.com's final, frantic preparations for a very public debut. Page 25

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SAP GETS STUCK IN THE SPIN CYCLE

Whirlpool's fast R/3 rollout defied 'red flags'

BY STACY COLLETT

Whirlpool Corp. made a risky and ultimately damaging business decision by going live with its SAP R/3 implementation over the Labor Day weekend knowing that "red flags" had been raised, according to SAP AG officials.

Fixing the problem would have delayed Whirlpool's go-live date by a week, SAP said. But pressure to take advantage of the long holiday weekend — and to get off of its legacy system well before 2000 —

pushed Whirlpool ahead. The decision resulted in a botched shipping system that, until it was fixed Nov. 1, left appliances sitting in warehouses. Some stores experienced six- to eight-week delays before receiving their orders.

ERP STUMBLE

"We suspected there would be problems, but the customer made a decision to go live" despite warning signals, said Jeff Zimmerman, senior vice president of customer support services at SAP.

Officials at Benton Harbor, Mich.-based Whirlpool wouldn't discuss details of the snafu. "We have had some delays, SAP, page 85

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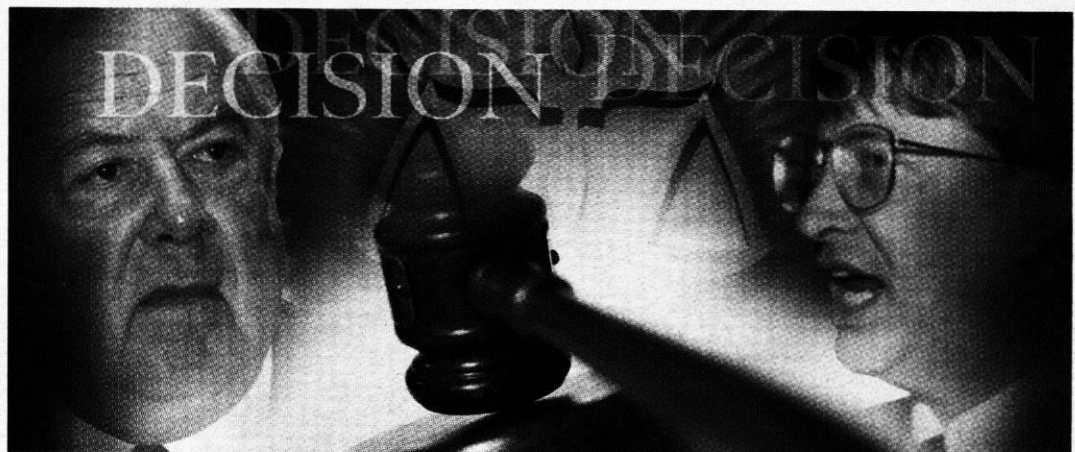
Network to link lenders, merchants, customers

BY THOMAS HOFFMAN

Although consumers can buy a toy or a book on the Web with a credit card and a click, there hasn't been an easy way for a manufacturing company to get short-term financing to buy \$100,000 worth of supplies online. Even though the business-to-business market is expected to be where the big e-commerce action is — \$1.3 trillion by 2002, according to Forrester Research Inc. — analysts said obtaining financing and credit

online has been an obstacle to its growth.

That's about to change. Next week, a Westwood, Mass.-based maker of Web-based automated credit software is launching an online network that will link merchants, customers and lenders together under the same hood. The secured Internet system, hosted by eCredit.com Inc., was designed to benefit sellers, buyers and lenders by opening up financing to a bigger pool of corporate customers. The idea is to drive more business-to-business transactions by making it *Dot-com Finance, page 85*



JUDGE SLAMS MICROSOFT

MICROSOFT CORP. IS A MONOPOLY that is free to charge what it wants for its operating systems and isn't threatened by rival platforms, such as Linux, said antitrust trial Judge Thomas Penfield Jackson Friday in hard-hitting and long-awaited findings in a landmark antitrust case.

In a sweeping rebuttal of the company's defense, Jackson said Microsoft, "enjoys so much power in the market for *Judge Slams Microsoft, page 4*

RACE HEATS UP FOR E-SUPPLY CHAINS

Ford, GM tout dueling automated purchasing

BY CRAIG STEDMAN

Ford Motor Co. and General Motors Corp. ratcheted up their contest for the auto industry's e-commerce pole position last week, announcing plans to set up rival online marketplaces aimed at automating purchasing activities in their supply chains.

The importance of the e-commerce race for the two automakers was illustrated by GM's decision to rush out its

announcement just hours after Ford went public with its initiative. GM officials coc their

Driven to the Web
■ Ford, majority owner of its venture with Oracle, will focus initially on signing up its top 100 suppliers. Supply-chain planning software will also be made available on its exchange.
■ GM could take 20% of Commerce One's stock. Its exchange will be linked to others run by Commerce One in different industries and to a companion system GM will use for its purchasing.

plans were sped up by several days in response to Ford's move.

GM also quickly changed the name of its marketplace from GM MarketSite to GM TradeXchange after a survey showed potential users preferred the second choice. "Welcome to the Internet world," a company spokesman said.

The dueling exchanges, which will provide Web-based forums for automotive suppliers to buy and sell parts and materials, are both due to go live by March. Ford is setting up a joint venture with Oracle Corp. to run its marketplace, while GM is teaming up with Commerce One Inc.

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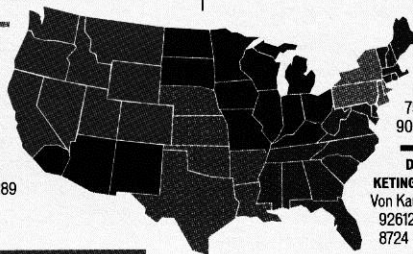
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AFTER THE WALL

Ten years after the collapse of the Berlin Wall, IT in Central Europe is catching up to the ways of the West. Page 42

WAITING IT OUT

Forget the New Year's Eve party! Many Y2K professionals want to be at the office at midnight to see how their efforts turn out. Page 46



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CHRIS SELLAND, AN ANALYST AT THE YANKEE GROUP IN BOSTON, ON WHY HERSHEY HIT SNAGS AFTER SQUEEZING A FOUR-YEAR SAP IMPLEMENTATION INTO 30 MONTHS. SEE PAGE 1.

Three New Wireless E-Mail Devices

BY DAVID STROM

TRAVELING EXECUTIVES looking to cut the cord on their e-mail habit have lots of choices these days. I looked at three of the latest wireless e-mail devices — the Palm VII, the Touchpoint phone with a built-in Web browser from Sprint PCS and an updated two-way pager from Research in Motion Ltd. All three do more than wireless e-mail, of course: You can jot down notes, keep track of your schedule and, in the case of Touchpoint, make cellular phone calls.

Although each unit has its frustrations and problems, all are improvements over the trio of devices I reviewed Feb. 15.

I've used one form or another of wireless e-mail for more than eight years and suggest that you consider the following:

- Can you get e-mail on these devices with the same corporate e-mail account that you use on your desktop? Most devices require some effort and some combination of software and services to do this.

- How much

skill is required to type a typical reply message? None of the devices is as handy as a full-size keyboard. You should try one out before buying to make sure you're comfortable with its controls and key layouts.

- Do these devices work indoors and in out-of-the-way places? All three I tested work best outdoors and in major metropolitan areas. The farther inside buildings and away from the city you take them, the worse the radio reception gets. This is just physics.

- Is the price reasonable and predictable? All the devices come with an array of monthly service plans and fees. Make sure you understand the pricing plan you need up front.

In an ideal world, each device would come with everything you need to extract e-mail from your existing corporate account. However, these devices aren't there yet. Each comes with its own e-mail account, separate from your existing corporate e-mail account. If your corporate e-mail system has message-forwarding features, you can turn that on when you leave town and have your mail forwarded to your device.

I took all three devices with me on several business trips and also carried them all over town to determine coverage capabilities and battery life. I also connected them to a Windows NT desktop and tested their synchronization software

and other utilities. Of the three, the Palm offers the most promise: It has the largest and most active developer community and the best software. However, to be a really effective Palm user, you will need to learn its Graffiti scripting language to compose messages. ▶

Strom is a freelance reviewer in Port Washington, N.Y.



Palm VII

Palm Computing Inc., a subsidiary of 3Com Corp. www.palm.com

Wireless service: BellSouth Wireless Data

Price: \$499, plus various plans (\$10 to \$40 per month, depending on volume) and \$10 activation fee

Keyboard/screen: Touch screen with Graffiti script; 3.5-in. diagonal Palm screen

Batteries: Two AAA batteries last for two or more weeks

Available: In New York since May; nationwide since October

The Palm VII has a variety of ways to read and respond to e-mail. It comes with its own built-in e-mail software, called iMessenger. However, it doesn't have as many features as I'd like, such as filtering, scheduled forwarding and mass message deletes. For example, you have to log in to the Palm.Net Service Web site to delete multiple messages at once. To obtain these features and to read

your existing e-mail account, you will need to make use of either Visto Corp., Yahoo Mail or MonkeyMail services. Another choice is to use ThinAirApps.com's ThinAirMail client software, a free product that is my favorite of the current alternatives available for wireless e-mail.

No matter which service or software you use, you have to use Graffiti to compose messages. It will take a while to learn this language, but it's easier than typing responses on the Touchpoint phone's keypad.

Blackberry Interactive Pager

Research in Motion Ltd. www.blackberry.net

Wireless service: BellSouth Wireless Data (850 model uses Ardis)

Price: \$399, plus \$40 per month for unlimited usage

Keyboard/screen: Full QWERTY keyboard but very small keys; screen has up to eight-line display

Battery: One AA lasts up to three days

Available: Now

The Blackberry has the best keyboard of the three, with a full typewriter layout of keys, albeit only 3 in. wide. Given its size, I could type fairly easily and compose longer messages than on the other devices. It comes with relatively weak desktop synchronization software, because you can't synchronize your e-mails yet between the device and your desktop. It also has the most confusing set of models. There's one that works only with Microsoft Exchange servers, another that works with Internet e-mail and a third that runs over American Mobile's Ardis wireless networks. This



latter model has a \$60-per-month usage plan and works with e-mail accounts through American Mobile's eLink Agent.

GoAmerica Communications Corp. (www.goamerica.net) offers e-mail access for varying fees and will sell you a reduced-price Blackberry as well.

Touchpoint Phone With Wireless Web

Sprint PCS (manufactured by Denso Corp.) www.sprintpcs.com

Wireless service: Sprint PCS with service from Phone.com Inc.

Price: Various pricing plans for both voice and data start at \$10 per month, plus price of phone

Keyboard/screen: Seven lines, with 12-button phone keys with Tegic script

Batteries: Rechargeable; lasts up to two days

Available: Now

Sprint PCS has introduced its Wireless Web service, through which you can browse some Web sites using your cellular phone. Several phones are available for this service, including ones from Motorola Inc., Nokia Corp. and Qualcomm Inc.

I tested a phone from Denso called Touchpoint. Any of these phones come ready to read e-mail: You can set up a free account with Yahoo Inc. and have it collect your corporate e-mail. And if you don't need to reply to your messages, you can forward or copy mail to Sprint's short messaging feature (every Sprint phone is equipped to receive e-mail at phonenummer@messaging.sprintpcs.com). I wanted to use the phone to read my mail at Infinite Technologies Inc.'s Mail-AndNews.com site, but Infinite is still working out the bugs with Sprint.

Built in to the phone is software from Tegic Communications Inc. called T9. Because you have only 12 buttons to key in any text, Tegic has developed a way to predict what you're going to type and to facilitate the process. Although it's no substitute for a QWERTY keyboard, it does a credible job.

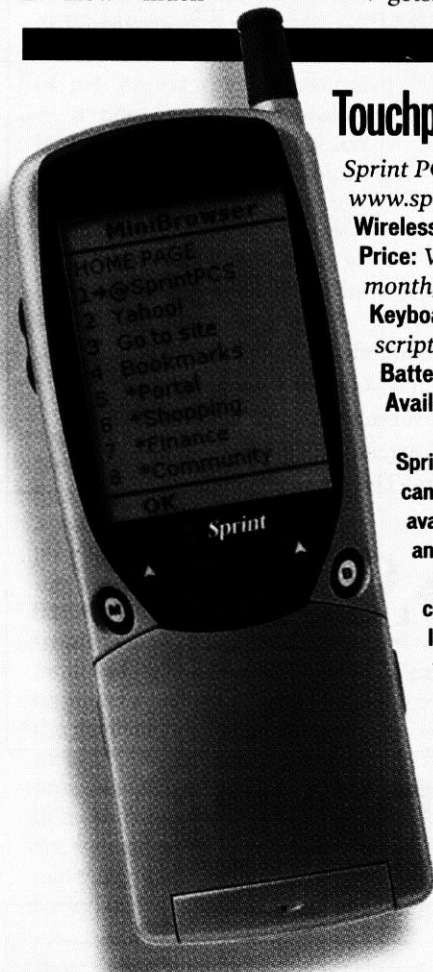


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SCHWARTZ

COMPLETE IDIOT'S GUIDE TO
ONLINE DATING AND RELATING

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THE COMPLETE IDIOT'S GUIDE® TO

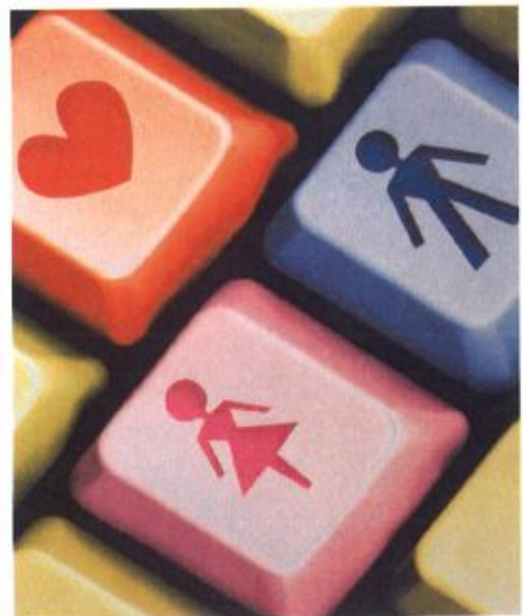
"This clever book takes the mystery and pitfalls out of looking for and learning about love on the Internet. With humor and intelligence, author Joe Schwartz provides an entertaining and easy-to-use guide that makes the vast plains of cyberspace accessible to the would-be romantic and just plain curious."

— 'eMale',
advice columnist for
women.com

Online Dating and Relating

- ◆ **The quick and easy** way to meet new people who share your interests
- ◆ **Idiot-proof steps** to establishing lasting friendships and relationships online
- ◆ **Down-to-earth advice** for when the going gets tough

Joe Schwartz



Dear Reader,

No doubt, if you are reading this, you are asking yourself the question "Should I buy this book?" Take this simple quiz to find out.

Dating is:

- (A) The measurement of an object's carbon content as a means to determine its age.
- (B) The process of ingesting a sweet edible oblong fruit.
- (C) The hellish dance of loneliness played out between two people as they vie for position to eviscerate each other's soul.
- (D) I do not date. I am a Vulcan.

If you answered any of the above, or even made up your own answer, you are correct and should buy this book (thus ensuring me a royalty). For those of you who need additional convincing, let's examine the answers more closely.

If you selected choice A, you probably have limited exposure to socializing with people. Since the last thing you want to do is converse with people face to face without any practice, purchasing this book will allow you to talk to others over the Internet without having to confront issues associated with grooming or hygiene. Inside these pages we'll explore chat rooms, instant messaging, and Web-based message boards, all of which can put you into contact with others over the Internet, while keeping you safe and anonymous.

If you selected choice B, you are either a farmer or someone obsessed with sexual innuendo. In either case, you need to meet people soon. Going through life relating to everything as a function of survival or a sick joke can only lead you to a troubled existence. In this book, you'll learn the best places to seek companionship online and, when converting it into an offline relationship, how to do so safely.

If you selected choice C, you're bitter. Nothing can really help you except the positive reinforcement of good experiences. Throughout this book are anecdotes from people who've met others online. Not all the stories end well, but all the storytellers have survived their tales. These stories hopefully will give you the courage to try to meet people via the Internet and the confidence to know that even if you do have a few dreadful experiences, you will survive.

Finally, if you selected choice D, you are an extraterrestrial. Who more than you needs to understand other humans? As such, these pages will introduce you to Web sites designed to give advice of the heart, assist with online romance, and ease the pain of getting over a relationship. As an alien, you will probably never use these resources yourself, but imagine how much better you'll interact with the human population after having been exposed to this information.

Thank you for taking this quiz to determine whether you need to buy this book. And thank you for your purchase.

Sincerely,

Joe Schwartz

The Complete Idiot's Command Reference

People socializing and dating on the Internet often have different reasons for wanting to meet others. Here are the five most common types of people, based on their social objectives.

The Dabbler has gone online to "see what this Internet dating thing is all about," but doesn't usually have any plan other than "to have fun." As you begin your journey socializing with others over the Net, you might find yourself in the middle of an email or chat room conversation that you thought was going really well, when the other party goes AWOL. That's the dabbler either getting bored or realizing that connection with another individual is not really what he or she is after.

The Nester wants to find a committed relationship and is looking to the Internet as one of many ways to find one. He or she is usually very goal-oriented in that the purpose of socializing online is not about the process of forging friendships, but is about finding THE ONE PERSON that will be his or her lifetime mate.

The Hormone wants sex. Usually he or she will make this very clear early on. Hormones vary in that some just want virtual sex (that is, simulating sex via a private chat room discussion or email), some want to meet you in the physical world, and some want it in all manner, shape, and form.

The Butterfly goes from chat room to chat room, person to person, having conversations with a multitude of different people. He or she is looking to make one or more friends and usually keeps the relationship platonic. In a simpler time, this person went by the name pen pal.

The Seeker doesn't know what he or she is looking for, but unlike the Dabbler, is seeking to make some sort of connection with another person. He or she might claim to be looking for a partner or just looking for sex, but the actual agenda is usually unknown to the Seeker.

Emoticons

Emoticon	Description
:) or :-)	The original smiley that means "I'm happy." Can also mean "I'm joking."
:(or :-("I'm sad." Indicates to the reader that the current writer is sad at what he or she has just heard.
;-)	A wink. Usually used for a flirtatious or sarcastic remark.
{hug} or [hug]	A hug.
{{{***}}}	Hugs and kisses.

If you'd like to explore the hundreds (if not thousands) of emoticons currently being used (or if you need to find the meaning of one), you can check out the following resources:

Online Lingo <http://www.thirdage.com/features/tech/netglos/index.html>

Internet Smileys.... ^_^ <http://members.aol.com/bearpage/smileys.htm>

Smilies Unlimited <http://www.czweb.com/smilies.htm>

que®

Acronyms that are common to the Internet have made their way into the messages people use to socialize online. Some of the more widely used ones are:

Acronym	Meaning
AFAIK	As far as I know
A/S/L	Age/Sex/Location
BBL	Be back later
BTW	By the way
DIKY	Do I know you?
GAL	Get a life
ILY	I love you
F2F	Face to face
IRL	In real life
LOL	Laugh out loud

If you want to learn and decipher the hundreds of additional acronyms found online, check out the following resources:

Alphabet Soup Explained <http://members.aol.com/nigthomas/alphabet.html>

Usenet Acronyms Dictionary <http://homepages.ihug.co.nz/~tajwileb/dictionary.html>

V.E.R.A. (Virtual Entity of Relevant Acronyms) <http://userpage.fu-berlin.de/~oheiabbd/vera-e.html> (This is a search engine for acronyms.)

Do You Hate to Type?

Would you rather just click a link to visit the Web sites in this book? Just point your browser to

<http://www.size-eight.com/book>

This site provides links to every Web page discussed in *The Complete Idiot's Guide to Online Dating and Relating* as well as new socializing Web sites that were created after this book went to press.

THE
**COMPLETE
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GUIDE[®] TO**

Online Dating and Relating

Joe Schwartz

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A Division of Macmillan USA
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How to Do
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Play music, browse the Web, send instant messages, download games—and more

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Manage appointments, take notes, crunch numbers, and synch data with your desktop PC



Frank McPherson

Mc Graw Hill OSBORNE

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What You'll Do in This Book

CHAPTER

■ Learn the hardware and software features of your Pocket PC	1
■ Work with information and run programs using the Pocket PC user interface	2
■ Change the appearance of your Pocket PC by selecting different themes	3
■ Change the settings on your Pocket PC to tailor it to your needs	4
■ Connect your Pocket PC with desktop computers	5
■ Synchronize your data with a desktop computer	6
■ Install programs onto your Pocket PC	7
■ Schedule appointments, manage contacts, and track tasks	8
■ Make phone calls using the Pocket PC Phone application	9
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■ Work with numbers using Pocket Excel	11
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About the Author

Frank McPherson is an avid user of handheld computers, starting with the Newton MessagePad in 1993 and later the Windows CE Handheld PC. Since 1993 he has been helping Newton, Handheld, and Pocket PC users online with Compuserve, the Microsoft Network, and Internet newsgroups. He developed and maintains the PocketPCHow2 website (<http://www.pocketpchow2.com>), which is visited by people from around the world seeking help using their Pocket PCs. Microsoft has recognized him as a Most Value Professional for his contributions to the mobile device community.

Frank has been a sports columnist and reporter for the Norway Current, a weekly newspaper in Norway, Michigan, and has also covered high school sports for the Iron Mountain Daily News in Iron Mountain, Michigan. Articles written by Frank about Pocket PCs have appeared in *Pocket PC Magazine*, *Brighthand.com*, and *PocketPC.com*.

A 1989 graduate of Michigan Technological University with a BS degree in Computer Science, Frank is also a Microsoft Certified Systems Engineer and Senior Information Specialist at EDS, where he has been employed for over ten years. Originally from Norway, Michigan, located in Michigan's beautiful Upper Peninsula, this Yooper now lives in West Bloomfield, Michigan with his wife, Ruth.

How to Do
Everything
with Your

Pocket PC

Second Edition

Frank McPherson



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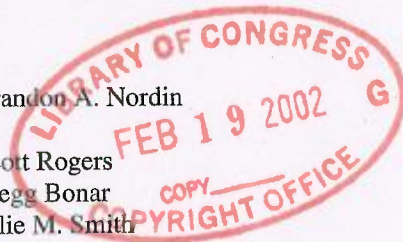
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How to Do Everything with Your Pocket PC, Second Edition

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Dedication

I was nearly halfway through writing this book on September 11, 2001. It was hard to write anything as the horror of that day's events, and the suffering of so many people, made writing books and Pocket PCs seem unimportant. Like many other Americans, I struggled with fear and uncertainty.

As the days passed with images of New York, Washington DC, and Pennsylvania constantly on television, I wondered what it is that I could do. All the people who died on that day did so enjoying the freedom the United States provides. Americans are free to travel anywhere within this great country, and earn a living doing work that provides personal satisfaction. In the United States everyone is free to practice any religion, go to any school, and voice their own opinions. Writing this book is one way that I enjoy my freedom, and in so doing bring honor to those who died on September 11, 2001.

This book is dedicated to those died on the planes, in the buildings, and on the ground in New York, Washington DC, and Pennsylvania. It is dedicated to our real heroes, the men and women of our fire and police departments, doctors, nurses, and emergency technicians, and members of our armed forces.

Let us never forget how precious all life is, and how truly blessed we are to live in a country in which we are free to seek out and fulfill our dreams.

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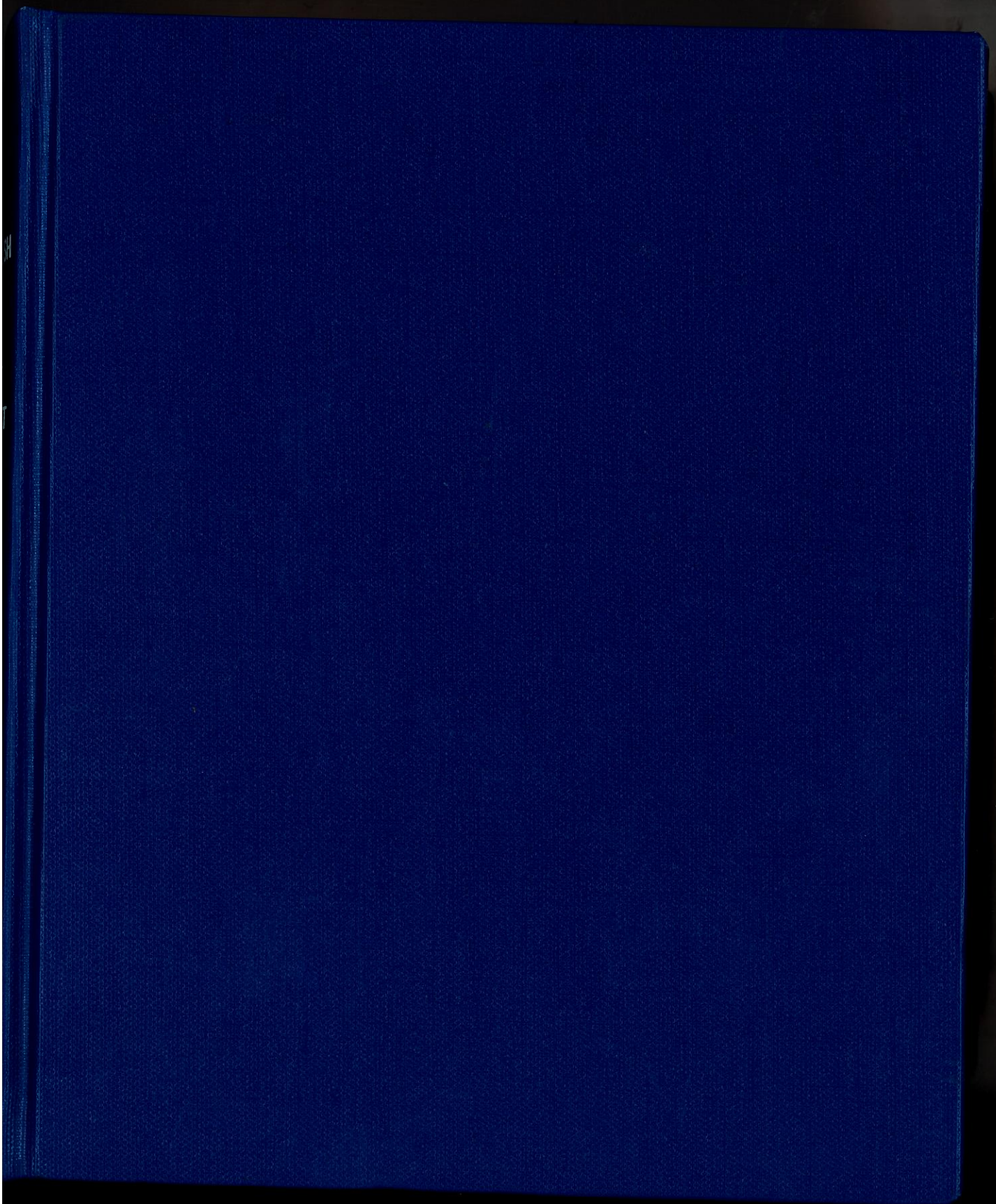
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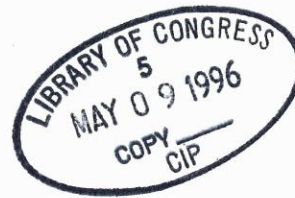
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To the Merry Punsters
(NTAP)

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