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Computer Use in Social Services Network

Vol 11 No. 3
Fall 1991

Networking: The Linking of People, Resources and Ideas

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About the Network

Computer Use in Social Services Network (CUSSN) is a nonprofit association of professionals interested in exchanging information and experiences on using computers in the human services.

The Newsletter has been published approximately 4 times a year and was sent free to all network members. Back issues are $5 each. The CUSSN Newsletter is being merged with the Haworth Press Journal titled, *Computers in Human Services*, edited by Dick Schoech. For details on how to subscribe to Computers in Human Services, contact Haworth Press, 10 Alice St., Binghamton, NY 13904-1580 Tel: 800/342-9678.

The Disk Copy Service makes human services demos and shareware available to members for a small processing fee. Write for free listing of software and see inside this newsletter for newest disks.

The Electronic Network (CUSSNet) establishes local bulletin boards, national and local mail and file transfer, downloading of public domain software, and access to several databases on human service computing. CUSSNet builds on FIDONET, about 10,000 microcomputer–based local bulletin boards across the U.S. and in 9 continents. See inside for a list of CUSSNet nodes. Communications are at 300–2400 baud, 8 data bits, 1 stop bit and no parity. Almost any computer or terminal and modem will work. Usually no fee is required.

Periodic Conferences have been sponsored by CUSSN, for example, HUSITA–1 at Birmingham England, 1987 and HUSITA–2 at Rutgers NJ, 1991. CUSSN again intends to sponsor HUSITA-3 in Mastrich, Holland in 1993 (see inside conference listing for more details).

A Mailing List is maintained by CUSSN for information dissemination purposes. Anyone interested in being put on the mailing list should send their address to Dick Schoech, Associate Professor, School of Social Work, The University of Texas at Arlington, UTA Box 19129, Arlington, TX 76019.

CUSSNet—CUSSN's Electronic Network

Overview

The electronic component of the Computer Use in Social Services Network (CUSSNet) establishes local bulletin boards, local and international mail and file transfer, conferencing, and repositories of electronically available information. CUSSNet builds on a 10,000+ local bulletin boards (FIDO, OPUS, etc.) around the world which automatically exchange information. Usually no fees are charged except for long distance mail.

If a BBS carrying the CUSSNet conference (echo) exists in your city, dial it up and follow the directions. Before calling long distance to a node, you may want to learn to use a BBS by calling a free local node. To locate a local FIDO or OPUS BBS, ask your local microcomputer dealer. You can use a local node to send mail and pick up whatever CUSSNet information your local BBS operator will get for you. Communications are at 300–2400 baud, 8 data bits, 1 stop bit and no parity. Almost any computer or terminal and modem will work.

Sample **message areas** are: Local and international public/private mail, conferences on human services, health, psychiatry, addictions, disabilities, AIDS, veterans, violence, etc. A message in the CUSSNet conference goes to all the boards listed below.

Nodes Carrying the CUSSNet Conference: *(accuracy is impossible with this list)*

U.S. Nodes

Location	Node	Board Name	Number	Baud
AZ Phoenix	1:104/18	Iasd Eng Bbs	1-602-789-5088	9600
AZ Phoenix	1:114/15	St Joes Hospital	1-602-235-9653	9600
CA Barstow	1:10/300	Bruce's Board	1-619-252-5150	1200
CA Clovis	1:205/10	Take-Two	1-209-299-3734	9600
CA Concord	1:161/503	Online Computer Reso	1-510-687-0236	9600
CA Folsom	1:203/53	The Second Opinion	1-916-985-4720	9600
CA Fresno	1:205/80	T.O.T.T. BBS	1-209-292-6403	2400
CA Goleta	1:206/2709	Over in Goleta	1-805-968-1408	2400
CA Manteca	1:208/1	Net 208 NEC	1-209-823-0093	9600
CA Sacramento	1:203/23	KBBS	1-916-338-5227	9600
CA San Francisco	1:125/10	SF BAY InterConnect	1-415-863-9718	9600
CA Tustin	1:103/501	Mount Silverthorn	1-714-838-6539	9600
CO Denver	1:104/52	NurseLink	1-303-270-4936	2400
CO Grand Junction	1:104/813	WCIE!	1-303-243-5146	2400
DC DE MD NJ NY PA V	1:13/13	Mid Atlantic	1-703-323-7654	9600
DE Newark	1:150/140	Black Bag BBS	1-302-731-1998	9600
FL Orlando	1:363/52	Central Fl. Psy For	1-407-645-1658	2400
IA Des Moines	1:290/627	FOG LINE BBS	1-515-964-7937	9600
IA Iowa City	1:283/657	Icarus	1-319-337-9878	9600
KY Murray	1:11/301	Fido-Racer	1-502-762-3140	9600
LA New Orleans	1:382/1	The Southern Star	1-504-885-5928	9600
LA New Orleans	1:382/1	The Southern Star	1-504-885-5928	9600
LA New Orleans	1:396/5	Pontchippi	1-504-244-1417	9600
MD Towson	1:261/1023	King Solomon's Mine	1-301-494-1533	9600
MD Wheaton	1:109/432	The Idea Link Tech	1-301-949-5764	2400
MI Monroe	1:120/175	Fast Eddie's BBS	1-313-243-0944	9600

Source: Bill Allbritten at 1:11/301, Oct 91

NC	Burlington	1:151/406	NightHawk BBS	1-919-228-7002	9600
NC	Raleigh	1:151/1000	REDCON	1-919-859-3353	9600
NC	Raleigh	1:151/1003	Shalom-3	1-919-851-3858	9600
NC	Raleigh	1:151/100	Raleigh HUB	1-919-851-8460	9600
NH	Chichester	1:132/111	On Line New Hampshir	1-603-798-4028	2400
NJ	Maple Shade	1:266/12	Maple Shade Opus	1-609-482-8604	9600
NJ	Medford	1:266/22	RTC-BBS	1-609-654-4991	9600
NM	Las Cruces	1:305/101	NASW New Mexico	1-505-646-2868	9600
NM	Las Cruces	1:305/105	Desert Dolphin	1-505-523-2811	9600
NY	Glens Falls	1:267/41	The HOST BBS	1-518-793-9574	9600
OH	Cleveland	1:157/200	PC-OHIO II HST	1-216-291-3048	9600
OH	Cleveland	1:157/555	John Carroll Univ	1-216-397-3068	9600
OH	Rocky River	1:157/2	Nerd's Nook II	1-216-356-1772	9600
OH	Rocky River	1:157/3	Nerd's Nook	1-216-356-1431	9600
OK	Oklahoma City	1:147/2777	Trinity BBS	1-405-692-2289	9600
TX	Clute	1:106/215	South o'the Border!	1-409-265-0463	9600
TX	Dallas/Fort Worth	1:130/10	D D Connection	1-817-277-6989	2400
TX	Grapevine	1:124/4115	Southern Crossroads	1-817-481-8984	9600
TX	Houston	1:106/112	The LAST Stop BBS	1-713-661-3399	9600
TX	Houston	1:106/116	The Leaders in Contr	1-713-584-1821	9600
TX	Houston	1:106/167	Texxas Star	1-713-821-6629	9600
TX	Houston	1:106/1729	JW's Laser BBS	1-713-688-1729	9600
TX	Houston	1:106/5433	Treeshare Genealogic	1-713-342-1174	9600
TX	Tomball	1:106/1555	Texas Father's BBS	1-713-376-4767	9600
WA	Tacoma	1:138/116	Group Medical BBS	1-206-582-3212	9600

Foreign Nodes

Location	Node	Board Name	Number	Baud
Belgium Deurne	2:513/11	HCC(B)-C Intrest Gro	32-3-3217839	9600
Netherlands Apeldoorn	2:500/211	Dutch Health Bbs	31-55-337951	2400
Netherlands Apeldoorn	2:500/4	HCC Centrum/Oost 1	31-55-410095	9600
Netherlands Echt	2:512/0	PCC Net	31-4754-87768	9600
HUNGARY	2:331/371	Budapest NET	36-1-118-79-50	9600
UK Hexham	2:256/97	Log on In Tynedale	44-434-606639	9600
UK London	2:254/70	GnFido	44-71-608-1899	9600
Italy Brescia BS	2:331/201	OCTOPUS	39-30-293250	9600
Italy Milano MI	2:331/301	BBS2000	39-2-76006857	9600
Italy Milano MI	2:331/307	TeleSiBioc	39-2-6889009	9600
Italy Verona	2:333/100	Arena's Hub	39-45-6860307	9600

Non-Fidonet Nodes

Location	Node	Board Name	Number	Baud
Sallisaw, OK	8:7000/35	Anawah Ministries	1-918-775-9102	9600

Source: Bill Allbritten at 1:11/301, Oct 91

PC-PASS (1 disk) Demo of authoring system with two social policy examples [D] IBM
PC-Pathway (1 disk) Demo of a career selection tool $[D] IBM
SIMCON (1 disk) Shareware policy simulation [U] IBM
SWBIB (2 disks) Annotated bibliography on computers in social work [F] IBM
TUTOR.COM (1 disk)(Ver 4.4) A general tutorial on the PC and DOS [U] IBM
Understanding Statistics (1 disk) A statistical tutorial $[D] {C} IBM
Word Perfect Learning System (2 disks) Shareware tutorial on Word Perfect [U] IBM

Health and Mental Health

ACHI (1 disk) Assessment of Chemical Health Inventory Demo [D] IBM
Agency Simulation (1 disk) Agency simulation source code & reports for a Dec 10 computer [F] IBM
AMIS (1 disk) Demo of a hospital social work/discharge planning system [D] IBM
ARES (1 disk) Demo of an At-Risk Evaluation System [D] IBM
ASH+ (1 disk) Demo of Automated Social History [D] IBM
CASS (4 disks) Computer Assisted Social Services (CASS) system [L] {HD} IBM
DALE (1 disk) Demo of a drug abuse education system [D] IBM
Decisionbase (3 disks) Fully functional sampler of integrated mental health software [D] {HD} IBM
DIS (1 disk) Demo of client self-administered Diagnostic Interview Schedule generating DSM III info. [D] IBM
DSMIIIR Trainer (1 disk) Program teaches the DSMIIIR [F] IBM
Hamilton Depression Assessment (1 disk) Automates a depression scale [F] IBM
Help-Software (1 disk) Demo of self-help software for assertiveness, self-esteem and stress [D] IBM
I-View Skills Demo of software to teach interviewing skills [D] IBM
MedSWIS (2 disks) Demo of a hospital social work information system [D] IBM
MHC-BIB (1 disk) Annotated bibliography (581 entries) on Mental Health Computing [F] IBM {HD}
PsyMed (2 disks) Provides an easy to use guide to psychotropic medications [U] IBM
PSYSEARCH (1 disk) Demo of a psychiatric diagnostic aide using a DSM-III-R type decision tree [D] IBM
The Psychiatric Assistant (2 disks) Demo of a system to assist clinicians [D] IBM

Management

Community Services Locator (1 disk) Demo of an information and referral system [D] IBM
Day Care Manager (3 disks) Shareware for managing a day care program [U] IBM {HD}
HSIS (1 disk) Demo of customizable client information system [D] IBM
Micro-Psych (1 disk) Demo of office management system for individual/group practices [D] IBM
MIS Manager (2 disks) Shareware computer inventory tracking system [U] IBM {HD}
R/Client (2 disks) Demo of a client management and reporting system [D] IBM
Sisyphus (1 disk) Demos program to help clinicians with paperwork [D] IBM {HD}
The Servant (5 disks) dBase III+ system for church/Sunday school members/activities [U] IBM {HD}
Volunteer Network (3 disks) Shareware for tracking and scheduling volunteers [U] IBM {HD}

Miscellaneous

Child Abuse (1 disk) Demo of how an intake prioritization expert system might work [F] IBM
Child Protection System (1 disk) Demo of a child protective services system [D] IBM
KWIKSTAT (2 disks) Shareware statistical package, Ver 2.0 [U] IBM {C}
Simple STATS (3 disks) 62 simple statistics programs [F] IBM
TNCinfo (2 disks) Texas Networks for Children Electronic Information System [U] IBM

Demo/shareware/freeware disk order form

To order, circle the disks requested. Enclose $5 per disk ($6 for non-members and overseas mail) to cover mailing and handling. On orders of over 10 disks, deduct $1 per disk. For 3.5" disks, add 50 cents per disk extra. Disks may be accompanied by vendor advertisements, order forms, etc. Proceeds from disk sales go towards furthering the CUSSN activities. Order from D. Schoech, CUSSN, UTA, Box 19129 GSSW, Arlington, TX 76019-0129. Make checks payable to CUSSN. UTA's Federal Taxpayer ID number is 75-6000121W.

Number of software products = _____; **Number of computer disks =** _____
Enclosed: (U.S. dollars only) # of disks X $5 (members) or $6 (non-members) per disk (minus $1 per disk for orders of 10+ disks) _____
Name: _____
Mailing Address: _____
City: _____ **State:** _____ **Postal Code:** _____ **Country:** _____

CUSSN Disk Copy Service

Definitions of software codes:

[D] = **Demo**—Software that highlights a product and/or gives you the feeling of how the actual product operates.
[F] = **Freeware**—Full working version; no restrictions on use.
[L] = **Limited Use Version**—Lets you examine the product, but limitations prevent continued use.
[U] = **User Supported Shareware**—Full working copy to examine; you are expected to register and pay the vendor if you use it.
IBM/MAC = Designates platform on which software runs. If both IBM & MAC are indicated, specify choice.
{HD} = Requires a hard disk.
{C} = Requires a color graphics card
$ = Vendor allows you to deduct the payment to CUSSN for disks from your purchase price.
Note: Disks are direct from the vendor and copied with vendor permission. Thus, disks are free of computer viruses.
All disks are guaranteed to work. However, disks may get damaged in the mail. If you have a problem, do a PrtSc of the problem and return it with your disk for a new copy.
Help build the list. If you have found a human service oriented demo/freeware/shareware disk to be useful, please send it along. For every demo/freeware/shareware disk you send me, I will send you any three disks free.

New Disks Since the Last Issue

Contrib Plus (1 disk)—Demo of the fund raising module of NFP accounting $[D] IBM

Donor Records (2 disks)—Limited use version (max 25 records) of a fund raising system [L] IBM {HD}

EVOLV (1 Disk)—Child Welfare Management Software [D] IBM
Demos 9 integrated modules: administration, case management, progress notes, adoptions, foster parent management, structured programs, health services, foster parent payments and Medicaid billing.

Learn to Sign (1) Shareware American Sign Language tutor [U]{C}

Negotiator Pro (1 disk)—Demo of a program that teaches negotiation skills [D] {HD} IBM & MAC
Demos a hypertext/expert system tool to teach negotiation theory, issues, and tactics.

NFP Accounting(1 disk)—Demo of General Ledger, Accounts payable & Payroll $[D] IBM

PC Learn (1 disk)— A general tutorial on computers and DOS [U] IBM

Rapid Proposal Maker (1 disk)—Freeware proposal maker for the EEC [F] IBM {HD}
Shell allowing users to complete forms producing an (Europe Economic Community) Proposal. Uses dbase files.

Relativity (1 Disk)—Demos computer generated genograms [D] IBM

Selected Disks described in Previous Issues—write for complete list

Accounting and billing

Fixed Asset Manager (2 disks) Shareware fixed asset management system [U] IBM {HD}
Fund Accountant (2 disks) Shareware fund accounting system [U] IBM {HD}
Nonprofit General Ledger (1 disk) Shareware nonprofit general ledger [U] IBM
Painless Accounting (3 disks) Shareware office accounting and billing system [U] IBM {HD}

Disabilities

CAPTAIN'S LOG (2 disks) Demos a cognitive rehabilitation system [D]{C} IBM
Freedom Writer (1 disk) Demo of input program for persons with limited mobility [D] IBM
RAVE (2 disks) Demos program to identify appropriate occupations $[D] IBM {HD}
Sign Friends (1 disk) Shareware Sign Language trainer [U] IBM
WorkNet (4 disks) Demos job development program $[D] IBM {hd}

Education/training

ANGER-ADVOCACY (1 disk) Training courses on Responding to Anger & Legislative Advocacy [F] IBM
BASIC Professor (1 disk) Shareware interactive tutorial on the language BASIC [U] IBM
Black Magic (3 disks) Shareware version of hypertext software [U] IBM
DOS Learning System (1 disk) Shareware DOS tutorial [U] IBM
Empirical Practice (3 disk) Materials for a course on empirical practice [F] IBM
Lotus Learning System (2 disks) Shareware tutorial on Lotus 1 2 3 [U] IBM
MEL (2 disks) Demo of Micro Experimental Laboratory system [D] IBM {C}
MRDOS (1 disk) Shareware introduction to the IBM and DOS [U] IBM
PC-CAI (1 disk) Shareware system to develop computer aided instructions [U] IBM

Articles, Reviews and Reports

Interview with Walter Hudson

Professor, School of Social Work, Arizona State University, Tempe, AZ 85287.

CUSSN: You've developed several human service software packages. Tell us what it's like to be a human service software pioneer. How did you get started?

Hudson: It got started back in the 1960s when I became convinced that the electronic computer was going to be a very important tool for social workers at all levels. I worked with mainframe computers for quite a long time in those early years and came to realize that the barriers between users and the machine (i.e., mainframe personnel and cost) made the mainframe computer unattractive as a flexible tool for practitioners. In those early years time–share on a mainframe computer was prohibitively expensive. A keyboard alone cost about $1,700. Social service agencies could not afford the time–share computer fees and the entire effort was very discouraging. This changed with the launching of the microcomputer revolution, about 1981, and today we can purchase an entire system for the price of that earlier keyboard. I became very excited about the potential of microcomputers and the role they could play in practice and in administration. I wanted to be involved in the development of applications on the microcomputer for use by practitioners.

By the time the microcomputer revolution came along, I'd been very much involved in measurement theory, development of scales, and the use of single subject designs to monitor and evaluate practice. It occurred to me that the administration and scoring of simple assessment tools would be a fairly straight–forward application of computer technology and I began working on a project that's now called the "Computer Assisted Social Services" or CASS program. I came to discover, however, that it wasn't straight–forward at all! What I thought would be a weekend project has taken seven years to finish.

I came to discover, however, that CASS wasn't straight–forward at all! What I thought would be a weekend project has taken seven years to finish.

When I started working on my first serious microcomputer project, the CASS program, it began as a simple scoring program for paper and pencil assessment scales. Shortly after that I visited some friends and colleagues in Michigan and Denise Bronson told me that she had successfully put several of my scales into Lotus. When I heard her discussing the use of Lotus as a driver for the administration of the scales I realized I was on the right track but had not recognized it. The work that she did got me excited, so I returned home and began taking the development of the project much more seriously. In the process of doing that I realized that I had to make some choices about how to pursue the programming. That naturally led to the question of what language and what system I should use. The IBM PC seemed the only way to go at the time. The McIntosh was brand new on the market, it was programmable only through the Apple Lisa computer (which was very expensive), and the McIntosh did not have wide distribution at that point. Thus, I decided to stick with the IBM system, got some good counsel on choices of languages and chose to work with the C–language.

CUSSN: What is it like for a social worker to begin learning C?

Hudson: It was very difficult at first. I was in Tallahassee, Florida. C was originally developed as a systems language (I'm not a systems programmer) and consequently the people who were most familiar with C were the ones I was least likely to encounter. The applications oriented programmers that I knew had never heard of C. I discovered that I was very lonesome because I had no one to talk to. With the help of some people on the West Coast I started gaining a basic familiarity with C–language. The process was one of learning a new computer system, becoming much more intimate with the architecture of the computer than I ever wanted to be, and finally having to learn a great deal about the C–language and its subtleties. There are many myths about how C–language came to be known as "C." I came to believe that when your programming efforts go well, "C" stands for "colossal" and when it goes poorly it stands for "cruel." The basic syntax for the language can be learned in a few days or a couple of weeks. The power of the language must be learned over a period of two to five years. C is a wonderful language but it is demanding.

CUSSN: Is it like trying to speak French where in a few days you can learn to ask things like were to go to the bathroom, but it takes years to figure out what they are saying when they tell you where the bathroom is.

Hudson: Yes.

CUSSN: Is your learning typical? Are there other ways to proceed? If someone had an idea and wanted to put it into software—how should they proceed?

Hudson: Learning C is no longer painful. There are excellent books available at all levels and most universities and community colleges now have superb introductory courses that will speed up the learning process. Software development tools are also much more affordable today. Much has changed, and for the better!

I think there are basically two models or variations on two models that are available for taking on a software development project.

I think there are basically two models or variations on two models that are available for taking on a software development project. The first is for the social worker or academic to function principally as the designer of the system and to become intimately involved with those who will actually do the coding and the design of the software product. The designer functions pretty much as the director of a major project with two, three or more people working with him or her.

CUSSN: Does that require money?

Hudson: Lots of it. The major cost is for personnel and that's over and above the trivial costs for software and hardware developmental tools your programming personnel must have in order to do the work you want them to do. I'm not sure that's a good model. The second model is for one to become intimate with the equipment as well as the software development tools, the design issues, the marketing problems, the distribution efforts. I'm not sure that's a good model either...there are costs and trade–offs to both approaches. If I do not have a lot of time to devote to the labor intensive effort of programming and have a lot of money, I would go with the first model. But if I do not have a lot of money and I want to get the job done, then I've got the choice of investing my own time and doing virtually all of the work with help from students or colleagues who might be interested in doing or learning about such work.

CUSSN: If you were to compare writing your CASS program with writing books, how many books would equal the work put into CASS?

Hudson: CASS consists of about a dozen different programs that take up about 600,000 bytes of disk space. These are the executable files that comprise the system. By the time you consider the software libraries and all of the source code that go into CASS, it's approximately 500 pages of source code. Five hundred pages of source code would probably equal three or four normal textbooks. In terms of the amount of time it takes to write that code, test it, debug it and refine it...Well, you make a lot more money writing textbooks than you do writing software. And none of the above even mentions the documentation that must accompany the software...CASS takes up about a million bytes of disk space.

CASS is approximately 500 pages of source code. Five hundred pages of source code would probably equal three or four normal textbooks...you make a lot more money writing textbooks than you do writing software.

CUSSN: Given the difficulty which you are describing why would anybody want to develop software? Do you think the software market or the number of users is going to change? Will there be more software developers or will there be people who basically have a drive such as you had?

Hudson: The computer is here to stay, and it's going to get better, more powerful, and easier to use. The kinds of languages available today, as good and as powerful as they are, are primitive in comparison to what we're going to see in the future. When artificial intelligence researchers solve the very difficult problem of natural language processing we're going to see a totally new generation of computer language tools emerging. I can't properly credit the source of the quote—I believe it was Herbert Shildt in one of his books on C–language—but someone once said that as soon as we solve the problem of natural language processing we will have written the last computer program. With natural language processing we can much more effectively command computers to carry out the functions and chores that we want done.

Yes, there are many problems associated with software development in the human services professions and disciplines and the impetus to engage in that will not likely come from the promise of financial rewards. People do these things for many reasons. It can be fun. It can be useful. It can be challenging. However, the greatest rewards are probably those which are intrinsic to the pleasures of problem–solving. Isn't that what really drives scientists and researchers?

As for users and markets...Yes, that is going to change. Human services organizations are increasingly pursuing budgets that will enable them to acquire computers, software, and the training that will enable them to employ computer technology as part of their normal service delivery efforts. Yet, I also believe that such growth will be rather slow. The growth will accelerate, however, in relation to the emergence of useful software tools. We need more tools and we need more developers.

CUSSN: What advice do you give doctoral students who are interested in developing software or computerized assessment and measurement? What areas should they do their dissertation on? Artificial intelligence?

Most social work faculty who decide the fate of tenure–seeking newcomers are not favorably disposed to what they often demeaningly describe as "computer programming."

Hudson: Actually, I am very reluctant to encourage doctoral students to learn to do what I and others have been trying to do. It is very risky as an investment of one's time. When people finish a Ph.D. and join a faculty, it is extremely difficult for me, in good conscience, to tell them to invest in this kind of developmental work. Their survival in a traditional academic environment demands that they write articles and publish them in peer review journals in order to secure their tenure. In short, the existing structure we have for rewarding and recognizing creative work in our universities is an impediment to the development of computer technology in the human service professions. Most social work faculty who decide the fate of

tenure–seeking newcomers are not favorably disposed to what they often demeaningly describe as "computer programming." There are many reasons for such attitudes but the attitudes are very real and they can be deadly for non–tenured faculty.

I would dearly love it if one or two or three doctoral students said, "I'm going to do this whether you help me or not." That would relieve my guilt and then I would help them. But I could not in good conscience encourage people in the human services professions to pursue a software development project, given what they must do in a doctoral program to become qualified academics. It's just too risky and it's a luxury that now can be enjoyed only by those who have already acquired tenure within the university. We need badly to re–think our reward structures given the emergence of new technologies.

That's very frustrating because I believe that there is a very great need for at least a limited number of people to devote elective time to the development of applications techniques and software for use by practitioners and their clients. I am utterly confident that 15 years from now we will be so far ahead of ourselves that we won't recognize what we're doing today. But how we're going to get there...I don't have a clear vision of it and it's very frustrating, given what I think many of us see about the opportunities and resources to get to that point. Part of it has to do with the excitement and commitment that individuals display in choosing to do this kind of work. For example, I'm convinced that the work you've done was not brought about because somebody came to you and said, "Dick, you're going to get a lot of great rewards if you pursue this. Build us a computer journal!" You did it by yourself, so in a sense I guess I would be curious to turn the question back and ask what made you do that?

CUSSN: Your primary focus has been assessment. Where has assessment been, where is it now, and where is it going in the future?

Hudson: We're only about 20 years old in this arena. Prior to that we did not take seriously the issues of measurement and formal assessment. All of this got started with Scott Briar's book back in 1971 when he began talking about clinical science, and developing ways of determining whether we're actually doing any good on a case by case basis. Scott gave us a refreshing perspective at a recent conference when someone complained that only about 40% of our graduates actually use the assessment and evaluation technology taught to them. He was very grateful that as many as 40% are using it in this brief period of time! I think that what we're seeing around the country is an increasing number of schools of social work responding to the CSWE mandate that we teach all of our students how to evaluate their practice. That emphasis will continue and expand.

However, I think we've also learned that if we count on training practitioners as the principle vehicle for delivering this technology and implementing it in the field...that will be a bad mistake. Current and future administrators and managers must also learn that the technology is available and that it can be used in what Rino Patti describes as effectiveness oriented administrative practice. Many years ago we came to program evaluation with a top–down approach and we know about the limitations and resistances encountered. With what we've now come to call empirical social work practice we've developed a technology that examines and implements evaluation from the bottom up. I think the next step is going to be that the two focuses are going to meet in the middle. Managers and administrators are beginning to ask such questions as "How can I aggregate single subject data collected for many clients in ways that allow me to look at service delivery components from an effectiveness point of view." In other words, can I show that we're having successes or failures in general when we're treating, say, elderly disabled clients...or are we doing any better when we're dealing with pregnant teenagers...or are we doing any better with the developmentally disabled?

With what we've now come to call empirical social work practice we've developed a technology that examines and implements evaluation from the bottom up. I think the next step is going to be that the two focuses are going to meet in the middle.

As for the measurement component of assessment and evaluation (a major interest for me over the past 18 years)...that is still very exciting. An increasing number of agencies and human services practitioners are making use of formal measurement tools to evaluate client problems, monitor progress, and examine service effectiveness. Moreover, we are now beginning to look more comprehensively at the formal measurement of client problems and our measurement tools will become a bit more sophisticated. I've recently developed, tested, and released the Multi–Problem Screening Inventory or MPSI scale which enables client problem assessment across 27 different areas of personal and social functioning. It is very satisfying because it helps address assessment issues for those who adopt a systems or ecological perspective in their practice. In short, continued research and development will provide us with new and better assessment tools and their use will continue and grow over time.

CUSSN: Have you looked at any of the decisions making tools that business is using?

Hudson: I'm very sensitive to the message that Rino Patti is trying to give us. We've too long attempted to model social welfare administration and management on the business school model. Rino pointed out that businesses are driven and motivated by profit incentives whereas the social welfare institution must have a different driver. It's not profit and it has to be the delivery of effective services. So we're coming at the assessment of organizational effectiveness from two entirely different perspectives. That's not to say that fiscal accountability is not critical because you've got to have an adequate base of financial resources in order to maintain the survival of the institution. Once that's secured, our objectives become very, very different. They're based on service delivery and

not profit. Thus, many of the profit–driven decision–support tools found in the worlds of business and finance will not be useful to those who must worry about the delivery of services. Linear programming, for example, is an elegant and powerful tool for optimizing profits in relation to the constraints of markets and production resources. Yet, the methods of linear programming have had little to no impact on social welfare administration.

CUSSN: Any closing remarks?

Hudson: I'm very excited when I see practitioners and human services organizations purchasing computers and seeking software tools to help them carry out their practice objectives. Moreover, this movement seems to be on the rise. It has been very slow up to this point but it is becoming much more promising. For example, I gave a presentation at the NASW conference in 1988. Nearly three years later a man who attended the presentation called me excitedly because he was then able to purchase a copy of CASS for his practitioners to use. It took him that much time and that much persistence to acquire the resources he needed to pursue what he saw as a potentially useful application of computers. I'm very encouraged by the increased use of formal measurement tools, even if only in traditional paper and pencil formats. That too will eventually motivate the use of computer–based assessment.

It is exciting to have a class of 40 students, future practitioners, indicate they want to learn something about using microcomputers in direct services and their work with clients.

It is exciting to have a class of 40 students, future practitioners, indicate they want to learn something about using microcomputers in direct services and their work with clients. I think that says something about where our practitioners are going in terms of making good use of measurement technology, single subject designs, evaluation of practice and using that in the context of a feedback mechanism to inform their practice almost immediately. To inform their service delivery efforts. Now...where all that will take us in terms of future software development and computer applications...I think we'll all struggle with that for awhile.§

Eldercare Services Go High Tech!

From Janis Gray, Director, Texoma Area Agency on Aging, 10000 Grayson Drive, Denison, Texas 75020, 903/786–2955, FAX 903/786–8122.

Eldercare is a broad definition encompassing a wide spectrum of supportive services for older adults and their family caregivers. It can range from a simple, inexpensive service as a daily telephone call to check on an older person's well–being, to a complex, coordinated care plan providing full–time home care for an elder who is totally disabled.

During the past five years a new phenomena, corporate eldercare, has evolved as a national issue. Studies have shown that as many as 25% of workers over the age of 30 have some caregiving responsibility for their older relatives. As most service agencies are only opened during normal working hours, employed caregivers must often take time off from work, sometimes without pay, or spend company time to seek appropriate help for their loved ones. The effects on the employee's productivity, job satisfaction and health are undermined, ultimately impacting the business's bottom line.

Studies have shown that as many as 25% of workers over the age of 30 have some caregiving responsibility for their older relatives.

Unfortunately, eldercare agencies, vendors, and service providers are often difficult to identify in telephone directories, as there is no consistent taxonomy utilized to describe service components and programs. Finding appropriate services can be complex and time consuming due to the following reasons: (1) Services for the elderly often differ from one community to another; (2) Services may have varying eligibility and cost requirements between different communities and states; (3) Services may be a part of a larger umbrella agency which makes them even more difficult to locate; and (4) Caregivers are unfamiliar with service terminology and often do not know what to ask for, even if they are successful in identifying the appropriate eldercare provider.

An elderly client and/or family caregiver should have access to current information from any point of service entry whether they seek help at work, within an agency, or from their home. Efforts to seek information usually occur as a result of a crisis, a point in time when families require moral support, an immediate response, and motivation–not frustration.

"Gatekeepers" are not limited to aging organizations (such as Area Agencies on Aging, Social Security, or the Veterans Administration), but include physicians, clergy, lawyers, hospitals, retirement facilities, city and county officials, nursing homes, banks, trust departments, public libraries and Chambers of Commerce, as well as employers, human resource directors, and employee assistance programs. A new product now exists which offers current, consistent, and easily accessible eldercare information to all gatekeepers, thus eliminating unnecessary man hours developing and updating resource inventories and providing a resource tool for those who need accurate and timely information.

The Texas Eldercare Connection Bulletin Board Service is a new service option which has been conceptualized, developed and expanded during the previous two years as a demonstration project. Grant funds have permitted the acquisition of a dedicated computer, a multi–line database bulletin board software system, and the initiation of data collection and programming activities. Ongoing system enhancement has resulted in hundreds of user friendly menus

and thousands of resource files, all of which can be accessed over the telephone via a computer and modem. The Eldercare Connection Bulletin Board System operates 24 hours a day; therefore, information can be accessed any time of the day or night. As more businesses, libraries, and agencies become automated, access to this information can be made virtually from any location in the state or nation. Other features include the following:

The Eldercare Connection BBS operates 24 hours a day; therefore, information can be accessed any time of the day or night.

- Information is maintained and updated on one centralized computer to ensure that users will have access to consistent and current information. Area Agencies on Aging are required by law to maintain eldercare resource information for their specified planning and service areas. Therefore, the participating consortium members have agreed to monitor and update service data in the bulletin board on a quarterly basis. New data is being input daily, thus expanding resource information available across the state.
- There is no need for a user to install any specialized software on their personal computers; therefore, it does not take up space on a user's system.
- There is no need to mail floppy diskettes to users for update, as all information is maintained in one centralized database and accessed via modem.
- Printed information can be generated at the user's site to present to the client, as needed, by pressing the "Print Screen" button.
- An on–line system operator may be accessed Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. (Central Daylight Time) to provide specialized assistance.
- Listings include a wide array of options including health care and in–home services, nursing homes, senior centers, retirement facilities, transportation programs, nutrition services, housing, legal assistance, volunteer opportunities and many others. Long distance caregiver information assistance can also be identified as all 670 Area Agencies on Aging serving the nation are included in the database.
- A toll–free number provides free long distance access

Expenses include one full time system operator/programmer, telephone access lines, monthly toll–free line charge, and travel for on–site orientation

Currently six Area Agencies on Aging in Texas, covering 72 of the 254 Texas counties are cost sharing this demonstration effort. Expenses include one full time system operator/programmer, telephone access lines, monthly toll–free line charge, and travel for on–site orientation for interested users in specified geographical areas. To access the Texas Eldercare Connection as a user call via modem 800/678–7415 or 903/786–2058.§

Computer Networks in Human Services: Title IV–E Foster Care

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Abstract

This study examines the impact of computer networks on Title IV–E reimbursement rates in Florida. The use of computer networks did not appear to have any large impact. Major problems were lack of access and adequately trained personnel.

Introduction

Within a relatively short period of time a substantial body of literature has developed concerning the implementation of computer systems in large organizations. Even more specialized studies of computers in child welfare agencies are now available to guide efforts to streamline the flow of information in programs such as foster care and child protection services.

Previous research indicates that the installation of computers does not automatically lead to the intended outcomes. An insightful article by Gundry (1985) warns us to keep in mind that the introduction of computers into the work place has important consequences for the work place culture. A cultural transformation occurs when organizational tasks are computerized. Management must cope not only with the technology itself, but also with the effect of technological change on the culture of the work place. Without adequate planning for change, employees may cling tenaciously to beliefs that don't incorporate computers. Steps can be taken to facilitate organizational receptivity to computers however (Raho, Belohav, and Fiedler, 1987; Gibson and Nolan, 1974; and Henderson and Treacy, 1986).

A cultural transformation occurs when organizational tasks are computerized.

Recent surveys indicate that significant changes are occurring in the functions of microcomputers in both public and private organizations. While word processing consistently has been the most popular use, integrated office systems, relational databases, on–line transaction processing, and local area networks (LANs) are now high priority items. One survey of 220 human service agencies found the primary uses of microcomputers to be word processing (72%), accounting (62%), and client record–keeping (62%) (Finn, 1988). Another study of human service agencies indicated that 25 percent of respondent sites had installed LANs in 1988, and that figure was projected to rise to 44 percent in 1989 (McWilliams, 1988).

Research in human service organizations also has documented the need for the organization's leadership to bring

the work unit into the network adoption process at an early stage and to provide continuing support for computer users (Mandell, 1989; Koroloff, 1989; Cooper, 1989). Mutschler and Cnaan's case studies of the computerization of two human service agencies (1985) concludes that when user employees have little input into the design, development and implementation of computer systems, the systems may become "burdens and nuisances" rather than useful tools. Mutschler and Hoefer's subsequent study (1990) indicates that training and access are the two most important factors in how well computers are received in human service agencies. Our research will help to test whether these findings hold in the case of networking in Title IV–E agencies and thus add to our knowledge of this important new technology.

Mutschler and Hoefer's subsequent study (1990) indicates that training and access are the two most important factors in how well computers are received in human service agencies.

Background of Title IV–E

The financial stakes in the IV–E program are enormous. Each of the fifty states provide foster care for children who, for reasons such as abuse or neglect, death or absence of a parent, or medical necessity, must be removed from their homes. Generally these foster care services are provided from state tax revenues. However, if a child meets certain eligibility requirements, such as being a member of an AFDC–eligible family, the foster care services may be fully reimbursed through a federal program. (The program is often referred to as AFDC–Foster Care.)

In November, 1989, the Florida State University Center for Human Services Policy and Administration and the Children, Youth and Family (CYF) program office of the Florida Department of Health and Rehabilitative Services entered into a contractual agreement for an evaluation of the operation of the Title IV–E program in Florida. Internal HRS studies indicated that there were sizable variations among the districts in IV–E reimbursements, thought to be due largely to the varying ability of District Offices to track IV–E eligible clients and document their eligibility for federal reimbursement.

Nationally at least half of all children in foster care are thought to be eligible for IV–E funding. Within the eleven (11) HRS districts in Florida, the rate of IV–E eligibility varied in 1988 from 33.6 percent to 52.4 percent. While some variation is expected, HRS' position was that the low rates of eligibility in some districts cost the state millions of dollars per year in lost IV–E reimbursements.

Documenting Title IV–E eligibility is a very data–intensive process. Without the following information on each case, reimbursement from the federal government is simply not allowed:

- Social Security number (or form ss–5, confirming application for a number)
- Birth certificate
- Family and child income (from employment, AFDC, VA benefits, child support payments, etc.)
- Medical insurance information
- Medicaid card or Medicaid Number
- Information on AFDC eligibility
- Living arrangement prior to removal

In addition each child must be continually tracked by the HRS district office in order to insure that the child is in a IV–E eligible placement, and any changes in the child's (or parents') status must be appropriately entered into the case record. Finally, IV–E information must be collected and shared at the district level by at least five independent organizational units of HRS: foster care, protective investigation, protective services, economic services, and child support enforcement. All of this information must then be forwarded to a central office at the state level for processing for federal reimbursement. It appears that a computerized information system could greatly enhance the operation of a Title IV–E program.

Methodology

Members of the project team (four Florida State University faculty and three doctoral students) visited twenty (20) sites in nine (9) of the district offices of HRS and conducted interviews with seventy–six staff, including those in Protective Investigation (PI), Protective Services (PS), Adoption and Related Services (ARS), Foster Care (FC) and Aid to Families with Dependent Children (AFDC). Selection of the sites was purposive; the goal being to study those districts which processed the majority of IV–E claims. We included districts with both high and low rates of IV–E reimbursements, as well as urban and rural districts. The site visit teams utilized structured and unstructured interviews and a limited amount of case reading designed primarily to document unit, service area, and district practices for initiating, processing, and tracking the referral of children who are potentially eligible for Title IV–E funding. These interviews also focused on the local district office's computer capabilities. In addition to obtaining inventories and descriptions of computer systems, staff were queried concerning any problems with their system, including training, access to the system, and system capabilities.

The Administrative Context of IV–E in Florida

Before discussing the computer networks, it is important to note the administrative context of IV–E and some of the problems faced by the various units of Florida's DHRS. None of the twenty sites visited in the districts could be held up as a "model of efficiency" in the processing of IV–E eligibility. Breakdowns in the processing of IV–E eligibility determination were evident in all interviews. While the causes varied between locations, they may be reduced to two overriding concerns. The first set of problems may be described as administrative in that they revolve around the production and processing of documents; the second set relates to the acquisition and subsequent flow of information required in the IV–E eligibility determination.

Some of the smaller service areas visited had fairly efficient systems within individual Foster Care units, especially those that had a single professional designated to screen and refer new cases. However, in some of these locations,

the prompt and thorough action of the foster care unit was negated by serious problems in the AFDC units receiving the referrals. In another instance, while a single professional screened and referred IV–E cases, any subsequent problems with the application had to be handled by the individual counselor carrying the case. As a consequence, the AFDC unit reported long delays in obtaining necessary information.

While numerous solutions to breakdowns within and between units exist, the general trend seems to be toward the centralization of administrative functions. Of nine districts, six (66.7%) have district–wide tracking and placement systems in place for monitoring children in shelter and foster care. In the remaining three districts surveyed, some degree of area–wide or unit–wide centralization of these administrative functions was noted.

In four districts (44.4%), these specialized units handle the processing of payments for the shelter and foster care systems. In the remaining five districts, some form of area–wide or unit–wide centralization of vouchering is commonplace. Two districts have included handling of the IV–E process in a centralized unit serving the entire district or the subdistricts. These newly organized central units were faced with serious backlogs of work that threatened to overwhelm them.

The second overriding concern involves the acquisition and subsequent flow of information necessary for determining IV–E eligibility. Regardless of the administrative structure for processing, basic information regarding the financial status of a child's parents is crucial for timely and accurate eligibility determination. At present, the primary source of information comes from Protective Investigations units. This fact was reflected in a frequently heard caveat that the accuracy and timeliness of certain forms was dependent on the PI's reports. Once parental custody has been removed, obtaining financial details from these parents becomes laborious, if not impossible. While centralization offers potential administrative solutions, it does not seem realistic that generating all of the information required for eligibility determination can be expected of a centralized person or unit.

While centralization offers potential administrative solutions, it does not seem realistic that generating all of the information required for eligibility determination can be expected of a centralized person or unit.

Computers and Networks

Within the state of Florida, at least six different computer networks (three mainframe–based, three PC–based) are being used to track IV–E clients and document eligibility. There is much variability among the districts as well as among the units within a single district. Those networks are summarized in Figure 1.

The most widely available computer network is the Client Information System (CIS), but it is also generally regarded as being the least useful. CIS is a general purpose state–wide system used for tracking and monitoring all HRS clients. Staff reported that CIS–generated reports were frequently confusing, inaccurate, and frequently several months out of date. None of the six Protective Services units surveyed had access to CIS, although all of the Protective Investigations units did have read–only access to this network. Only six of the twenty Foster Care units visited had read–only capability. A total of 18 personal computers are located in the 28 foster care units (although other units may have limited access to machines not located in their units). Twelve units (42.9 percent) have no computers in their office; 5 units (17.9%) have a computer not in use due to lack of software and/or trained personnel; thus 60.7% of the foster care units have no in–house computer capability at present.

All of the Protective Investigations units had both read and write access to the Florida Protective Services System, and these staff were generally satisfied with the operation of the network. FPSS maintains data on all protective services clients, including those who are alleged victims of abuse and neglect. Because of the state's mandate that all such cases be investigated within twenty–four hours of a report, it is essential that client records are up–to–date. It seemed odd, however, that none of the Protective Services units had access to FPSS. Both PI and PS units are responsible for placing children in reimbursable IV–E foster care placements.

The Automated Payment Systems (APS) network was available in eight of the PI units on a read–only basis, but because PI units also have access to FPS, the APS network was rarely used there. The only other units with access to APS were Economic Services, where the network was primarily used for tracking payments to foster care vendors. The APS network does provide considerable information which is necessary to document IV–E eligibility, but it was not commonly used by units other than Economic Services.

The PC–based Emergency Shelter and Substitute Care (ESSC) network was used as a daily tracking and reporting tool in several of the districts. These were sites with high caseloads and centralized shelter and/or foster care placement coordination functions. Most of the smaller and more rural sites using the ESSC system rely primarily on manual

Figure 1: **IV-E Computer Networks**

Network	Mainframe	PC	Purpose	Clients	Administration
APS	X		Payments	Economic Services	State
CIS	X		General	All HRS	State
ESSC		X	Tracking	Foster Care	State
FPSS	X		Tracking	Protective Svcs	State
ICWSIS		X	Tracking	Child Welfare	District
CAMELOT		X	Tracking	Protective Svcs	District

tracking logs which are used to periodically update ESSC records for the generation of required reports. The major reasons for resorting to manual tracking in those sites where ESSC was available were related to access. Only five (17.9 percent) of the Foster Care units had ESSC software available on computers located in "their" offices. In the remainder, clerks responsible for input would wait in line in PI or PS offices next door, across the street, or on the other side of town. In some offices where ESSC software and computers were available, personnel trained to use the system had vacated their positions over a year earlier and had not been replaced.

Only five (17.9 percent) of the Foster Care units had ESSC software available on computers located in "their" offices.

Two districts have unique, district–wide PC–based networks that are used with IV–E clients. One has established a centralized placement, licensing, and vouchering unit and a network called the Integrated Child Welfare Services Information System (ICWSIS). This network is used by district personnel in Foster Care, Protective Investigations, and Protective Services for daily input and weekly reporting. Monthly reports are also generated from ICWSIS to generate vouchers for shelter and foster home payments.

The other district uses the Camelot network for daily updates and information requests. This is the only network which is shared with local foster care providers. The Foster Care supervisor receives a report on each case at the end of the day from a terminal located in each foster care unit. We heard no complaints regarding the operation of this system.

Findings and Conclusions

Access to computer capability is generally limited in most Children, Youth and Family (CYF) units so that the utility of on–line systems and/or software designed to aid in administration is problematic. The state–wide Client Information System (CIS) seems virtually useless due to perceptions of CIS generated reports as "inaccurate," "out of date" and generally confusing. Likewise, the PC–based Emergency Shelter and Substitute Care Network (ESSC), another state–wide computer system, appears unproductive due to lack of access and adequately trained personnel. As a result, some districts have created their own networking systems.

Another district uses the FPSS for case tracking and the CIS system for inquiries to the state office. The ESSC system is used to generate monthly reports. The foster care unit, however, still utilizes a manual system—a large piece of cardboard on which the name of every IV–E client, their current placement, and other essential information is written.

The correlation of the computer/employee ratio with the proportion of the districts' foster care costs which are reimbursed with IV–E funds was very low (r=.22). However, if one looks only at the large metropolitan districts with high caseloads, the only districts with IV–E reimbursement rates above 40 percent are the three with the highest scores on our index.

We strongly suspect that there are other variables such as staff turnover rates, staff/caseload ratios, and staff training that may be as important as access to computer networking. However, it is logical that computer networking would have a more pronounced effect in the large, urban districts where caseloads are higher. Computerized record–keeping may be of limited value in rural offices where a secretary is able to maintain adequate records on foster care placements on a large sheet of cardboard. We have suggested that networks may have the most significant impact on agencies that have heavy workloads and thus this potentially mediating variable should be considered in future research on networks.

We have suggested that networks may have the most significant impact on agencies that have heavy workloads and thus this potentially mediating variable should be considered in future research on networks.

In short, we found the impact of computer networks on Title IV–E reimbursements to be limited. Our study is consistent with other research which identifies lack of access and properly trained personnel as key issues. Also, our research indicates that promptness and accuracy of data are crucial if a network is to be successful. Our research reinforces previous findings that computers do not automatically lead to improved results.

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MCH–Net: Creating a Human Services Network Model

From Andrew B. Lefton, John G. Reiss & Steve A. Freedman.

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Introduction

A number of strategies for broadening communication and mutual support in the Maternal and Child Health (MCH) community were drafted by participants at the Second Annual National SPRANS[1] Workshop (Minneapolis, 1988). Participants, including parents, the staffs of MCH regional offices, Title V Program administrators and Bureau of Maternal and Child Health (BMCH) grantees, identified the following as essential activities

- computerized access to model programs and resource materials;
- federal agency communication with SPRANS and state programs on a regular basis;
- state and local network collaboration in the design and implementation of case management systems and Individual Family Service Plans (IFSP's);
- an electronic database of SPRANS projects and materials;
- wider dissemination of information regarding SPRANS project successes and failures;
- an electronic database of consultants from existing SPRANS projects who could assist newly funded SPRANS projects;
- MCH–related information disseminated through electronic network databases;
- increased communication between MCH national projects, regional offices and local programs;
- coordination across state, federal and private agencies to optimize access to funding sources

MCH–Net: Creating a Human Services Network Model

Development of MCH–Net

Funded by BMCH, in the Fall of 1988, the National Center for Policy Coordination in Maternal and Child Health (NCPC) has been actively engaged in research and development to support the implementation of a national MCH telecommunications network (MCH–Net). The development of this network, which will support the information gathering, monitoring, and dissemination efforts of BMCH, parallels the growing MCH–community awareness that information resource management and computer networks are vital to the successful implementation of MCH policy objectives.[1]

The primary goal of the MCH–Net Project is to expand the capability of the existing informal MCH networks through the use of telecommunications services. Rather than changing the character of prevailing MCH networking, this Project sought, instead, to enhance the speed, efficiency, timeliness, and scope of this process.

The primary goal of the MCH–Net Project is to expand the capability of the existing informal MCH networks through the use of telecommunications services.

Feasibility Study

Review of Technical and Programmatic Factors. A computer–based telecommunications network is one of many mechanisms that can be used to facilitate communications, information dissemination, data sharing, collaboration and consultation within the MCH community. Over the last few years, advancements have overcome many of the technical barriers that impeded the implementation of such a network. For example, the speed, memory, networking and data processing capabilities of personal computers have been greatly enhanced. Currently available software for personal computers is becoming both increasingly sophisticated, and more "user friendly." Similarly, the capability of computers to interact with complimentary technologies (e.g., fax, telephone, specialized mail services) has created the basis for a number of effective and efficient networking alternatives. Because of these advances, it is now technically feasible for most health care administrators, direct service workers and health care consumers to access, retrieve, analyze and disseminate information on a more immediate basis. Many of the factors that have inhibited the development of electronic information networks (i.e., the high cost of equipment, low levels of user technical competence, and the lack of demand for quick and easy access to information) are being overcome. There remain a number of organizational, resource, and training factors that still must be addressed. These factors will be discussed in detail later in this article.

A thorough review of existing MCH–related networks and information sources was needed in order to determine what additional services, if any, may be needed. It was also necessary to establish if these services and networks might have duplicate or overlapping services, and if so, how a resolution to this duplication might be achieved.

Programmatic Factors. An initial activity of the MCH–Net Project involved conducting a feasibility and design study from December, 1988, to November, 1989. The study involved reviewing several on–line computer telecommunications and bulletin board systems that were then available to the MCH community. Systems reviewed included both private paid–subscription and public free access services. Private paid services generally have no long distance charges, but generally require an access fee. Examples include: (1) SCAN (Shared Communications & Assistance Network), (2) SpecialNet, (3) Public Health Network and, (4) Connect Information System. Public services, which have no on–line charges, but generally require a long distance call, include: (1) AUNT FABS (Family Based Services), (2) SERIES (Special Education & Rehabilitation Information Exchange System), (3) HDS (Office of Human Development Services), and (4)

CYDLINE (Children and Youth with Disabilities–on LINE system).

The review[2] revealed that most of these specialized network services were able to meet the needs of the programs they were designed to support, but in many cases offered duplicate or overlapping services.

The review[2] revealed that most of these specialized network services were able to meet the needs of the programs they were designed to support, but in many cases offered duplicate or overlapping services. In addition, they did not offer a sufficient breadth of services and functions to meet the design criteria established by the MCH–Net Project staff for a broad service–based MCH information network. These design criteria required that the network: 1) include a broad range of MCH–related content areas; 2) allow access to MCH–related national data bases; 3) be relatively easy to use; 4) be accessible by the largest possible number of users; 5) include a reasonably transparent means to transfer files between DOS based, PC and Macintosh operating systems, and 6) offer a graphics–based interface. The design criteria reflect the MCH–Net Project Planners decision that the practical needs of the project and program offices, and not the technology, should be the primary focus that determines network design features. While the development of the network infrastructure (technology components) is a necessary forerunner to implementation of the network, it is the design and management of the system's information resources (content areas) that will form the heart of the network. The topic of information resources will be discussed later.

Needs Assessment. A subsequent activity of the development phase involved the design and distribution of a communications needs survey of members of the MCH community. This activity took place from August, 1989, to January, 1990, and included the dissemination of a survey instrument designed to assess MCH community needs in two major areas: 1) how MCH projects and program offices currently communicate and access information, and 2) what factors are perceived as important in developing an MCH information resource network. The survey was sent to approximately 1,400 respondents.[3] The results of the survey are currently being tabulated and a report will be made available to interested parties and survey participants.[4]

Implementing MCH–Net

The implementation of MCH–Net requires that both functional and human requirements are supported at these levels of the networking system hierarchy: (1) user; (2) organizational, and (3) network. Because individual user needs are the primary reason for MCH–Net, it is at this level that we must focus most of our energy and attention. Development of network services does not stand apart from either individual nor organizational needs; therefore the successful integration of both forms a critical part in the development process. Each forms a vital link in a reciprocal approach to network development and expansion. Feedback based on user needs and observations assists in further design modifications to the general network.

Addressing User Needs

Since the success of any network depends upon creating a successful fit between user needs and technology, addressing the needs of the potential user is of prime importance . In order to properly implement the network, a sensitive and reciprocal approach to network development should be considered. Since the management of change is required for this process, it becomes necessary to attune the process to the different developmental and learning styles exhibited by users as they move through various stages of change and acceptance, which are here defined as: (1) asking questions; (2) differentiation; (3) integration; and (4) generalization. Detailed below is a description of the process that individuals typically go through when beginning to participate in a telecommunications network.

Detailed below is a description of the process that individuals typically go through when beginning to participate in a telecommunications network.

Stage I: Asking Questions

First, several questions may arise when individuals are asked to consider using telecommunications: Why change now, my old methods work fine? What good will it do for me? For my agency, or program? I'm comfortable with the way I operate, why change and perhaps look foolish? What's all this going to cost and how long will it take to implement?

In order to persuade users to participate in the network, it is necessary to show that some gain will be achieved by their making the effort. Gains can include: (1) increasing productivity; (2) participating in and affecting the feedback process; (3) facilitating access to expertise that, heretofore, was inaccessible; or (4) allowing access to information that had previously only been available through a long and protracted search. Increasingly, organizations are recognizing that individuals with the skills to operate in a computer–based information environment are becoming more valuable as knowledge workers[5] to projects and programs where they act as information facilitators. Having made a decision to develop electronic networking skills, typically the user will move through three stages, each leading to higher levels of competence and comfort, and each exhibiting certain competence characteristics (Tovey, et al) (see figure 1).

Stage II: Differentiation

While computer technology is often marketed as "user friendly," in reality using a computer, especially for telecommunications, is far from "intuitively obvious." In fact, there are numerous factors that can complicate rather than simplify the work process. These factors include, the user's: (1) computer; (2) communications software; (3) modem,

Figure 1: Stages of Computer Competence

Stage I: Questions • Why do I need to do this? • What's it going to cost?	Stage II: Differentiation Level 1: Beginner • basic errors • frustration Level 2: Novice • simple messages • search for correct content
Stage III: Integration Level 3: Hooked • enthusiasm • expanded use & content	Stage IV: Generalization Level 4: Tools of the Trade • Standard Operating Procedure • Source of expertise

and (4) phone access. Similar sources of error can be found on the "receiver's" side as well. An added source of error can occur in the information system's mainframe computer.

Support mechanisms, such as readily available on–line computer and telephone technical support are essential prerequisites during these early stages of network development. Simple errors at the beginner and novice stage, without adequate support, can create formidable barriers to learning. The challenge, to the network developer, is to create an environment that "sets the user up for success."

Stage III: Integration

Users at this stage exhibit the characteristic of being "hooked" and have learned to send and receive electronic mail (e–mail) quite readily. Keyboard skills and information search and dissemination routines are better integrated; though use of more sophisticated telecommunications functions (i.e., distribution lists[6], on line conferencing, binary file transfers[7], and scripting[8]) are still not evident. The user retains self–conscious characteristics, and still relies on technical support. Use of the network is not fluid or second–nature. Encouraging the use of more sophisticated network functions, including the involvement in user groups helps to bridge the movement from dependence to independence.

Stage IV: Generalization,

During this latter stage of networking, the user further integrates skills as "tools of the trade," which become standard operating procedures (normalized daily routines). The telecommunications system becomes further generalized within the organization and use of the network becomes more "transparent." Content moves to the foreground, and the mode of transmission moves into the background. Computerized telecommunications now competes on an equal footing within a spectrum of information technologies, which include the telephone, Interactive Voice Response (INR) and fax machines. During this final stage, full involvement with network features such as distribution lists, binary file transfers (exchanging application–specific documents), downloading public domain software, faxing and registered e–mail becomes the norm. The use of outside technical support is minimized and the user then becomes a source of technical support within the organization.

Stage V. Organizational Considerations

Accommodating the information burden of individuals contributes to organizational efficiency, while separating individuals from crucial information can be a barrier to effectiveness. On the other hand, having access to too much information can mean costly attention to activities that may not need it, as well as inundating the organization with information, much of it of little or no use. Information networks magnify these effects, because they reach so many people, so fast. Changing the nature of information, or its distribution patterns, can prove very costly to an organization.

A Rand Corporation study on electronic information systems (T. Bikson, 1981) reported that the benefits of information technology should not be left to chance, rather they should be promoted through careful research. This report goes on to state that, "successful technology transfer is most strongly affected by the operation of a strictly situational set of characteristics that constrain the implementation of an innovation in a user context." The characteristics described are four in number:

- First; "efforts to understand how outcomes are determined must focus on group dynamics and other organizational processes impacting on the adopting unit." In other words, how do people work together and what factors affect this relationship.
- Second; "this [implementation] perspective underscores the finding that the process requires a great deal of 'people–based support.'" Most of the discretionary choices are made by individuals and groups of individuals. It is the collective outcome of these dynamics that will ultimately affect the success of the implementation.
- Third; "user participation in planning and decision–making during implementation will be a significant predictor of positive outcomes."
- Finally, "research supports the view that all along the continuum from initiation to full incorporation the innovative system is being changed by the user context even while that context is itself changing to adapt to the system." The implementation process is reciprocal, with the Network (consisting of users and the system) forming an information feedback loop that is in a constant state of flux.

Network Implementation

Pre–Network Networking. A communications network does not create itself in a vacuum. Individuals, the participating organizations, the agencies that fund these participating organizations, the network administrator, and the network developers all must acknowledge and act on a set of common goals that include electronic networking and sharing information. Since networking already exists, at least informally in most organizations, it is the use of these informal networks as a pathway to

networking that forms the foundation for a comprehensive electronic network.

Developing a Rationale. Organizations can have a variety of reasons for moving from an informal network to an electronic network. These can include: overcoming geographic barriers, accessing time restricted information, monitoring collaborative efforts, and using on–line conferencing to augment individual and organizational needs for pre–conference or pre–meeting information. Individual reactions will differ greatly as this process gains momentum, but it is the variety of reactions that helps to shape the development process. At some point; however, a decision needs to be made that the electronic medium has value for the full spectrum of users, and needs to be accepted by the users as a whole. Without a decision by the user population, in its entirety, to fully commit to the electronic medium, consolidation may never take place.

Installation and Use. The appearance of a computer, modem, printer and communications software foreshadows the transition to electronic networking. Consistent access to technical support during this stage is vital. Users facing a little understood technology, with inadequate support, can forestall the implementation effort. While an individual within a program, or project, can and should rely on outside technical support, having a coworker to rely upon can make the process more desirable. For this reason, the MCH–Net Project supports the concept of co–worker training to provide mutual support, as well as back up for the organization.

The development of a network community is an equally vital need. Users should be encouraged and supported to come together at regular intervals to discuss mutual problems, develop face–to–face relationships, and provide feedback to network management so that network services can more accurately reflect the needs of the larger community of users.

...individuals who show competencies or an interest in becoming leaders in MCH networking are being identified and asked to become Information Resource Trainers (IRT's) for the rest of the community.

Resource and Service Training. During the development of MCH–Net, individuals who show competencies or an interest in becoming leaders in MCH networking are being identified and asked to become Information Resource Trainers (IRT's) for the rest of the community. These individuals will be provided with specialized training to allow them to act as a training and technical resource for the organization they serve. One function of IRT's will be to "evangelize" the network; to share their time and expertise in order to expand network usage. The IRT's will serve as the models for advanced network usage. They will make sure that users have e–mail to read when they sign on, will answer directly or refer users to expertise for their technical questions, and will provide feedback on a variety of issues designed to enhance network services.

Information Resource Providers (IRP's), are programs and or individuals that wish to share information and/or expertise with the larger network community. They will serve as electronic bulletin board editors and/or database managers. IRP's will take responsibility for the information that resides on their part of the network. Examples of topic areas for IRP's on MCH–Net are:

MCH Activities	Developmental
SPRANS	Disabilities
Grants Guidance	Headstart
Project Information	Adolescent Health
Legislation	Advocacy Groups
Early Intervention	State Bulletin Boards
High Risk Infants	Infant & Child Health
Health Care Financing	Maternal Health
Special Education	HIV
Nutrition	Genetics

The "Critical Mass". Once a determination is made that a critical number of users have signed onto the network, providers of vital information may decide that information access or dissemination can take place only via the electronic network in order to consolidate network use. This will be an important stage in network development, since a majority of participants must use the network for it to be considered successful. At this juncture, there will be a difference between users who have access to network information and those who don't. It is anticipated that this difference will motivate those without access to join the network. Support and training will remain an essential strategy throughout this phase.

Network Policies and "Norms". During this latter phase, development of network information "policies and procedures" will be implemented throughout the informal structure. Decisions as to who does or doesn't receive certain types of information, timeliness and schedules for posting vital information, posting responsibility, and guidelines for confidentiality and security will be prominent. Issues regarding the involvement of other related networks and information resources will also become evident at this stage. Information support personnel will maintain a crucial role in network development and coordination, primarily as users and promoters of advanced network features.

Social and Economic Effects of Networking

Advantages

The benefits of electronic networking are that it helps to equalize participation[9] for all those involved; reduces the need for postal and clerical services; allows for a quicker response rate and more efficient use of one's time (e.g., eliminates telephone tag); provides a higher level of security (e.g., registered e–mail, written record of messages with a date stamp), and allows for greater consensus building due to bulletin boards and on–line conferencing. In addition, information pertaining to legislation, funding, or association–specific issues, etc., can be disseminated quickly prior to face–to–face meetings thereby allowing for a more thorough review of the issues. Coordination and collaboration with a larger number of participants can become a

Post Doctoral Fellowships in Mental Health/Mental Retardation
Computer Applications and Mental Health Policy and Ethics

Three Post Doctoral Fellowships are available at the **Missouri Institute of Mental Health**, beginning as soon as January or as late as September, 1992.

Computer Applications in Mental Health/Mental Retardation: One Fellow will help develop and test an advanced decision support system, the Mental Retardation-Expert, an NIMH funded project for problematic behavior treatment consultation. Another Fellow will work in one or more of the following areas: automated neuropsychological testing and assessment, multimedia/interactive video disk applications in mental health, computer modeling of mental health management, or the use of decision support systems in mental health settings. Fellowships in computer applications will involve direct experience with state-of-the-art microcomputer hardware and software. In addition to participation in major on-going developmental projects, fellows are encouraged to develop knowledge and skills about computer hardware and software more generally, become familiar with the field of mental health and mental retardation computing, and plan and conduct other computer-based projects.

Mental Health Policy and Ethics: One Fellow will have an opportunity to track current developments in health policy that affect the lives of mentally ill patients and mental health professionals. The Fellow will be expected to monitor federal and state legislation, examine the cost effectiveness of mental health treatment, and study the impact of national health policies. Active participation in the emerging national health care debate is encouraged.

MIMH is part of the University of Missouri-Columbia School of Medicine, and Fellows receive appointments in the Department of Psychiatry. Twelve month salaries for these fellowships start at approximately $20,000 and may be higher, depending on relevant experience. Minimal qualifications include a Doctoral Degree in a discipline related to mental health, mental retardation, or health policy, and, for the Mental Retardation-Expert fellowship, experience with functional analysis and the behavioral treatment of persons with mental retardation. Fellowships are generally for two years.

Applications will be taken until all positions are filled. Applicants should send a Vita and letter of application to: Matthew G. Hile, Ph.D., Missouri Institute of Mental Health, 5247 Fyler Avenue, St. Louis, MO 63139-1494.

Project to Link Human Service Electronic Networks

For years we have been trying to electronically link human service professionals worldwide. We have several existing networks.

- **CUSSN** is a FIDONet conference which circulates about 100 messages each week to about 50 local BBSs worldwide (see page 2). Its main advantage is that it costs nothing free and is a grass roots operation. It disadvantages is reliability and accessibility outside of cites with no CUSSNet node.
- **AACTHS Electronic Conference** is a Canadian human service electronic conference which built on ROSE MEDIA. This conference serves the needs of Canadians, but it not connected to other networks.
- **The Social Work Discussion Group** is a Bitnet based conference for those in the human services. It is operated by Harry Chaiklin from the U. of MD and sends several messages to subscribers each week. It also is not connected to other networks. The advantages is that Bitnet is available free worldwide to academics. The disadvantages is that it is almost impossible for those not in academia to join bitnet.

Many other human service oriented networks and BBSs exist, such as COMPSY and the BITNET systems sponsored by the American Psychological Assn.

An attempt is being made to build on the existing systems and solve the access and connectivity issues. We are developing one or a set of conferences which have the capacity to link several major human service electronic networks worldwide. One conference will be a HUSITA conference connecting human service professionals interested in technology (CUSSNet, AACTHS, etc). Another planned conference will be for ISPCAN on child abuse issues.

The Institute for Global Communications (IGC) cam provide a low–cost, highly–assessable network which has the capacity to link CUSSNet and BITNET. Thus, users can participate in one or several human service oriented conferences through IGC, CUSSN or bitnet.

For those wanting to help develop this network, contact Tom Hanna, Cornell U, E 200 MVR Hall, Cornell, Ithaca NY 14853-4401. Watch for details about this network in the next CUSSN issue.

CUSSN Newsletter/CHS Merger Notice

The Computer Use in Social Services Network (CUSSN) Newsletter will be merged with the Haworth Press Journal Computers in Human Services beginning January, 1992. The last issue of the CUSSN Newsletter will be Vol. 11 No. 4, Winter 1991/92. The first merged issue of Computers in Human Services will be Vol. 9 No 1.

Computers in Human Services is edited by Dick Schoech, who is also the editor of the CUSSN Newsletter. The Journal will contain the most relevant portions of the Newsletter, e.g., bibliographic listings, software listings, and upcoming events. Other activities of the CUSSN Network will continue, e.g., the diskcopy service and CUSSNet (the electronic network).

Those already subscribing to the CUSSN Newsletter will be notified about their subscription expiration date. Information on new subscriptions should be requested from Haworth Press, 10 Alice St, Binghamton, NY 13904-1580, Tel: 1-800-342-9678, Fax (607) 722-1424

real–time activity without having to travel or conduct unwieldy telephone conferences.

Disadvantages

Hardware and software incompatibility currently remains somewhat of a problem, as does the need to train individuals and organizations on different computer systems. The MCH–Net Project began its network development process by comparing graphics–based and text–based user interfaces. While the graphics–based interface made training somewhat easier, it limited access to other networks. Users without a graphics capability were unable to access network resources. Fortunately, the use of more sophisticated resident communications software with pull–down menus, and the continuing evolution towards a graphics look and feel by the PC community, will encourage movement toward this type of interface.

Social and organizational processes form the largest problem area. Social science research indicates that three types of effects are produced by technology: (1) the intended technical effects, improvements, and efficiency that justify investing in new technology; (2) anticipated organizational adjustments from new technology; and (3) unintended social effects (the changes in the way work and social activities are organized). (Clemons and McFarlan, 1986)

Unintended social changes occur in (a) work habits (how work is organized); (b) interpersonal relations (creation of new groups and new forms of social interaction); (c) different demands on one's time and attention (learning new skills, training); and how decisions are made (decision through use of a computer, not only in face–to–face groups) (R. Tovey, et al, 1990). Information overload is another unanticipated effect that can have a profound effect on work habits.

Other Effects

Studies indicate that telecommunications saves money and allows one a better use of their time (ibid). The effects on communications in rural areas can show a greater impact since distance is no longer a factor. Hidden costs such as the need to modify a phone system, altering office space, training and development, user fees, inefficient information search strategies and/or technology, and possible long distance charges all need to be considered.

Collaborative Networking

At the federal level, the Departments of Health and Human Services and of Education have funded a number of data and network projects related to education and health service needs for the maternal and child community. Because of their different funding sources and target populations, these information services have developed in relative technical isolation. However, with the increasing emphasis on integration and coordination of family–centered services, a number of network projects are now responding to the need to coordinate services and information they provide. The Human Service Information Network Project[10] is a coordinated effort on the part of the Headstart National Bulletin Board, MCH–Net (Maternal and Child Health Network), SCAN (Shared Communication and Assistance Network) and SpecialNet (Special Education Network), and is designed to provide access to on–line information resources and communications through a linked network approach.

The first phase of this project involves the development of a common set of communications, information resource, and access specifications (see Fig. 2).

Efforts will focus on creating a network environment that implements common network access while maintaining the integrity and service focus of the component networks. Project members believe that a coordination of resources and technology can be achieved, while minimizing duplication, thereby facilitating the creation of a common network structure supportive of the diverse health and educational needs of the maternal and child health and related communities.

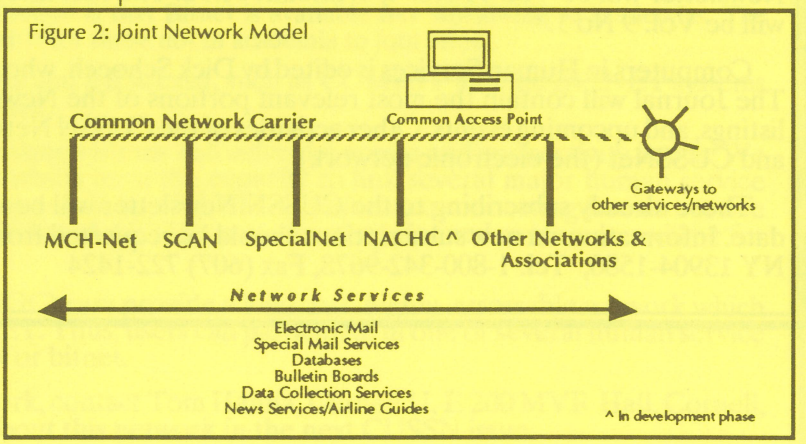
Considerations

There are a number of issues that require careful consideration for anyone wanting to install an electronic network as an information systems option.

- Have I planned realistically in terms of equipment, software, time, resources and in the amount of persistence needed to accomplish my goals?
- How can information technology be used to solve human problems, and how can it be appropriately applied so as not to aggravate social problems?
- How can information technology be used to improve organizational management, and how may it be inappropriately used to create disorganization?

Organizations are making increasingly complicated, and expensive decisions, about services and equipment without a sense of where it is leading them. It becomes clear that the need to develop strategic plans for the implementation of information technology is greatly needed. Projects, programs and the agencies that fund them need to develop an array of strategically linked plans to make best use of information technology in the long term. As was pointed out by Berman & McLaughlin, "...the intrinsic merits of an innovation do not assure its widespread diffusion and utilization. Rather it is the interaction of those features with the user setting that need attention in the technology transfer process." MCH–Net is striving to incorporate network technology, and user needs, towards the implementation of

Figure 2: Joint Network Model



a broad–based human service network that fosters new and productive working relationships.

Footnotes

[1] Special Projects of Regional and National Significance funded by the Office of Maternal and Child Health.

[2] Characteristics of Existing Telecommunications Resources, originally published by the Institute for Child Health Policy, December, 1988. Updated for the Progress Report on the Maternal & Child Health Network, October, 1989.

[3] SPRANS Projects, State Title V Program Directors, DHHS Regional Offices, National MCH Centers, University Affiliated Programs, Departments of Pediatrics, Advocacy Groups and Associations, etc.

[4] Those interested in receiving a copy of the survey results should send a request and a SASE to MCH–Net Program Mgr., MCH–Net Project, 5700 SW 34th St., #323, Gainesville, FL 32608.

[5] Know]edge worker is a term, first attributed to Peter Drucker, for people]e paid to put knowledge to work rather than brawn or manual skill.

[6] Distribution lists are functions that a]]ow the user to send messages and facsimile to an unlimited number of network users, by grouping them under a common identifier.

[7] Binary file transfers allow for the sending/receiving of formatted files (e.g., retains format characteristics) for users of identical software packages. Text, or ASCII, file transfers do not retain the format characteristics, but solely allow text characters to be sent/received.

[8] Scripting is a programming feature that allows for the creation of custom electronic forms for collection and distribution of data.

[9] "Usually, the person who talks the most is the person who has the highest social status or the most authority in the organization. It seems that in computer–mediated groups, where there are no salient reminders of status differences, communication is less closely regulated." (5. Kiesler, 1986)

[10] Members of the Human Service Information Network Project work group are: Shawn McBride, Headstart Natl. Bulletin Board System, University of Maryland, 800–888–8682 Andrew Lefton, MCH–Net, National Center for Policy Coordination in MCH, 904–392–5904 Roland Loudenburg, SCAN/AAUAP, 301–588–8252 Mike Norman, SpecialNet, 800468–8550 (GTE–ES in cooperation with the National Association of State Directors of Special Education (NASDSE)

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Tovey, R., et al, Electronic Networking in Human Service Agencies: A Developmental Analysis, *Child Welfare*, Vol. XIX, No. 2, pp. 116–127, March–April, 1990

Plan to attend HUSITA-3 June 13-17, 1993 Maastrich, Limburg, The Netherlands

The conference will focus on IT applications and the quality of life and services.

For information and a call for papers, contact Theo Willemsen, P.O. Box 1278, 6040 KG Roermond, The Netherlands. Tel: 04750- 40000. FAX 04750-28844.

Making Social Databanks Work

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Introduction

To store and retrieve information electronically is considered by many as the most modern and (therefore) desirable way of exchanging information. If people turn their back on this kind of information exchange, they are considered by some to be old fashioned and incapable to understand this wonderful new technique.

In reality the causes of this problem are not the characteristics of a (reluctant) user, but the fact that the builders and organizers of databanks often don't understand how their clients are used to gather information, for what purpose and what kind of information they really need.

This article will discuss this problem and offer some possible solutions, with reference to the recent developments in the Netherlands in this area. The most important of these Dutch developments is the "MIP," the Social Information Plan.

A number of pilot projects are about to be launched in the Netherlands as part of the Social Information Plan (MIP), the aim of which is to improve the flow of social information from whatever source via intermediaries to private citizens. The pilot schemes will target handicapped and elderly people and ethnic minorities and will focus on health, training and education, and budgeting. My organization (the CREON Foundation) is participating in MIP.

A number of pilot projects are about to be launched in the Netherlands as part of the Social Information Plan (MIP), the aim of which is to improve the flow of social information from whatever source via intermediaries to private citizens.

The main challenge facing us is to create a network of organisations and institutions which specialise in the broad field of social information services directed at the public. Together they will generate the data needed, establish a common way of structuring and updating the fast–changing data and evaluate the data according to agreed criteria. They themselves will be responsible for the contents of the databank and the preparation of data for storage. At the centre of the network is a kind of clearinghouse or transfer point whose staff are responsible for coordination and management of the network, storage and retrieval of data, and the "technical" aspects.

As mentioned above, the purpose of MIP is to improve the flow of data via intermediaries to the public. It was assumed for a long time that only one single flow of data was involved and that electronic databanks would provide

the answer for everyone. This has since been shown not to be the case. Intermediaries assimilate data in a significantly different way to the "end user", i.e. the individual. Databanks containing social data have proved of use mainly to the former, and even then only under stringent conditions. Failure to recognise this difference has led to the downfall of many electronic information systems. Rather than a single flow of data then, there are two flows: that between sources of data of all kinds and the intermediary, which I shall call the "secondary area", and that from the intermediary to the customer, or the "primary area".

Intermediaries assimilate data in a significantly different way to the "end user", i.e. the individual.

In this article, data and information always mean "social data and information", which is defined in the MIP project plan as "information directed at the public which is of relevance to the way in which individuals function in society and their ability to exercise their rights as citizens.

Primary area

The advent of computers and the introduction of electronic databanks have had at least one adverse effect. The provision of "information" (a meaningful combination of facts) has been reduced to an exchange of "data" (the raw facts themselves). This misconception is not new, but has been around since the time of the Ancient Greeks. The so–called Code Model has been acknowledged in communication theory ever since the days of Aristotle. Briefly, this Model involves a transmitter, a receiver and a signal. The clarity of the signal depends solely on the signal–to–noise ratio.

Two important assumptions are made in this model. First, it is assumed that neither the transmitter or the receiver are changed by the process of transmitting or receiving the signal. Second, the model assumes equal knowledge on the part of transmitter and receiver, in other words that the receiver knows as much as the transmitter does about the signal and the way in which it was transmitted and received.

This model met with severe criticism during the earlier part of this century and was eventually largely discredited. With the advent of electronic databanks the Code Model has been revived. People have gone back to talking about "data" as if they were "information", and "retrieval" as if it were something the receiver did which effectively changed nothing and which always produced a clear signal, provided there was no noise. This picture is quite wrong. The "retrieval" of a piece of data is not the same as a user obtaining information. Information does not become meaningful until it is part of a communication process in a socio–cultural and intellectual context, and via interpretation through interaction with other people. There is a considerable risk that data will be misunderstood or wrongly interpreted in cases where there is no face–to–face contact between supplier and recipient: there is no non–verbal element, the context of a piece of data is missing; there is no opportunity for comparing interpretations of the material with the intentions of the supplier.

The primary area involves interpersonal communication or interaction, with all the subtleties this entails. There is no electronic transmission of data, just conversations. The interlocutors may, however, require immediate access to certain facts in order to use them in the conversation. Electronically stored data may well provide the means of obtaining these facts. Since it is usually the intermediary, given the nature of his/her role, who has access to and makes available the bulk of the data required during the conversation, rather than the customer, the intermediary must have the ability to gather the necessary information in an adequate, rapid and accurate way.

Intermediaries are expected above all, however, to be of service to the customer, which usually entails more than simply passing on a few facts. They must therefore meet the following requirements, based on a list compiled by Walter LaMendola (Denver, USA):

- An all–round knowledge is more important than specialist knowledge; an intermediary must be able to see beyond the limits of his or her own profession and bureaucratic machinery.
- An intermediary must be flexible and follow the customer's line of argument rather than direct it.
- The needs of the customer must be dealt with in a context which he/she understands, recognises, accepts and is familiar with, not in a context which suits the intermediary; problems must be addressed in relation to each other.
- The customer should, as far as possible, not be referred elsewhere; the intermediary should preferably provide the link him or herself.
- Intermediaries should cooperate with the formal and informal network of related services, at local and national level.
- An intermediary must have direct access to diverse and adequate sources of information.
- A solution should be sought within the social support structures around the customer him or herself (his/her family, acquaintances, community, club, etc.).
- Intermediaries must have sufficient knowledge and expertise to do the job.

The problems with a large–scale data matching project in Denmark (information provided by Lars Qvortrup, Odense University, Denmark) shows what can happen when this process is regarded merely as an exchange of information. The project was expected to help solve Denmark's unemployment problem by building a central database with three major files, unemployed, job vacancies, all activities by the staff at the job centres per client. However, the interactive process between the intermediary (employment officer) and the persons seeking and offering work now deteriorated into filling in forms. If the matching program would have been offered as a new tool to intermediaries and their clients, helping them in their free discussion of problems and opportunities, things possibly would have been different.

Experience in the Netherlands and elsewhere with electronic information systems containing social data, which

are intended for direct use by the public, has shown that schemes of this kind do not work.

I would like to remind the reader that I am still referring to "social" data. There is evidence that databanks with concrete material like the amount of money (benefits) the user is entitled, or trivial data (advertising) or simple facts (prices, opening hours, addresses) can and will successfully be used directly by the people concerned.

The reason for the problems in retrieving social data is, that the user is assumed to have certain qualities which he or she in fact seldom possesses.

The reason for the problems in retrieving social data is, that the user is assumed to have certain qualities which he or she in fact seldom possesses.

These qualities are the following.

First, the user should have a frame of reference within which to place the material requested. This usually means that he or she needs considerable background knowledge of the field to which the data relates.

Secondly, users must be able to establish what information they still require at a given point in time and to isolate that query from the context. This requires powers of abstraction and a substantial knowledge of the context, otherwise the abstracted material will become detached from its context and lose its meaning. Social information, however, requires a high level of background knowledge.

A third requirement is that the user should be familiar with his or her hardware and the search structure of the databank. Despite frantic efforts to make systems as user–friendly as possible, many of the intended users remain confused.

In fact, some people like to say that the term "user–friendly" really implies that the user is expected to be so friendly as to battle his or her way through a jumble of symbols and menus without complaining. It should be realised that familiarity with the search structure is not only a question of knowing how it works but implies above all the ability to follow the logic of the person who classified the data. Moreover, the more extensive a databank is, the more "layered" the menu structure has to be, which increases the level of abstraction of the terms presented as menu choices.

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Lastly, a lot of people are having difficulty using keyboards, still the most commonly used means of accessing computers.

The fourth requirement, which is often overlooked because it is so obvious, concerns the reading skills of the user. By this I do not simply mean that the user should be literate but that he or she should have the skills and cognitive ability necessary to be able to read from computer screens and printouts. This sort of information is often presented in telegram style as a series of keywords without a context. Even actual text would often appear to have been written by someone with a technical rather than a literary bent.

Secondary area

In the secondary area it is the intermediaries who are the key figures, individuals of all kinds from professionals and volunteers to agents and relatives. A distinction clearly needs to be made between various types of intermediary. The first type are the "information brokers", those who pass on material without adding much to it, if at all. Their skill lies in the ability to understand what the person making the enquiry wishes to know and to abstract that information from a pool of data. Most of the information they deal with is of the factual sort. This group includes librarians, information officers and booking clerks. The second type are the information processors, who work mainly for the social, health and welfare services.

A further distinction needs to be made between those who are intermediaries out of choice and those who are forced into this role. The latter group comprises persons who are called upon to answer all kinds of questions when they themselves do not feel that their profession or position makes them the appropriate person to answer such questions. The main example of this type of intermediary is family doctors. Those who are intermediaries out of choice, on the other hand, advertise the fact that they provide information for the public. The difference between these two subgroups is important because the "willing" intermediary is expected to have the proper knowledge and expertise in his or her capacity as a provider of information whereas the "unwilling" intermediary does not see the provision of information as part of his or her work and does not therefore see the need to have any special skills in this field. Any measures that may be taken to help intermediaries do their job better, such as further training, method development, the distribution of information or training in the use of new equipment, would therefore appeal to the "willing" intermediaries but not to the "unwilling" ones.

Unlike in the primary area, the electronic transmission of data to intermediaries may well prove useful, but only under certain conditions. Experiences in the Netherlands and abroad produce in some cases a disappointing picture with regard to the practical value of databanks and their use by intermediaries, especially in the case of "socially useful" information, such as that involved in the MIP. Why should this be so?

Databanks have proven useful only where they complement the expertise of the users and originate in and can be placed in the context with which the users are familiar. I am no longer referring here to "dumb" databanks, in which the data lie there waiting until someone is clever enough to find them, as if they were Easter eggs, but to decision support systems or advice systems. To give an example: a social worker who has to decide whether to take a child away from its family because of suspected abuse will in the future be

able to consult an advice system. This system is being developed by him/herself and expert colleagues, who have input past case records, including the measures that were taken and the consequences thereof, according to a system which they themselves devised. The computer will search out those cases which most resemble the case in question so that the social worker can weigh up the likely effect of various measures. Such a system serves in fact to provide a series of second opinions from one's colleagues.

Advice programs, like the Dutch program ADDI and the English 'Maximiser' and 'Lisson Grove Benefits Program', are also examples of "smart" ways of obtaining information. A blank application form, series of calculations, etc. can be called up on the screen and filled in to establish how much benefit, rent subsidy etc. the customer is entitled to. Similar programs are available for calculating family budgets. The advantage of programs like this is that the intermediary no longer has to search for the information he or she needs in databanks before he can start. The advice program contains all the relevant data already and gives an immediate answer.

Another issue concerns the way in which databases are constructed. It has been shown time and again, both in practice and in the literature, that the chief problem regarding the construction of databanks has nothing to do with storage and retrieval technology but with the organisation of the input and output. Nonetheless, we see the same mistake being repeated again and again, with too much time and money being invested in technology (hardware and software) while too little attention is paid to the users.

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The main problems lie in the collection of data, checking that the material is accurate, complete and up–to–date, determining its relevance and quality (with regard to both content and formulation), arranging it in a logical order and presenting it in a structured way. In practice, this is largely an organisational issue, i.e. a matter of assigning particular tasks to those organisations which are competent to deal with them. Owing to the complexity of such a problem in practice, a single organisation will often take on all these tasks (content, organisation and technical matters) itself, with varying degrees of success, but usually very little.

Dutch examples

Organisation theory teaches us that Technology, Organisation and Content (the TOC model) should always be kept separate.

What this means is that welfare organisations with knowledge of a particular field should be expected to contribute their knowledge only (the C in the TOC model). Their task could be to collect the raw material, weed out superfluous data and carry out an initial check for quality, accuracy, relevance and up–to–dateness. This work can only be done by organisations which are familiar with the context from which the information has been extracted. They are also the only ones in a position to "translate" what is usually a complex mass of interrelated data into short, self– contained chunks of text, suitable for storage in a databank.

There are those organisations which occupy a key position in a network of other organisations and individuals, which could play an organisational role (the O in the TOC model) in the setting up of a databank. The National Institute of Social Care and Welfare (NIZW) is a prime candidate in the Netherlands for assuming a central function of this kind as far as the provision of information and documentation for intermediaries is concerned. It is currently busy establishing an Information, Documentation and Research Centre, known by its Dutch initials CIDO.

This Centre will play a pivotal role in the area of welfare information and documentation, functioning as a central address for anyone who has questions relating to the day–to–day work of the welfare services. CIDO will act as a reference source, the "point of access" to material of a practical kind. It is important that the end user is not confronted with a myriad of organisations to be contacted depending on the question. Ideally, therefore, there should be one national telephone number which may be called irrespective of the nature of the question and one address for written queries, the so–called 'one–stop–shopping' solution.

As a result of its national status and broad spectrum, the NIZW will be able to gather much of the necessary data from its various sectors, but it will still be dependent on other organisations for additional material. The CIDO will therefore be organised in such a way as to make maximum use of the services of existing organisations which can carry out part or all of these additional tasks. As far as possible the NIZW needs to play an initiating and coordinating role within the network. Material on information technology applications in this field will be provided by welfare workers through this transfer point. The Centre will thus act as a nodal point in the national network, bringing together and coordinating existing flows of data and those yet to be developed in collaboration with national, regional and local organisations.

In the context of MIP, an information network of this kind is being organized in the Province of Limburg (the southernmost province of the Netherlands) as part of a 3–year pilot project and is to be developed on a regional basis. The project has a budget of approximately US$ 1.8 million, contributed by national and provincial government and the participating organisations. Limburg is part of a 'Euro–region' which encompasses Liege in Belgium and Aachen in Germany.

This organisational network will be set up along the same lines as the CIDO for the exchange of information within the province of Limburg. Work on the Limburg Network, as it will be called, will start in June 1991. All the organisations in the region that handle data intended for the public (access to which is mainly through intermediaries) belong to the network. An electronic network, known as ICIS (Interactive Communication and Information System), will be developed to support the organisational net-

work, according to EEC standards. The role fulfilled by NIZW on a national level will be played by LIOSE (Limburg Institute for Social Welfare and Education) in Limburg.

Finally, there are those organisations which have the technical (the C in the TOC model) capacity, both in terms of hardware and software, physically to construct a databank, maintain it and make the data in it accessible to the users. One such organisation at national level is the Dutch Centre for Public Libraries and Literature (NBLC). In Limburg there is the Limburg Information and Library Centre.

Conclusion

The chances of mobilising this much support for a databank are substantially increased by the fact that those supplying the data are also those who wish to use it. What organisation would go to all the trouble of supplying data in the right form otherwise? Some degree of continuity can only be ensured if organisations get more out of the system than they put into it. The attraction is that they will also have access to data from other sources as well as their own and that this information will, moreover, be systematically organised. The quality of data can also be checked to some extent in that the person asking for information is often familiar with the area concerned and knows the source of the data.

The conclusion of this article is that we now have the technology to gather and update data and continually check it for accuracy and quality. The task for the future is to make it attractive and usable by everyone. This means linking data to users, especially intermediaries, putting it in the right context, so that what emerges from our interaction with databanks is valuable information for the benefit of individuals, groups and society as a whole.§

Creative Statistical Software: A Must for the Publications Minded Researcher

From Bit Hacker, Creative Solutions Software, 2614 Chinquapin Oak, Arlington TX 76012.

Introduction

Have you ever analyzed your valuable date in SPSS or SAS, only to find non–significant results? If so, then you need **CHEAT** (Creative Hypotheses Evaluation Analysis Technique). CHEAT can almost always obtain significant results in cases where you know your hypotheses are correct, but your data just won't cooperate.

Most statistical analysis software assumes that you begin your research with a statement of the hypotheses. While this approach is traditional, it is illogical and counter productive to your true goal, that is, getting the results published.

What CHEAT Does

CHEAT presents the user with a list of the 215 Journals that prefer research based manuscripts. The user selects the most preferred journal for publication. CHEAT then uses artificial intelligence based inferencing techniques to work with you and your data to provide maximum publication potential in the journal selected.

CHEAT can almost always obtain significant results in cases where you know your hypotheses are correct, but your data just won't cooperate

The CHEAT method has several advantages. For example, some journals do not consider Chi Square as a very powerful test of significance. Therefore, if such a journal was chosen by the user, CHEAT would only analyze data with a statistic more in line with those used by the journal in past articles. In addition, CHEAT will determine and use the statistic which results in the highest statistical significance. If a user's data is problematic, CHEAT will work the user through one or several data building techniques to allow more powerful manipulation to be preformed. During data building, CHEAT prompts the user for agreement with the assumptions required for these powerful statistics. As CHEAT processes data, problematic data and suggested modifications are presented along the increased significance that each change will obtain. Users accept or reject each suggested by simply clicking the mouse.

The result of a CHEAT analysis is an optimum statistical analysis, a series of tables presenting the data, and a reference list of articles pertinent to the statistics CHEAT has used. The user can quickly add text to CHEAT output and submit the manuscript for publication.

An Example of CHEAT in Action:

The following testimony is from an academic who credits CHEAT with her recent tenure.

I wanted to publish an article illustrating that students who actually did well in research class earned significantly more money than students who were passed because professors could not tolerate them in their class next semester. I could not take the time to collect new data, because the paperwork to my tenure committee was due in three months. I had my old grades and the average salary of alumni for the last five years. Although this data seemed weak, I ran some statistics. Unfortunately, they did not seem to support my hypothesis, even though I knew the hypotheses to be valid. I suspected I needed some sophisticated technology to help modernize my research approach.

I purchased CHEAT, ripped off the shrink wrap, signed the copyright agreement, and flung the disks into my floppy drive. It quickly installed and thanked me profusely, indicating that CHEAT was programmed in a third–world country and I was helping to eliminate world poverty. I began to feel good about my Hi–Tech approach. I looked over the list of journals that appeared on the screen and chose a prestigious journal for my manuscript.

The words "thinking—please wait" flashed in red on the screen for about a minute and then CHEAT requested information and data, i.e, student grades and subsequent salaries. Since I only provided an average salary for gradu-

ates for the last 5 years, CHEAT asked if I could tolerate two assumption:

- That the salary range of alumni was $20,000 to $150,000.
- That individual salaries could be picked at random and assigned to students.

I indicated that these data building techniques were appropriate and CHEAT proceeded with its calculations.

CHEAT began ruling out statistical tests. First Pearson Product Moment Correlation, then T Test, then Kendall's Tau, and then even Chi Square. It then began ruling out tests I had never heard of, such as the Double Inverted Cluster Analysis and the Minoan Multivariate Agricultural & Livestock Test.

CHEAT finally selected an intuitively oriented associational test called the Divine Factorial. The Divine Factorial was developed in the 9th Century by European Monks to prove the accuracy of their calculations on the number of Angels that could sit on the point of a needle. This test found my data highly significant and within minutes, beautifully constructed charts where flashing across my screen with the appropriate ** marks indicating significance according to Divine Factorial and citing several recent, although rather obscure foreign reference to the statistical test used.

CHEAT produced publications suggestions such as: (1) this journal prefers no more than four tables and eight double spaced manuscripts pages, (2) use an average sentence length of 120 words, (3) use a readability index rating of 19 educational years, and (4) use a jargon index of 95 on a 100 point scale. With the charts and guidelines, I was able to word process a manuscript in several hours.

CHEAT produced publications suggestions such as: (1) this journal prefers no more than four tables and eight double spaced manuscripts pages, (2) use an average sentence length of 120 words, (3) use a readability index rating of 19 educational years, and (4) use a jargon index of 95 on a 100 point scale.

Publication came more quickly than I expected. The Journal editor indicated that my manuscript looked interesting and of the type and format the Journal preferred to publish. The reviewers commented that they found the results counter intuitive and therefore important, especially given their highly significant nature. One reviewer mentioned that he/she was not aware of the Divine Factorial, but that it seemed warranted give the list of recent supporting references.

What more can I say. CHEAT was worth its $99 purchase price and promises to be a valuable research tool for me and my colleagues who are constantly seeking new ways to optimize our chances with the Tenure Committee. I would suspect it would provide equally impressive results in the nonprofit and business world where quick significant results from questionable data are mandatory and where fewer readers scrutinize assumptions and recognize obscure statistical tests. I give CHEAT an A+ for power and practicality.§

Research Needed

From CUSSN Members.

In an effort to guide future research, CUSSN handed out a form at the HUSITA–2 conference requesting participants indicate what research was needed in the field of human services computing. The results follow. Readers having ideas for needed research should send them to CUSSN.

Description of Needed Research

A replication of the study carried out in Michigan in 1987 by Jean V. Harrod, which reported upon the level of accuracy of the computer held child protection records (as compared to manual case files). In the Michigan study a high percentage of errors were found in many fields. Hypothesis were tested which suggested the source of error would be found to result from the variability in the attitudes of supervisory staff responsible for child protection operations. My major hypothesis is that the maintenance of the computer held record system can be improved so as to increase accuracy of the information store.

Experts to Contact Before Conducting Research

- Colin Barnes, Canley District Centre, 312 Charter Ave., Coventry, CV4 8DA United Kingdom

Description of Needed Research

There is a need to collect data regarding personality type, problem solving, style, demographics, etc, of alcoholism and chemical dependency, client/patient; collect data on: personality type, P/S style of therapist, treatment approaches and modalities and treatment out–come, and correlate this information so as to watch client characteristics with therapist and therapy, thereby increasing chances of successful treatment.

Experts to Contact Before Conducting Research

- James Sope Renouex Inc. 1421 Jersey Av North, Minneapolis, MN. 55427–9962 (612) 591–5829
- Michael D. Paetos, MSW ACA, New Jersey Collegiate Substance Abuse Prog., Hortado Health Center, 11 Bishop Place, New Brunswick, NJ 08903 (908) 923–6646
- Ralph A. Reggs Simtec Management, 150 Parkway Dr. Salamanca, NY 14779 (716) 945–1900

Description of Needed Research

Needed research is a Delphi Type study with leaders in the human service and computer field on what future information technology holds for human service direct practitioners, managers, planners, researchers, and policy makers (national associations), and what each group should be doing to prepare for the future.

Experts to Contact Before Conducting Research

- Begin with the editorial boards of relevant journals and newsletters.

- Schoech, Ph.D. Assoc. Prof, School of Social Work, U. of TX at Arlington, UTA Box 19129, Arlington, TX 76019–0129, 817/273–3964, Bitnet: b947djs@utarlvm1, Fax: 817–794–5795

Description of Needed Research (taken from CUSSNet)

It would be comforting to imagine that computerization in human services is an incremental process and—if we wait long enough—it will happen. However, I think we must also consider the idea that there are no guarantees that history will proceed toward a specific desired outcome. It is possible that the personal computer could go the way of the CB radio.

The thing that got me thinking along these lines was a wire service feature in the Albuquerque Journal which reported that some economists are questioning the cost effectiveness of the PC in the business world, pointing out that supportive, hard evidence of the PC's worth is hard to come by. My interpretation of this is that the smart money men are foreseeing a continuing recession and eying likely victims for some capital cost cutting. Whether such a conclusion is valid is not so important as the fact that there will be great pressure to accept it if the economy continues in its currently dismal state. I think we must also assume that trends in the business community will soon pervade the public and non–profit domains.

So, it may be later than you think. And, it is probably a good idea for those of us who promote human services computing to take a hard look at where we are, where we would like to be, and what it would take to get us from here to there. The first thing to do is to admit that the skeptics are right—there is very little hard evidence of the value of PCs and mini–systems in terms of productivity enhancement, whether we are looking at money–making enterprise or non–profit. In the public and non–profit areas there is not even anything substantial in the way of anecdotal accounts of efforts to computerize human services. When was the last time you read about a "successful" experience with computers in a social services agency? Are you personally familiar with a single social service agency that is fully computerized? If so, I'd like very much to hear about it.

So, I think some competent research is in order. It would also be nice to see some funding for well–designed pilot projects which could give us a look at what really happens when all of the information processing of a human services agency is computer mediated. At worst, the results would show us that computers in human services are a waste of resources and we can move on to other things. What is more likely, I think, is that we would see the development of some genuinely useful computerization guidelines for human services planners.

Experts to Contact Before Conducting Research

- Mike Connealy Via CUSSNet: NASW New Mexico, Las Cruces, NM (1:305/101.0)

HUSITA-2 Additions to the CUSSN Skills Bank

From participants at the HUSITA–2 Conference

All HUSITA–2 registrants were given the skills bank form. Only 11 were returned. Previous entries total 54, although some are very old. Please help networking by completing the form on the attached page and returning it to CUSSN at POB 19129, Arl TX 76019–0129 to add your name to the skills bank. New additions will be printed in the next newsletter and made available on floppy disk through the CUSSN disk copy service.

Alison Alpert, MSW, Coord. Psy. day treat, Community Consultation Center, 1 University Pl., #21B, New York, NY 10003 USA, Tele: 212–232–5032 212–777–0163

Interest areas: research, software designs, single system research

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Research Applications — *Proficiency*: 1
Area: Client Information Systems — *Proficiency*: 4

Hardware skills and proficiency where 1 = low and 5 = high

Area: Computers (AT & XT Clones) — *Proficiency*: 4
Area: Modems — *Proficiency*: 1

Software skills and proficiency where 1 = low and 5 = high

Area: DOS Ver. 3.x–4.x — *Proficiency*: 4
Area: PC–File Ver. 5.0 — *Proficiency*: 4
Area: Quickbase — *Proficiency*: 5
Area: WordPerfect 5.0/5.1 — *Proficiency*: 4

Jan Cooper, BA/MA, Graduate students MSW, Catholic Univ. of America, 2810 Rittenhouse St. N.W., Washington, DC 20015 USA, Tele: 202–362–7293

Interest areas: 22 years large systems design & development (I am new to human service)

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Software design\development — *Proficiency*: 5
Area: (for govts, universities, businesses)

Harmen W. Grebel, DR., TEACHER/CONSULTANT, ECINDHAVEN CAUSA, PO BOX 34F, ECINDHAVEN, 5600AH NETHERLANDS, Tele: 040–605630 FAX:, Email: GREBEL at HSEPM. HSE. BITNET

Interest areas: information planning, instruction materials

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: developing information plans in welfare — *Proficiency*: 4
Area: instruction material — *Proficiency*: 4

Hardware skills and proficiency where 1 = low and 5 = high

Area: IBM PC'S AND THE LIKES — *Proficiency*: 2

Software skills and proficiency where 1 = low and 5 = high

Area: DOS — *Proficiency*: 2
Area: WordPerfect — *Proficiency*: 4
Area: PLAN PERFECT — *Proficiency*: 4

Teaching skills & proficiency where 1=little to share & 5 = much

Area: mentally handicapped care — *Proficiency*: 2
Area: telemation/videos — *Proficiency*: 2
Area: just try its my job — *Proficiency*: 2

Andrew Lefton, MA, PROGRAM DIRECTOR, INSTITUTE FOR CHILD HEALTH POL, U. OF FL.5700 SW 34TH ST #323, GAINSEVILLE, FL 32608 USA, Tele: (904) 392–59 FAX: (904) 392–88, Email–Internet: Andrew_Lefton at ichp.circa.ufl.edu

Interest areas: case management, electronic networks, health policy evaluation, information systems

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: case management — *Proficiency*: 4
Area: electronic networks — *Proficiency*: 3

Area: health policy evaluation *Proficiency*: 1
Area: information systems *Proficiency*: 3

Hardware skills and proficiency where 1 = low and 5 = high

Area: MACINTOSH (ALL MODELS) *Proficiency*: 4
Area: APPLE CASEWRITERS *Proficiency*: 3
Area: NET MODEM *Proficiency*: 3
Area: DEST 4 APPLE SCANNERS *Proficiency*: 3
Area: PROFAX MODEM *Proficiency*: 3

Software skills and proficiency where 1 = low and 5 = high

Area: 4TH DIMENSION DBMS *Proficiency*: 4
Area: MICROSOFT WORD *Proficiency*: 3
Area: MICROSOFT EXCEL *Proficiency*: 3
Area: QUARK EXPRESS (DTP) *Proficiency*: 3
Area: MAC SYSTEM 7.0 (OS) *Proficiency*: 3

Teaching skills & proficiency where 1=little to share & 5 = much

Area: ELECTRONIC NETWORKS *Proficiency*: 5
Area: INFORMATION SYSTEMS *Proficiency*: 3

Comments: I am interested in expert systems & decision support systems.(DDS), as well as Training & development issues.

Alfonso Ortiz, MPA, Dir, MIS, CDHS Buffalo State College, 1300 Elmwood Ave, Buffalo, NY 14222, Tele: 716–881–2800 FAX: 716–881–9044

Interest areas: computerized training tracking systems, health information systems

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Training tracking systems *Proficiency*: 5
Area: Conference management systems *Proficiency*: 5
Area: Email systems *Proficiency*: 4
Area: Bulletin Board Systems *Proficiency*: 4

Hardware skills and proficiency where 1 = low and 5 = high

Area: PS/2 IBM Family *Proficiency*: 5
Area: HP Laser Printers *Proficiency*: 5
Area: Hayes Modems *Proficiency*: 2
Area: Scanner *Proficiency*: 2

Software skills and proficiency where 1 = low and 5 = high

Area: Dbase IV Ver 1.1 *Proficiency*: 5
Area: Lotus 123, Ver 3.0 *Proficiency*: 3
Area: DOS 5.0 *Proficiency*: 2
Area: OS/2 *Proficiency*: 2
Area: Procomm Plus *Proficiency*: 4

Teaching skills & proficiency where 1=little to share & 5 = much

Area: DOS *Proficiency*: 4
Area: Dbase IV *Proficiency*: 4
Area: Email *Proficiency*: 4

Ralph Riggs, MS, Admin. Assistant, Salamanca District Authority, 150 Parkway Dr., Salamanca, NY 14779 USA, Tele: 945–1900 FAX: 945–5016

Interest areas: alcoholism, chemical, networks, integrated systems, expert systems

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Alcoholism *Proficiency*: 5
Area: Chemical Dependency *Proficiency*: 5
Area: Networks *Proficiency*: 4
Area: Integrated Systems *Proficiency*: 2
Area: Expert Systems *Proficiency*: 1

Hardware skills and proficiency where 1 = low and 5 = high

Area: Computers (CPU's) IBM Corp. *Proficiency*: 4
Area: Printers IBM Corp. *Proficiency*: 4
Area: Monitors IBM Corp. *Proficiency*: 4
Area: Modems Hayes Corp. *Proficiency*: 4

Software skills and proficiency where 1 = low and 5 = high

Area: Database Management Systems *Proficiency*: 5
Area: Networking Software (Novell) *Proficiency*: 5
Area: Word Processing *Proficiency*: 3
Area: Various Graphics Packages *Proficiency*: 3
Area: Windows *Proficiency*: 3

Teaching skills & proficiency where 1=little to share & 5 = much

Area: Alcoholism ed progress documentation *Proficiency*: 5
Area: Alcoholism ed quality assurance *Proficiency*: 5
Area: Alcoholism ed assessment service *Proficiency*: 4
Area: Alcoholism ed treatment planning *Proficiency*: 4
Area: Alcoholism ed assessment review *Proficiency*: 5

Phillip Schervish, PhD, DIRECTOR, INSTITUTE FOR SOCIAL JUSTICE, THE CATHOLIC UNIV. OF AMERICA, WASHINGTON, DC 20064 USA, Tele: (202)319–545 FAX: (202) 319–50, Email: BITNET SCHERVISH at CUA

Interest areas: decision support, social policy, social justice, social change

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: multi criteria dm in policy *Proficiency*: 4
Area: information use in CMHCs *Proficiency*: 1
Area: qualitative/quanit data decision supp *proficiency*: 1
area: computer & social change *Proficiency*: 1
Area: computers & social justice *Proficiency*: 1

Hardware skills and proficiency where 1 = low and 5 = high

Area: DOS MICROCOMPUTERS *Proficiency*: 5
Area: MODEMS *Proficiency*: 5
Area: SCANNERS *Proficiency*: 5
Area: LASER PRINTERS *Proficiency*: 4

Software skills and proficiency where 1 = low and 5 = high

Area: DesD VIEW 5.12 *Proficiency*: 4
Area: BiBASE 3.1 *Proficiency*: 4
Area: PROCOMM T 2.0 *Proficiency*: 4
Area: NOVEL NETWARE *Proficiency*: 3
Area: SPSS/PCT *Proficiency*: 4

Teaching skills & proficiency where 1=little to share & 5 = much

Area: info use & info in decision making *Proficiency*: 5
Area: multi criteria dm & policy research *Proficiency*: 5
Area: I T & service accounting *Proficiency*: 5

Dick J. Schoech, PhD, Associate Professor, U. of Texas at Arlington, SSW, Box 19129, Arlington, TX 76019, Tele: 817/273–3964 FAX: Email: b947djs at utarlvm1

Interest areas: knowledge based systems, networking, the system development process

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: knowledge based systems *Proficiency*: 2
Area: networking using a BBS *Proficiency*: 3

Hardware skills and proficiency where 1 = low and 5 = high

Area: DOS *Proficiency*: 3
Area: IBM 386 *Proficiency*: 3
Area: HP Laserjet printer *Proficiency*: 3

Software skills and proficiency where 1 = low and 5 = high

Area: Wordstar 5.5 *Proficiency*: 3
Area: Ventura (gem version) *Proficiency*: 3
Area: R:BASE 3.1 *Proficiency*: 4

Teaching skills & proficiency where 1=little to share & 5 = much

Area: human service software *Proficiency*: 5
Area: human service computer applications *Proficiency*: 4

Comments: Editor of Computers in Human Services, a Haworth Journal. Send for information about articles and software reviews needed.

International Skills Bank Registration Form

In an effort to network worldwide, we are building the skills bank of individuals interested in Human Service Information Technology. Please complete the form below and return to Dick Schoech, Associate Professor, U of Texas at Arlington, SSW, Box 19129, Arlington TX 76019-0129. FAX 817/794-5795.

Name: _____ Degree: _____
Title: _____ Ethnicity/culture _____
Organization _____
Mailing Address: _____
City: _____ State: _____ Zip code: _____
Country: _____ Telephone Numbers: _____ _____
FAX: _____ E-MAIL: _____ _____

List several key words or phrases describing your interest and expertise in human service information technology, e.g., client tracking, expert systems, mental health assessment, etc.

_____

List your information technology related skills/knowledge areas and level of proficiency for each. Be as precise as you can, e.g., child placement expert systems, mental health tracking systems. Proficiency level codes are:

1 = interest only
2 = carried out unfunded research in the area
3 = carried out funded research in the area
4 = developed applications in the area
5 = developed many applications in the area

Area: _____ Proficiency level code: ___
Area: _____ Proficiency level code: ___
Area: _____ Proficiency level code: ___
Area: _____ Proficiency level code: ___
Area: _____ Proficiency level code: ___

List your familiarity with hardware (computers, printers, modems, etc.). Be as specific as possible on the manufacturer and model of the hardware. For each piece of hardware listed, indicate one of the following proficiency level codes.

1 = Use occasionally
2 = Use frequently
3 = Use regularly
4 = Can diagnose and repair minor problems
5 = Can diagnose and repair serious problems

Hardware: _____ Proficiency level code: ___
Hardware: _____ Proficiency level code: ___
Hardware: _____ Proficiency level code: ___
Hardware: _____ Proficiency level code: ___
Hardware: _____ Proficiency level code: ___

List your familiarity with up to 5 pieces of software (operating systems, databases, etc.). Be as precise as possible on the brand name and version of the software listed. For each piece of software you list, indicate one of the following proficiency level codes.

1 = Use occasionally
2 = Use frequently
3 = Use regularly
4 = Customize this software for others
5 = Write code connected with this software

Software: _____ Proficiency level code: ___
Software: _____ Proficiency level code: ___
Software: _____ Proficiency level code: ___
Software: _____ Proficiency level code: ___
Software: _____ Proficiency level code: ___

List the content areas of your training and curriculum development activities. For each content area listed, indicate one of the following materials sharing codes.

1. I have no materials to share for this content area
2. I have a course outline to share
3. I have a course outline and handouts to share
4. I have an outline, handouts, and exercises to share
5. I have an outline, handouts, exercises, & software to share

Teaching area: _____ Proficiency level code: ___
Teaching area: _____ Proficiency level code: ___
Teaching area: _____ Proficiency level code: ___
Teaching area: _____ Proficiency level code: ___
Teaching area: _____ Proficiency level code: ___

Copy and send in to CUSSN

Provide comments about your interests and skills on back

Moshe Sherer, DSW, LECTURER, SCH S/W TEL AVIV UNIV., BOB SHAPELL SCH S/W TEL AVIV, TEL AVIV, 69978 ISRAEL, Tele: 3–5459128 FAX: 3–6429269, Email: SHERER AT TAUNIVM

Interest areas: therapy, expert systems, administration, research

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: computerized therapeutic tools *Proficiency:*: 4
Area: computerized games & simulations *Proficiency:* 4

Hardware skills and proficiency where 1 = low and 5 = high

Area: COMPUTERS *Proficiency:*: 5
Area: PRINTERS *Proficiency:*: 5
Area: MODEMS *Proficiency:*: 5
Area: FAX *Proficiency:*: 5

Software skills and proficiency where 1 = low and 5 = high

Area: SPSS PC *Proficiency:*: 5
Area: DBASE *Proficiency:*: 5
Area: WORD PROCESSOR *Proficiency:*: 4

Teaching skills & proficiency where 1=little to share & 5 = much

Area: introduction to computers *Proficiency:* 5
Area: SPSS PC *Proficiency:* 4
Area: Computer use in social services *Proficiency:* 5

Ronny A. Shtarkshall, PhD, Director MPH Program, Sch Public Health U.Jerusalem, PO.

Box 1172, Jerusalem, Israel 91010 Israel, Tele: +972–2–34160 FAX: +972–2–434–4, Email: SHILUV at Hadassah

Interest areas: counseling, expert systems, tutoring

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Counseling Support Systems *Proficiency:* 4
Area: Human Sexuality *Proficiency:* 3

Hardware skills and proficiency where 1 = low and 5 = high

Area: Macintosh *Proficiency:* 4
Area: HP Laser Printer *Proficiency:* 4

Software skills and proficiency where 1 = low and 5 = high

Area: Word Processing–WriteNow *Proficiency:* 3
Area: Excel *Proficiency:* 4
Area: Stat. 512+ *Proficiency:* 3
Area: Filemission *Proficiency:* 4

Curtis Stoelting, MPs, RESEARCH ASSOCIATE, U OF CALGARY REHAB STUDIES, 2500 UNIV. DR N.W., CALGARY, ALBERTA T2NIN4 CANADA, Tele: 403–22D–7347 FAX: 403–282–9244, Email: C STOELTING. at UNCAMULT BITNET

Interest areas: counselor education

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Counselor education *Proficiency:* 4

Hardware skills and proficiency where 1 = low and 5 = high

Area: DeskJet 500 *Proficiency:* 3
Area: Mars 105 Plus *Proficiency:* 3

Software skills and proficiency where 1 = low and 5 = high

Area: WordPerfect *Proficiency:* 3

Teaching skills & proficiency where 1=little to share & 5 = much

Area: Counselor education *Proficiency:* 5

Myron E. Weiner, MGA, Professor, Sch S/W U. of CT., 21 Bidwell Parkway, Bloomfield, CT 06002 USA, Tele: 203–243–1582 FAX: 203–243–9211,

Interest areas: Management, H.S. Info system design

Knowledge/expertise and proficiency where 1 = low & 5 = high

Area: Management & computers *Proficiency:* 3
Area: Org & systems design & technology *Proficiency:* 2
Area: Human service info systems design *Proficiency:* 2

Hardware skills and proficiency where 1 = low and 5 = high

Area: Macintosh II (Apple) *Proficiency:* 3

Teaching skills & proficiency where 1=little to share & 5 = much

Area: Computer applications for agencies *Proficiency:* 4
Area: management & technology *Proficiency:* 2

CUSS Network Advisory Board Members

Member Activities

Neighborhood Info System Project

from James L. Greer, Urban Data Systems, Inc, POB 96, Red Hook, NY 12571 914/758-0502, FAX 914/758-3221.

I am interested in collaborating with researchers and practitioners in neighborhood development and advocacy throughout the U.S. In our Neighborhood Information System (NIS) project we collected and analyzed data in one neighborhood in Chicago on:

- Public capital investments
- Housing and economic development subsidies
- Private investment
- Real estate activity; and
- property tax assessments

These data were assembled from a variety of public sources—mostly various agencies of local government—and organized into a single data set on a microcomputer. This information was organized by small geographical areas and disseminated to community development corporations.

Thus far, this data and the analysis it permits have led to a number of uses, for example, the evaluation of a CDC initiative to leverage public development subsidies and to participate in the city's capital budgeting process.

I believe that accurate, up–to–date information on public sector and private market activities in the communities of the city can:

- Significantly contribute to informed participation in a number of policy areas,
- Assist in the development of a neighborhood plan, and
- Provide the basis for strategic decision–making by community based organizations.

A community based databank and analysis system would lend itself, for instance, to:

- Assessing and empirically measuring the patterning of economic vitality and distress across the various communities of the metropolitan complex
- Provide a set of empirical baselines against which to measure the impact of various community economic development policies
- Provide one way to evaluate the initiatives of Community Development Corporations in their effort to encourage community economic development
- Provide resources (information and the capacity to analyze that information) to community based organizations.

In the last year, I have been working with several organizations to initiate projects modeled on the NIS project in several cities throughout the country.

What is AACTHS?

from Rob MacFadden, Coordinator, Canada CUSSN, Assistant Professor, Sch of Soc Wk, U. of Toronto, 246 Bloor St. West, Toronto, M5S 1A1.

The Association for the Advancement of Computer Technology in Human Services (AACTHS) was established about 3 years ago to "...promote the considered application of computer technology in human services, consistent with professional standards and values." To achieve this purpose, the Association will:

- promote networking and information sharing about computer technology in human services
- promote an awareness of the ethical issues associated with the use of computer technology in human services
- provide access to computer related resources for members
- encourage the development of literacy and competency in computer technology for human service professionals
- encourage the development of innovative computer applications for human services in the areas of research, clinical practice and social policy.

As a non-profit organization, the Association is intended to be multidisciplinary in scope and is committed to using computers in its operation to improve communication between members and the Association and to improve service to members.

The statements above are taken from our By-Laws. We currently have between 120-140 members who receive our newsletter. Most are from the Ontario area, and some are farther afield like Calgary, and Colorado. Our current Board is comprised of psychologists, social workers, educators, private practitioners and others.

We have held conferences, workshops and publish a newsletter. Perhaps the most significant resource is our electronic conference which is on a large information utility called RoseMedia, based in Toronto. We have a private conference which is like an internal BBS with our own file section, E-mail, bulletins, etc. Members can also use the larger, RoseMedia resources outside our AACTHS conference. One of our current projects is in conjunction with the United Way- to develop a highly automated sign-on process that will allow novice social service users to more readily participate in the conference. It uses automatic dialing, password entry, automatic searching of conferences, uploading, downloading of compressed messages/data, and off-line review. We hope to attract the United Way agencies into the conference and also to facilitate their communications via telecommunication. If this is successful, our membership curve will climb considerably. We need a critical mass to ensure ongoing use of the conference.

We met last month to begin our strategic planning. This month we are "meeting" via the electronic conference to continue the development of our mission, objectives and strategies.

Some of the challenges are to keep the members and Board active. It has not been easy to get even the Board members on our conference. Many computer sophisticates have not tested the telecommunications waters.

My sense is we are going to commit to a regular event, perhaps in collaboration with another source, enhance the conference and continue the newsletter. If the United Way thing takes off, this could radically alter our development.

These are a few comments to the words, "What is AACTHS?" I would be glad to respond to any inquiries.

Multimedia Experiences Needed *from Bob Beicher, SUNY at Buffalo, Bitnet = FESBEICH@UBVMS.BITNET*

Hi! I am the "Product Review" editor of the new Journal of Educational Multimedia and Hypermedia. The first issue should be out soon, after that it will be quarterly. I am trying to assemble a group of people who have used multi-hypermedia products and wouldn't mind sharing their experiences with others. Mac/IBM/Next?Amiga/Apple...any platform is welcome. I have guidelines which I would be happy to send to you. If you are not interested, but know someone else who might be, could you please forward this note to them.

Residential Psychiatric Computer Use *from Dennis G. Christoff, ICORPS, President, 308 E. Chestnut St. Jeffersonville, IN. 47130*

The ICORPS (Indiana Conference of Residential Psychiatric Services) is a twelve year old statewide organization made up of service providers for the chronically mentally ill. The membership includes psychiatric technicians, case managers, therapists, and administrative staff. ICORPS was the first state organization to affiliate with the new National Association of case management. We conduct a three day conference annually (each October) and computers in mental health has been part of this conference the past four years.

Computers in Psychiatry in Norway *from Dr. Torleif Ruud, Kreklingen 1, 6860 Sandane, Norway*

I would like to receive information on the use of computers in psychiatry, psychology or health services. Presently, I work in the following areas:

- I am chairman in the committee on computers in psychiatry in the Norwegian psychiatric association. Presently we are working to establish a minimum basis data set (a set of variables and their coding, as well as standard reports) for use in Norway psychiatric institutions.
- I was one of the first psychiatrists in Norway to do the statistical analysis of my research on a PC, and I continue to use and try out different programs in this field.
- I have during 1990/91 developed administrative and clinical software for psychiatric institutions (developed in DataEase), and this program is now being considered by several institutions in Oslo and elsewhere. Further development of this program (KLIP: Clinical Information System for Psychiatry), is now a cooperation between me and the company who will sell and support it, but we also plan to involve several institutions.
- I have ideas on developing and trying out software for decision support in the selection of treatment methods, and I would like to get in touch with people with similar interests.
- I have recently been asked by the Director of Health to be project leader for a work in developing systematic methods for the assessment of psychiatric services, and I expect to look into how we can use computers as a tool in such work. (I have done that in planning psychiatric health services in our part of Norway).

I am a psychiatrist with training in psychotherapy and group analysis, as well as some in family therapy/systemic theory. I am medical director of an outpatient clinic and a center for psychiatry in a rural area.

During a trip in the U.S. in September/October 1990, I met David Gastfriend in Boston. He gave me some information on several projects going on in that area. I would be very interested in getting in touch with people working with issues similar to the ones I am working with, and I hope this will be possible through CUSSN.

Computer Information Center for Special Education–Israel *Michael J. Hanan, The P. Rutenberg Institute for Youth Education, 77, Hanassl av. P.O. box 6015, Halfa 34642 Tel: 972-4- 387958 FAX 972-4-387565*

For almost fifty years our Institute has served all segments of Israel's youth. We have attempted to be the initiators of projects which answered needs that were not being met by other agencies and fell within our area of activity. One of the areas of our specialization over recent years has been computers in education. An unanswered need in our country is providing information regarding education for disabled children and youth. We are therefore establishing a computerized information center for special education.

We have set aside rooms which will serve staff, researchers, students; but particularly teachers, youth and community workers and parents. Computers, data bases, etc. will join books and journals within this library complex. As a non–profit institution we were greatly aided by a grant from the Rosenberg Foundation, which enabled us to obtain the initial hardware to "start up" the project.

At this time we are seeking information for inclusion in our information bank.

Donor Software Needed *from Mary Pivetti, Department of Human Services, PO Box 511, Bakersfield CA 93302 (805) 861-2032*

I am employed at A. Miriam Jamison Children's Center in Bakersfield, CA. We are a county run protective agency for abused, abandoned, and neglected children. I am looking for a donor tracking program with merging, labeling, and cross referencing capabilities (among other capabilities.) Is there such a beast? I am very interested in getting started to document our donor information on the computer, but cannot do so until I find the right program.

Lung Association Applications *from Paul Henfield, L.I.S.W., 161 North Broadleigh Road, Columbus, OH. 43209, (614) 457-4570*

My Masters degree is in Social Administration from Case Western Reserve University. My focus while in Graduate School was in alcoholism, planning and administration. Beginning in graduate school and increasing since then I have become interested in computers and information systems in nonprofit. My interest led me to purchasing a PC as my first present to myself after landing my first "big"

job after graduate school. Since then I have continued to take courses in computing and information systems. My goal now is to find a position where I can be working with computers full time.

As director of Patient Services for the Central OH. Lung Association, I am responsible for the administration of several financial assistance programs, grant writing, budgeting, program planning, needs assessment and evaluation. This year I was able to receive a $20,000 grant from the OH. Department of Development for the purchase of room air conditioners for persons suffering from chronic obstructive pulmonary disease. I do all my own word processing and spreadsheets. Although I work for a relatively small agency, we do all accounting, client and patron records inhouse.

Continuing Education Information Needed–West Indies *from Pat Hinds, 9 Kitchener St., Woodbrook, Trinidad, West Indies.*

I am a social worker presently involved in putting together our 1992 continuing education program and we are considering including computer use. I am interested in receiving helpful information.

Award Nominations Sought *from LOGIN Services, 245 Sixth St., St. Paul, MN 55101.*

Nominations for programs demonstrating productivity and quality improvement in computers and information services are being sought by the Exemplary State and Local Awards Program (EXSL) before February 1, 1992. EXSL recognizes outstanding public sector projects and programs that have reduced significant cost savings, measurable increases in productivity, and improvements in the quality and effectiveness of government services. Applications should be requested from LOGIN.

Resources

Electronic Information Resources

MCH–Net (Maternal and Child Health Network), SpecialNet (special education), and SCAN (developmental disabilities) have been linked to form Human Services InterNet. InterNet is carried on U.S. Sprint with administrative services provided by GTE Education Services. For more information, contact MCH–Network, National Center for Policy Coordination in MCH, 5700 SW 34th St., Suite 323, Gainesville, FL 32608-5367, 904/392-5904, FAX 904/392-8822.

MacPsych is an unmoderated mailing list for academic psychologists who use the Macintosh in teaching and research (vs clinical applications). To subscribe, send Email to R_LEHMAN@FANDM.BITNET.

PIE Online (Policy Information Exchange). Contains mental health policy resources and information. Contact Mental Health Policy Resource Center, 1730 Rhode Island Ave., Suite 308, Washington DC 20036.

Community Drug Abuse Education Electronic Conference is a forum for issues related to community drug abuse education and the epidemiology and study of drug abuse. It is run by the Office of Substance Abuse Studies at the University of Maryland at Baltimore. VM BitNet users can subscribe by sending a request to the Coordinator Treat Tschirgi HIRG@UMAB.UMD.EDU. (From asuvax.eas.asu.edu!wpi.WPI.EDU!fay (Peter R Fay) via CUSSNet).

Government Bulletin boards. These are open boards in the Washington, D.C. area, No pre–registrations are required

WORLD BANK

Information, Technology and Facilities Development, data: (202) 676–0920, voice: (202) 473–3076, Sysop: Ashok Daswani, Miguel Cuadra, public access: no limitations specified

EXPORT–IMPORT BANK

Exporters' BBS data: (202) 566–4602 data: (202) 566–8180 voice: (202) 566–4690 Sysop: Bob Hughes, Joel Kahn public access: 24 hours/day 7 days/week

DEPARTMENT OF COMMERCE

Economic News (Office of Economic Affairs) data: (202) 377–3870 data: (202) 377–0433 voice: (202) 377–4450 Sysop: Ken Rogers public access: may browse; charges fees for full access

Office Automation (Bureau of the Census) data: (301) 763–4576 voice: (301) 763–7448 Sysop: Nevins Frankel public access: 24 hours/day 7 days/week

Personnel (Bureau of the Census) data: (301) 763–4574 voice: (301) 763–7448 Sysop: Nevins Frankel public access: 24 hours/day 7 days/week

Microcomputer Electronic Information Center (National Bureau of Standards) data: (301) 948–5717 data: (301) 948–5718 voice: (301) 975–3359 Sysop: Ted Lanberg, Lisa Carnahan public access: 24 hours/day 7 days/week

Data Management Information Exchange (National Bureau of Standards) data: (301) 948–2048 voice: no voice line indicated Sysop: not listed public access: 24 hours/day 7 days/week

Information Technology Exchange (National Oceanic and Atmospheric Administration) data: (301) 770–0069 voice: (301) 377–2949 Sysop: Rich Kissel public access: 24 hours/day 7 days/week

Planning and Budget (Office of the Secretary) data: (202) 377–1423 voice: (202) 377–2949 Sysop: John O'Conor, Pat Spencer, Kathy Cooper Appropriations data: Sharon Davis Budget Bulletins: Beth Mack public access: 24 hours/day 7 days/week

DEPARTMENT OF THE NAVY

Naval Aviation News Computer Information (NANci) (Washington) data: (202) 475–1973 ––avn: 288–1973 voice: (202) 433–4407 ––avn: 288–4407 Sysop: Commander John A. Norton public access: 24 hours/day 7 days/week

Naval Weapons Engineering Support (NAVWESA) (Washington, S.E.) data: (202) 433–6639 ––avn: 288–6639 data: (202) 433–2171 voice: (202) 433–4836 Sysop: Bill Walsh public access: 4pm –7am weekdays; 24 hrs weekends/holidays

Judge Advocate General (Alexandria/Arlington) data: (202) 325–0748 ––avn: 221–xxxx voice: (202) 325–8312 Sysop: Ens. John Sawyer, Lcdr. Chris Buechler public access: 24 hours/day 7 days/week

Naval Observatory (Washington, Dwntn) data: (202) 653–1079 voice: (202) 653–1522 Sysop: M. Miranian public access: no limitations specified enter @TCO command for command directory

DEPARTMENT OF THE ARMY

Corps Engineer Planners (Mt. Vernon) data: (202) 355–2098 voice: (202) 355–3087 Sysop: Michael Walsh public access: 24 hours/day 7 days/week

Corps of Engineers (COE) Manpower (Washington, D.C.) data: (202) 272–1514 voice: not listed Sysop: Rich Courtney public access: 24 hours/day 7 days/week

DEPARTMENT OF DEFENSE

Ada Information Database data: (202) 694–0215 (DOD) (301) 459–3865 (Hyattsville, Md.) voice: (703) 685–1477 (Alexandria, Arlington) Sysop: none listed public access: 24 hours/day 7 days/week

Defense Technology Security Administration Export Control data: (202) 697–3632 (DOD) voice: (202) 693–1148 (DOD) Sysop: not listed public access: exclusive use of exporters of licensed items under provisions of U.S. Export Control laws

DEPARTMENT OF STATE

Agency for International Development (Arlington, Va.) data: (703) 875–1465 voice: (703) 875–1369 Sysop: Jerry Galindo public access: 24 hours/day 7 days/week

DEPARTMENT OF JUSTICE

Immigration and Naturalization Service (Washington, D.C.) Budget and Finance data: (202) 786–3640 voice: no voice line indicated Sysop: not listed public access: do not use in mid–day

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration (Washington, Dwntn) data: (202) 426–2961 voice: (202) 366–4057 Sysop: not listed public access: 24 hours/day 7 days/week

Newsletters, Magazines, Journals Etc.

501 (C)omputing News focuses on the computing needs of 501(c) non–profit organizations. For a free copy, contact Communal Computing, POB 6599, Silver Spring, MD 20916 301/598- 9062.

Books and Reports

Software Reference Guide for Local Government Operations is available for $42 from ICMA, 77 N. Capitol St. SE, Suite 500, Washington DC 20002-4201 202/962-3620 FAX 202/962- 3500.

The Merced County Experience: Automating the Welfare System is an insert in Government Technology Magazine, Vol 4#9, Sep. 91. The system called MAGIC, uses workstations attached to workstations. An expert system will handle eligibility 5,000 rules and the system calculates benefit levels. The experience is described with the following anticipated results.

Reduce the error rate for AFDC and food stamps for an annual savings of $2,225,748

Increased productivity of eligibility workers from 155 to 300 cases per month resulting in a 32% reduction in the number of eligibility workers needed resulting in a savings of $671,645 per year. For example, some complex cases that once required 8 hours to determine eligibility could be completed in minutes.

Reduce the number of eligibility forms from 750 to 400.

The calculated payback for the system is 3.68 years.

Software Announcements

THINKable is a multimedia software program for cognitive impairment that therapists can use in treating memory loss resulting from injury, developmental disabilities, substance abuse, degenerative disease, and neurological disorders. Contact Regina Lewis, IBM US Marketing & Services, 1133 Westchester Ave., White Plains, NY 914/642-5469.

College Selection Software on how to select the right college, major and how to plan for college is available from Education Information Systems, Inc., Box 5215, Ridgewood NJ 07451. 201/445-4636.

Software Finder contains over 25,000 business applications searchable by function, industry and application. Contact World Class Software, 245 Elwa Place, West Palm Beach, FL 33405 407/586-5156. $25.

WordPerfect Encryption Utility is available from Information Security Corp, 1141 Lake Cook Rd. Suite D, Deerfield IL 60015, 708/405-0500, FAX 708/405-0506.

PledgeMaker is a fund–raising package built on the Oracle database manager. It is available from SOFTREK, 3729 Union Rd., Buffalo, NY 14225 716/685-0823, 800/442-9211, FAX 716/681-7669.

Hot Dots 3.0 produces braille from within your word processor. **ZoomText** produces large print on the display. For ordering information and a demo disk, contact Raised Dot Computing, 408 S. Baldwin, Dept 902, Madison WI 53703 800/347-9594.

Fund$ystem is a fund accounting package. See space advertisement in this issue for details.

Management Information Consultancy leads a practitioner logically through the causes and possible interventions available when working with young people who steal. From Psych Systems 2000 c/o Ken Manning, 301 Green Lane South, Coventry CV3 6EH, West Mid lands, England Tel (0203) 415 606.

Goal–Focused Interviewing helps students and professionals in the mental health field enhance their interviewing skills by placing them in the position of an interviewer in hypothetical counseling situations. From Frank F. Maple & Lewis Kleinsmith, U. of Michigan & Cynthia L. Kleinsmith, Washtenaw Community College. **Laboratory in Classical Conditioning** simulates 3 experimental procedures and presents a tutorial in classical conditioning. For information on both programs and a catalog, contact Conduit Educational Software, U. of Iowa, Oakdale Campus, Iowa City, IA 52242 800/365-9774.

Super Optimizing Solutions Software helps users arrive at solutions to public policy and other problems whereby all users come out ahead of their best initial expectations simultaneously. Contact SOS Group, 1720 Parkhaven Dr., Champaign IL 61820. $50.

Shrink 3.0, automates many of the tedious tasks associated with billing and financial analysis of practice. Available from Multi-Health Systems, 908 Niagara Falls Blvd., North Tonawanda, NY 14120-2060, 800/456-3003.

Software to Automate Financial Management in a State Dept. of Mental Health is available from Mitchell Humphery & Co., 11720 Borman Dr., St. Louis MO 63146 800/237-0028.

Software Listings and Catalogs

National Collegiate Software Catalog materials will now be distributed by William C. Brown, a major textbook publisher. Contact them at 800-338-5578, FAX 800-346-2377.

Access Unlimited contains computing information in the areas of special education, therapy and home settings. Contact at 3535 Briarpark Dr., #102, Houston TX, 800/848-0311.

Educational Software catalog of inexpensive software for the Apple II is available along with a free demo disk from AV systems, Inc 1445 Estrella Dr., Santa Barbara, CA 93110 805/569- 1618.

Self–Awareness and Career Development Software catalog is available from Ciasa, Inc., 2017 Cedar St., Berkeley CA 94709.

Direct Computer Access & Communication for People with Physical Disabilities is available from Pointer Systems, One Mill St., Burlington VE 05401 800/537-1562(US) 802/658- 3260(worldwide) FAX: 802/658-3714.

Adaptive Technology Shareware Catalog contains mostly switches and switch training software which you can request and evaluate. Contact R.J. Cooper & Assoc, 24843 Del Prado #283, Dana Point, CA 92629 714/240-1912

Sequential software for language intervention catalog is available from Laureate Learning Systems, Inc., 110 East Spring St., Winooski, VT 05404 800/562-6801.

1991 Software & Source Book contains over 300 transportation software listings. Contact McTrans, Center for Microcomputers in Transportation, U. of FL, 512 Well Hall, Gainesville FL 32611-2083, 904/392-0378, FAX 904/392/3224.

Communication Aids for Children and Adults catalog is available from Crestwood Co., 6625 N. Sidney Place, Milwaukee, WI 53209 414/352-5678.

Upcoming Events

International Exhibition on Equipment and Care for the Elderly and Disabled, 21-22 November 1991, World Trade Centre, Singapore. Contact Siti Subaidah, SEATRO, 5001 Beach Rd #12-23 Golden Mile Complex, Singapore Tel: 65/2965881/2 Fax 65/2961171.

World Congress on Technology: Information Technology, Computerization, and Electronics in the Workplace for People with Disabilities, December 1-5, 1991, Arlington VA. Contact S Mercado, Council on Accessible Technology, 202/501-0720, FAX 202/501-3510, TDD 202/501-2296.

Physically Challenged Expo, January 10-12, 1992, San Jose Convention Center, CA. Contact Street Eaters, POB 4000, Suite 157, Pahrump, NV 89041, 702/727-9085, FAX 702/727-9569.

21st Annual Conference of the Society for Computers in Psychology, November 21, 1991, San Francisco, CA. Contact via bitnet, Bill Palya, Dept of Psychology, Jacksonville State U., Jacksonville, AL 36265, 205/782-5641, FAX 205/782-5680, Email FWLP@JSUMUS.

Technology and Persons with Disabilities, March 18-21, 1992, Los Angeles Airport Marriott Hotel. Contact H. J. Murphy, Office of Disabled Student Services, California State U, 18111 Nordhoff St–DVSS, Northridge, CA 91330 818/885-2578, FAX 818/885-4929.

Cognition and Representation, April 3-5, 1992, Buffalo, NY. Contact Center for Cognitive Science, 651 Baldy Hall, SUNY, Buffalo, NY 14260, Email: dcp@sybil.cs.buffalo.edu

Computer Applications in Mental Health, April 17, 1992, Indianapolis, IN. Contact Marvin Miller, Indiana U School of Medicine, 1315 W. 10th ST. Indianapolis IN. 317/634-8401, FAX 317/634-8401 #414.

Computing for the Social Sciences, May 4-7. 1992, U of Michigan. The focus is on revolutionary capabilities for the management and analysis of social, economic, political, and demographic data brought about by the technological changes of recent years. Abstracts are due on 1 December 91. Contact Al Anderson, U. of MI, 313/998-7140, FAX 313/998-7415, INTERNET albert_F._anderson@um.cc.umich.edu

Educational Applications of Technology for Deaf Students, May 28-30, 1992, Rochester, NY. Contact James K. Carrroll, Rochester Institute of Technology, National Technical Institute for the Deaf, LBJ Bldg, POB 9887, Rochester, NY 14623- 0887, 716/475-6834 (Voice/TDD).

Computers Across the Curriculum: A Conference on Technology in the Freshman Year, May 29–31, 1992, New York City. Designed for faculty, administrators and researchers in higher education. Deadline for abstract submissions, November 15, 1991. Contact M. Kirsch, Computers Across the Curriculum, CUNY Office of Academic Computing, 555 West 57th Street/14th Floor, New York, NY 10019.Phone (212) 541-0329

Technology: Gateway to Rehabilitation, June 6-11, 1992, Toronto Canada. Over 150 exhibits are anticipated. Contact RESNA, Suite 700, 1101 Connecticut Ave NW, Washington DC 20036 202/857-1199.

3rd International Conference on Computers for Handicapped Persons, July 7-9, 1992, Vienna, Austria. Contact H. J. Murphy, Office of Disabled Student Services, California State U, 18111 Nordhoff St–DVSS, Northridge, CA 91330 818/885-2578, FAX 818/885-4929.

Microcomputers in Transportation IV, July 22-25, 1992, Baltimore, MD. Contact McTrans, Center for Microcomputers in Transportation, U. of FL, 512 Well Hall, Gainesville FL 32611- 2083, 904/392-0378, FAX 904/392/3224.

7th Annual Conference on Medical Informatics, September 6-10, 1992, Geneva Switzerland. Contact SYMPORG, S.A., Administrative Secretariat, 108, route de Frontenex, 1208 Geneva, Switzerland Tel: 4122/786 37 44, FAX 4122/786 40 80.

HUSITA-3, June 13-17, 1993. Maastrich, Limburg, Netherlands. The conference will focus on IT applications and the quality of life and services. For information and a call for papers, contact Theo Willemsen, P.O. Box 1278, 6040 KG Roermond, The Netherlands. Tel: 04750-40000. FAX 04750-28844.

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