

FOCUS ON EXCEPTIONAL CHILDREN

Sources of Computing¹

Charles J. Horn, Jr., and David M. Finn

Information relating to computers and their use in education is expanding rapidly. Professional journals, commercial publishers, formal and informal networks, the popular press and media are all telling us that computer literacy is the survival skill of the 1990s. If education is to be transformed, as suggested by Taber (1981), Katz (1983), Naisbitt (1982), Education in the Information Society (1983), and Harclerod (1982), educators must have timely, accurate information concerning computers and their use for educational purposes. Traditionally, educators have relied upon the professional educational literature to serve that function. That approach was adequate when developments were evolving within the field, in closely allied fields, or in government agencies.

The computer revolution in education today is not a fad that can be discussed and debated in the professional literature, then discarded in favor of the next innovation. The significance of the microcomputer revolution is that society is being transformed and education must reflect that transformation. Thus, educators must be willing to seek information from a variety of nontraditional sources. This article seeks to identify some of those sources.

The group of students who will have the greatest opportunity to benefit from computer technology are the students we currently identify as exceptional. Taber (1983) has indicated some of the desirable characteristics of microcomputers as: infinite patience, the ability to objectively individualize instruction and analyze results, and the capability of memory storage. The speed and accuracy of microcomputers can be used to extend the limited abilities of some handicapped students and assist them in becoming more efficient learners. These same attributes can be used to extend and expand the intellectual and creative potential of gifted and talented children.

For years special educators have been innovative in their approach to teaching special populations (Hannaford & Sloane, 1981). They now can seize another opportunity to provide crucial leadership for the education community in adopting the promising new computer technology. To provide that leadership, special educators must become and remain articulate in all aspects of technological literacy.

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This article is intended as a current reference on sources of computing. As such, it includes descriptions of hardware producers, software houses, information exchange systems, resource networks, journals and publications, and related technological developments.

HARDWARE PRODUCERS—COMPUTERS

Computer hardware is a term usually applied to computing machines and equipment. Hardware producers manufacture the machines and equipment. Computers are classified as *mainframe*, *mini*-, or *micro*-.

Mainframe computers gained prominence between 1944 and 1970. The first commercially available mainframe computer was the UNIVAC I, produced by Remington Rand. Others include the NCR 330, Honeywell 400, IBM 360, and Burroughs 3000-8000 Series. These large, complex machines required skilled programmers to operate them. The primary advantage they offer today is their extensive memory capacity. Minicomputers are

similar to mainframe computers in that they can link several computers together, but they have a smaller memory capacity.

The computer revolution of the 1970s saw the development of *microprocessors*, which used silicon chips for integrated circuits. The size of the machine was reduced dramatically while the capacity increased considerably. The term *micro* is applied to these small, compact, portable machines. The focus of this article is on micro or personal computers.

Computer hardware producers who are currently most active in education and related fields are listed below.

Apple Computer, Inc.
10260 Bandlely Dr.
Cupertino, CA 95014
Apple II Computer, Apple IIe Computer, Apple III Computer

Atari Computer Division
Warner Communications
P.O. Box 427
Sunnyvale, CA 94086
Atari 400 Computer System, Atari 800 Home Computer

Bell and Howell
Interactive Communications Division
7100 N. McCormick Rd.
Chicago, IL 60645
B/H Microcomputer System

Borg Warner Educational Systems
600 W. University Dr.
Arlington Heights, IL 60004-1889
System 80, Microsystem 80

Commodore Pet
681 Moore Rd.
King of Prussia, PA 19406

Compucolor
P.O. Box 569
Norcross, GA 30091

Digital Equipment Co.
2 Mt. Royal Ave.
Marlboro, MA 01752

Franklin Computer Corp.
7030 Colonial Hwy.
Pennsauken, NJ 08109

Heath-Zenith Co.
Hilltop Rd.
St. Joseph, MI 49085

Hewlett-Packard
3000 Hanover St.
Palo Alto, CA 93404

Houghton Mifflin, TSC
Dept. 35, Box 683
Hanover, NH 03755
Dolphin Computer

FOCUS ON EXCEPTIONAL CHILDREN

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Chicago, IL 60602

Infertec Data Systems
2300 Broad River Rd.
Columbia, SC 29210
Compustar

Logical Machine Corp.
1294 Hammerwood Ave.
Sunnyvale, CA 94086
ADAM Business Computer

North Star
1440 Fourth St.
Berkeley, CA 94710

Osbourne
26500 Corporate Ave.
Hayward, CA 94545

Radio Shack Division
Prentke Romich Co.
8769 Township Rd. 513
Shreve, OH 44676
Express 3 Communication Prosthesis

Tandy Corp.
P.O. Box 2625
Ft. Worth, TX 76113
TRS-80 Microcomputers

Texas Instruments
12501 N. Central Expressway
Dallas, TX 75222

Victor Technologies Inc.
380 El Pueblo Rd.
Scotts Valley, CA 95066
Victor Computer, Victor Communication
Sub System

Wang Laboratories Inc.
One Industrial Ave.
Lowell, MA 01851
Wang Professional Computer

Xerox Corp.
5310 Beethoven St.
Los Angeles, CA 90066
Xerox 820 Personal Computer

HARDWARE PRODUCERS— PERIPHERALS

Peripherals is a term applied to a wide variety of machines that may be interconnected with a computer. Peripherals may provide either input to the computer or output from the computer. Common peripherals used

in educational programs include clock/calendar, graphics tablet, joysticks/paddles, light pens, modems, printers, protection devices, robots, speech/sound synthesizers, and video. Producers of some peripherals commonly used in education are listed below.

ABW Corp.
P.O. Box 1047
Ann Arbor, MI 48106
supplies and accessories

Adaptive Peripherals
4535 Bagley Ave. N.
Seattle, WA 98103
adaptive firmware card

Advanced Business & Technology Inc.
12333 Saratoga-Sunnyvale Rd.
Saratoga, CA 95070
supplies and accessories, data key pad

ALF Products, Inc.
1448 Estes St.
Denver, CO 80215
music synthesizer

A.M. Electronics, Inc.
3366 Washtenaw Ave.
Ann Arbor, MI 48014
disk drive

American Intelligent Interface
P.O. Box 48
Prairie View, IL 60069
mechanical interface

AMPS Co.
Research and Development Group
3954 Tramore Dr.
Cincinnati, OH 45236
power supply

Apple Computer, Inc.
10260 Bandley Dr.
Cupertino, CA 95014
graphics tablet, disk drive, printer interface
boards, supplies and accessories

Applied Engineering
P.O. Box 47031
Dallas, TX 75247
real-time clock

Artra, Inc.
P.O. Box 653
Arlington, VA 22216
voice recognition access

Atari, Inc.
1265 Borregas Ave.
Sunnyvale, CA 94086
numerical key pad, printer, color plotter

Bi-Com Systems
10 Yorkton Industrial Ct.
St. Paul, MN 55117
control devices

Bluelakes Sales
3240 University Ave.
Madison, WI 53705
laser scan video disk, interface board

Broderbund Software
P.O. Box 3266
Eugene, OR 97403
light pens

California Computer Systems
250 Carribean Drive
Sunnyvale, CA 94086
interface boards, clock/calendar

California Micro Products
795 W. Imperial Hwy.
Brea, CA 92621
numeric key pad

Cavri Systems
26 Trumbull St.
New Haven, CT 06511
interactive video system

Century Electronics
447 Associated Rd.
P.O. Box 429
Brea, CA 92621
numeric key pad

CJM Industries, Inc.
P.O. Box 2367
Reston, VA 22090
controls, graphics, joy stick

Computer Land, Inc.
29673 Northwestern Hwy.
Southfield, MI 48034
light pen

Computer Systems
15335 S. Hawthorne Blvd.
Lawndale, CA 90260
clock/calendar

Computers to Help People
1221 W. Johnson St.
Madison, WI 53715
scanner, light pen, voice synthesizer, special
input disk, talking Bliss Apple

Condex Pacific, Inc.
693 Veterans Blvd.
Redwood City, CA 94063
tape activator, tape recorder control

Corvus Systems
2029 O'Toole Ave.
San Jose, CA 95132
Corvus omninet

CPU, Inc.
5161 Atlanta Hwy.
Montgomery, AL 36109
mobile power system

Creative Software Development
Computer Room
1879 S. Main St.
Salt Lake City, UT 84115
real-time clock/calendar

D.C. Hayes Assoc., Inc.
5835 Peachtree Corners, E.
Norcross, GA 30092
modems

Digital Equipment Corp.
Terminal Product Group
2 Mt. Royal Ave. WP01-5
Marlboro, MA 01752
letter printer

Electronics Warehouse
15820 Hawthorne Blvd.
Lawndale, CA 90260
interface boards

Giegner, Carl
1603 Court St.
Syracuse, NY 13208
speech synthesizer

GJ Computer Enterprises
P.O. Box 8050
Ann Arbor, MI 48107
interface boards

Green Valley Informatics
769 N. Sacre Ln.
Monmouth, OR 97631
switch input, word processing

Grover & Associates
7 Mt. Lassen Dr. D116
San Rafael, CA 94903
micro communicator, single-switch control

Heuristics, Inc.
1285 Hammerwood Ave.
Sunnyvale, CA 94006
speech lab, robot-controlled car

High Technology, Inc.
801 N. Classen Blvd.
P.O. Box 14665
Oklahoma City, OK 73113
power supply protection device

Information Services, Inc.
9100 W. Bloomington Fwy.
Suite 177
Minneapolis, MN 55431
touch sensitive video terminal

Inmac
2465 Augustine Dr.
Santa Clara, CA 95051
supplies and accessories

Interactive Structures Inc.
P.O. Box 404
Bala Cynwyd, PA 19004
supplies and accessories, analog input system,
interface boards, isolated power interface

I.O.R. Enterprises
Rt. 6, Box 20
Chapel Hill, NC 27514
alternative input devices, insta-speak
picture-com., quick scan, speaking control,
Bliss

Jensen Tools, Inc.
7815 S. 46th St.
Phoenix, AZ 85040
supplies and accessories

John Bell Engineering
P.O. Box 338
Redwood City, CA 94064
interface boards

Kalglo Electronics, Inc.
Colony Drive Industrial Park
6584 Ruch Rd.
E. Allen Turnpike
Bethlehem, PA 18017
power supply protection

Lobo Drives International
354 S. Fairview Ave.
Goleta, CA 93117
disk drives, disk controller boards

Maryland Computer Services
2010 Rock Spring Rd.
Forest Hill, MD 20150
modified Perkins braille

M.E.C.C.
2520 Broadway
St. Paul, MN 55113
Blissymbols

Micromate Electronic Inc.
116A Eighth St., Suite 110
Manhattan Beach, CA 90266
supplies and accessories

Micro Music Inc.
309 Beaufort
University Plaza
Normal, IL 61761
music composer

Mountain Computers
300 Pueblo Rd.
Scotts Valley, CA 95066
supplies and accessories, super teler, remote
control, apple clock

Netronics R & D Ltd.
333 Litchfield Rd.
New Milford, CT 06776
speech synthesizer

Novation
18664 Oxnard St.
Tarzana, CA 91356
modem

Omni Communications Co. Inc.
200 W. County Line
R.D. 3, Box 200
Jackson, NJ 08527
power supply protection

Pan Dynamics, Inc.
2950 Nebraska Ave.
Santa Monica, CA 90404
graphics hard copy terminal

Peripherals Plus
119 Maple Ave.
Morristown, NJ 07960
joy stick

Personal Micro Computers
475 Ellis St.
Mountain View, CA 94043
braille embosser

Prentke Romich Co.
8769 Township Rd. 513
Shreve, OH 44676
two-switch keyboard input

Programma International Inc.
2908 N. Naomi St.
Burbank, CA 91504
joy stick, switching device

Radio Shack Division
Tandy Corp. Box 2625
Ft. Worth, TX 76113
printer

RKS Enterprises, Inc.
643 S. Sixth St.
San Jose, CA 95112
power supply protection

Rocky Mountain Software Inc.
214-131 Water St.
Vancouver, B.C. V6B 4M3
handicapped typewriter

Rushakoff, G. Evan
New Mexico State University
Las Cruces, NM 88003
single-switch keyboard, single-switch
assessment

School and Home Courseware
1341 Bulldog Ln., Suite C
Fresno, CA 93710
talking screen textwriter

SciTronics Inc.
523 S. Clewell St.
P.O. Box 534
Bethlehem, PA 18015
real-time clock, controls

Scott Instruments
815 N. Elm
Denton, TX 76201
voice entry terminal

SGL Waber Electric
300 Harvard Ave.
Westville, NJ 08093
power supply protection

Soft Key Associates Inc.
44 Front St.
Ashland, MA 01721
protection devices

Software Research Corp.
University of Victoria
P.O. Box 1700
Victoria, B.C. V8W 2Y2
Canada
visible speech for hearing impaired

Solutions Inc.
3740 Colony Dr.
San Antonio, TX 78230
interactive video

Southern Semiconductor Inc.
6030 Unity Dr., Suite J
Norcross, GA 30071
interface boards

SSM Microcomputer Products
2190 Paragon Dr.
San Jose, CA 95131
video-disk interface board

Street Electronics
1140 Mark Ave.
Carpinteria, CA 93013
echo speech synthesizer

Sun Research Inc.
Box 210
New Durham, NH 03855
power supply protection

System Design Engineering
25131 1/2 Cypress
Lomita, CA 90713
real-time clock

Telesensory Systems, Inc.
P.O. Box 10099
Palo Alto, CA 94304
braille keyboard

Terrapin Inc.
678 Massachusetts Ave.
Cambridge, MA 02139
robot turtle

TG Products
P.O. Box 2931
Richardson, TX 75080
joy stick

3 G Company Inc.
Route 3 Box 28A
Gaston, OR 97119
light pen

TII Electronics Inc.
1375 Akron St.
Copiague, NY 11726
power supply

Vanner Inc.
2136 Eakin Rd.
Columbus, OH 43223
power supply

Versa Computing, Inc.
887 Conestoga Circle
Newbury Park, CA 91320
drawing tablet

Voice Machine Communications, Inc.
10522 Covington Circle
Villa Park, CA 92667
speech input

Voicetek
P.O. Box 388
Goleta, CA 93116
voice input-output terminal

Votrax Consumer Products Group
500 Stephenson Hwy.
Troy, MI 48084
Type-N-Talk speech synthesizer

Walt Woltoz
655 S. Fair Oaks, M213
Sunnyvale, CA 94086
single switch scan and two-switch operation

Westside Electronics
P.O. Box 636
Chatsworth, CA 91311
real-time clock, game paddle controller,
supplies and accessories

Zygo Industries Inc.
P.O. Box 1008
Portland, OR 97207
keyboard emulator

SOFTWARE PRODUCERS

Software producers develop the computer programs used with the machines. Programs may be as simple as a single command or a highly complex set of statements containing intricate sub-programs. Development of software for educational purposes is a demanding task. Certain authoring systems may simplify some of the programming aspects, but detailed frame-by-frame planning is time consuming and costly.

Educational software may originate with commercial producers, university or school personnel, teachers, students or other interested persons. Occasionally, software developed for one purpose may apply to another, but as a rule software serves specific purposes. Some software is developed specifically for handicapped persons. Other software may be adaptable for use by handicapped persons.

At the present, software is machine-

specific as well. Hardware producers develop software intended to be used exclusively with the machines they produce. Software producers may develop programs that are compatible with several different machines, but each is a separate software package. Before investing in software, purchasers must have a clear idea of what they wish to accomplish.

Various software programs have been developed for a variety of users such as teachers, teacher educators, administrators, and researchers. A list of approximately 350 software producers is provided here. A list of an additional 142 educational software producers is given in the *School Microwave Directory*. Some of the software producers provide a variety of services such as advertisements for new materials, service to machines, consulting assistance to users, software development, and updating information. The term *special education* includes the gifted and talented, so some of the distributors listed below provide materials appropriate for gifted students and programs. There is no implied endorsement of the following individuals or companies.

Abbott Educational Software
334 Westwood Ave.
E. Longmeadow, MA 01028
language arts, reading, administration

Abramson, Al
7211 S. 180th St.
Kent, WA 98051
solar engineering

Academic Software
22 E. Quackenbush Ave.
Dumont, NJ 07628
complete special ed. software

ACORN Resources Inc.,
634 N. Carolina Ave., S.E.
Washington, DC 20003
foreign languages

Activity Resources Inc.
P.O. Box 4875
Hayward, CA 94540
basic math

Addison-Wesley Publishing Co.
2725 Sand Hill Rd.
Menlo Park, CA 94025
math games and graphing

Aftermath Software
155316 Gulf Blvd., #204
Madeira Beach, FL 33708
polar coordinate curves and surfaces

Ahead Designs
699 N. Vulcan, #88
Encinitas, CA 92024
language arts, spelling, authoring systems

American Guidance Service
Publishers Bldg.
Circle Pines, MN 55014
games

American Micro
P.O. Box 306
Red Hook, NY 12571
special education software

Apple-Cations
21650 W. Eleven Mile Rd.
Suite 103
Southfield, MI 48076
English and math games

Apple Computer Inc.
10260 Bandlely Dr.
Cupertino, CA 94017
math, programming, author language and simulation

Applied Educational Systems
RFD #2 Box 213
Dunbarton, NH 03301
administration

Applied Microsystems
P.O. Box 59484
Dallas, TX 75229
beginning speech

Aquarius Publishers, Inc.
P.O. Box 128
Indian Rocks Beach, FL 33535
academics, authoring

Artra Inc.
P.O. Box 653
Arlington, VA 22216
special needs

Ashley, Kennerley
760 S. Washburn
Corona, CA 91720
least common denominator

Atari, Inc.
1272 Borregas Ave.
Sunnyvale, CA 94086
history, sociology, physics, algebra, spelling,
economics, and other subjects

Atari Program Exchange APX
P.O. Box 3705
Santa Clara, CA 95055
complete special ed. academics programs,
including basic living skills and special needs
applications

Athroid Digital, Inc.
P.O. Box 1385
Pittsfield, MA 01202
language, reading, spelling, foreign language,
word processing, special needs

Avant-Garde Creations
P.O. Box 30161
Eugene, OR 97403
complete CAI packages in math, physics,
chemistry, biology, English, and German

AZP Inc.
128 Crooked Hill Rd.
Huntington, NY 11743
planetarium

Baker, Bob
5845 Topp Ct.
Carmichael, CA 95608
fraction series, math drill in integer addition,
spelling, steno.

Banana, Inc.
P.O. Box 2868
3400 Executive Pky.
Toledo, OH 43606
special ed. software, word processing,
authoring and administration programs

Bank Street College of Education
610 W. 112th St.
New York, NY 10025
word processing

Basic & Beyond
P.O. Box 10
Amawalk, NY 10501
math, spelling, games, vocabulary, and
geography

Bell & Howell Micro Systems
7100 N. McCormick Rd.
Chicago, IL 60645
authoring languages

Bernard, John
235 Mesa Ave.
Newbury Park, CA 91320
algebra tutor

Bishop, Daniel R.
Box 125
Branson, MO 65616
chemistry drill, formulas and equations,
general chemistry

BLS Inc.
2503 Fairlee Rd.
Wilmington, DE 19810
educational software

Bluebird's Inc.
2267-23rd St.
Wyandotte, MI 48192
typing, math and statistics

Borg-Warner Educational
Systems
600 W. University Dr.
Arlington Heights, IL 60004
critical reading

Bottom Shelf
751 De Kalb Industrial Way
Atlanta, GA 30033
educational software

Brain Bank
220 Fifth Ave., Suite 408
New York, NY 10001
language arts, reading, science, social studies,
games

Brain Box
601 W. 26th St.
New York, NY 10003
reading, social studies, American history

Broderbund Software
1938 Fourth St.
San Rafael, CA 94901
word processing

California School for the Deaf
39350 Gallaudet Dr.
Fremont, CA 94538
authoring, misc., and special needs

California Software
P.O. Box 275
El Cerrito, CA 94530
programs for teaching COBOL and ALGOL

Career Aids, Inc.
8950 Lurline Ave., Dept. F
Chatsworth, CA 91311
educational software

Center for Educational Experimentation,
Development & Evaluation
218 Lindquist Center for Measurement
University of Iowa
Iowa City, IA 52242
educational software—teacher education

Charles Mann & Associates
55722 Santa Fe Trail
Yucca, CA 92284
management, budgeting, and instructional
programs, authoring programs

Comalдор
P.O. Box 356, Post Station 0
Toronto, Ontario, Canada M4A2N9
educational software, games, administration,
and special needs

Comm Data Systems
P.O. Box 325
Milford, MI 48042
math, geometry, English, logic, and reading

Commodore Compute
487 Devon Park Rd.
Wayne, PA 19087
MIT-Logo

COMP.O.S.E.
6500 W. 95th St.
Oak Lawn, IL 60453
administration

COMPRESS
P.O. Box 102
Wentworth, NH 03282
energy, genetics, statistics, chemistry, and
evolution

CompuEd
920 NW 179 Terrace
Miami, FL 33169
multiplication

Compumax, Inc.
P.O. Box 1139
Palo Alto, CA 94301
lesson writing system, authoring programs

Compu-Tations, Inc.
P.O. Box 502
Troy, MI 48099
educational software, games, and special
needs

Computer Advanced Ideas
1442A Walnut St.
Suite 341
Berkeley, CA 94709
language arts, games, and authoring systems

Computer Aids
P.O. Box 5502
Fort Wayne, IN 46895
word processor, files, talking Apple for the
blind

Computer Curriculum Corp.
P.O. Box 10080
Palo Alto, CA 94303
reading, language arts

Computer Ed Game
4966 El Camino Real
Los Altos, CA 94022
games

Computer Information Exchange
P.O. Box 159
San Luis Rey, CA 92068
educational software and math

Computer Software
Books Are Us
Irvine, CA 92714
misc.

Computer Station
11610 Page Service Dr.
St. Louis, MO 63141
reading

Computers to Help People
1221 W. Johnson St.
Madison, WI 53715
special needs

Concept Educational Software
P.O. Box 6184
Allentown, PA 18001
math, language arts, science, and geography

Conduit
P.O. Box 388
Iowa City, IA 52244
change agent simulation, coexist arpulation
dynamics, flowering plant competition, eco-
logical modeling, Enzkin-enzyme-kinetics,
evolution and natural selection, Haber
ammonia synthesis, interpretation Have
Theory of Light, laboratory in cognition and
perception, linkover genetic mapping,
Newton satellite orbits, sociology, reaction
notes, constants scatter particle scattering

Control Data Corp.
8100 - 34th Ave., S.
Minneapolis, MN 55440
PLATO time-sharing system

Convergent Systems, Inc.
245 E. Sixth St.
St. Paul, MN 55101
educational software and games, foreign
language, misc.

Cook's Computer Company
1905 Bailey Dr.
Marshalltown, IA 50158
math, letter and number recognition, art
education, typing and spelling

Cooksey, Ken
560 Fair Hill Rd.
Libertyville, IL 60048
gradebook for teachers

Cow Bay Computing
P.O. Box 515
Manhasset, NY 11020
educational software, authoring, administra-
tion

Creative Computing (Sensational Software)
P.O. Box 1139
Morristown, NJ 07960
47 software packages including entire line
from MECC and Huntington Computer
Project

Creevay, James
P.O. Box 441186
Miami, FL 33144
graphic math review

Cross Educational Software
P.O. Box 1536
Ruston, LA 71279
spelling, science, games, pre-reading, word
processing, administration

Curriculum Applications
16 Plymouth St.
Arlington, MA 02174
algebra billiards

D & M Software
1510 S. 97th St.
Tacoma, WA 98444
spelling

Data Command
P.O. Box 548
Kankakee, IL 60901
language arts, reading, games

Data Graphics, Dept. AGRS
P.O. Box 566 Union Station
Endicott, NY 13760
advanced graphics

Data Train, Inc.
840 NW 6th St., Suite 3
Grants Pass, OR 97526
business record keeping and data base
applications

David, E. & Associates
22 Russett Lane
Storrs, CT 06268
special education

Del Marva Computer Club
P.O. Box 36
Wallops Island, VA 23337
special education

Demi-Software
P.O. Box 570
Lynnbrook, NY 11563
history—presidents

Developmental Learning Systems
One DLM Park
P.O. Box 4000
Allen, TX 75002
games—math

DeZoysa, C.A.
P.O. Box 170
Keyport, NJ 07735
information storage and retrieval

Dilithium Press
30 NW 23rd Pl.
Portland, OR 97210
arithmetic, flash card drill, metric, reading
improvement, vocabulary and numbers

Donie, Edward M.
137 Horse Pond Rd.
Sudbury, MA 01776
reading

Dormac, Inc.
8034 SW Nimbus
Beaverton, OR 97005
special needs

Computer Literacy Software

Interactive Tutorials

NEW

Why not learn about computers on a computer using real software? No prior computer experience needed. The programs take you through five steps for each tutorial:

1. Knowledge assessment
2. Prompt or hint
3. Alternative assessment
4. Explanation
5. Student creates sentence using information learned from tutorial. Computer generates sentence for comparison.

This simple and practical program is perfect for inservice training of staff and teachers.

by Marilyn E. Ruggles, Lawrence Public Schools, Kansas
Thomas M. Skrtic, University of Kansas

Computer Literacy 1. Machine

Tutorial Set

Hardware
Input/Output
Computer
CRT
Interface
Keyboard
Integrated Circuit

C.P.U.
Peripheral
Disk Drive
Printer
Modem
Storage
ROM
RAM
Software
Firmware
Diskette
Bit
DOS
Byte
Character
Alpha Numeric
Cursor
Terminal

Computer Literacy 2. Use

Tutorial Set

Machine Language
BASIC
High Level Language
COBOL
PASCAL
FORTRAN
Hard Copy

Bootstrap
Syntax
Data
Debug
Write
File
Execute
Read
Text
Reset
Flow Chart
Backup
Command
Load
Time Sharing
ASCII
Program
Prompt

Computer Literacy 3. Applications

Tutorial Set

Drill and Practice
Tutorials
Simulations
Problem Solving
Instructional Gaming
Data Base
Word Processing

CAI
CMI
Utility Program
Users Group
Documentation
Courseware
Computer Literacy
Artificial Intelligence
PILOT
LOGO
Software Cluster
Interactive Video
Informational
Light Pen
Input Mode/Output Mode
Autofloring System
Copy Locked
Networking

Runs on Apple II computer with 48K DOS 3.3.
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misc.
- Software Exchange
P.O. Box 68
Milford, NH 03055
preschool games, word processing
- SoftWare House, Inc.
695 E. 10th N.
Logan, UT 84321
math programs and games
- Software Research
P.O. Box 1700
Victoria, BC V8W 2Y2
Canada
science, reading, language arts, and art
- Software Technology
3763 Airport Rd.
Mobile, AL 36608
misc.
- Solartek
P.O. Box 298
Guilford, NY 12084
solar energy game and solar home simulations
- Southern Micro Systems for Educators
P.O. Box 1961
Burlington, NC 27215
special education management system, PIAT error analysis report, WISC-R computer report
- Southeastern Educational Software
3300 Buckeye Rd.
Atlanta, GA 30341
math, language arts, games, typing tutor, and special needs
- SouthWest EdPsych Services
P.O. Box 1870
Phoenix, AZ 85001
math, reading, spelling, games, business education, and special needs
- Spinnaker Software
215 First St.
Cambridge, MA 02142
art, games, pre-reading
- Sproutt, J. C.
5002 Sheboygan Ave., #207
Madison, WI 53705
grade distribution program
- Sjepp, Robert
Station A, Box 5002
Champaign, IL 61820
word processing, special needs
- Sterling Swift Publishing Co.
1600 Fortview Rd.
Austin, TX 78704
programming in BASIC, math, computer science, and data processing
- Stone's Southern School Supply
3800 Holly Springs Rd.
Raleigh, NC 27606
reading, educational software
- Stoneware
50 Belvedere
San Rafael, CA 94901
administration
- Strategic Simulations Inc.
465 Fairchild Dr. #108
Mountainview, CA 94043
games
- SubLOGIC Communication Corp.
713 Edgebrook Dr.
Champaign, IL 61820
spelling, social studies, and games

Sunburst Communications
Room JK-5
39 Washington Ave.
Pleasantville, NY 10570
educational software

Synergistic Solar, Inc.
P.O. Box 560595
Miami, FL 33156
states and capitols

Sysdata International, Inc.
7671 Old Central Ave. NE
Minneapolis, MN 55432
administration

Tamarack Software
P.O. Box 247
Darby, MT 59829
authoring, administration

Tape-Tronics
346 N. Western Ave.
Los Angeles, CA 90004
German language, math

Teacher's Pet Software
1517 Holly St.
Berkeley, CA 94703
math, language arts

Teaching Assistant
22 Seward Dr.
Huntington Station, NY 11746
student grades, management program, and
physics tutorial

Teaching Pathways, Inc.
P.O. Box 31582
Amarillo, TX 79120
administration

Teaching Tools: Microcomputer Services
P.O. Box 12679
Research Triangle Park, NC 27709
addition, subtraction, spelling, matching
games, letters and numbers

Teach Yourself by Computer Software
40 Stuyvesant Manor
Geneseo, NY 14454

Technical Language Systems
P.O. Box 172
San Angelo, TX 76902
administration

Teck Associates
P.O. Box 8732
White Bear Lake, MN 55110
educational software, games, and authoring
systems

Temporal Activity Products
1535 - 121st Ave. SE
Bellevue, WA 98005
music

Terrapin, Inc.
380 Green St.
Cambridge, MA 02139
Logo, special needs

Texas Instruments
P.O. Box 53
Lubbock, TX 79408
educational software, games, word processing

T.H.E.S.I.S.
P.O. Box 147
Garden City, MI 48135
word games, math practice, and instructional
games

Thorpe, Steven M.
4312 N. 350 W.
Pleasant View, UT 84404
auto pilot—polar and cartesian

TIES
1925 W. County Rd. B2
St. Paul, MN 55113
math, language arts, reading, science, author-
ing, computer literacy, administration, and
special needs

3 R Software
P.O. Box 3115
Jamaica, NY 11431
language art series

Time Share Corp.
Hanover, NH 03755
reading, math, language arts, curriculum,
management and guidance information

Transnet Corp.
1945 Route 22
Union, NJ 07083
educational software

Tritter Software
8355-140 St. N.
Seminole, FL 33542
quadratic equations

TSC—a Houghton-Mifflin Co.
Dept. 70, Box 683
Hanover, NH 03755
educational software

Tycom Associates
63 Velma Ave.
Pittsfield, MA 01201
algebra

TYC Software
40 Stuyvesant Manor
Geneseo, NY 14454
earth science series, games, individual study
center, mind memory improvement, test
creator, tutorial spelling

Unicom
297 Elmwood Ave.
Providence, RI 02907
language/reading development

Universal Systems for Education
14901 E. Hampden, Suite 250
Aurora, CO 80014
reading

Upper Room
907 Sixth Ave. E.
Menomonie, WI 54751
educational software, games, special needs

Vath, Joseph
370 Ogden Parma Townline Rd.
Spencerport, NY 14559
basic math

Visual Horizons
180 Metro Park
Rochester, NY 14623
misc.

Wadsworth Electronic Publishing Co.
20 Park Plaza
Boston, MA 02116
math

Ward, Hugh
1615 Falmouth Ave.
Deltona, FL 32725
basic math drill series, basic math self
instruction

Wiggers, Thomas
University of Mississippi Medical Center
2500 N. State St.
Jackson, MS 39206
administration

Woltosz, Walt
655 S. Fair Oaks, M213
Sunnyvale, CA 94086
word processing, games, reading, and special
needs

Woodmere Project
973 Benton St.
Woodmere, NY 11598
vocabulary

Zimmerman, Harry R.
2215 S. Soland Dr.
Las Cruces, NM 88001
computerized audiometric system

HARDWARE/SOFTWARE REVIEWS

Hardware and software reviewers systematically screen new products for educational consumers. This would be highly expensive and inefficient for every computer user to attempt. Reviews are published by commercial publishers, public agencies, private associations, and computer user

groups. A list of hardware/software reviewers follows:

AEDS Monitor

Association for Educational Data Systems
1201-16th St. N.W.
Washington, DC 20036

APS/WNM

Software Evaluation Project
College of Education
University of New Mexico
Albuquerque, NM 87131

California TEC Center

1983 Educational Software Preview Guide
Software Library and Clearinghouse
SMERC Library
San Mateo County Office of Education
333 Main St.
Redwood City, CA 94063

Classroom Computer News

341 Mt. Auburn St.
Watertown, MA 02172

Computing Teacher

Dept. of Computer Instruction
Information Service
University of Oregon
Eugene, OR 97403

Digest of Software Reviews: Education

1341 Bulldog Ln., Suite C
Fresno, CA 93710

Electronic Learning

902 Sylvan Ave.
Englewood Cliffs, NJ 07632

EPIE Micro-Courseware Proj Files

EPIE and Consumers Union
Box 620
Stony Brook, NY 11790

Infoworld

375 Cochituate Rd.
Box 837
Framingham, MA 01701

Learning

530 University Ave.
Palo Alto, CA 94301

MACUL Journal

Michigan Association for Computer Users
33500 Van Born Rd.
Wayne, MI 48184

Resources in Computer Education

MicroSIFT
Northwest Regional Educational Laboratory
300 SW 6th Ave.
Portland, OR 97204

School Microware Directory

School Microware Review
P.O. Box 246
Dresden, MA 04342

Swift's Educational Software Directory

Sterling Swift Publishing Co.
1600 Ft. View Rd.
Austin, TX 78704

VanLove's Apple Software Directory

Vital Information
350 Union Station
Kansas City, KS 64108

Western Center for Microcomputers in Special Education

1259 El Camino Real, Suite 275
Menlo Park, CA 94025

INFORMATION EXCHANGE SYSTEMS

Information exchange systems take a variety of forms. For purposes of this discussion, the systems are classified as *human*, *electronic*, and *print*.

Human systems usually revolve around some association of persons with a mutual interest. They may be as formal as a national association of educators or as informal as a local club or users group. In a human information system, the mode of exchange is *person-to-person*.

Electronics information systems usually revolve around a data base. Interested persons then contribute information to, or extract information from, the data base. Some systems operate as electronic links between persons, with the content determined entirely by the users.

Print information systems are the traditional methods for information exchange in education. Publications include books, journals, newsletters, and advertising materials. Major information systems in education are listed below.

Human Resource Networks

Alabama Council for Computer Education
P.O. Box 6105
Dothan, AL 36302

Apple for the Teacher
5848 Riddio St.
Citrus Heights, CA 95610

Association for Development of Computer Based Instructional Systems

Miller Hall 405
Western Washington University
Bellingham, WA 98225

Association for Educational Data Systems

1201-16th St. N.W.
Washington, DC 20036

Boston Computer Society

Educational Resource Exchange
Three Center Plaza
Boston, MA 02108

CEC Special Education Software Search

Dept. Field Services
Council for Exceptional Children
1920 Association Dr.
Reston, VA 22091

Computer-Using Educators of British Columbia

3264 St. Georges Ave.
North Vancouver, BC V7N 1V3
Canada

Division of Media Evaluation Services

Educational Media and Technology
State Dept. of Public Institutions
Raleigh, NC 27611

Educational Computer Consortium of Ohio

Teacher Center 271
4777 Farnhurst Rd.
Cleveland, OH 44124

EDUCOM

P.O. Box 364
Princeton, NJ 08540

EDUSIG

Digital Equipment Co. Users Group
One Iron Way
Marlboro, MA 01752

Electronic Data Processing/Special Interest Group

Commercial Union Assurance Companies
One Beacon St.
Boston, MA 02108

Institute for Professional Development

245 Nassau St., Suite D
Princeton, NJ 08540

International Council for Computers in Education

Dept. of Computer and Information Science
University of Oregon
Eugene, OR 97403

Linc Resources, Inc.

1875 Morse Rd., Suite 225
Columbus, OH 43229

MEAN Division, Education Turnkey Systems

256 N. Washington St.
Falls Church, VA 22046

FOCUS ON EXCEPTIONAL CHILDREN

Michigan Association for Computer Users
33500 Van Born Rd.
Wayne, MI 48184

Minnesota Educational
2520 Broadway Dr.
St. Paul, MN 55113

Northwest Council for Computers in Education
Computer Center
Eastern Oregon State College
La Grande, OR 97850

Northwest Regional Educational Lab
710 SW Second Ave.
Portland, OR 97204

Technical Education Research Centers
8 Eliot St.
Cambridge, MA 02138

Texas Computer Education Association
7131 Midbury
Dallas, TX 75230

Total Information Educational Systems
Minnesota School District
Data Processing Joint Board
1925 W. County Rd. B 2
St. Paul, MN 55113

Trace Research Center
Trace Research and Development
University of Wisconsin
Madison, WI 53705

Utah Council for Computers in Education
Utah State Office of Education
Division of Curriculum and Instruction
250 E. 500 S.
Salt Lake City, UT 84111
(interface)

Electronic Networks

Bibliographic Retrieval Services (BRS)/ After
Dark
1200 Route 7
Latham, NY 12110

CompuServe
5000 Arlington Center Blvd.
Columbus, OH 43220

Bowne Information Systems
160 Water St.
New York, NY 10038

Computer Corp. of America
575 Technology Square
Cambridge, MA 13239

Dialog
Information Services, Inc.
3460 Hillview Ave.
Palo Alto, CA 94304

Electronic Information Exchange System
New Jersey Institute of Technology
323 High St.
Newark, NJ 07102

ERIC Clearinghouse on Teacher Education
One Dupont Circle, Suite 610
Washington, DC 20036

Handicapped Education Exchange (HEX)
11523 Charlton Dr.
Silver Spring, MD 20902

Open Network
P.O. Box 18666
Denver, CO 80218

The Source
1616 Anderson Ave.
McLean, VA 22102

Special Net
National Association of State Directors of
Special Education
1201-16th St. NW
Washington, DC 20036

REFERENCES

- Education in the information society. *Futurist*, 1983, 17(2), 65-66.
- Hannaford, A., & Sloane, E. Microcomputers: Powerful learning tools with proper programming. *Teaching Exceptional Children*, 14(2), 54-57.
- Harclerod, F. The future of instructional technology. In *Communications and the future*. Bethesda, MD: World Future Society, 1982.
- Katz, E.L. Microcomputers: A course of study for gifted students. *Focus on Exceptional Children*, 1983, 15(6), 1-16.
- Naisbitt, J. *Megatrends*. New York: Warner Books, 1982.
- Taber, F. The microcomputer—Its applicability to special education. *Focus on Exceptional Children*, 1981, 14(2), 1-14.

ADDITIONAL REFERENCES

- Computer courseware development and evaluation. In *Educational technology*. Englewood Cliffs, NJ: Educational Technology Publications, Jan. 1983.
- Dominguez, J., & Waldstein, A. *Educational application of electronic technology*. Seattle, WA: Western States Technical Assistance Resources (WESTAR), Sept. 1982.
- School Microware Directory*. Dresden, MA: Dresden Associates, Fall 1982.
- Swift, S. *Educational software directory*. Austin, TX: Sterling Swift Publishing Co., n.d.
- Ulrich's International Periodicals Directory*. 23rd ed. New York: R. R. Bowker Co., 1982.)
- WIDL Video. *Apple II blue book*. Chicago: Author, Fall 1981.