

# REFERENCES

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1. Abernathy, W., and E. McBride, 1978, "A Computer Simulation for Teaching Client Referral Skills," *Proceedings of the 1978 Conference on Computers in Undergraduate Curricula (CCUC/9)*, Denver, Colo.: University of Denver, Department of Mathematics, pp. 356-363.
2. Abrahamson, S., J. S. Denson, and R. M. Wolf, 1969, "Effectiveness of a Simulator in Training Anesthesiology Residents," *Journal of Medical Education* 44:515-519.
3. Allen, J. L., 1976, "The Future of Simulators in Skills Training," *Proceedings of the First International Learning Technology Congress and Exposition in Applied Learning Technology*, vol. IV. Buffalo, N. Y.: Calspan Graphics, pp. 2-6.
4. American Board of Medical specialties, 1977, *1976-1977 Annual Report*, Evanston, Ill.
5. American Medical Association, 1977a, *Directory of Accredited Residencies, 2977-78*, Chicago, Ill.
6. —; 1977b, *Physician Distribution and Medical Licensure in the U. S.*, 1976, Chicago, Ill.
7. Anderson, H., 1969, "Statistical Surveillance of a Title XIX Program," *American Journal of Public Health* 59:275-289.
8. Ashbaugh, D. G., and R. S. McKean, 1976, "Continuing Medical Education, the Philosophy and Use of Audit," *Journal of the American Medical Association* 236:1485-1488.
9. Association of American Medical Colleges, 1977, *1977-78 Curriculum Directory*, Washington, D.C.
10. —; 1978a, *Medical School Admission Requirements, 1978-79*, Washington, D.C.
11. —; 1978b, *1978-79 Curriculum Directory*, Washington, D.C.
12. —; 1978c, *A Study of Three-Year Curricula in U.S. Medical Schools*, Washington, D.C.
13. —; 1978d, "A Description of the Formal Medical Education Process," paper prepared for the Office of Technology Assessment, U.S. Congress.
14. —; 1979, personal communication from Robert Beran to the Office of Technology Assessment, U.S. Congress.
15. Barnett, G. O., 1976, *Computer-Stored Ambulatory Record (COSTAR)*, NCHSR, Research Digest Series, USDHEW, Pub]. No. (HRA) 76-3145.
16. Barr, D. M., and C. R. Gaus, 1973, "A Population Based Approach to Quality Assessment in Health Maintenance Organizations," *Medical Care* 11 :523-528.
17. Bejar, I. I., D. J. Weiss, and G. G. Kingsbury, 1977a, *Calibration of an Item Pool for the Adaptive Measurement of Achievement (Research Report 77-5)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
18. —; D. J. Weiss, and K. A. Gialluca, 1977b, *An Information Comparison of Conventional and Adaptive Tests in the Measurement of Classroom Achievement (Research Report 77-7)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
19. Bentz, W. F., and A. D. Luzi, 1975, "Learning in Interactive Mode: How Financial Events Affect Financial Statements," *Proceedings of the 1975 Conference on Computers in the Undergraduate Curricula (CCUC/6)*, Fort Worth, Tex.: Texas Christian University, Department of Computer Sciences, pp. 171-177.

20. Beran, R. L., R. L. Folk, J. V. Griesen, and J. S. Camiscioni, 1976, *Individualizing the Study of Medicine, The Ohio State University College of Medicine Independent Study Program*, New York, N. Y.: Westinghouse Learning Corporation.
21. Bergin, R., P. G. Lundquist, and P. O. Wester, 1978a, "Computers in Education (1): Problem-Oriented Medical Education—CASE in Sweden and in the USA," *Lakartidningen* 75:3139-3141 (Swedish).
22. — ; and P. O. Wester, 1978b, "Computers in Education (2): CASE at the Serafimer Hospital—an Evaluation," *Lakartidningen* 75:3142-3143.
23. Bergner, M., R. A. Bobbitt, W. E. Pollard, D. P. Martin, and B. S. Gilson, 1976, "The Sickness Impact Profile: Validation of a Health Status Measure," *Medical Care* 14:57-67.
24. Berkanovic, E., 1974, "An Appraisal of Medicaid Records as a Data Source," *Medical Care* 12:590-595.
25. Berner, E. S., T. J. Bligh, and R. O. Guerin, 1977, "An Indication for a Process Dimension in Medical Problem Solving," *Medical Education* 11:324-328.
26. Bitzer, D. L., and H. G. Slottow, 1968, "The Plasma Display Panel—A New Device for Direct Display of Graphics," in D. Secrest and J. Nievergelf (eds.), *Emerging Concepts in Computer Graphics*, New York, N. Y.: W. A. Benjamin.
27. Bitzer, M. D., and M. D. Bourdreaux, 1969, "Using a Computer to Teach Nursing," *Nursing Forum* 8:234-254.
28. Bleich, H. I., 1971, "The Computer as a Consultant," *New England Journal of Medicine* 284:141-146.
29. Bloomfield, D. K., G. L. Hody, and A. H. Levy, 1978, "Some PLATO Applications in Health Sciences Education," in E. C. Deland (ed.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
30. Bork, A., 1978, "Machines for Computer-Assisted Learning," *Educational Technology* 18:17-20.
31. Boutwell, R. C., 1978, "Medical Education and Instructional Design," *Journal of Educational Technology Systems* 6:317-339.
32. Bowie, J., and G. O. Barnett, 1976, "MUMPS—An Economical and Efficient Time Sharing System for Information Management," *Comp. Prog. Biomed.*, 6:11-22.
33. Boyle, D., 1978, "Developing S/UR: Strategy and Usage," *Journal for Medicaid Management* 1:58-64.
34. Braithwaite, W. R., 1976, *A Computerized Medical Data Base in Medical Care Review*, San Francisco, Calif.: University of California, San Francisco.
35. Branscomb, L. M., 1979, "Information: The Ultimate Frontier," *Science* 203:143-147.
36. Braunstein, M., J. R. Cohn, L. Chansky, and D. James, 1974, "Family Practice Residents Learn 'Computer,'" *Patient Care*, Mar. 1, 1974, pp. 111-120.
37. Breeze, M. S., and F. Schimpfhauser, 1977, "Computer-Simulated Clinical Encounters Part I: Development, Utilization and Evaluation," *Journal of the American Dietetic Association* 70:382-388.
38. Brenner, M. H., and H. Paris, 1973, "Record Systems for Hospital Outpatient Clinics," in J. H. Murnaghan, (ed.), *Ambulatory Care Data: Report on Ambulatory Medical Care Record*, Philadelphia, Pa.: Lippincott Co.
39. Brian, E., 1973, "Foundation For Medical Control of Hospitalization: CHAP-PSRO Prototype," *New England Journal of Medicine* 288:878-882.
40. Brook, R. H., 1973, "Critical Issues in the Assessment of Quality of Care and Their Relationship to HMOs," *Journal of Medical Education* 48:114-134.
41. — and A. D. Avery, 1975, *Quality Assurance Mechanisms in the United States: From There to Where?* Santa Monica, Calif.: Rand Corporation, Publ. No. P-5520.

42. \_\_\_\_; and K. N. Williams, 1976a, "Effect of Medical Care Review on the Use of Injections," *Annals of Internal Medicine* 85:808-817.
43. \_\_\_\_; K. N. Williams, and A. D. Avery, 1976b, "Quality Assurance Today and Tomorrow: Forecast for the Future," *Annals of Internal Medicine* 85:808-817.
44. \_\_\_\_; and K. N. Williams, 1977, *Evaluation of the New Mexico Peer Review System, 1971 to 1973*, Santa Monica, Calif.: Rand Corporation, Publ. No. R-2110-HEW/RC.
45. Brown, J. M., and D. J. Weiss, 1977, *An Adaptive Testing Strategy for Achievement Test Batteries (Research Report 77-6)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
46. Brown, J. S., 1975, "Uses of Artificial Intelligence and Advanced Computer Technology in Education," in R. Seidel and M. Rubin (eds.), *Computers and Communications: Implications for Education*, New York, N. Y.: Academic Press.
47. \_\_\_\_; 1977, *Diagnostic Models for Procedural Bugs in Basic Mathematical Skills (ICAI Report 8)*, Cambridge, Mass.: Bolt, Beranek & Newman.
48. \_\_\_\_; A. Collins, and G. Harris, 1977, *Artificial Intelligence and Learning Strategies (ICAI Report 6)*, Cambridge, Mass.: Bolt, Beranek & Newman.
49. Brown, M. D., and W. B. Sale, 1974, "QAP, the AHA's Program," *Hospitals* 48:59-62.
50. Buchanan, C. C., 1978, "Association for the Development of Computer Based Instructional Systems, Special Interest Group on Computer Based Training," *Newsletter*. July 1978, Clarion, Iowa: Allen Printing Co.
51. Buck, C. R., Jr., and K. R. White, 1974, "Peer Review: Impact of a System Based on Billing Claims," *New England Journal of Medicine* 291:877-883.
52. Bukoski, W. J., and A. L. Korotkin, 1976, "Computing Activities in Secondary Education," *Educational Technology* 16:9-23.
53. Casbargue, J. C., 1978, "Computer Assisted Instruction in Health Professions Education: Guidelines for Utilization," in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
54. Christoffel, T., and M. Loewenthal, 1977, "Evaluating the Quality of Ambulatory Health Care: A Review of Emerging Methods," *Medical Care* 15:877-897.
55. Clark, R. R., 1974, "The Impact of a Computerized Peer Review System on Continuing Medical Education," *The Ohio State Medical Journal*. December 1974, pp. 748-75.
56. Cohen, M. F. (cd.), 1974, *Hospital Computer Systems*, New York, N. Y.: Wiley Biomedical-Health Publications.
57. Combs, B., 1973, "TYMNET: A Distributed Network," *Datamation* 19:40-44.
58. Cotner, L. E., and R. D. Vidmar, 1977, "A Hospital Peer Review System," *Proceedings of the First Annual Symposium on Computer Applications in Medical Care*, Washington, D. C.: Institute of Electrical and Electronics Engineers, Inc., pp. 117-122.
59. Cramblett, H., R. E. Pengov, and G. L. Trzebiatowski, 1979, *Computers in Health Care*, testimony for the Subcommittee on Domestic and International Scientific Planning, Analysis and Cooperation, House Committee on Science and Technology, U.S. Congress. Washington, D. C.: U.S. Govt. Printing Office, No. 106.
60. Darby, C. A., A. L. Korotkin, and T. Romashko, 1970, *Survey of Computing Activities in Secondary Schools (Final Report AIR (852)10/70)*, Washington, D. C.: American Institutes for Research.
61. Davis, R. W., 1977, "Computer Instruction Basic Hardware Alternatives," *NSPI Journal* 16:7-11.
62. Decker, B., and P. Bonner, 1973, *PSRO: Organization for Peer Review*, Cambridge, Mass.: Ballinger Publ. Co.

63. Deland, E. C. (cd.), 1978, *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
64. Dennis, V. E., 1977, "Interim Progress Report—The Phase II Physiology Self-Evaluation Unit's 'Physeu' Program," Columbus, Ohio: The Ohio State University.
65. Denson, P. H., 1965, "The Quality of Medical Care," *Yale Journal of Biology of Medicine* 37:523-536.
66. Dick, W., and R. Latta, 1969, *Comparative Effects of Ability and Presentation Mode in CAI and Programmed Instruction (AD-694021)*, Springfield, Va.: Clearinghouse for Federal Scientific and Technical Information.
67. Dickinson, C. J., 1977, *A Computer Model of Human Respiration*, Lancaster, England: MIP Press Limited.
68. Dobson, A., J. G. Greer, R. H. Carlson, F. A. Davis, L. E. Kucken, B. J. Steinhart, T. P. Ferry, and G. S. Adler, 1978, "PSROS: Their Current Status and Their Impact to Date," *Inquiry* 15:113-128.
69. Donabedian, A., 1966, "Evaluating the Quality of Medical Care," *Millbank Memorial Fund Quarterly* 44:166-206.
70. —, 1976, "Measuring and Evaluating Hospital and Medical Care," *Bulletin of the New York Academy of Medicine* 52:51-59.
71. —, 1978, "The Quality of Medical Care," *Science* 200:856-864.
72. Doull, J., and E. Walaszek, 1978, "The Use of Computer-Assisted Teaching Systems (CATS) in Pharmacology," in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
73. E.D.S. Federal Corporation, 1976, *Retrospective Analysis of Medical Services, Systems Manual*, Dallas, Tex.
74. Eisenberg, J. M., S. V. Williams, L. Garner, R. Viale, and H. Smits, 1977, "Computer-Based Audit to Detect and Correct Overutilization of Laboratory Tests," *Medical Care* 15:915-921.
75. Ellis, J. A., 1978, "A Comparative Evaluation of CMI and IMI," *Proceedings of the Association for the Development of Computer Based Instructional Systems*, pp. 393-397.
76. Etnyre, V. A., and E. M. Wolf, 1975, "Measuring the Educational Effectiveness of Business Policy Courses Using Variable Modes of Computer Interface," *Proceedings of the 1975 Conference on Computers in the Undergraduate Curricula (CCUC/6)*, Fort Worth, Tex: Texas Christian University, Department of Computer Sciences, pp. 37-45.
77. Evans, L., 1978, personal communication from the Chairman, FLEX Committee, to the Office of Technology Assessment, U.S. Congress.
78. Farquhar, B. B., E. P. Hoffer, and G. O. Barnett, 1978, "Patient Simulations in Clinical Education," in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
79. Federspiel, C. S., W. A. Ray, and W. Schaffner, 1976, "Medicaid Records as a Valid Data Source: the Tennessee Experience," *Medical Care* 14:166-172.
80. Fielden, J., and P. K. Pearson, 1978, *Cost of Learning With Computers*, London, England: CET.
81. Fields, C., 1979, Department of Defense, Advanced Research Project Agency, personal communication to the Office of Technology Assessment, U.S. Congress.
82. Fincham, S. M., M. Grace, W. C. Taylor, E. N. Skakun, and F. C. Davis, 1976, "Pediatric Candidates' Attitudes to Computerized Patient Management Problems in a Certifying Examination," *Medical Education* 10:404-407.
83. Flashner, B. A., S. Reed, R. W. Coburn, and P. R. Fine, 1973, "Professional Standards Review Organizations: Analysis of Their Development and Implementation

- Based on a Preliminary Review of the Hospital Admission and Surveillance Program in Illinois, " *Journal of the American Medical Association* 223:1473-1484.
84. Forman, M. H., R. E. Pengov, and J. L. Burson, 1978, "CAIREN: A Network for Sharing Health Care Learning Resources With Ohio Health Care Facilities and Educational Institutions," in E. C. Deland (ed.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
  85. Friedman, R. B., S. E. Newsom, S. Cheung, and J. Schaltz, 1977, "A Simulated Patient-Physician Encounter Using a Talking Computer," *Journal of the American Medical Association* 238:1927-1929.
  86. \_\_\_\_\_ 01978, personal communication from the project director, Computer Based Examination (CBX) Project, to the Office of Technology Assessment, U.S. Congress.
  87. Gall, J. E. Jr., 1977, "The Patient Care Quality Assurance System," *Proceedings of the First Annual Symposium on Computer Applications in Medical Care*, Washington, D. C.: Institute for Electrical and Electronic Engineers, Inc., p. 116.
  88. Garner, H., M. Anger, and W. Trigg, 1975, "Instructional Support Systems," in L. Golubchick and B. Perski (eds.), *Innovations in Education*, Dubuque, Iowa: Kendall-Hunt Publ. Co.
  89. Gaston, G. W., 1969, "Oral Cancer Recognition (ORALCA)," in *The Users' Guide to CAI at the Ohio State University College of Medicine*, Columbus, Ohio: Ohio State University.
  90. Gerhold, G., and L. Kheriaty, 1978, "Common PILOT Progress Report," *ADCIS News* 10(2) :36-40.
  91. Giebink, G. A., and L. L. Hurst, 1975, *Computer Projects in Health Care*, Ann Arbor, Mich.: Health Administration Press.
  92. Glantz, S. A., 1978, "Computers in Clinical Medicine: A Critique," *Computer* 11(5):68-77.
  93. Goldstein, R. L., J. J. Roberts, B. Stanton, D. B. Maglott, and M. J. Horan, 1975, "Data for Peer Review: Acquisition and Use, Results in the Experimental Medical Care Review Organization Program," *Annals of Internal Medicine* 82:262-267.
  94. Gonnella, J. S., D. Z. Louis, and J. J. McCord, 1976, "The Staging Concept—An Approach to the Assessment of Outcome of Ambulatory Care," *Medical Care* 14:13-21.
  95. Goran, M. J., J. W. Williamson, and J. S. Gonnella, 1973, "The Validity of Patient Management Problems," *Journal of Medical Education* 48:171-177.
  96. \_\_\_\_; J. S. Roberts, M. Kellogg, J. Fielding, and N. Jessie, 1975, "The PSRO Hospital Review System," *Medical Care* 13(4):1-33 (Supplement).
  97. Gordon, T. L., 1978, "Applicants for 1977-78 First Year Medical School Class (Datagram)," *Journal of Medical Education* 53:696-698.
  98. Graettinger, J., 1977, *National Residency Matching Program Annual Report*, Washington, D. C.: Association of American Medical Colleges.
  99. Grayson, L. P., and J. B. Robbins, 1972, *U.S. Office of Education Support of Computer Projects, 2965-1972*, Washington, D. C.: U.S. Govt. Printing Office, Publ. No. HEW 5.212:12044-71.
  100. Green, R. (ed.), 1976, *Assuring Quality in Medical Care: The State of the Art*, Cambridge, Mass.: Ballinger Publ. Co.
  101. Gregory, R. J., 1975, "Outcome: A Computer Simulation of the Results of Psychotherapy and Its Use in the Psychology Research Course," *Proceedings of the 1975 Conference on Computers in the Undergraduate Curricula (CCUC/6)*, Fort Worth, Tex.: Texas Christian University, Department of Computer Sciences, pp. 213-217.
  102. Group for Research in Pathology Education (GRPE), 1974, *Annual Meeting Report to Members*, Omaha, Nebr.

- 103<sub>0</sub>. Guerra, C., H. McDaniel, J. Kaufman, and D. Fuller, 1977, "CASPER: An Interactive Approach to Computer-Managed Testing," *Proceedings of the Association for the Development of Computer Based Instructional Systems*, pp. 39-54.
104. Halverson, J. D., and W. F. Ballinger, 1978, "Computer Assisted Instruction in Surgery," *Surgery* 83:633-638.
105. Hamblen, J. W., 1972, *Inventory of Computers in U.S. Higher Education, 1969-1970: Utilization and Related Degree Programs*, Washington, D. C.: U.S. Govt. Printing Office.
106. Hansen, D. N., B. F. Johnson, R. L. Fagan, P. Tam, and W. Dick, 1974, *Computer-Based Adaptive Testing Models for the Air Force Technical Training Environment, Phase Z: Development of a Computerized Measurement System for Air Force Technical Training (AFHRL-TR-74-48)*, Bethesda, Md.: Educational Resource Information Center (ERIC, ED 094 759).
107. Harless, W. G., G. G. Drennon, J. J. Marxer, J. A. Root, and G. E. Miller, 1971, "CASE: A Computer-Aided Simulation of the Clinical Encounter," *Journal of Medical Education* 46:443-448.
108. —; G. G. Drennon, J. J. Marxer, J. A. Root, L. L. Wilson, and G. E. Miller, 1973a, "CASE-A Natural Language Computer Model," *Computers in Biology and Medicine* 3:227-246.
109. —; G. G. Drennon, J. J. Marxer, J. A. Root, L. L. Wilson, and G. E. Miller, 1973b, "GENESYS-A Generating System for the CASE Natural Language Model," *Computers in Biology and Medicine* 3:247-268.
110. —; 1975, "MERIT-A Model for Evaluation and Recertification Through Individualized Testing," *Proceedings of the 14th Annual Conference on Research in Medical Education*, Washington, D. C.: Association of American Medical Colleges.
111. —; N. A. Farr, M. A. Zier, and J. R. Gramble, 1978a, "MERIT-An Application of CASE," in E. C. Deland (ed.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.;
112. — ; N. A. Farr, M. Z. Zier, and J. R. Gramble, 1978b, "A Method for Physician Recertification," *Technological Horizons in Education Journal* 5(6):51-55.
113. Health Care Management Systems, Inc., 1976, *Interim Evaluation Report: New Mexico Professional Standards Review Organization Revised Medicaid Ambulatory Care Review System*, app. A. La Jolla, Calif.: Health Care Management Systems, Inc.
114. —; 1977, *Physician Ambulatory Care Evaluation Program, vols. 1-8*. La Jolla, Calif.: Health Care Management Systems, Inc.
115. —; 1978, "Computer Technology in Medical Care Quality Assurance," paper prepared for the Office of Technology Assessment, U.S. Congress.
116. Hickey, A. E., 1975, *Computer-Assisted Instruction*, Newburyport, Mass.: ENTELEK.
117. Hody, G. L., and R. A. Avner, 1978, "The PLATO System: An Evaluative Description," in E. C. Deland (ed.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
118. Hoffer, L. P., G. O. Barnett, B. B. Farquhar, and P. A. Prather, 1975, "Computer Aided Instruction in Medicine," *Annual Review of Biophysics and Bioengineering* 4:103-117.
119. Holloway, D. C., L. J. Wiczai, and E. T. Carlson, 1974, "Evaluating an Information System for Medical Care Evaluation Studies," *Medical Care* 13:329-340.
120. Hubbard, J., E. Levit, C. Schumaker, and T. Schnabel, 1965, "An Objective Evaluation of Clinical Competence," *New England Journal of Medicine* 272:1321-1328.
121. Huber, G. A., H. Wolfe, and C. P. Hardwick, 1974, "Evaluating Computerized Screening as an Aid to Utilization Review," *Inquiry* 11:118-195.

122. Human Resources Research Organization, 1974. Project data base on computer programs that had been designed for teaching and testing. Of 4,900 computer programs that had been developed for the purpose of teaching or testing (CAI and CAT), table 1 includes 2,750 of these programs.
123. ———; 1978, "Use of Computers to Improve Professional Assessment," paper prepared for the Office of Technology Assessment, U.S. Congress.
124. Institute of the Future, 1979, *Teletext in the United States: A Study of Public Service Potential and Policy Issues*, informal paper presented to the Office of Technology Assessment, U.S. Congress, Menlo Park, Calif.
125. Jacobs, C. M., T. H. Christoffel, and N. Dixon, 1976, *Measuring the Quality of Patient Care: The Rationale for Outcome Audit*, Cambridge, Mass.: Ballinger Publ. Co.
126. Johnson, M. E., and L. L. Leveridge, 1978, *The Significance of the Optical Videocisc to Education*, internal document, American Medical Association, Division of Educational Policy and Development.
127. Johnson, S. L., 1976, "Simulators for Sensor Operator Training," *Proceedings of the First International Learning Technology Congress and Exposition in Applied Learning Technology*, v. IV. Buffalo, N. Y.: Calspan Graphics, pp. 19-23.
128. Kamp, M., 1975, *Index to Computerized Teaching in the Health Sciences*, San Francisco, Calif.: University of California, San Francisco.
129. Kessner, D. M., C. E. Kalk, and J. Singer, 1973, "Assessing Health Quality—The Case for Tracers," *New England Journal of Medicine* 288:189-194.
130. Kimberlin, D. A., 1973, *A Preliminary Instructional Model for a Computerized Training System*, Army Signal Center and School, Ft. Monmouth, N. J., Bethesda, Md.: Educational Resource Information center (ERIC ED 083 822).
131. Kopstein, F., and R. Seidel, 1968, "Computer-Administered Instruction Versus Traditionally Administered Instruction: Economics," *Audio Visual Communications Review* 16:147-175.
132. LaPerle, E. S., and E. G. McNulty, 1974, "Data Set Provides Uniformity, Flexibility," *Hospitals* 48(12):115-120.
133. Lawrence, S. B., 1978, "INTERNIST," *Forum on Medicine* 1(4):44-47.
134. Lefever, R. D., and J. K. Johnson, 1976, *Survey of the Use of Computers in Instruction*, Washington, D. C.: Association of American Medical Colleges.
135. Lembcke, P. A., 1956, "Medical Auditing by Scientific Methods," *Journal of the American Medical Association* 162:646-655.
136. ———; 1967, "Evolution of the Medical Audit," *Journal of the American Medical Association* 199:111-118.
137. Lewis, C. E., 1974, "The State of the Art of Quality Assessment—1973," *Medical Care* 12:799-806.
138. Lippey, G., and N. Partos, 1976, "Improvements to a Computer-Assisted Test Construction System," *Educational Technology* 16(12):26-29.
139. Long, H., 1978, personal communication from the IBM Corporation to the Human Resources Research Organization in preparation for a paper for the Office of Technology Assessment, U.S. Congress.
140. Lyons, T. F., and B. C. Payne, 1974, "The Relationship of Physicians' Medical Recording Performance to Their Medical Care Performance," *Medical Care* 12:463-469.
141. Magraw, R. M., 1976, "Formal Quality Assessment and Utilization Review Programs: Their Effects on the Basic Transactions in Medical Education," *Bulletin of the New York Academy of Medicine* 52:105-118.
142. Martin, J. B., 1978, "Toward Effective Computer-Aided Medical Care Evaluation Studies," *Inquiry* 15:139-141.



143. Massachusetts General Hospital, 1978, memorandum from the Laboratory of Computer Sciences to the Board of Directors, Health Education Network, Inc.
144. McClain, D. H., S. W. Wessels, and K. M. Sando, 1975. "IPSIN-Additional Systems Enhancement Utilized in a Chemistry Application," *Proceedings Of the 1975 Conference on Computers in the Undergraduate Curricula (CCUC/6)*, Fort Worth, Tex.: Texas Christian University, Department of Computer Sciences, pp. 139-145.
145. McDonald, C. J., 1976, "Protocol Based Computer Reminders: The Quality of Care and the Nonperfectability of Man," *New England Journal of Medicine* 295:1351-1355.
146. Murray, D. Jeris, B. Bhargava, J. Seegar, and L. Blevins, 1977, "A Computer-Based Record and Clinical Monitoring System for Ambulatory Care," *American Journal of Public Health* 67:240-245.
147. Merchant, F. T., 1978, personal communication from the Permanent Secretary of the FLEX Examination Board to the Office of Technology Assessment, U.S. Congress.
148. Merola, A. J., R. E. Pengov, and B. T. Stokes, 1978, "Computer-Supported Independent Study in the Basic Medical Sciences," in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
149. Mesel, E., and D. D. Wirtschafter, 1976a, "Automation of a Patient Medical Profile From Insurance Claims Data: A Possible First Step in Automating Ambulatory Medical Records on a National Scale," *Milbank Memorial Fund Quarterly/Health and Society* 54:29-45.
150. . and D. D. Wirtschafter, 1976b. "Automating Ambulatory Medical Records: A Claims-Based Medical Profile," *Computers and Biomedical Research* 9:89-91.
151. Meskauskas, J., and J. J. Norcini, 1978, *Progress Report on the Data Analysis of the MERIT—Recertification Study*, Philadelphia, Pa.: American Board of Internal Medicine.
152. Meyer, T., 1978, *State of the Art of Measurement of Physician Competence*, draft of a paper presented to the Coordinating Council on Medical Education.
153. Milliken Communications Corporation, 1979, personal communication from Bodie Marx to the Office of Technology Assessment, U.S. Congress.
154. Mills, R. R. B. Fetter, D. C. Riedel, and R. Averill, 1976, "AUTOGRP: An Interactive Computer System for the Analysis of Health Care Data," *Medical Care* 14:603-615.
155. Misselt, A. L., and E. Call-Himwich, 1978, *Analysis of the Shepard Air Force Base Computer-Based Education Project (MTC Report No. 21)*, Urbana, Ill.: University of Illinois, Computer-Based Education Research Laboratory.
156. Mitzel, H. E. (cd.), 1974, *An Examination of the Short-Range Potential of Computer-Managed Instruction*, conference sponsored by the National Institute of Education, Chicago, Ill., November 1974.
157. Mockovak, W. P. et al., 1974, *The Application and Evaluation of PLATO IV in Air Force Technical Training*, Lowry Air Force Base, Bethesda, Md.: Education Research Information Center (ERIC Ed 096 957).
158. Molnar, A. R., 1975, "Viable Goals for New Educational Technology Efforts: Science Education and the New Technological Revolution," *Educational Technology* 15:4.
159. ; 1978, "The Next Great Crisis in American Education: Computer Literacy," *The Journal* 5(4):35-38.
160. Morehead, M. A., 1976, "Ambulatory Care Review: A Neglected Priority," *Bulletin of the New York Academy of Medicine* 52:60-69.

161. Morgan, J. P., 1977, "Watching the Monitors: "Paid" Prescriptions, Fiscal Intermediaries and Drug-Utilization Review, " *New England Journal of Medicine* 296:251-256.
162. Mourad, L., and M. Forman, 1976, *The Role of CAI in Nursing Education at The Ohio State University*, internal document, Ohio State University School of Nursing.
163. Murnaghan, J. H., and K. L. White, 1971, "Hospital Patient Statistics, Problems, and Prospects," *New England Journal of Medicine* 284:822-828.
164. —; 1974, "Health-Services Information Systems in the United States Today, " *New England Journal of Medicine* 290:603-610.
165. National Academy of Sciences, Institute of Medicine, 1976, *Assessing Quality in Health Care: An Evaluation*, Washington, D. C.: National Academy of Sciences.
166. National Board of Medical Examiners, 1973, *Evaluation in the Continuum of Medical Education. Report of the Committee on Goals and Priorities of the National Board of Medical Examiners*. Philadelphia, Pa.: National Board of Medical Examiners.
167. —; 1975, *1975 Bulletin of Information*, Philadelphia, Pa.: National Board of Medical Examiners.
168. —; 1979, *Annual Report—1978*, Philadelphia, Pa.: National Board of Medical Examiners.
169. Nelson, A. R., 1976, "Relation Between Quality Assessment and Utilization Review in a Functioning PSRO, " *New England Journal of Medicine* 292:671-675.
170. —; and J. Q. Cannon, 1976, "The PACE Project: Computer-Assisted Peer of Ambulatory Services, " *Proceedings of a Conference Assessing Physician Performance in Ambulatory Care*, San Francisco, Calif.: American Society of Internal Medicine.
171. Nevison, J. M., 1970, *The Computer as Pupil: The Dartmouth Secondary School Project*, Hanover, N. H.: Kiewit Computation Center.
172. Norton, S., J. Doull, and E. J. Walaszek, 1972, "A Computer Assisted Teaching System for Medical Pharmacology, " presented at the *Fifth International Congress of Pharmacology*, San Francisco, Calif.
173. Norwood, D. D., 1977, "A Patient Care Quality Assurance System Overlaid on a Hospital Wide Medical Information System, " in D. B. Shires and H. Wolff (eds.), *Med. Info. '77*, Amsterdam, The Netherlands: North Holland Publ. Co.
174. Noyce, R., 1977, "Microelectronics," *Scientific American* 237:62-69.
175. Nuthmann, C. F., 1968, *Time-Shared Interactive Computer-Controlled Information Television (TICCIT), MTP-307*, Washington, D. C.: The MITRE Corporation.
176. Nyborg, P. S., P. M. McCarter, and W. E. Erickson, (eds.), 1977, *Information Processing in the United States: A Quantitative Summary*, Montvale, N. J.: American Federation of Information Processing Societies, Inc.
177. Ohio State University, 1976, "CAI Course Development Times, " internal document, The Ohio State University College of Medicine.
178. —; 1977, "Rate Determination for CAI Access, " The Ohio State University College of Medicine.
179. —; 1978, *MERIT—A Model for Evaluation and Recertification Through Individualized Testing: A Final Report*, The Ohio State University College of Medicine, Division of Computing Services for Medical Education and Research.
180. Orlansky, J., and J. String, 1977, *Cost-Effectiveness of Flight Simulators for Military Training*, Arlington, Va.: Institute for Defense Analysis.
181. Papert, S., 1975, "A Learning Environment for Children, " in R. Seidel and N. Rubin (eds.), *Computers and Communications: Implications for Education*, New York, N. Y.: Academic Press.

182. Patience, W. M., 1977, "Description of Components in Tailored Testing, " *Behavior Research Methods & Instrumentation* 9:153-157.
183. Pengov, R. E., 1974, "A Modularly Designed Computer-Assisted Instruction Reporting System (CAIRS)," in *Med. Info. '74*, Amsterdam, The Netherlands: North Holland Publ. Co.
184. —; 1978, "The Evolution and Use of Computer-Assisted Instruction (CAI) in Health Sciences Education at The Ohio State University College of Medicine, " in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
185. Peters, H. W., 1976, "The Electronic Aristotle," *Computer Decisions* 8:42-46.
186. Pierleoni, R. G., 1978, "Clinical Evaluation Techniques for the Health Professions," *Improving Human Performance Quarterly* 7:204-216.
187. Pine, S. M., and D. J. Weiss, 1976, *Effects of Item Characteristics on Test Fairness (Research Report 76-5)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Programs, Department of Psychology.
188. Practical Concepts, Inc., 1975, *Practical Concepts for Using Interactive TV Applications in the Medical Community*, Washington, D. C.: Practical Concepts, Inc.
189. Puig, G. A., 1976, "The Training Effectiveness of Simulation, " *Proceedings of the First International Learning Technology Congress and Exposition in Applied Learning Technology*, v. IV, Buffalo, N. Y.: Calspan Graphics, pp. 28-32.
190. Reichert, A. K., and N. J. Greenberg, "The Application of Simulation Techniques to Enhance Student Understanding, " *Proceedings of the Association for the Development of Computer Based Instructional Systems*, pp. 364-378.
191. Rimoldi, H. J. A., 1961, "The Test of Diagnostic Skills, " *Journal of Medical Education* 36:73-79.
192. Roberts, E. A., 1977, "In-House Computer for Training?" *NSPI Journal* 16(9):7-11.
193. Rosati, R. A., J. F. McNeer, C. F. Starmer, B. S. Mittler, J. J. Morris, Jr., and A. G. Wallace, 1975, "A New Information System for Medical Practice, " *Archives of Internal Medicine* 135:1017-1024.
194. Sanazaro, P. J., R. L. Goldstein, J. S. Roberts, D. B. Maglott, and J. W. McAllister, 1972, "Research and Development in Quality Assurance, the Experimental Medical Care Review Organization Program, " *New England Journal of Medicine* 287:1125-1131,
195. — and R. M. Worth, 1978, "Concurrent Quality Assurance in Hospital Care, " *New England Journal of Medicine* 298:1171-1177.
196. Sayetta, R. B., 1976, "Critique of an Earlier Study of the Sacramento Medical Care Foundation's Certified Hospital Admission Program (CHAP)," *Medical Care* 14:80-90.
197. Schoolman, H. M., and L. M. Bernstein, "Computer Use in Diagnosis, Prognosis, and Therapy," *Science* 200:926-931.
198. Schumacher, C. F., F. D. Burg, and W. G. Taylor, 1975, "Computerization of a Patient Management Problems Examination to Prevent "Retracing''," *British Journal of Medical Education* 9:281-285.
199. Seely, O., and V. Willis, 1975, "Socrates Test Retrieval at the California State University and Colleges, " *Proceedings of the 1975 Conference on Computers in the Undergraduate Curricula (CCUC/6)*, Fort Worth Tex.: Texas Christian University, Department of Computer Sciences, pp. 135-138.
200. Segall, A., D. Benor, and O. Susskind, 1978, "Consonance Between instruction and Evaluation in Medical-Education—Beersheva Experience, " *Improving Human Performance Quarterly* 7:189-196.

201. Seidel, R. J., B. Hunter, C. Kastner, and M. Rubin, 1974, "Obstacles to Widespread Use of Computer-Based Curricula Innovations: A Review, " *Journal of Computer-Based Instruction* 1:28-31.
202. — ; and M. Rubin (eds.), 1975, *Computers and Communications: Implications for Education*, New York, N. Y.: Academic Press.
203. — ; and L. Stolorow, 1975, *A CMI Heuristic for the Services and ARPA*, paper submitted to Educational Testing Services, Princeton, N.J.
204. — ; and H. Wagner, 1977, *Cost Effectiveness Specification for Computer Based Training Systems*, III, Alexandria, Va.: Human Resources Research Organization.
205. — ; R. Rosenblatt, H. Wagner, R. Schultz, and B. Hunter, 1978, *Evaluation of a Prototype Computerized Training System (CTS) in Support of Self-Pacing and Management of Instruction (Final Report)*, Alexandria, Va.: Human Resources Research Organization.
206. Senior, J., 1976. *Toward the Measurement of Competence in Medicine, The Computer-Based Examination (CBX) Project*, Philadelphia, Pa.: National Board of Medical Examiners and the American Board of Internal Medicine.
207. Sherwood, B. A., and J. Stifle, 1975, *The PLATO IV Communications System (CERL Report X-44)*, Urbana, Ill.: University of Illinois.
208. Simborg, D. W., B. H. Starfield, S. D. Horn, and S. A. Youtree, 1976, "Information Factors Affecting Problem Follow-Up in Ambulatory Care, " *Medical Care* 14:848-856.
209. Skakun, E. N., W. C. Taylor, and D. R. Wilson, 1977, "A Follow-Up Study of the Computerized Patient Management Problem Examination in Pediatrics, " in D. B. Shires, and H. Wolff (eds.), *Med. Info.*, '77, Amsterdam, The Netherlands: North Holland Publ. Co.
210. — ; W. C. Taylor, and D. R. Wilson, 1978, "Computerized Patient Management Problem as Part of the Pediatric Certifying Examination, " manuscript submitted to the *Journal of Computer-Based Instruction*.
211. — ; 1978, personal communication to the Office of Technology Assessment, U.S. Congress.
212. Slee, V. N., 1970, "Professional Activity Study, " *Medical Care* 8(4):34-40.
213. Sorlie, W. E., and L. A. Jones, 1975, "Descriptions of a Computer-Assisted Testing System in an Independent Study Program, *Journal of Medical Education* 50:81-83.
214. St. John, D. B., D. R. Dobin, and B. H. Flashner, 1973, "An Automated System for the Regulation and Medical Review of Long-Term Care Facilities and Patients, " *American Journal of Public Health* 63:619-630.
215. Starkweather, J. A., 1971, "Educational Networks and Interfacing With the University Computing Center, " in *Computer Applications in Dental Education*, San Francisco, Calif.: University of California, San Francisco.
216. Sterling, T. D., 1975, "Humanizing Computerized Information Systems, " *Science* 190:1168-1172.
217. Stetten, K. J., 1972, *Toward a Market Success for CAI: An Overview of the TIC-CIT Program (M72-73)*, Washington, D. C.: The MITRE Corporation.
218. Suppes, P., and M. Morningstar, 1969, "Computer-Assisted Instruction, " *Science* 166:343-350.
219. Tennyson, C. L., 1977, "A Look at the CAI Systems Market," *NSPI Journal* 16(9):10-12.
220. Tidball, C. S., 1976, survey summary (mimeo) of R. D. Lefever and J. K. Johnson, 1976, *Survey of the Use of Computers in Instruction*, Washington, D. C.: Association of American Medical Colleges.

221. ;1978a, "Health Education Network, " in E. C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
222. ;1978b, "Using Minicomputers for Courseware Delivery, " in E.C. Deland (cd.), *Information Technology in Health Science Education*, New York, N. Y.: Plenum Press.
223. "Trends in Computer-Assisted Instruction, " 1978, *Educational Technology* 18(4) :April issue.
224. U.S. Congress, Office of Technology Assessment, 1977, *Policy Implications of Medical Information Systems*, Washington, D. C.: U.S. Govt. Printing Office.
225. ;House of Representatives, 1978, *Computers and the Learning Society*, report prepared by the Subcommittee on Domestic and International Scientific Planning, Analysis, and Cooperation of the Committee on Science and Technology, 95th Cong., 2d sess.
226. U.S. Department of Health, Education, and Welfare, 1973, *Medicaid Management Information System, General System Design for Title 19*, vols. 1-5, Washington, D.C.
227. ;1975, *Federal Reports Manual, PSRO Management Information System, 1975*, Health Care Financing Administration, Washington, D.C.
228. ;1977, *Automation of the Problem-Oriented Medical Record*, Washington, D. C.: National Center for Health Services Research, Health Resources Administration, DHEW Publ. No. (HRA) 77-3177.
229. ;1978a, *Federal Support for Health Professions Education*, options paper, Office of the Assistant Secretary for Health, Office of Health Policy, Research, and Statistics.
230. ;1978b, *Advance Data, Vital and Health Statistics*, no. 30, National Center Health Statistics.
231. Vale, C. B., 1977, *Applications of Computerized Adaptive Testing (Research Report 77-1)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
232. Van Matre, N., 1978, "The Navy's CMI System, " *Proceedings of the Association for the Development of Computer Based Instructional Systems*, pp. 269-270.
233. Voss, G. et al., 1978, "Computer-Assisted Instruction in Medicine: A German View, " *Proceedings of the Association for the Development of Computer Based Instructional Systems*, pp. 63-72.
234. Votaw, R. G., and B. B. Farquhar, 1978, "Current Trends in Computer-Based Education in Medicine, " *Educational Technology* 18:54-56.
235. Webb, S. B., Jr., M. C. Robson, and A. L. Lanckton, 1975, "A Monitoring Strategy for Quality Assurance Programs, " *Connecticut Medicine* 39:253-256.
236. Weiss, D. J., 1974, *Strategies of Adaptive Ability Measurement (Research Report 74-5)*, Minneapolis, Minn.: University of Minnesota Psychometric Program, Department of Psychology.
237. —; (cd. ), 1975, *Computerized Adaptive Trait Measurement: Problems and Prospects. Proceedings of a Symposium Presented at the Convention of the American Psychological Association (Research Report 75-5)*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
238. \_\_\_\_; 1976, *Final Report: Computerized Ability Testing, 1972-1975*, Minneapolis, Minn.: University of Minnesota Psychometric Methods Program, Department of Psychology.
239. Welch, C. E., 1973, "Professional Standards Review Organizations—Problems and Prospects, " *New England Journal of Medicine* 289:291-295.

240. White, N. H., 1976, *Ambulatory Care Quality Assurance Projects*, vols. 1-3, La Jolla, Calif.: Health Care Management Systems.
241. Willey, L. V., 1975, *Computers and Instructional Productivity*, Bethesda, Md.: IBM Corporation.
242. Williamson, J. W., 1977, *Improving Medical Practice and Health Care: A Bibliographic Guide to Information Management in Quality Assurance and Continuing Education*, Cambridge, Mass.: Ballinger Publ. Co.
243. ; 1978, "Formulating Priorities for Quality Assurance Activity, Description of a Method and Its Application, " *Journal of the American Medical Association* 239:631-637.
244. Wismar, B. L., and G. R. Christopher, 1969, "Computerized History, " in *Proceedings of the 8th Annual Conference on Research in Medical Education*, Washington, D. C.: Association of American Medical Colleges.
245. Wooster, H., 1976, "An Experiment in Networking: The LHNCBC Experimental CAI Network, 1971 -1975," *Journal of the Americal Society for Information Science* 27:329-338.
246. Zimmerman, J., 1978, "Physician Utilization of Medical Records: Preliminary Determinations, " *Medical Informatics* 3:27-35.