

Publications

PUBLICATIONS for Barrett Hazeltine

1. "Sequential Circuits and Variable Length Encodings", Brown University, Division of Applied Mathematics Report No., BTL 12, November 1960: *IEEE Transactions on -Information Theory*, Vol. IT19, No. 1, p. 48, January 1963.
2. "A Procedure for Obtaining and Economical Asynchronous Sequential Circuit Directly From a Set of Regular Expressions", Brown University, Division of Engineering, October 1961. *Proceedings of Third Annual Symposium on Switching Theory and Logical Design*, AIEE, September 1962
3. "A Summer Course for High School Students as a Recruiting Scheme", *IEEE -Transactions on Education*, Vol. E-5, No. 3, 4, p. 195. September - December 1962
4. "Encoding of Asynchronous Sequential Circuits", *IEEE Transactions on Electronic Computers*, Vol. EP14, No. 5, October 1961.
5. "Construction of Irredundant Multilevel Switching Functions", *IEEE Transactions on Electronic Computers*, Vol. EC-13, No. 4, August 1964
6. "Decision Making in the Management of Research and Advanced Development Activities", *IEEE Transactions on Engineering Management*, Vol. ESM-17, No. 2, May 1970.
7. "Comment on Motivation and Counseling of Engineering Students", *Journal of Engineering Education*, Vol. 53, No. 1, September 1966, pp. 63~64.
8. "Minilabs in Engineering Education", *Proc. IEEE*, Vol. 59, No. 6, June 1971, pp.980-981,
9. "Another Teaching Experience in Zambia", *Engineering Education*, Vol. 63, No. 1, April 1973, pp. 537-538.
10. "A New System of Academic Evaluation", *Research in Higher Education*, Vol. 1, No.4, October I December 1972.
11. "Discussion: Energy Qualifications and Initial Performance of Engineering Students at 'the University of Zambia", *Technos*, Vol. 1, No. 4, October - December 1972.
12. *Introduction to Electronic Circuits and Applications*, Textbook Kendall Hunt Publishing Company, Dubuque, IA, 1980.
13. *Engineering Education and a Lifetime of Learning*, Co-author, ASEE. Washington, DC, 1975.
14. "Strategies for Engineering Schools in Developing Countries", *Technos*, Vol. 6, No. 1, January-March, 1977,
15. "Lecture Handouts--an Effective Educational Tool" accepted for publication in *ERM*.
16. "Technology Strategies for Less Industrialized Nations", *Technos*, Vol. 69, No. 1, January-March 1980.
17. "The Human Side of Education", accepted for publication in *ERM*.
18. "Undergraduate TA's in Big Courses-Everybody Wins", *Engineering Education*, Vol. 81. No. 5, pp. 363-365. Feb-March 1981
19. "Energy Planning Issues in Malawi", Society for the Advancement of Science in Malawi Blantyre, May 9, 1981, *Malawi Journal of Science*, 1982.
20. "Malawian Management Case Studies, Vol. I". with J. Parkinson and P. Rutherford, University of Malawi-The Polytechnic, January 1982.
21. "Undergraduate Teaching Assistants in Large Courses", *ASEE Annual Conference Proceedings*, 1983.

22. "Engineering Courses for Liberal Arts Students: Recent Developments", *Frontiers in Education Conference Proceedings*, 1983, ASEE.
23. "Transfer of Technology into Malawi", *International Journal of Management*, Vol. 4, No. 2., June 1987, pp, 194-201
24. "Intermediate Technology", Course Outline, with Christopher Bull, *Bulletin of Science, Technology & Society*, Vol. 6, Number 6, 1986.
25. "Academic Visitors to Third World Universities - Roles and Effectiveness" with James Chipeta submitted to *Topic Magazine*.
26. "Science and engineering: Their place in a complex world" *Private Colleges and Universities*, 1989
27. "Electronic Circuits and Applications," monograph published by NLA Center, SUNY-Stony Brook, Stony Brook, NY,
28. "Small Scale Technology in Botswana" SAMS Working Paper Series, No 93002, September, 1993, School of Accounting and Management Sciences, University of Botswana
29. "Note on the export rose growing business in Zimbabwe", John Griffis and Barrett Hazeltine, *Journal of the Export Rose Growers of Zimbabwe*, July 1997
30. Appropriate Technology: Tools, Choices, and Implications, Barrett Hazeltine and Christopher Bull, 1999, Academic Press, San Diego
31. Field Guide to Appropriate Technology, Barrett Hazeltine and Christopher Bull (editors), Academic Press, 2003, San Diego

Recent Reports

15. "Instruction Using Experiments in a Computer", John P. Fulton, Barrett Hazeltine, Brown University Report, Project 1-8-A0~5, Department of Health, Education and Welfare, July 31, 1973.
16. "Electric Power Generation for Camps in National Parks": B. Hazeltine and J.Mwenechanya, Report TD-111, School of Engineering, University of Zambia, February 1977.
17. "An Exportable, Self-Contained Introductory College Course in Management", developed through a grant from the Metropolitan the Insurance Company, May 15, 1978.
18. "An Operations Study of Brown University Health Services", with Michael Schield, May 1980,
19. "Engineering Education in the Republic of China", September 4, 1980, "Notes on Energy Planning in the Republic of China", September 4, 1980, prepared for the National Science Council, Republic of China.
20. "Notes on Energy Planning", "Economics of Photovoltaic Devices in Rural Bangladesh", July 23, 1982, prepared for Center for Policy Research, University of Dacca.
21. "Recommendations for Engineering Education in Southern New Jersey", Report to The New Jersey Department of Higher Education, with Marian Visich, May 1, 1986.
22. "The Liberal Art of Science, Agenda for Action". American Association for the Advancement of Science, Washington. DC 1990. (Member of study group that prepared report)
23. "Teaching Management Through Cases" Higher Education Development Unit, University of Botswana, Number 9, October 1993
24. "TechnoServe and The Miranda Caju Project", July 29, 2004, with Eric Sillman, case study for Technoserve and for educational use
25. "The Paul Cuffee School" November 26, 2004, case study for educational use
26. "Residential Properties", joint with Gerald King, April 2005, case study for educational use

27 "Connect EDU", May 2005, case study for educational use

Reviews

61 reviews since 1966 for *Computer Reviews*

Many reviews since 1962 for *Math Reviews*

92 reviews since 1982 for *The Weaver*

4 reviews since 1991 for *IEEE Technology and Society Magazine*

104 reviews since 1991 for *Science, Technology, and Society*

2 reviews since 1992 for *IEEE Spectrum*

Reviewer for *IEEE Transactions on Education*, ERM Division of ASEE, NCIIA

Recent Meetings Participated In and Seminars Presented

12. "Computers in Education" and "Technology Transfer". seminars presented at Prince of Songkla University, Hat Yai, Thailand. August 7, 1984 and De LaSalle University, Manila, Philippines, August 9-10, 1984.

13. "Logic Circuits as a vehicle for Technological Literacy" invited lecture at Illinois State University, October 1, 1985.

14. "Appropriate Technology and Technology Transfer", Minerva Lecturer at Union College, October 23, 1985,

15. "Digital Logic", Technological Literacy Workshop, NJIT, Newark. NJ, June 5-6, 1985, January 6, 1986, June 3-4, 1986.

16. "Technological Literacy Courses", ASEE Annual Conference Atlanta, June 18. 198~,

17. "The New Liberal Arts", NASULGC meeting, Washington DC, November 11, 1985.

18. "Computers in Engineering Education", National University of Singapore. January 9, 1986.

19 "Computers in Education" Workshop presented at Payap University, Thailand, January 10-16, 1986, at Satya Wacana University, Indonesia, January 14-17, 1986, at De La Salle University, Philippines, January 21-24, 1986 as William P. Fenn Lecture, United Board for Christian Higher Education in Asia.

20. "Succeeding in a Technological Society" Institute on National Affairs. Iowa State University, Ames, Iowa, February 11, 1986.

21. "Logic Circuits presented at Technological Literacy session of AAHE, March 13, 1986, Washington, DC.

22~ "Technological Literacy-an Engineer's perspective" Iona College October 17 1986

23. "Technology for Third World Women", Union College, November 11, 1986

24. "Management of Research and Development" University of Ibadan January 16. 1987.

25. "Technological Literacy and The New Liberal Arts," ACU-I Annual Meeting, Boston March 29, 1986.

26. "Computers in Malawi: Possibilities and Problems", presented at conference - Computers in Southern Africa, March 22, 1988, Blantyre, Malawi

27. "Use of Computers in Planning", with G. R Mthindi, presented at conference - Computers in Southern Africa, March 22, 1988, Blantyre, Malawi

28. "Appropriate Technology an Update from Malawi", NLA Project Directors Meeting, Wellesley, MA August 11, 1989.

29. Technological Literacy Courses at Brown University" 1990 ASEE Annual Conference

Proceedings, Toronto June 25, 1990.

30. "Teaching Non Engineers" ASEE Middle Atlantic Section Regional Meeting Annapolis, MD, April 28, 1990,
31. "Review of Technological Literacy Programs", ABET Technological Literacy Workshop, Washington DC, May 6, 1991.
32. Member of Panel at "Workshop on Membership" at Sigma Xi National Meeting, October 11, 1991.
33. Technology Literacy Programs at Brown University," Sloan - NLA meeting, Atlanta, GA, October 25, 1991.
34. "Weaving Technology and Human Affairs," Technological Literacy Conference, Washington, DC, February 8, 1992.
35. "Engineering Education: Opportunities and Constraints" ASEE Southwestern Regional Meeting, Albuquerque, NM, March 16, 1992.
36. "Why Engineering Belongs at a Liberal Arts College", Rowan College, March 22, 1994
37. "Effective and Unbiased Technology Transfer *Proceedings of the International Conference on Energy and the Environment*, Shanghai, China, May 8-10, 1995
38. Designing a Course for Technological Literacy" AAAS 19th Annual Meeting February 10, 1996
39. Panel on Technological Literacy Programs and Other Vehicles for Informed Public Decisions, (Panel Chair), 1996 International Symposium on Technology and Society-Technical Expertise and Public Decisions, Princeton University, June 21-22, 1996
40. "Technology Management-Difficult but Important", Popular Lecture Series No. 1/1997, National University of Science and Technology, Bulawayo, April 3, 1997
41. "Technology and Science Policy for Development" First International Conference on the Role of Science and Technology in Development" 7-11 Dec.1998, Faculty of Science, University of Malawi, Zomba, Malawi
42. "Introduction to Entrepreneurship and the Entrepreneurial Mind" Bates Seminar Series on Entrepreneurship, September 24, 1999, Bates College, Lewiston, Maine
43. "The Engineering Past as Prologue", Baylor University, October 5, 2000
44. "Appropriate Technology Design", Rhode Island School of Design, Providence, April 16, 2001
45. "How to be an Effective Innovator in the Third World", National Collegiate Inventors and Innovators Alliance, Annual Meeting, March 14-15, 2002
46. "Return on Introspection", In2: InThinking Network Inaugural Forum, April 19-20, 2002
47. "Successful Entrepreneurship", RITEC Venture 2002, June 13, 2002
- 48 "Globalization and Technology", Salve Regina University, Jan 24, 2003
49. "Integrating Sustainability and Social Entrepreneurship in Technical Programs" (Panel discussion), National Collegiate Inventors and Innovators Alliance, Annual Meeting, March 20-22, 2003
50. "Setting Up Small Businesses in Africa, Haffenreffer Museum of Anthropology, April 5, 2003
51. "Beyond Engineering: People and Insights" Integrating Sustainable-Appropriate Technology and Service Learning in Engineering Education, Sept 26-29, 2004, University of Colorado at Boulder