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ED 014 129

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BY- VINCENT, HOWARD L.

NATIONAL CENTER FOR EDUCATIONAL STATISTICS (DHEW)

REPORT NUMBER NCES-DOA-TN-2

PUB DATE 15 JUL 66

EDRS PRICE MF-\$0.25 HC-\$0.44 9P.

DESCRIPTORS- *BIBLIOGRAPHIES, *ECONOMICS, *OPERATIONS
RESEARCH, *EDUCATIONAL PROBLEMS, *EDUCATIONAL PLANNING,
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Howard L. Vincent

**Technical Note
Number 2**

July 15, 1966

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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BOOKS

- ABT Associates, Inc. Survey of the State of the Art: Social, Political, and Economic Models and Simulations. A report for the National Commission of Technology, Automation, and Economic Progress. Cambridge, Massachusetts: November 1965.
- Anderson, C.A. and Bowman, M.J. Education and Economic Development. Chicago: Aldine Publishing Co., 1965.
- Bancroft, Gertrude. The American Labor Force. New York: John Wiley and Sons, Inc., 1958.
- Becker, Gary S. Human Capital. Princeton: Princeton University Press, 1965.
- Bell, Chauncey F. Cost-Effectiveness Analysis as a Management Tool. Santa Monica, California: Rand Corporation, 1964, (Paper, AS36.R331.P2988).
- Bruner, Jerome. The Process of Education. Massachusetts: Harvard University Press, 1963.
- Correa, Hector. The Economics of Human Resources. Amsterdam: North Holland Publishing Co., 1963.
- Denison, Edward. The Sources of Economic Growth in the United States and the Alternatives Before Us. New York: Committee for Economic Development, 1962.
- Dorinan, Robert (Ed.) Measuring Benefits of Government Investments. Washington, D.C.: Brookings Institution, 1963.
- Eckstein, Otto. Public Finance. Englewood Cliffs, N.Y.: Prentice-Hall, 1964.
- Eckstein, Otto. Water-Resources Development - The Economics of Project Evaluation. Massachusetts: Harvard University Press, 1961.

- Harbison, Frederick and Myers, Charles. Education, Manpower and Economic Growth: Strategies of Human Resources Development. New York: McGraw-Hill, 1964.
- Harbison, F. and Myers, C. A. Manpower and Education. New York: McGraw-Hill Book Co., 1965.
- Harris, Seymour E. Higher Education: Resources and Finance. New York: McGraw-Hill, 1962.
- Harris, Seymour E. The Economics of Higher Education. New York: Harper and Bros., 1961
- Hirsch, W. Z. Education in the Program Budget. RM-4333-RC, Santa Monica, California: The Rand Corp., 1965.
- Hirsch, Werner Z. and others. Spillovers of Public Education Costs and Benefits. Los Angeles: Institute of Government and Public Affairs, University of California, 1964.
- Kershaw, Joseph A. and McKean, Roland N. System Analysis and Education. Santa Monica, California: Rand Corporation, 1959. (AS 36 R333 RM2473-FF)
- Knair, Owen A. (Ed.) Long-Range Planning in Higher Education. Boulder, Colorado: Western Interstate Commission for Higher Education, 1965.
- Koenig, H.E., and Keeney, M.G. A System Approach to Higher Education. Michigan: Michigan State University, Division of Engineering Research, May 1966
- Lebergott, Stanley. Manpower in Economic Growth. New York: McGraw-Hill, 1964.
- Machlup, Fritz. The Production and Distribution of Knowledge in the United States. New Jersey: Princeton University Press, 1962.
- McCullough, J.D. Cost Effectiveness: Estimating Systems Costs. Bethesda, Md.: Rand Corporation, 1965.
- Morgan, J. N., David, M. H., Cohen, W. J., and Brazer, H. E. Income and Welfare in the United States. New York: McGraw-Hill, 1962.
- Mushkin, Selma. Economics of Higher Education. Washington: Department of Health, Education and Welfare, Office of Education, U.S. Government Printing Office, 1962.
- National Society for the Study of Education. Social Forces Influencing American Education. Chicago: University of Chicago Press, 1961.
- Novick, David. Concepts of Cost for Use in Studies of Effectiveness. Santa Monica, California: Rand Corporation, 1957. (UG633,N61)

- Novick, David. Efficiency and Economy In Government Through New Budgeting and Accounting Procedures. Santa Monica, California: Rand Corporation, 1954. (HJ2051.N6a)
- Novick, David. Program Budgeting: Program Analysis and the Federal Budget. Massachusetts: Harvard University Press, 1965.
- Orcutt, Guy H., and Others. Microanalysis of Socioeconomic Systems. A Simulation Study, New York: Harper and Row, 1961.
- Organization for Economic Co-operation and Development. Economic Aspects of Higher Education. Paris: 1964.
- Organization for Economic Co-operation and Development. Economic Models of Education. Paris: 1965.
- Organization for Economic Co-operation and Development. Forecasting Educational Needs For Economic and Social Development. Paris: 1962.
- Organization for Economic Co-operation and Development. Planning Education for Economic and Social Development. Paris: 1962.
- Organization for Economic Co-operation and Development. The Residual Factor and Economic Growth. Paris: 1965.
- Quade, E.S. Analysis for Military Decisions. Santa Monica, California: Rand Corporation, 1964. (R-387-PR)
- Quade, E.S. Cost-Effectiveness Analysis: An Introduction and Overview. Santa Monica: Rand Corporation, 1965. (AS36.R331 P3134).
- Sasiemi, Maurice, Yaspan, Arthur and Friedman, Laurence. Operations Research - Methods and Problems. New York: John Wiley & Sons, Inc., 1965.
- Schultz, Theodore. The Economic Value of Education. New York: Columbia University Press, 1963.
- Sheldon, Bernert Elenor and Glazier, Raymond A. Pupils and Schools in New York City - A Fact Book. New York: Russel Sage Foundation, 1965.
- Smithier, Arthur. A Conceptual Framework for the Program Budget. Santa Monica, California: Rand Corporation, 1964. (AS36.R333 RM 4271-RC)
- Smithier, Arthur. Government Decision Making and the Theory of Choice. Santa Monica, California: Rand Corporation, 1964. (AS36.R331 P2960)
- Syracuse University. The Economics and Politics of Public Education Series. New York: Syracuse University Press, Vol. 1-12, 1963.

UNESCO. Economic and Social Aspects of Educational Planning. Paris: Unesco, 1964.

UNESCO. Perspectives of Educational Development in Asia. Conference of Ministers of Education and Economic Planning of Member States in Asia, Paris: Unesco, 1965.

Universities - National Bureau Committee for Economic Research. Public Finances: Needs, Sources, and Utilization. Princeton: Princeton University Press, 1961.

Weisbrod, Burton A. External Benefits of Public Education. Princeton: Princeton University Press, 1964.

Wolfbein, Seymour L. Employment and Unemployment in the United States. Chicago: Science Research Association, 1964.

JOURNAL ARTICLES

Alterman, Jack. "Interindustry Employment Requirements", Monthly Labor Review. July 1965, pp. 841-850.

Alterman, Jack. "Studies of Long-Term Economic Growth", Monthly Labor Review. August 1965, pp. 983-987.

Arrow, Kenneth J. "Criteria for Social Investment", Water Resources Research. Vol. 1, First quarter 1965, pp. 1-8.

Arrow, Kenneth J. "The Economic Implications of Learning by Doing", Review of Economic Studies. June, 1962, pp. 155-173.

Becker, Gary S. "Investment in Human Capital: A Theoretical Analysis", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1962, pp. 9-49.

Becker, Gary S. and Chiswick, Barry R. "Education and the Distribution of Earnings", American Economic Review, Paper and Proceedings of the 78th Annual Meeting, Vol. LVI, May 1962, pp. 358-369.

Blaug, M. "The Rate of Return On Investment in Education in Great Britain", The Manchester School. Vol. XXXIII, No. 3, September 1965.

Bolt, R., Koltun, W. L., and Levine, O. H. "Doctoral Feedback into Higher Education," Science. Vol. 148, May 14, 1965.

Borus, Michael E. "A Benefit-Cost Analysis of the Economic Effectiveness of Retraining the Unemployed," Yale Economic Essays. Fall 1964, Vol. 4, pp. 371-429.

- Bowen, William C. and Finegan, Aldrich T. "Educational Attainment and Labor Force Participation", American Economic Review, Paper and Proceedings of the 78th Annual Meeting. Vol. LVI, May 1966, pp. 567-582.
- Chance, W.A. "Long-Term Labor Requirements and Output of the Educational System", Southern Economic Journal. Vol. XXXII, No. 4, April 1966.
- Ciriacy-Wantrup, S.V. "Benefit-Cost Analysis and Public Resources Development", Journal of Farm Economics. Vol. 37, Nov. 1955, pp. 676-689.
- Davis, James A. "Higher Education: Selection and Opportunity", The School Review. Vol. 71, No.3, Autumn 1963, pp. 249-265.
- Davison, William I. "Public Investment Criteria", Land Economics. Vol. 40, May 1964, pp. 153-162.
- Denison, Edward F. "Education, Economic Growth, and Gaps in Information", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1962, pp. 124-128.
- Eckstein, Otto. "Investment Criteria for Economic Development and the Theory of Intertemporal Welfare Economics", Quarterly Journal of Economics. Vol. 71, Feb. 1957, pp. 56-85.
- Economic Council of Canada. "Education and Economic Growth in Canada", Monthly Labor Review. April 1966, pp. 377-380.
- Enthoven, Alain C. "Economic Analysis in the Department of Defense", American Economic Review. Vol. 53, May 1963, pp. 413-423.
- Faluvergi, L. "The Planning of Budgetary Expenditure on Education on the Basis of a Mathematical Model - The Method Employed in Hungary", Journal of Public Finance. Vol. XXI, No.1, 1966.
- Feldstein, Martin S. "Opportunity Cost Calculation in Cost-Benefit Analysis", Public Finance. Vol. 19, 1964, pp. 117-139.
- Feldstein, Martin S. "The Social Time Preference Discount Rate In Cost-Benefit Analysis", Economic Journal. Vol. 74, June 1964, pp. 360-379.
- Folger, John K. and Nam, Charles B. "Trends in Education in Relation to the Occupational Structure", Sociology of Education. Vol. 36, No.1, Fall 1964, pp. 19-33.
- Goode, Richard B. "Tax Treatment of Individual Expenditures for Education and Research", American Economic Review, Papers and Proceedings of the 78th Annual Meeting. Vol. LVI, May 1966, pp. 208-216.
- Hansen, W.L. "Total and Private Rates of Return to Investment in Schooling", Journal of Political Economy. Vol. LXXI, April 1963.
- Healy, Francis X. "A Method of Analysis for Municipal Investment in Urban Renewal", Land Economics. Vol. 39, Aug. 1963, pp. 313-319.

- Hiner, Lawrence G. "The Hazards of Benefit-Cost Analysis As A Guide to Public Investment Policy", Public Finance. Vol. 17, No.2, 1962, pp. 101-117.
- Hirshleifer, Jack. "On the Theory of Optimal Investment Decisions", Journal of Political Economy. Vol. 66, Aug. 1958, pp. 329-352.
- Hunt, S.J. "Income Determinants for College Graduates and the Return to Educational Investment", Yale Economic Essays, Fall 1963.
- Intriligator, Michael D. and Smith, Bruce L.R. "Some Aspects of the Allocation of Scientific Effort Between Teaching and Research", American Economic Review, Paper and Proceedings of the 78th Annual Meeting. Vol. LVI, May 1966, pp. 494-507.
- Krutilla, John V. "Welfare Aspects of Benefit-Cost Analysis", Journal of Political Economy. Vol. 69, June 1961, pp. 226-235.
- Lassiter, Rog L. "The Association of Income and Education for Males by Region, Race, and Age", The Southern Economic Journal. Vol. XXXII, No.1, July 1965, pp. 15-22.
- Marglin, Stephen A. "The Opportunity Costs of Public Investment", Quarterly Journal of Economics. Vol. 77, May 1963, pp. 274-289.
- Miller, H.P. "Lifetime Income and Economic Growth", American Economic Review. Vol. LX, No. 4, Sept. 1965, pp. 834-844.
- Miller, W.L. "The Economics of Education in English Classical Economics", Southern Economic Journal. Vol. XXXII, No. 3, Jan. 1966.
- Mincer, Jacob. "On-the-Job Training: Costs, Returns, and Some Implications", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1962, pp. 50-79.
- Nelson, Richard R. and Phelps, Edmund S. "Investment in Humans, Technological Diffusion and Economic Growth", American Economic Review, Paper and Proceeding of the 78th Annual Meeting. Vol. LVI, May 1966, pp. 69-75.
- Page, David A. "Retraining Under the Manpower Development Act: A Cost-Benefit Analysis", Public Policy. Cambridge: Harvard University Press, 1964.
- Prest, A.R. and Turvey, R. "Cost Benefit Analysis: A Survey", The Economic Journal. Vol. LXXV, Dec. 1965, pp. 683-735.
- Schultz, Theodore W. "Reflections on Investment in Man", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1962, pp. 1-8.
- Sjaastad, Larry A. "The Costs and Returns of Human Migration", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1962, pp. 80-93.

- Smolensky, Eugene. "Investment in the Education of the Poor: A Pessimistic Report", American Economic Review, Papers and Proceedings of the 76th Annual Meeting. Vol. LVI, May 1966, pp. 370-378.
- Steiner, George. "Program Budgeting: Business Contribution to Government Management", Business Horizons. Spring 1965, Vol. 8, pp. 43-52.
- Stufflebine, Wm. Craig. "Institutional Elements in the Financing of Education", The Southern Economic Journal. Vol. XXXII, No. 1, July 1965, pp. 15-34.
- Swardloff, Sol. "Manpower Projections: Some Conceptual Problems and Research Needs", Monthly Labor Review. February 1966, pp. 138-143.
- Swift, H.J. and Weisbrod, B.A. "On the Monetary Value of Education's Inter-generation Effects", Journal of Political Economy. Vol. LXXIII, No. 6, Dec. 1965.
- Tropp, Asher. "The Social Function of Education Systems", Social and Economic Studies, Selected Papers on Education Presented at the 7th Latin-American Congress of Sociology, 1964.
- Vernor, R. "Comprehensive Model-Building in the Planning Process," Economic Journal, March 1966.
- Wiseman, Jack. "Cost-Benefit Analysis in Education", The Southern Economic Journal. Vol. XXXII, No. 1, July 1965, pp. 1-12.
- Weisbrod, Burton A. "Education and Investment in Human Capital", Journal of Political Economy. Vol. LXX, No. 5, Oct. 1965, pp. 106-123.
- Welch, Finis. "Measurement of the Quality of Schooling"; American Economic Review, Papers and Proceedings of the 78th Annual Meeting. Vol. LVI, May 1966, pp. 379-392.