TRAINING RESEARCH ABSTRACTS

Adeberg, Morton
"Industrial Training of the Hard-Core Unemployed"
Personnel, Vol. 45, No. 6, Nov.-Dec. 1969, pp. 22-27

The Boeing Company Vertol Division initiated a training program in August of 1968 for the purpose of training 100 male, hard-core unemployed adults from a North Philadelphia ghetto in semi-skilled jobs. This article discussed that program and some of the findings that were a result of the program: (1) Industry has a commitment to these people, (2) The problem of poverty is primarily in the black ghettos, and (3) The effect of ghetto conditions on the hard-core trainees' personality and attitudes. Also mentioned are several problems to be anticipated in training the disadvantaged. A realistic training program for these people would include: (1) remedial and basic education, (2) prevocational training, (3) pre-assignment training, (4) on-the-job training and (5) supportive services.

BACIE *Register of Programmed Instruction in the Field of Education and Training in Commerce and Industry*

Vol. 2, 1968. British Association for Commercial and Industrial Education, London, July 1968, 203 pp. (Abstracted in *Research in Education*, Educational Resources Information Center, Jan. 1970, Vol. 5, No. 1, p. 11)

"The British Association for Commercial and Industrial Education has included in its register of annotated programmed instructional materials: programs available in the United Kingdom; programs dealing with industrial and commercial training and related further education; and information as supplied by the authors or producers of programs. The areas covered are: chemistry; commercial subjects; computers; electricity; electronics; engineering; industrial processes and techniques; management subjects; mathematics; physics; police procedures; sales; training. Also included are a subject index and a list of producers, publishers, consultants, government departments and educational establishments."

Banister, R. E., S. L. Abbott, J. F. Schuster and P. G. Wells
"New Model for Teaching Auto Technology"
American Vocational Journal, Washington, D. C., Vol. 44, No. 3, Mar. 1969, pp. 68-71 (Abstracted in *CIRF Abstracts*, June 1969, Sec. 13, No. B 29604)

"This article discusses a new program which combines audio-visual learning with conventional teaching methods for the training of automobile maintenance personnel. Traditional instructional programs in automobile maintenance technology rely heavily on lectures, discussion, demonstrations, textbooks and practical work. In 1968 the Mount San Jacinto College introduced a new system into its instructional program for the preparation of competent garage mechanics and panel beaters. The new program was constructed to include audio-visual (film and tape multi-media units) sessions. The program was initiated: (1) to determine whether teaching machines would increase the efficiency of the teaching-learning process; (2) to develop a new training system for training garage mechanics and panel beaters; and (3) to involve teachers in the development of new teaching techniques. Evaluation is an integral part of the program. It involves a pre-test, continuous testing throughout the multi-media units, and a post-test. Teachers who have used the program at Mount San Jacinto feel that it not only increases student learning but also improves teaching skills."

GERALD H. WHITLOCK
Editor

WILLIAM L. COLLINS
Assistant

Benson, J.

"Utilizing Adjunct Programs for Flexible and Improved Instruction"

Journal of Industrial Teacher Education, Lafayette, Ind., Vol. 5, No. 4, Summer Issue 1968, pp. 27-32 (Abstracted in *CIRF Abstracts,* Vol. 9, 1970, Sec. 13, No. B 27423)

"This article describes an experiment carried out to evaluate the efficacy of a new use of programmed instruction – the adjunct program – in teaching manual skills. The purpose of the investigation was to study the effectiveness of linear programmed instruction sheets in the teaching of manipulative operations. Two experimental groups, one identified as T2 (adjunct program) and T3 (illustrated adjunct program), were evaluated and compared with a control group (T1) which utilized a standard operation sheet. The data were summarized by means of analysis of variance and the corresponding test for significance based on the F-distribution. No significant differences were found among the groups, T1, T2, and T3 on either the 'time required to complete the job' variable or the 'quality of the completed job' variable. Further conclusions are that the programmed materials utilized in the investigation had a positive effect in supplementing the group demonstration in the teaching of manipulative operations. Also previous research has indicated that illustrated programs are superior to non-illustrated programs in studies involving the learning of manipulative skills."

Unless you are completely satisfied with the performance of all your salesmen, you need SAM'S SECRET. This hard-hitting 10 minute sound/color film can help make your salesmen want to be super-salesmen, and achieve a higher score in the serious game of selling. See for yourself. $7.50 preview charge is applicable to rental, or purchase. Skeptical? Ask for our explanation of why SAM'S SECRET is called a "potent psychological tool."

portafilms management services

Sam's secret

4180 Dixie Hwy.
Drayton Plains, Mich. 48020
(313) 674-0489

Dwyer, Francis M., Jr.

"Adapting Visual Illustrations for Effective Learning"

Reprint from *Harvard Educational Review,* Vol. 37, No. 2, 1967, pp. 250-263 (Abstracted in *Research in Education,* Educational Resources Information Center, Vol. 4, No. 9, p. 48)

"Reports on the effectiveness of visual illustrations used in conjunction with oral instructions. Results indicate that the reduction of realistic detail in an illustration does not necessarily reduce its instructional effectiveness and in many cases improves it. There were also significant differences in the effectiveness of different types of instruction for different educational objectives. In the final analysis, it is probably necessary to determine what details are crucial cues for particular lessons."

Tell advertisers that you saw it in the

ASTD

Training and Development Journal

Hammerton, M.

Factors Affecting the Use of Simulators for Training

Medical Research Council, Cambridge, England, Apr. 1966, 4 pp. (abstracted in *U.S. Government Research and Development Reports,* Vol. 70, No. 1, Jan. 10, 1970, p. 31, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va., 22151)

"The paper reviews and discusses the implications of a series of experiments germane to the use of simulators for training purposes. Problems of measuring transfer of training are briefly discussed, and a series of nine experiments is summarized. Each of these experiments is concerned with visual or environmental factors which can affect the usefulness of a training simulator. The results obtained are discussed, and their limitations and fields of application are stated. A number of conclusions are presented, those chiefly of interest to designers and those chiefly of interest to users being given separately."

New ASTD Name Badges

Ready for Chapter Functions

Attractive new fabric, self-adhesive name badges for chapter use are now available from the National Office. Badges are white with ASTD emblem and lettering in blue and gold.

Price depends on quantity ordered:

1 to 99	10¢ each
100 to 199	8¢ each
200 to 499	6¢ each
500 or more	5¢ each

All orders must be pre-paid.

Be ready for coming chapter meetings and other functions. Order now!

ORDER DEPARTMENT

American Society for Training and Development

P.O. Box 5307, Madison, Wis. 53705

Please send:

_____ ASTD Name Badges $_____

Postage and handling .50

Amount enclosed $_____

to

Name_____

Title_____

Company_____

Address_____

City_____ State_____

Zip Code _____

Harding, Larry G., and Howard L. Fleischman

Aptitude Level and Consumer Acceptance of Programmed Instruction

Naval Personnel Research Activity, Navy Training Research Lab., San Diego, Cal., Oct. 1967, 20 pp. (Abstracted in *Abstracts of Research and Related Materials* in Vocational and Technical Education, Winter 1969, p. 345, ERIC Clearinghouse, Center for Vocational and Technical Education, Ohio State University, Columbus, Ohio)

"A 28-item attitude survey was administered to 347 enlisted men at the Aviation Mechanical Fundamentals School, Class A, Memphis, Tenn., to determine the degree of reaction to programmed instruction by aptitude levels. Scores from the General Classification Test or the Verbal Expression Test were used to identify four aptitude levels. Analysis of variance procedures was used to test for significance of difference. No differences in attitudes were detected between students of different aptitude levels. However, it was suggested that program effectiveness and student attitudes should be monitored as the number of programs increased. The attitude survey is included."

Higgins, W. H., Allen E. Ivey, and Max R. Uhlemann

"Media Therapy: A Programmed Approach to Teaching Behavioral Skills"

Journal of Counseling Psychology, Jan. 1970, Vol. 17, No. 1, pp. 20-26

"Media therapy is a video method of training clients in behavioral skills useful in daily interaction. This research studies the effectiveness of these training procedures in teaching dyads the skills of direct, mutual communications, skills closely related to those emphasized in encounter groups. Three approaches were used to teach these skills: (a) full treatment (media therapy); (b) programmed text and video models only; and (c) reading material only. The full treatment group showed the most improvement in amount of direct or mutual communication followed by the programmed group. Implications of the media therapy framework are discussed."

HumRRO *Bibliography of Publications* (as of June, 1969)

Human Resources Research Organization, 300 N. Washington St., Alexandria, Va. 22314, Sep. 1969, 314 pp.

"This bibliography has been compiled to provide as complete information as is feasible about HumRRO research publications and HumRRO research by-products. This information is intended for use by research and development personnel concerned with human factors problems, and operational personnel concerned with utilization of training and other research information and by-products. Researchers and users of research and development in the military services, other government agencies, and elsewhere concerned with training and other human factors research and development will find the bibliography a useful aid in their work."

Isely, Robert N., and Paul W. Caro, Jr.

"Use of Time-Lapse Photography in Flight Performance Evaluation"

Journal of Applied Psychology, Feb. 1970, Vol. 54, No. 1, pp. 72-76

"A time-lapse photographic technique for recording and scoring the inflight performance of helicopter aviator trainees during a hypothetical tactical instrument mission is described. Data were derived from 16mm films of the instrument panel readings of the TH-13T helicopter. Advantages, disadvantages, and other possible applications of the film technique are also discussed."

Jeffels, A.
"Engineering Apprentice Training: Programmed Learning Integrated With Skill Development"
Aspects of Educational Technology, 1969, London, Methuen, 671 pp., [cf. p. 383-386] (Abstracted in *CIRF Abstracts*, July 1969, Sec. 13, No. B 28624-2)

"This paper is concerned with the essential steps to be taken when introducing programmed learning into established training systems with regard to administrative problems, staff attitudes and trainee reaction. The methods used resulted in providing remedial action for individual trainees earlier and with better results. Further, specialist instructors were released from repetitive basic instruction and could concentrate on skill development and the average marks of the class rose."

Kress, Gerard C., Jr.
"A Study of the Effects of Administering Programmed Instruction to Interacting Groups"
Journal of Educational Psychology, 1969, Vol. 60, No. 4 (Part 1), pp. 333-338

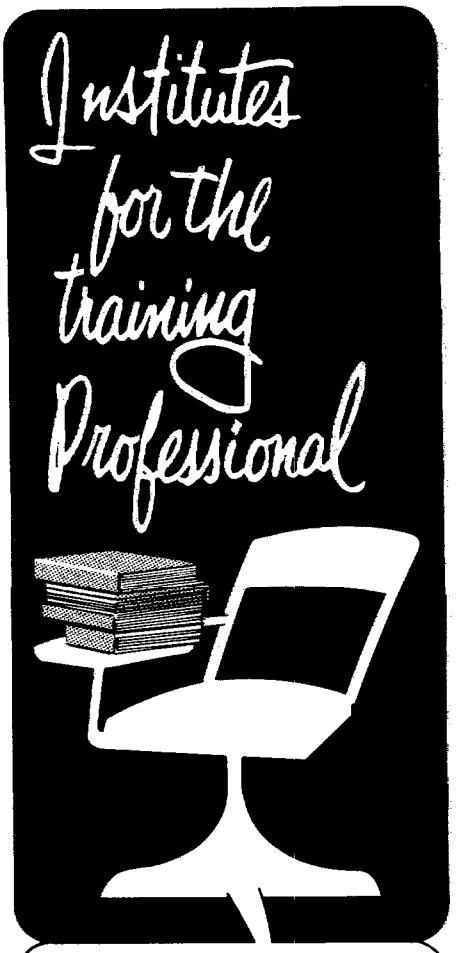
"166 11th graders completed a 660-frame program working either individually or in a group of four classmates constituted so as to be either homogeneous or heterogeneous in ability. Groups of each type worked under one of three conditions that provided for increasing degrees of social interaction: (1) group pacing, (2) group pacing and public confirmation and group discussion. Dependent measures included error rate, immediate and delayed proficiency scores, student attitudes, and completion time. Homogeneous and heterogeneous groups did not differ from each other on any dependent measure. The only observed differential effect of social interaction was in program completion time which tended to increase as the degree of interaction increased."

Lefkowitz, Joel
"Effect of Training on the Productivity and Tenure of Sewing Machine Operators"
Journal of Applied Psychology, Feb. 1970, Vol. 54, No. 1, pp. 81-86

"It was felt that a significant determinant of the high rate of personnel turnover among a population of female sewing machine operators was inadequate initial training. Two hundred eighty new trainees received either one, two or three days' vestibule training. The longer the training, the lower the turnover rate, but the lower the productivity as well. Both effects were statistically significant, but the effects on productivity were deemed of less practical significance. A fourth training group received three days integrated vestibule and on-the-job training and achieved the best balance of productivity and employee retention. The more difficult the operation on which a trainee was placed the more likely she was to terminate her employment. Another significant determinant of resignations was employees' encountering a job which was contradictory to their expectations."

Mathis, Arthur, Timothy Smith, and Duncan Hansen
"College Students' Attitudes Toward Computer-Assisted Instruction"
Journal of Educational Psychology, 1970, Vol. 61, No. 1, pp. 46-51

"Instruction in general psychology by computer (CAI) or reading was given to 64 college students. A modified Solomon four-group design was used to assess changes



- The Training Function
  Section A — July 19-24, 1970
  Section B — July 20-25, 1970
- Training Methods
  July 26-31, 1970
- Planning and Running Effective Management Development Courses
  July 19-24, 1970
- Management Development
  July 26-31, 1970

Held on the Madison Campus of University of Wisconsin. Sponsored by the American Society for Training and Development in cooperation with the Management Institute.

ASTD

☐ Please forward additional information and registration forms for the four Institutes for Training Professional to:

NAME _____
TITLE _____
AFFILIATION _____
CITY _____ STATE _____ ZIP _____

For additional information . . . clip and mail this coupon direct to ASTD, Program Department, P.O. Box 5307, Madison, Wis. 53705.

He left the company. For good. Like 25,000 other valuable employees who lost their lives last year in auto accidents.

Which has prompted a lot of businesses to set up the National Safety Council's Defensive Driving Course. A course that utilizes tested concepts and techniques of defensive driving that can dramatically reduce traffic accidents among your employees.

Western Electric has already trained hundreds of its employees how to drive and survive. So have other employee-conscious businesses like National Cash Register. Oklahoma Gas and Electric. And the Hartford Insurance Group.

You, too, will find it very profitable to set up your own Defensive Driving Course for your employees.

Because the best way to keep your workers working is to keep your workers alive.

Send for the survival course.

Special Projects—Public Information
National Safety Council
425 N. Michigan Ave.,
Chicago, Illinois 60611

advertising contributed for the public good.

Please mail me full details on the Defensive Driving Program.

Name_____

Title_____

Firm Name_____

Address_____

City_____

State_____ Zip_____

in attitude toward CAI as measured by a 30-item scale. Students were generally positive toward CAI but those that had experienced it were more positive than those who participated in the reading control group. Students who made many errors while being instructed by the computer were less positive toward it (r = -.49). Also students who recieved a CAI program or reading covering unfamiliar concepts rather than material on which they were to be tested that week were less positive. Pretesting had no effect on attitudes. The ease of programming a computer to provide errorless and relevant instruction is discussed."

Mesics, Emil, Comp. and Samuel Marcus, Comp.

The Hard-Core Unemployed, An Annotated Bibliography, Reference Memorandum Series

School of Industrial and Labor Relations at Cornell University, State University of New York, Ithaca, N.Y., Feb. 1969, 5 pp. (Abstracted in *Research in Education,* Educational Research Information Center, Vol. 5, No. 1, p. 119)

"Pertinent items having to do with national policy on hard-core unemployed and specific applications and techniques drawn from organizational experiences are identified. The compilers focused upon 1968 publications; the earliest publication data is 1964. The 41 entries are organized under the following headings: (1) Poverty in the Community and the Nation – The Hard-Core Unemployed, (2) Getting and Holding Jobs by the Hard-Core Unemployed, (3) Learning and Retraining Problems and (4) Experiences with Integrating the Hard-Core into Work Involvement."

Mitzel, Harold E., and Others

Experimentation With Computer-Assisted Instruction in Technical Education

Semi-Annual Progress Report, Computer Assisted Instruction Lab, Pennsylvania State University, University Park, June 30, 1967, 68 pp. (Abstracted in *Abstracts of Research and Related Materials* in Vocational and Technical Education, Winter 1969, p. 344, ERIC Clearinghouse, Center for Vocational and Technical Education, Ohio State University, Columbus, Ohio)

"Six research studies involving computer assisted instruction (CAI) are reported. 'Gradient and Full-Response Feedback in Computer-Assisted Instructions' did not substantiate the hypothesized advantage of gradient-response over full-response feedback on the basis of amount learned (n = 24). 'Relative Effectiveness of Various Modes of Stimulus Presentation through Computer-Assisted Instruction' reported no significant differences for audio, typed, or display modes of presentation, but all three were significantly better than no Instruction (n = 90). 'Expressed Student Attitudes under Several Conditions of Automated Programmed Instruction' reported the use of 'contingent prompting and feedback' and 'knowledge of correct response' computer-assisted instruction and a programmed text all containing the same program with 66 students in grades 9 and 10. A 40-item attitude scale revealed both methods resulted in significantly greater positive attitude than did the programmed text. 'Remedial and Review Branching in Computer-Assisted Instruction' contrasted branching and non-branching programs. Results from 42 students indicated no differences in learning but the branching program required more time. Two projects which are in progress on 'Numerical and Verbal Aptitude Tests Administered at the CAI Student Station' and CAI Time-Accounting and Usage Analysis' are reported."

Prather, Dick C.

The Effects of Trial and Error or Errorless Training on the Efficiency of Learning a Perceptual Motor Skill and Performance Under Transfer and Stress

Arizona State University, 1969, 73 pp. (Abstracted in *Dissertation Abstracts International*, A, Dec. 1969, Vol. 30, No. 6, p. 2385)

"96 student pilots at Luke AFB were randomly assigned to six groups. All Ss were trained on a range estimation problem with three groups given trial-and-error training with feedback and three groups given an errorless method of training in which error commission during training was almost impossible. After training, groups from each training method were compared on performance under transfer, stress and a combination of transfer and stress. Under both the stress and the transfer conditions, the trial and error Ss performed significantly better. There were no significant differences between the groups under a combination of transfer and stress. Overall performance by the trial-and-error Ss was superior to the errorless Ss on all experimentally produced conditions. The author concludes that trial-and-error is a superior method of training when compared with heavy prompting procedures if the task is one of difficult perceptual learning."

Renbarger, Ray N.

An Experimental Investigation of the Relationship Between Self-Esteem and Academic Achievement in a Population of Disadvantaged Adults

Michigan State University, 1969, 186 pp. (Abstracted in *Dissertation Abstracts International*, A, Dec. 1969, Vol. 30, No. 6, pp. 2318-2319)

"59 disadvantaged Negro women who were students in a clerical training program at the McNamara Skills Center in Detroit were divided into two experimental and two control groups in order to determine whether or not it was possible to influence the self-esteem of disadvantaged adults through guidance experiences and secondarily, to find out in what way and to what extent the academic achievement of these students is influenced as self-esteem is modified. Pre- and post-tests of self-esteem were obtained by use of the Tennessee Self-Concept Scale and a self-esteem inventory designed by the author. Academic achievement was measured by the Iowa Test of Basic Skills. A two-week group guidance experience was provided for the experimental groups. Results indicated that the guidance experiences had a negative influence on self-esteem and that there was a positive relationship between self-esteem and academic achievement. The data did not support the hypothesis that these disadvantaged students would score lower in self-esteem than a normal population."

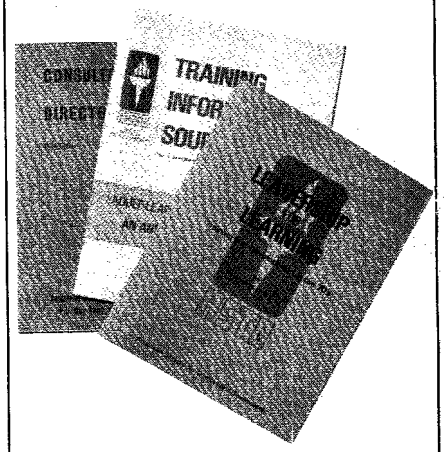
Romiszowski, A.

"The Use of Programmed Instruction in British Industry"

Aspects of Educational Technology, London, Methuen, 1969, 671 pp. (Abstracted in *CIRF Abstracts*, Vol. 9, 1970, Sec. 13, No. B 28624-1)

"This paper was presented at the Conference on Programmed Learning and Educational Technology held in the University of Glasgow from 5 to 8 April, 1968. It concerns a survey carried out to determine the general acceptance and usage pattern of programmed instruction in industry. Findings include the fact that the use of programs is continuing to expand, new applications of programmed instruction during 1967 were mainly in training areas other than draft apprentice training, most users became interested in programmed instruction either through an article in a magazine or by attending a conference, a trend is developing toward tailor-made programs to meet specific training needs of individual undertakings. Further, many firms do not

For Your Training Bookshelf



Leadership for Learning — Training and Development in the 70's, a thought-provoking collection of **Journal** President's Page articles by Gordon Lippitt, ranges from organization renewal topics to a time-use study. $1.75

ASTD Consultant Directory provides you with a handy listing of trainers available on a consulting basis in a wide range of training areas. $3.50

Volume I of **Training Information Sources** offers abstracts of recently published works on adult learning characteristics. $2.50

ORDER TODAY!

All orders must be prepaid. There will be an additional 50 cent postage and handling charge.

Enclosed find $_____, for _____

copies of the ASTD publication(s) _____

_____

_____

Name _____

Organization _____

Address _____

City _____ State _____ Zip _____

Send to: Order Department, ASTD
P.O. Box 5307
Madison, Wisconsin 53705