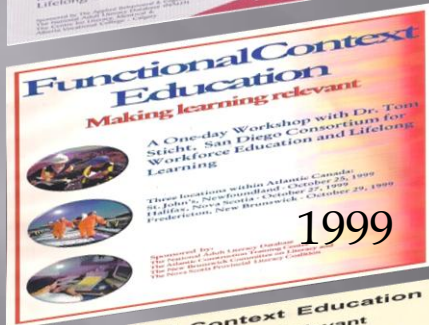
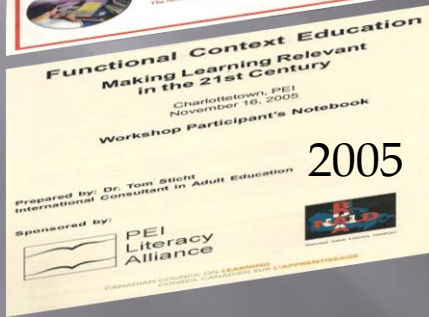


1997



1999

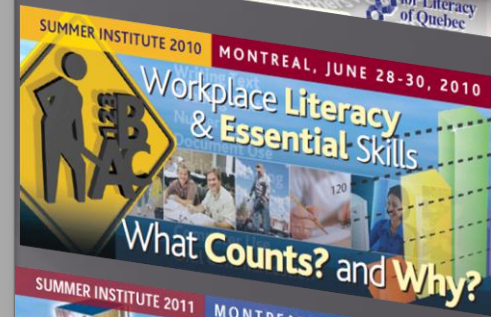
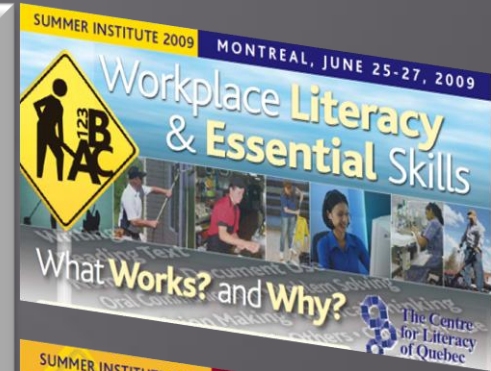


2005

Functional Context
Education
and Workplace
Literacy

Part 3

Tom Sticht
International Consultant in
Adult Education



Functional Context Education and Workplace Literacy

Schedule

Part 1. 09:00-10:30am Introduction to the workshop. Overview of theories, methods, and professional wisdom in the history of workplace literacy and FCE.

10:30-10:45 Break

Part 2. 10:45-12:00 Scientific research on FCE and workplace literacy leading to the National Workplace Literacy Program (NWLP) in the United States

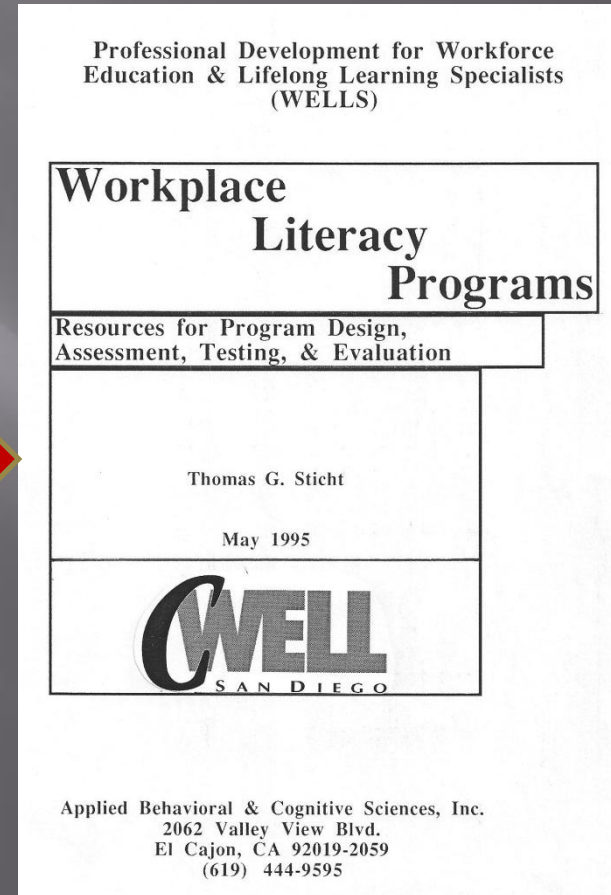
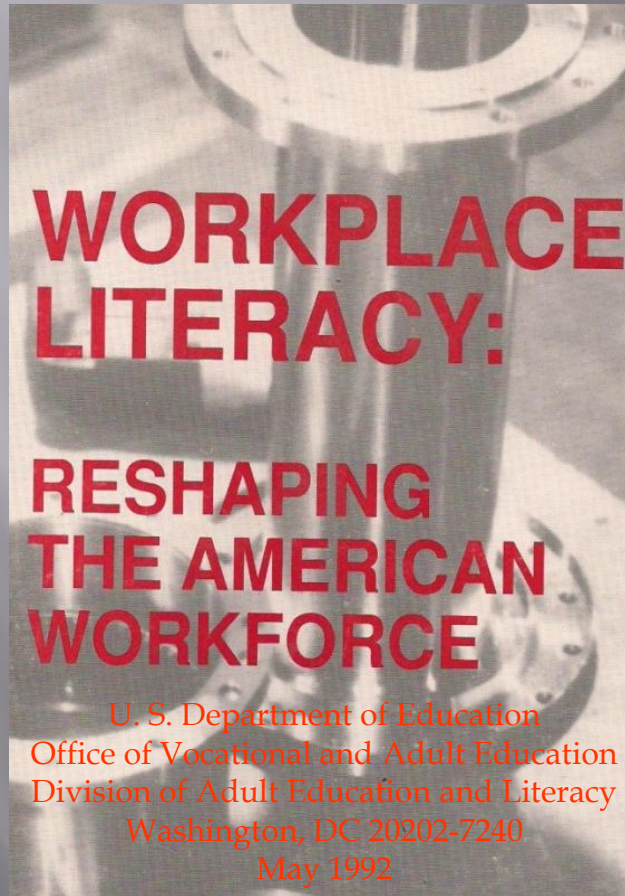
12:00-12:30pm Lunch

Part 3. 12:30-02:00 Workplace literacy and workforce development research and programs following the NWLP

02:00-02:15 Break

Part 4. 02:15-03:30 Contemporary projects on contextualizing and integrating program design and engaging employers and employees.

Functional Context Education and Workplace Literacy



Functional Context Education and Workplace Literacy



Promising Strategies for Involving Employers in Skills Development Efforts

Sectoral Training Programs

Sectoral training programs are another important strategy for involving employers in skill development. Interest in the sectoral approach is growing across the country, and several new initiatives have emerged in recent years. This strategy focuses on an industry or a small set of industries and develops industry-specific expertise that supports the design and operation of training programs.

WorkFORCE Education and Training

Incumbent Worker Training

One important strategy for strengthening employer involvement in training for low-skill workers is to improve the design of incumbent worker training programs to reach this population more effectively. This approach generally provides public funds (usually from employer taxes) to individual employers or a consortium of employers to upgrade the skills of current employees or train new hires.

WorkPLACE Education and Training

Functional Context Education and Workplace Literacy

Functional Context Education and Workplace Literacy

the bottom line

WHISTLER - Western Canada Workplace Essential Skills Training Network No 7, October 1997



Functional Context Education Explored

In early October, Dr. Tom Sticht facilitated a day-long workshop for a group of fifty educators in Calgary. The event was one of two Canadian appearances by Dr. Sticht to be sponsored by the National Adult Literacy Database, the Centre for Literacy at Dawson College, and AVC - Calgary.

From his early investigations in the San Diego Ship Yards, to his more recent work on workplace-to-work programs, Dr. Sticht has consistently brought rigorous psychometric research to bear on the task of workplace training. Despite a reputation as a voracious military trainer, Sticht's Calgary presentation revealed him to be a compassionate man who is concerned about the lives of the "left off" youth denied the opportunity for job training because of low literacy achievement. His own research has shown that people with lower levels of literacy can succeed in job-related training if functional context principles are followed.

In his presentation, Sticht explored the relationship between knowledge and skills, and emphasized the importance of task-ground knowledge to both learning and skills development. The lack of a meaningful context for much school-based instruction, he concluded, means that many students do not have the foundation upon which to build new knowledge. "By and large, we still do not teach literacy in a very functional way," he was forced to concede when questioned about changes in the school system over the last 20 years.

Dr. Sticht has recently completed a series of guides for occupational learning, which are available from McGraw-Hill (Clement Occupational Adult Learning Series).

Dr. Thomas Sticht takes a break during the intensive content education presentation at Alberta Vocational College - Calgary

Professional Development for Workforce Education & Lifelong Learning Specialists (WELLS)

Workplace Literacy Programs

Resources for Program Design, Assessment, Testing, & Evaluation

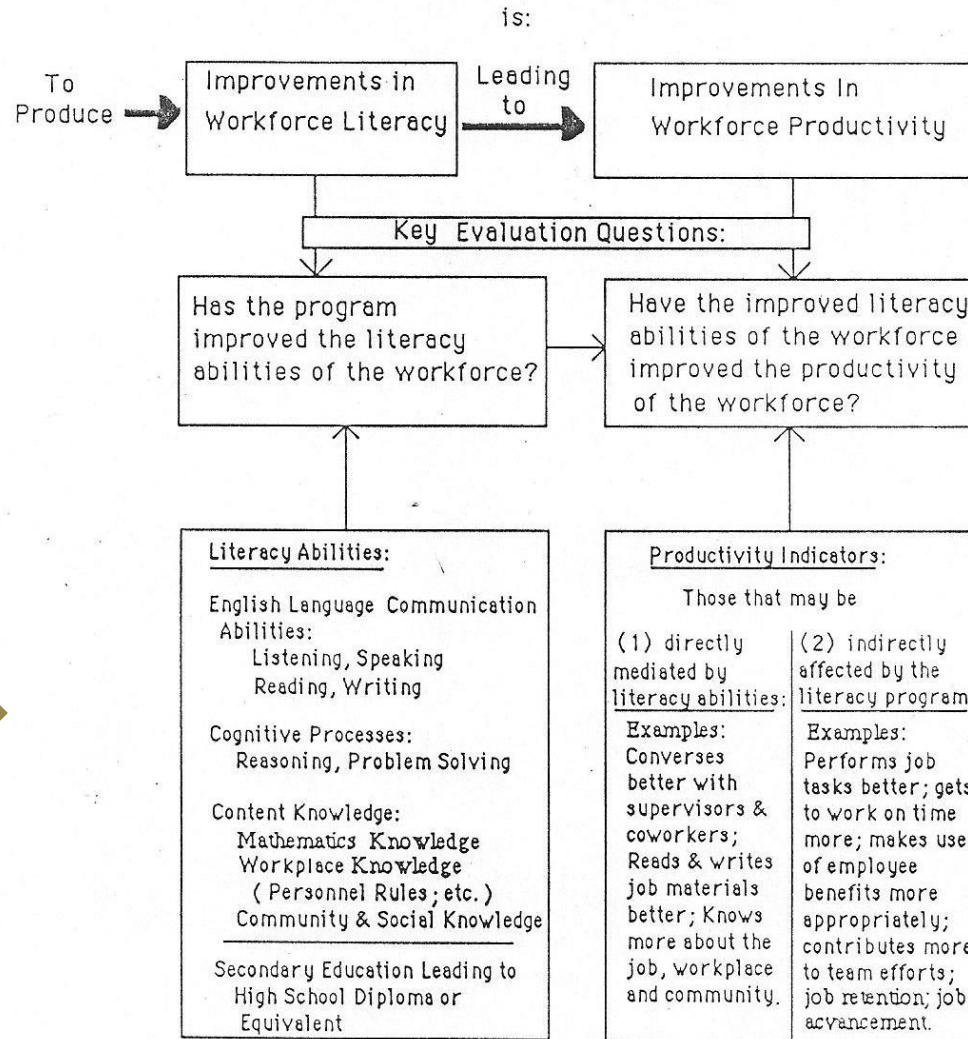
Thomas G. Sticht

May 1995



Applied Behavioral & Cognitive Sciences, Inc.
2062 Valley View Blvd.
El Cajon, CA 92019-2059
(619) 444-9595

The Purpose of the National Workplace Literacy Program is:



Functional Context Education and Workplace Literacy

Evaluating Workplace Literacy Programs

2010



John Benseman



INTERNATIONAL SPECIAL REPORT



Transferring literacy skills in the workplace

John Benseman describes a study from New Zealand that assesses whether lessons learnt in the classroom reach the workplace

Four levels

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(1) Kirkpatrick, J. and Kayser Kirkpatrick, W. (2009) *The Kirkpatrick four levels: a fresh look after 50 years, 1959–2009*. www.managesmarter.com/managesmarter/images/pdfs/trg_20090417_kirkpatrickwhitepaper.pdf

Functional Context Education and Workplace Literacy

Job-Linked Literacy: Innovative Strategies at Work

Part I

Vestibule Training:
Basic Skills for New Hires

A Work in America Institute
National Policy Study



The Productivity Forum

Allied-Signal Aftermarket Filter Division/Fram
East Providence, Rhode Island

American Airlines
Dallas, Texas

American Express Company
New York, New York

American Federation of Labor and Congress of Industrial Organizations
Washington, DC

American Federation of State, County, and Municipal Employees, District Council #37
New York, New York

American Federation of Teachers
Washington, DC

American Telephone and Telegraph
Morristown, New Jersey

Ameritech
Chicago, Illinois

BellSouth Corporation
Atlanta, Georgia

Black and Decker Corporation
Towson, Maryland

The Boeing Company
Seattle, Washington

Bristol-Myers Squibb Company
New York, New York

Caterpillar Inc.
Peoria, Illinois

Champion International Corporation
Stamford, Connecticut

CIBA-GEIGY Corporation
Ardley, New York

Communications Workers of America
Washington, DC

Deere & Company
Moline, Illinois

Eastman Kodak Company
Rochester, New York

Exxon Corporation
New York, New York

General Electric Company
Bridgeport, Connecticut

General Motors Corporation
Detroit, Michigan

International Union of Bricklayers & Allied Craftworkers
Washington, DC

International Brotherhood of Electrical Workers
Washington, DC

International Ladies' Garment Workers' Union
New York, New York

Johnson & Johnson International
New Brunswick, New Jersey

Leggeway Transportation Corporation Specialized Transportation Group
Birmingham, Michigan

LTV Steel Company
Cleveland, Ohio

Merck & Company, Inc.
Rahway, New Jersey

Metropolitan Transportation Authority
New York, New York

Miller Brewing Company
Milwaukee, Wisconsin

Minnesota Power
Duluth, Minnesota

Motorola Inc.
Schaumburg, Illinois

National Association of Letter Carriers
Washington, DC

NBC Inc.
New York, New York

Nestle Enterprises, Inc.
Purchase, New York

New England Medical Center
Boston, Massachusetts

New York City Department of Sanitation
New York, New York

New York City Human Resources Administration
New York, New York

New York City Mayor's Office of Operations
New York, New York

New York State Department of Civil Service
Albany, New York

New York State Department of Labor
Albany, New York

New York State Governor's Office of Employee Relations
Albany, New York

New York State Office of Mental Retardation and Developmental Disabilities
Albany, New York

Phillip Morris USA
New York, New York

Potlatch Corporation
Lewiston, Idaho

Public Employee Department, AFL-CIO
Washington, DC

Sarnia Manufacturing Centre, Shell Canada Limited
Corunna, Ontario

Saturn Corporation
Spring Hill, Tennessee

Scott Paper Company
Philadelphia, Pennsylvania

Service Employees International Union
Washington, DC

Southwestern Bell Telephone Company
St. Louis, Missouri

State University of New York, Nelson A. Rockefeller College of Public Affairs & Policy
Albany, New York

The Travelers Companies
Hartford, Connecticut

United Automobile Workers of America
Detroit, Michigan

United States Postal Service
Washington, DC

United Steelworkers of America
Pittsburgh, Pennsylvania

Weirton Steel Corporation
Weirton, West Virginia

1991-93 Functional Context Education and Workplace Literacy Disseminated to Fortune 500 Companies

Job-Linked Literacy: Innovative Strategies at Work

Part II

Meeting the Challenge of Change:
Basic Skills for a Competitive Workforce

A Work in America Institute
National Policy Study

Job-Linked Literacy: Innovative Strategies at Work

Part III

Moving Ahead:
Basic Skills for Career Advancement

A Work in America Institute
National Policy Study

Functional Context Education and Workplace Literacy

Three Uses of Workplace Literacy Education

Workplace Literacy
For Transitioning
New Hires Into
Employment



Workplace Literacy
for Helping Employees
Meet New Demands of
Workplace Change



Workplace Literacy for
Helping Employees
Gain Upward Mobility
in Their Employment



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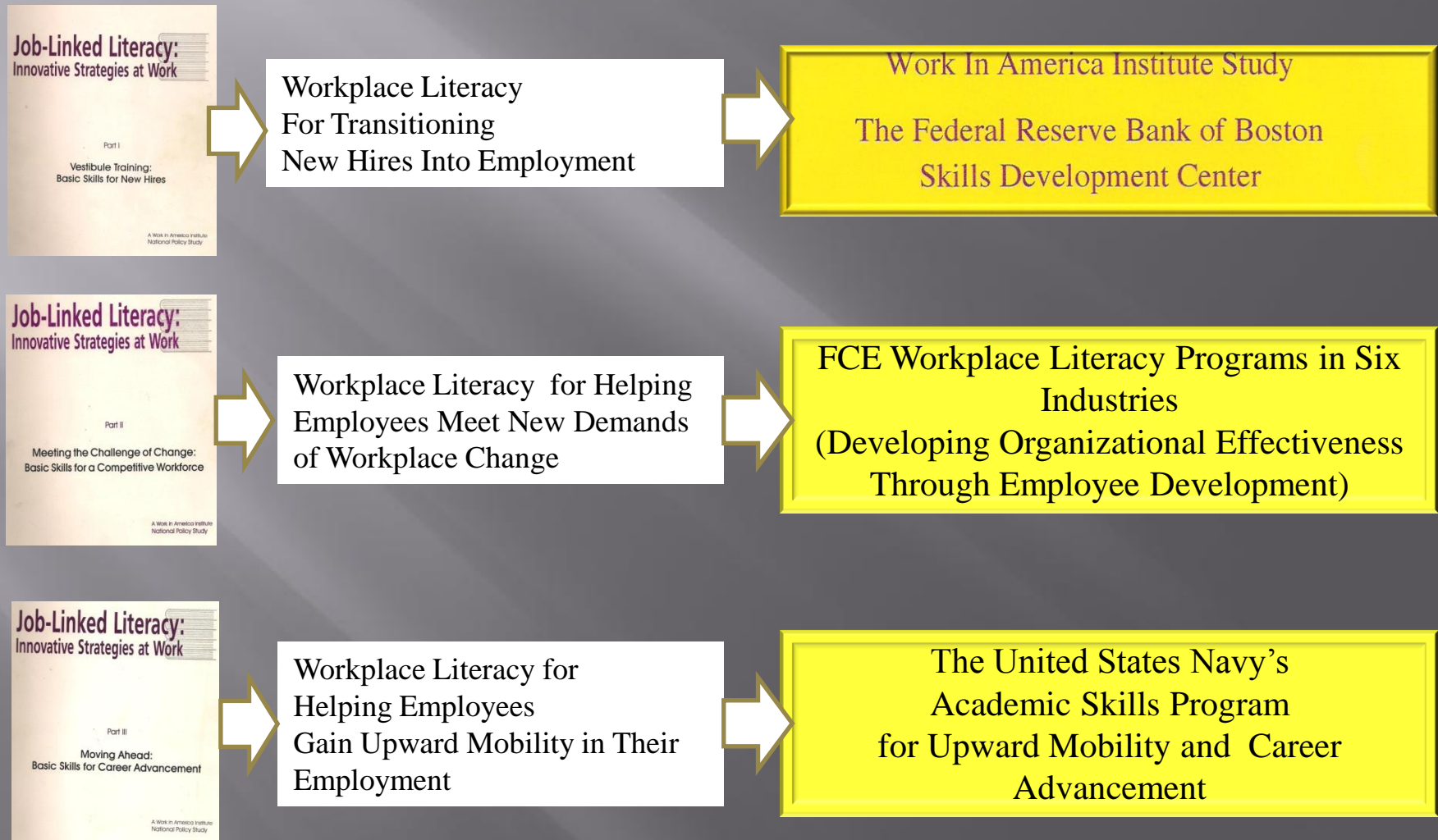
Part III

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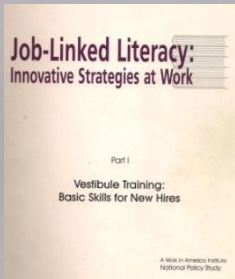
A Work in America Institute
National Policy Study

Functional Context Education and Workplace Literacy

Three Workplace Literacy Programs



Functional Context Education and Workplace Literacy



Workplace Literacy
For Transitioning
New Hires Into Employment

Work In America Institute Study

The Federal Reserve Bank of Boston
Skills Development Center

Work In America Institute Study

The Federal Reserve Bank of Boston
Skills Development Center

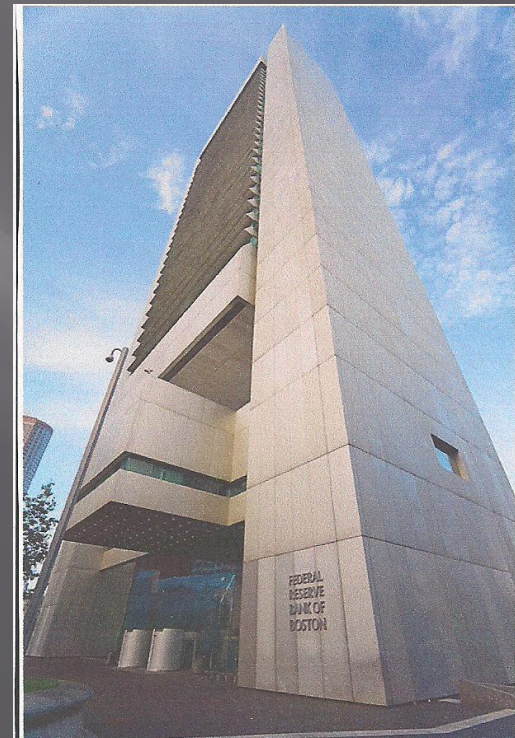
Problem: Recruiting sufficient qualified workers
in response to higher turnover rates

Response: Established the Skills Development Center
to train less educated and experienced new
hires in personal life management, basic
skills, and job skills for 6-12 months with
training pay and benefits

Students mostly young, minority, females

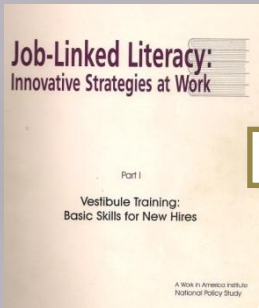
Train in an open classroom integrated into
the personnel department

Spend some time in work experience in
different bank departments



Federal Reserve Bank of Boston - 3/4

Functional Context Education and Workplace Literacy

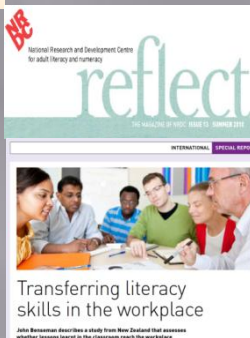


Workplace Literacy
For Transitioning
New Hires Into Employment

Work In America Institute Study
The Federal Reserve Bank of Boston
Skills Development Center



John Benseman



Transferring literacy skills in the workplace

Four levels

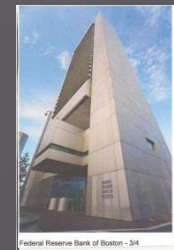
The project used Kirkpatrick's evaluation model, in which transfer of new LLN* skills back into the workplace equates with Level 3.

Level 4: Results	To what degree targeted outcomes occur, as a result of the learning event(s) and subsequent reinforcement.
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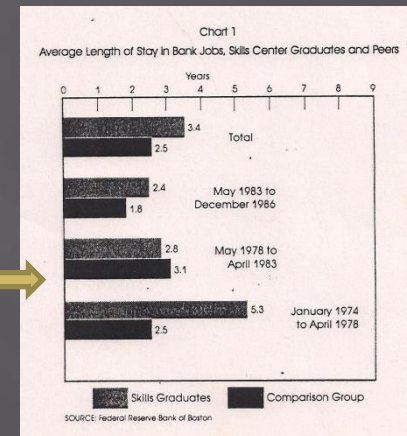
Work In America Institute Study
The Federal Reserve Bank of Boston
Skills Development Center

Outcomes:

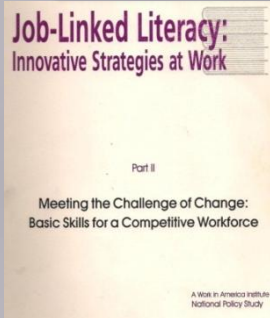
- Skills center trainees sometimes filled short term, temporary jobs in the bank thereby reducing costs by one-half for outside temporary workers
- Length of service longer than for fully qualified regular hires thereby reducing recruitment and replacement costs
- Out year wages of Center graduates were similar to those of fully qualified employees indicating comparable productivity and job performance
- 66% completed program



Federal Reserve Bank of Boston - 34



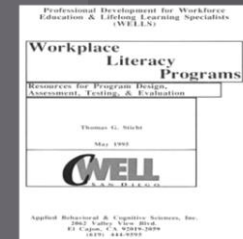
Functional Context Education and Workplace Literacy



Workplace Literacy for Helping Employees Meet New Demands of Workplace Change

FCE Workplace Literacy Programs in Six Industries
(Developing Organizational Effectiveness Through Employee Development)

Problem: Study of six industries in Chicago area found some 30-50 percent were lacking or weak in basic English, literacy, or mathematics skills needed to work in new Total Quality Management (TQM) environment.



Burgess-Norton Mfg. Co. develops and manufactures piston pins, shafts, powdered metal parts, castings and keys, and sub-assemblies.

ITT McDonnell & Miller manufactures boiler feeders, water cutoffs, steam vents and pressure regulators.

John Crane, Inc. manufactures mechanical cells for pump companies, the automotive industry, and other petroleum-related businesses.

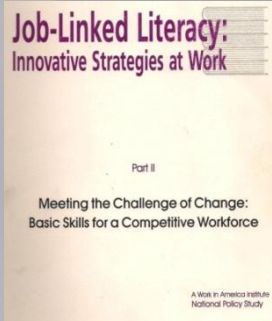
Phoenix Closures, Inc. develops, manufactures and markets closures, fitments and container sealing systems used in packaging a wide range of consumer, industrial and institutional products.

Tricon Industries, Inc. manufactures custom inserted molded components for the automotive industry and switches for the appliance industry.

Videojet Systems International is a subsidiary of A. B. Dick Company and manufactures continuous stream ink jet processing printers and specialty inks.



Functional Context Education and Workplace Literacy



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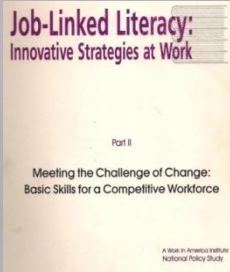
Linda
Mrowicki

Sarah
Newcomb

Approach: Workplace education programs were implemented that integrated work-related skills with language, literacy, or mathematics skills.

Each industry training site established an Employee/Employer Basic Skills Committee to make joint decisions on program design and implementation; a Site Coordinator was appointed; industry personnel worked with adult educators from a local government skills center who developed and delivered the program.

Functional Context Education and Workplace Literacy



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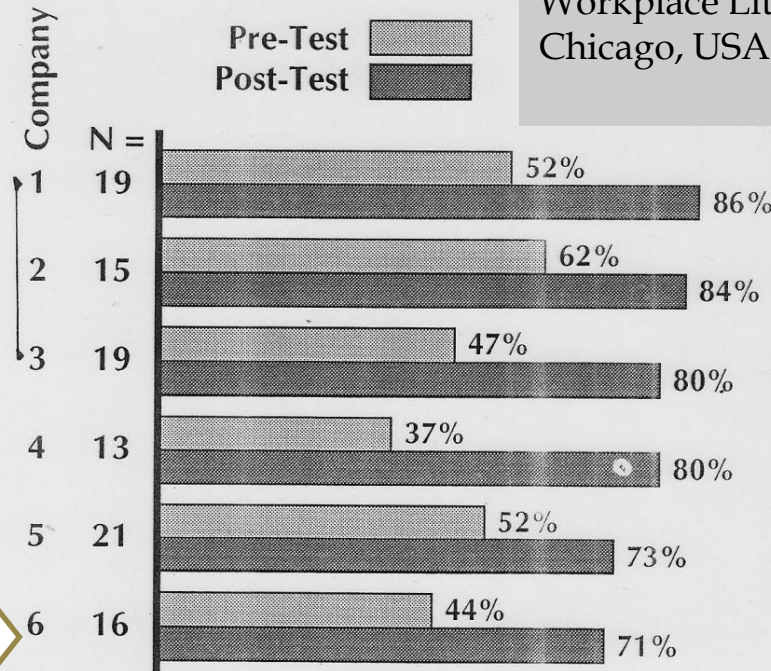
John Benseman



Four levels

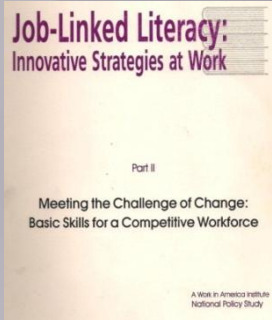
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Percent correct on job-related ESL / Literacy Tests

Functional Context Education and Workplace Literacy



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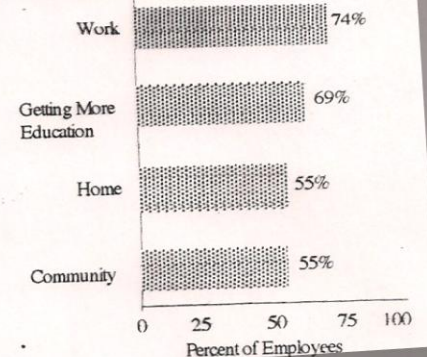


John Benseman

The majority of the employees themselves said that the workplace literacy programs had helped them not only at work, but also at home and in the community, and most were stimulated to seek further education.

Effects of Workplace Literacy Programs in the Chicago Area, 1994

Employees Reporting That Workplace Literacy Program Helped Them At



Four levels

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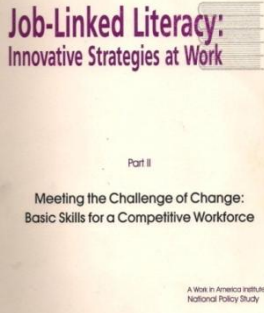
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Transferring literacy skills in the workplace

John Benseman describes a study from New Zealand that assesses whether lessons learnt in the classroom reach the workplace

Functional Context Education and Workplace Literacy



Workplace Literacy for Helping Employees Meet New Demands of Workplace Change

FCE Workplace Literacy Programs in Six Industries
(Developing Organizational Effectiveness Through Employee Development)

Outcomes: In all programs learners made significant gains in learning. Supervisors reported that the programs had a variety of positive effects on organizational effectiveness, including increased productivity, employees became easier to train, their job performance, safety, and communication improved, many became more promotable, and a third of them said their companies would continue the programs.



John Benseman

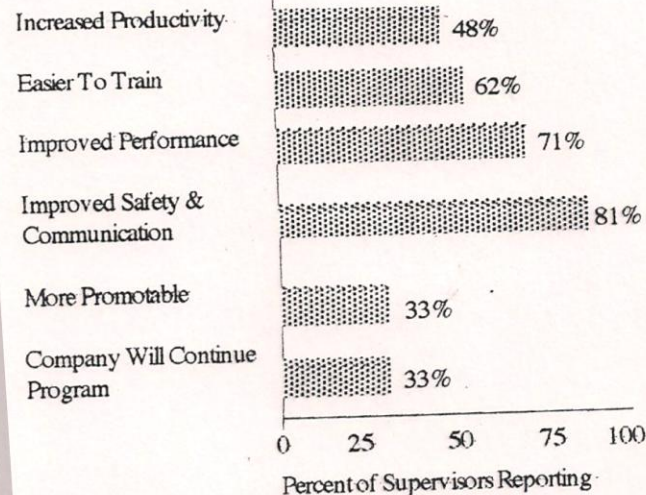


Four levels

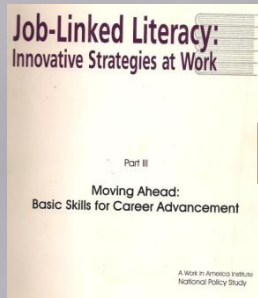
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Improvements to Organizational Effectiveness



Functional Context Education and Workplace Literacy



Workplace Literacy for
Helping Employees
Gain Upward Mobility in Their
Employment

The United States Navy's
Academic Skills Program
for Upward Mobility and Career
Advancement

United States Navy Academic Skills Program 2006

Problems: Low retention rates after first enlistment producing high recruitment replacement costs of some \$35,500 per new recruit

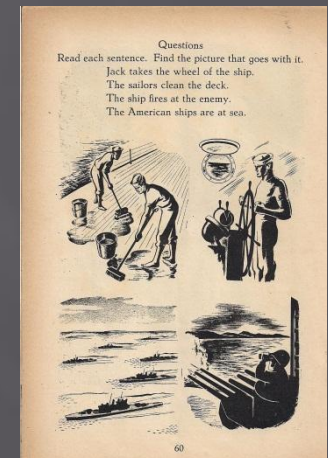
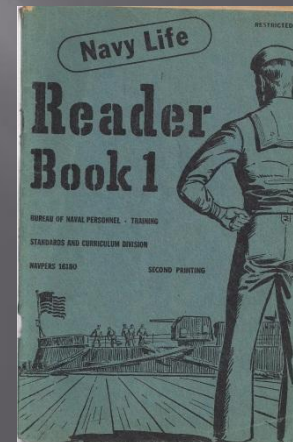
Excessive failure rates for promotion

Low rates of success in qualifying for cross-training into higher level jobs

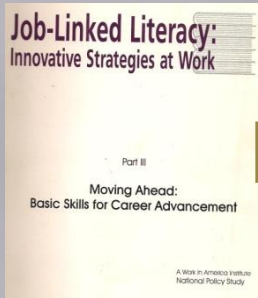
Approach: Implement Voluntary Education (VOLED) Off-Duty Academic Skills training programs using free self-paced software instruction in basic reading, writing, math and science, work skills



Teaching Navy Workplace Literacy in World War II 1945



Functional Context Education and Workplace Literacy



Workplace Literacy for
Helping Employees
Gain Upward Mobility in Their
Employment

The United States Navy's
Academic Skills Program
for Upward Mobility and Career
Advancement

United States Navy Academic Skills Program 2006

Outcomes

Reenlistment rates increased from 34 percent for those without Academic Skills (AS) training to 48 percent for those who completed AS training.

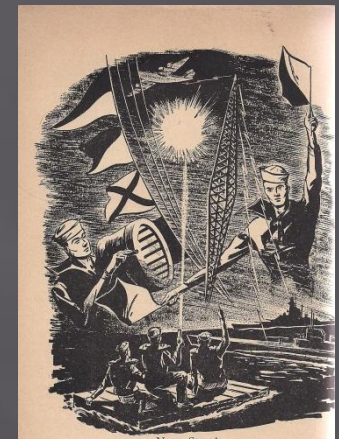
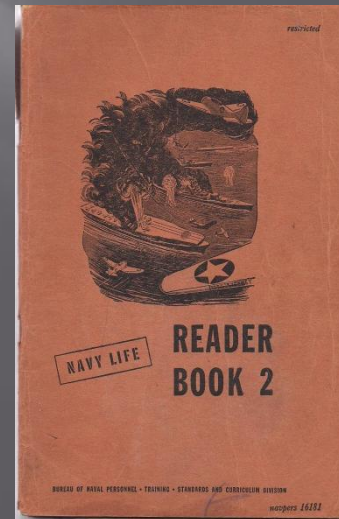
Each dollar in AS training returned \$14-22 dollars in recruitment/training savings

Promotability increased and cross-training qualifications increased from 6 percent for those not taking AS training to 18 percent for those completing AS training

Across the Department of Defense, enrollments in VOLED basic skills programs increased by over 50 percent from 26,136 in 1996 to 39,413 in 2000.



Teaching Navy Workplace Literacy in World War II 1945



Navy men have a number of ways of sending signals from one ship to other ships. They can send signals from ships to planes, too. They can send signals from the land to ships or the sea. They can send signals from the land to planes in the sky. And they can read these signals as well as you can read this book.

Functional Context Education and Workplace Literacy



Promising Strategies for Involving Employers in Skills Development Efforts

Sectoral Training Programs

Sectoral training programs are another important strategy for involving employers in skill development. Interest in the sectoral approach is growing across the country, and several new initiatives have emerged in recent years. This strategy focuses on an industry or a small set of industries and develops industry-specific expertise that supports the design and operation of training programs.

WorkFORCE Education and Training

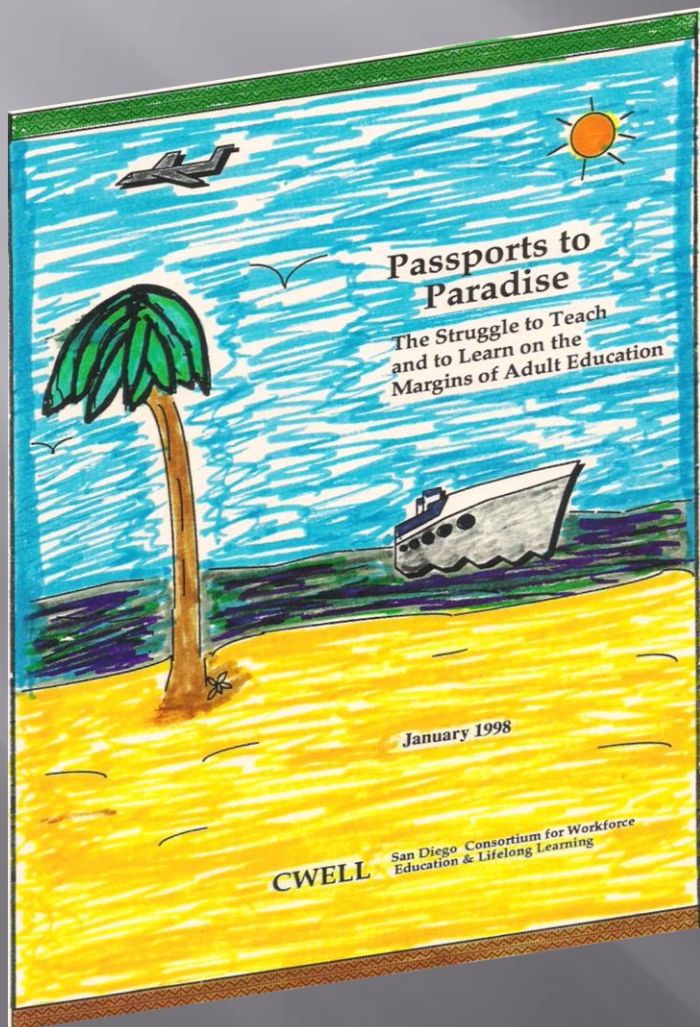
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WorkPLACE Education and Training

Functional Context Education and Workplace Literacy in Scientific Perspective

Sectoral Training in the San Diego Community College District
Division of Continuing Education



Wes Popham

Vocational English as a Second Language (VESL): Teaching English in Electronics Training. (1998)

1. ESL in the morning; Electronics Assembly (EA) Training in the afternoon
2. 10 weeks 9:30-11:30am VESL; 12-3:00pm EA
3. Multicultural; Multilevel
4. Students need to demonstrate a basic understanding and verbal proficiency in English for admission to training
5. High motivation seems to be a consistent factor for students attending training. Motivation is not so much to learn English, but to get a job, change jobs, have some money, support their family, make a better life, get off welfare, etc. In essence, students are not attending class to learn traditional English, but to get the necessary skills to obtain an electronic assembly or related job.
6. Actual assembly equipment and materials are used by the VESL instructor for demonstration of procedures and as props for learning and discussion.
7. *Scripted, Modular Sequence of Instruction*. Because training is open entry/open exit, students begin and complete training at various times throughout the ten weeks. Use of scripted, sequenced, modules of instruction allows students to arrive before or during a module that will be repeated for them at the end of approximately eight weeks. Students know where they are at any given time during the training process. The final stage of each module is a written test, called a quiz to keep test anxiety low.

Functional Context Education and Workplace Literacy in Scientific Perspective

Sectoral Training in the San Diego Community College District
Division of Continuing Education

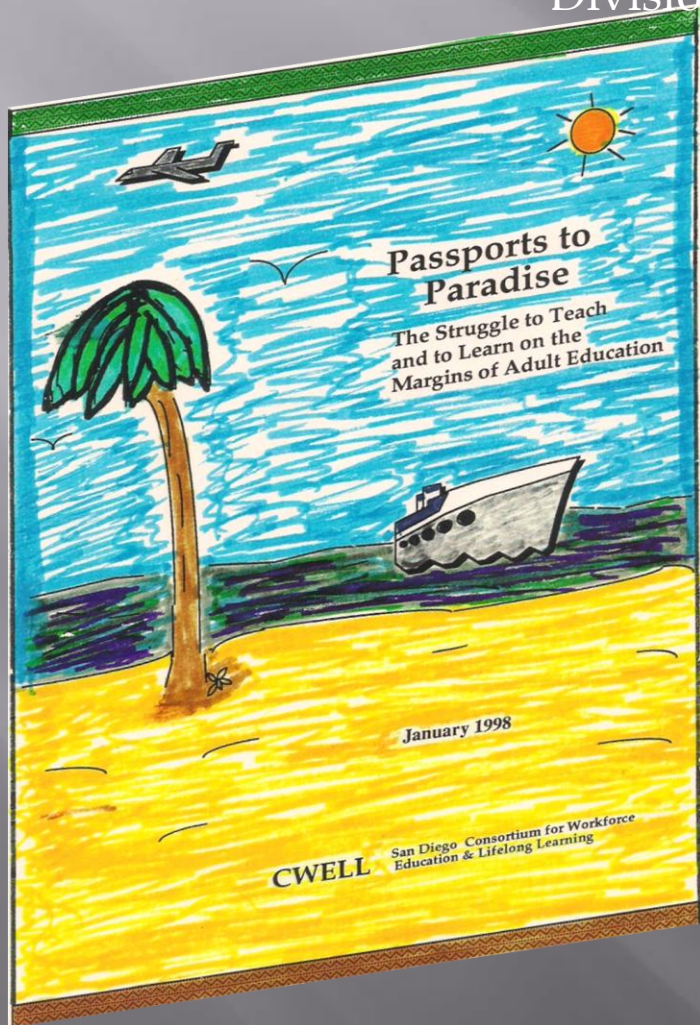
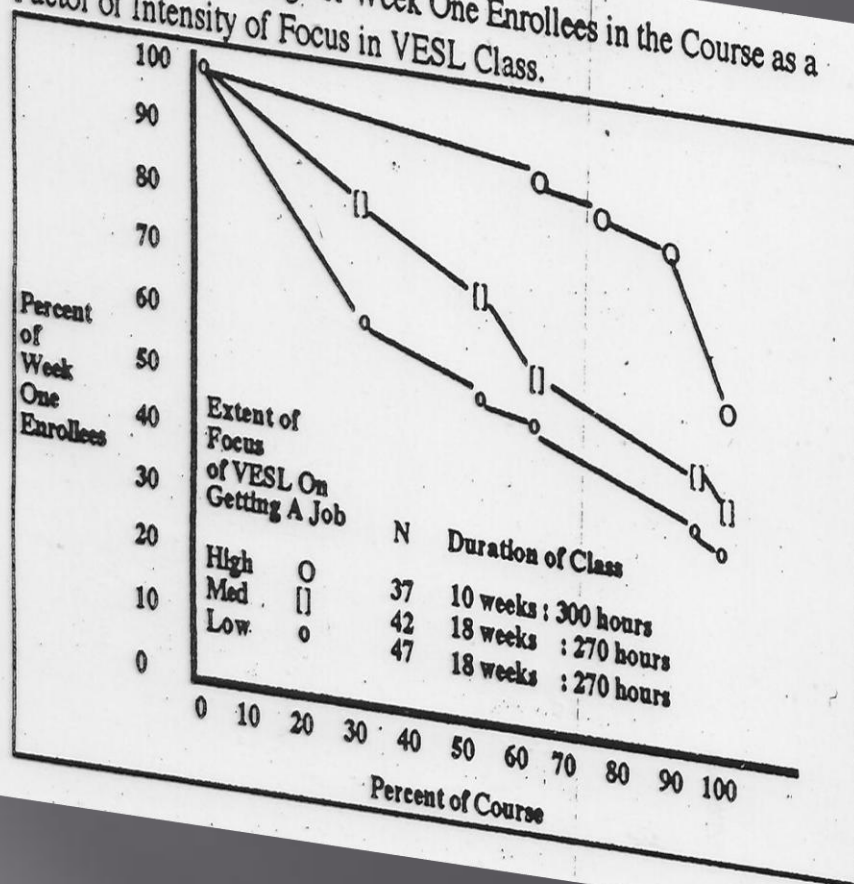
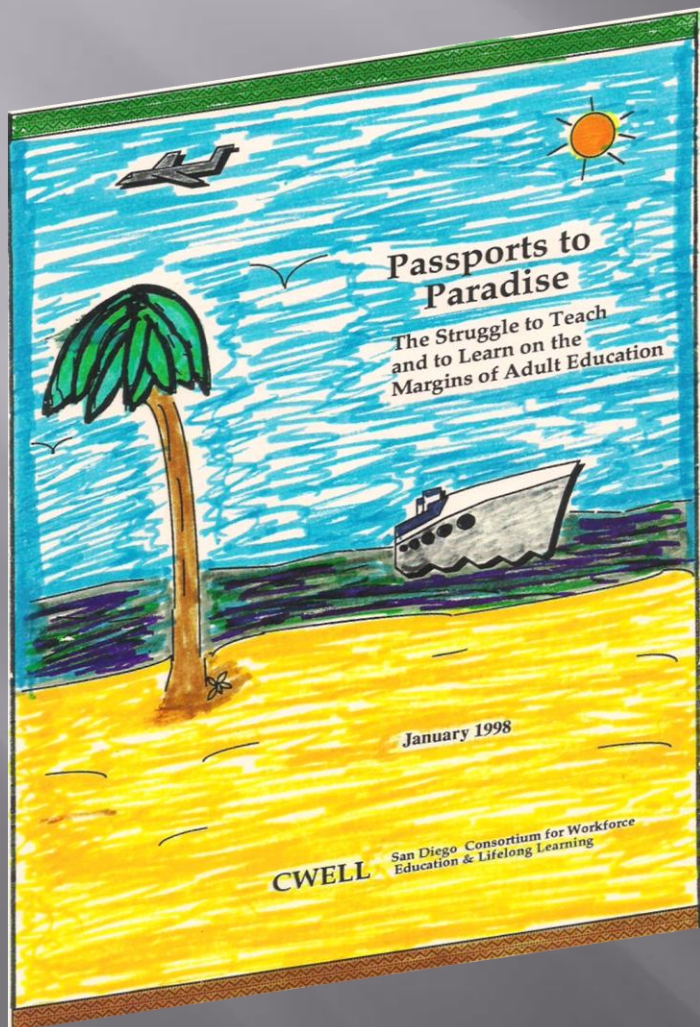


Figure 3. The Percentage of Week One Enrollees in the Course as a Factor of Intensity of Focus in VESL Class.



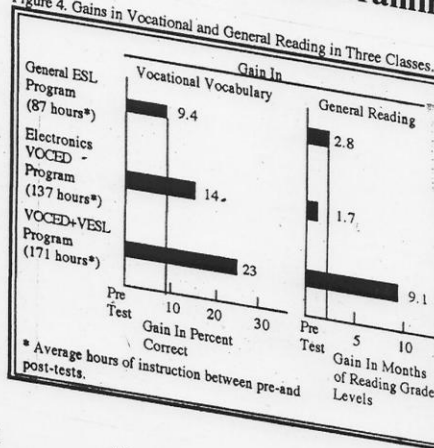
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Sectoral Training in the San Diego Community College District
Division of Continuing Education



Vocational English as a Second Language (VESL): Teaching English in Electronics Training. (1998)

Figure 4. Gains in Vocational and General Reading in Three Classes.



Instructional Program	Vocational Vocabulary Gain Per 100 Hrs Instr.	General Reading Gain Per 100 Hrs Instr.
General ESL	10.8	3.21
Electronics VOCEd	10.2	1.24
VOCEd+VESL	13.5	5.32

The rate of improvement in Vocational Vocabulary in the integrated VOCEd+VESL program was approximately 25-30 percent greater than that in either of the other two programs.

The VOCEd+Electronics VESL program shows a gain rate per 100 hours of instruction some 65 percent higher for General Reading than the general ESL program, and over 300 percent greater than the VOCEd program.



Functional Context Education and Workplace Literacy

Basic Skills at Work Programme United Kingdom 1991-1996

1991

Workplace Basic Skills Programs in the United Kingdom: Why so Few?

1991

Alan Wells

*Adult Literacy and Basic Skills Unit
London, UK*



Workplace Literacy 1996



CWELL Project Coordinator Tom Sticht with Mick Habgraft, Trade Union Representative at the Ford Motor Company, Dagenham, England

1999

Functional Context Education for Schoolplaces and Workplaces

1991

Thomas G. Sticht

Applied Behavioral & Cognitive Sciences, Inc.



Improving literacy and numeracy
A fresh start
The report of the working group chaired by Sir Claus Moser



Functional Context Education and Workplace Literacy

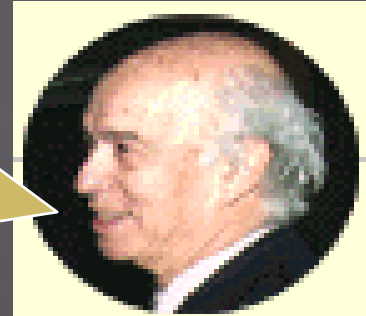
Basic Skills at Work Programme United Kingdom 1991-1996



Improving literacy and numeracy
A fresh start
The report of the working group chaired by Sir Claus Moser

26th February 1999

We met with Dr Thomas Sticht, a leading researcher on adult basic skills in the United States. ...and we were also helped by a discussion with Baroness Blackstone, the Minister for Further and Higher Education, at a Basic Skills Agency Board Meeting.



Chairman:
Sir Claus Moser
KCB CBE FBA



Functional Context Education and Workplace Literacy in Scientific Perspective

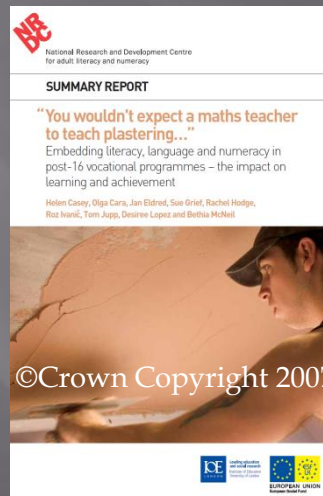
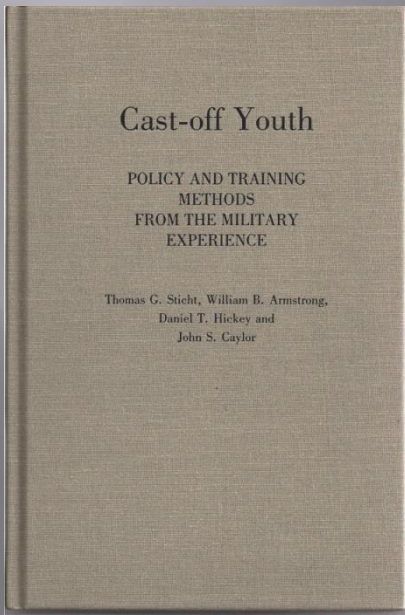
Improving literacy and numeracy
A fresh start
The report of the working group chaired by Sir Claus Moser



Cast-off Youth Book Cited
in BSA paper for Lord
Moser Group-1998-99

The Agency drew upon the outcomes of the Basic Skills at Work Programme to identify the key models that should be used in the delivery of workplace basic skills:

- *integration of basic skills into job-related programmes, leading to acquisition both of basic skills and job-specific skills¹³;*

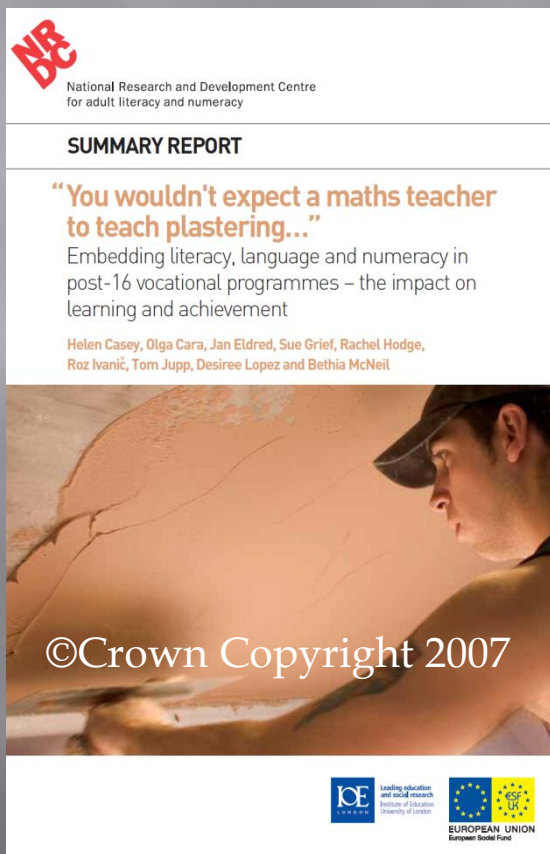


Skills for Life Strategy Adopts Embedded Basic Skills and Vocational Skills Education



Functional Context Education and Workplace Literacy in Scientific Perspective

In Sectoral Studies, the UK's Skills for Life Strategy Embedded (Integrated) Basic Skills and Vocational Skills Education




NRC
National Research and Development Centre
for adult literacy and numeracy


SUMMARY REPORT

“You wouldn't expect a maths teacher to teach plastering...”
Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement

Helen Casey, Olga Cara, Jan Eldred, Sue Grief, Rachel Hodge, Roz Ivanič, Tom Jupp, Desiree Lopez and Bethia McNeil

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 Leading education and social research Institute of Education University of London

 EUROPEAN UNION European Social Fund

This research project explored the impact of embedded approaches to literacy, language and numeracy (LLN) on 79 vocational programmes. The courses were based in 15 further education colleges and one large training provider located in five regions of England.

The 1,916 learners who took part were preparing for national vocational qualifications at Levels 1 or 2 in one of five areas of learning:

- Health and Social Care
- Hair and Beauty Therapy
- Construction
- Business
- Engineering