

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



#### SUMMARY REPORT

"You wouldn't expect a maths teacher to teach plastering..."

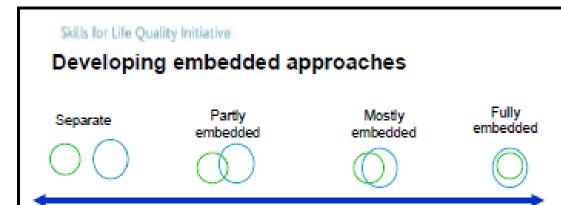
Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement

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









Separate vocational and LLN content – learners experience their LLN development and vocational studies as entirely, or almost entirely, separate. Any connections are made by the learners themselves

Partly embedded – learners experience their LLN development and vocational work as integrated to some degree/only in some aspects Mostly embedded – learners mostly experience LLN development as an integral part of their vocational work, but some aspects of their LLN development and vocational work remain uncoordinated Fully
embedded or
Integrated –
learners
experience
their LLN
development as
an integral part
of their
vocational
work

113



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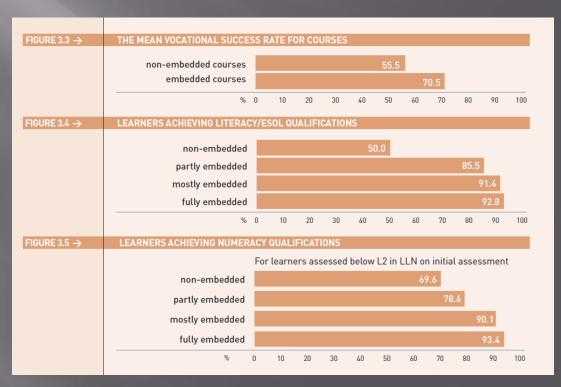
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### Learning Outcomes





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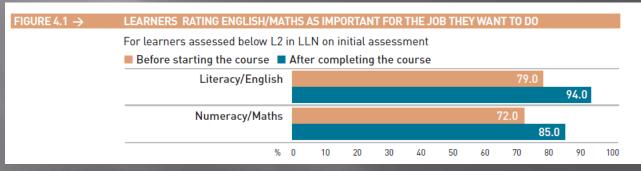
Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement

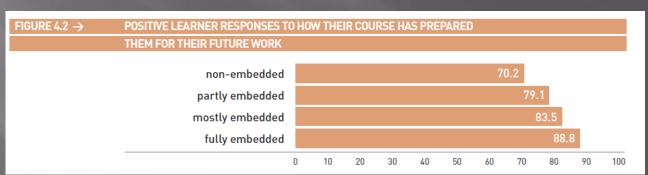
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### Learner Perspectives







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Skills for Life Quality Initiative

### Some of the most significant factors associated with achievement

- LLN teachers understand and engage with the vocational area as part of their work
- LLN teachers are willing to develop their skills in relation to the vocational area
- Vocational teachers are willing to develop their skills in relation to LLN.

NRDC 2006 Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on teaching and learning



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Skills for Life Quality Initiative

### Some of the most significant factors associated with achievement

- Learners perceive both their vocational and Skills for Life development are delivered by a single team
- Formal shared planning between vocational staff, LLN staff supports integration of LLN into vocational teaching
- LLN teachers are viewed by staff and learners as contributing to learners' vocational aspirations

continued....



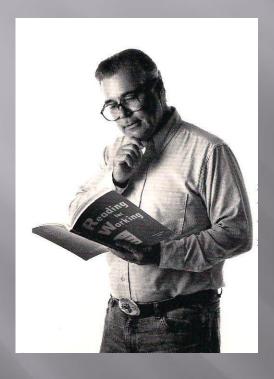
In Sectoral Studies, the UK's Skills for Life Strategy Embedded (Integrated) Basic Skills and Vocational Skills Education



### Features of teaching and learning:

:

- LLN teaching linked to practical, vocational content.
- LLN materials contextualised to the vocational area.
- Initial/diagnostic assessment contributing to integration of LLN.
- Differentiation according to LLN needs in the way the vocational subject is taught.
- LLN seen as essential in the development of learners' professional identity and success.
- LLN development treated as relevant to all learners, not only those with LLN needs.



## EXECUTIVE OFFICE OF THE PRESIDENT COUNCIL OF ECONOMIC ADVISERS

Preparing the Workers of Today for the Jobs of Tomorrow July 2009  $\,$ 



...one of the more promising curricular innovations that helps to improve student success is "contextualized learning," in which adults obtain basic skills in the context of occupational training. Not only does this allow the students to progress through the programs more quickly but it also helps to keep them engaged with relevant examples and applications. p 20

Another common element of successful programs is that they are based on appropriate curriculum and pedagogy. Washington State's I-BEST [Integrated Basic Education and Skills Training] program, for example, blends basic skills and occupational training to generate more contextualized learning, where traditionally these have been segregated into distinct programs. The result is a more effective approach to teaching adults who need both basic skills and job skills. p.18

Integrated Basic Education & Skills Training (I-BEST)
(summary information from Pierce College District, Washington State)

#### Problem:

The State of Washington's economy is highly dependent on the creation of pathways to success in the workforce for English Language Learners and Adult Basic Education students.

### Approach:

The Integrated Basic Education & Skills Training (I-BEST) program addresses the need to provide work skills and basic education in a timelier manner. The I-BEST pairs English as a Second Language (ESL), Adult Basic Education (ABE), and General Education Development (GED) instructors with professional-technical instructors in the same classroom to concurrently provide literacy education and workforce skills training to Basic Education (ABE/GED) and English as a Second Language adult students.

In this integrated model, the Basic Skills curriculum is tailored to the skills that are needed to learn and do the job for which the student is training. The basic skills are all taught in the context of the career.



- 23 of 34 colleges engaged 31 programs approved
- More than 400 learners enrolled
- Occupation clusters include:
  - automotive technology
  - business technology
  - trades and manufacturing
  - early childhood education
  - health care
  - corrections
  - Transportation

### **Integrated Basic Education & Skills Training (I-BEST)**

(summary information from Pierce College District, Washington State)

#### **Outcomes:**

10 I-BEST programs piloted in Washington State found that:

Integrated students were 5 times more likely to earn college credits than were traditional Basic Skills students.

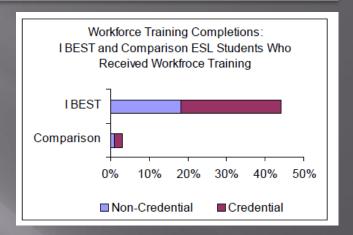
Integrated students earned an average of 10 college-level credits compared to only 3 college-level credits earned by the students in traditional Basic Skills classes.

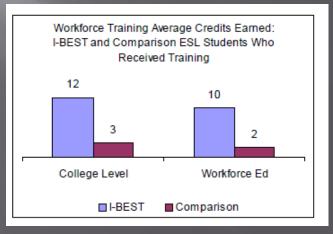
Integrated students earned an average of 12 workforce credits as compared to only 2 workforce credits earned by the comparison group.

Integrated students were 15 times more likely to complete workforce training.

44% of the integrated students completed workforce—training programs as compared to only 3% of the comparison group. Most of these completions were in short term certificate programs that provide living wage employment opportunities and educational progression.

Dropout rates among this segment of the college's student population were significantly reduced.

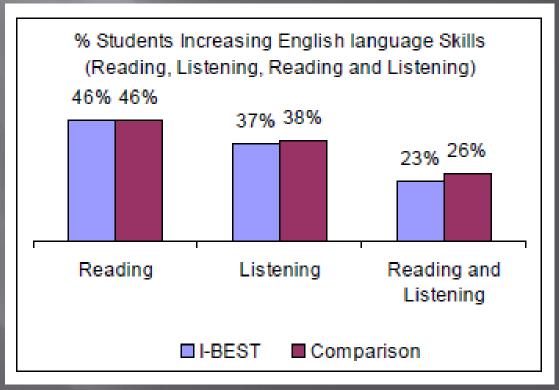




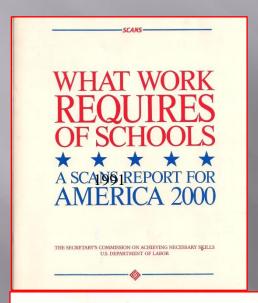


I-BEST Learners Learned ESLReading and Listening in the Functional Context of Workforce Training But Performed as Well on CASAS General Reading and Listening Assessments as Did ESL Learners in General Basic Skills Programs

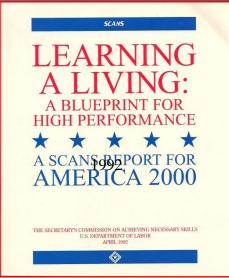




Secretary of Labor's Commission on Achieving Necessary Skills (SCANS)



SCANS Heard about FLIT and XFSP functional context education workplace literacy programs at first meeting and later promulgated a "contextual" approach to



We believe, after examining the findings of cognitive science, that the most effective way of learning skills is "in context," placing learning objectives within a real environment rather than insisting that students first learn in the abstract what they will be expected to apply.

A lifelong learning system serves all adults, including those who lack basic education skills, and adults who did not complete high school. Instead of having to enroll in programs labeled "basic literacy," these adults are offered courses that teach literacy and other basic skills in the context of job requirements for the SCANS competencies.<sup>46</sup> Sticht, 1988/89

### Application of Navy XFSP Book Approach to Civilian Sectoral Trades

### ABOUT THE AUTHORS



#### Thomas G. Sticht

For more than 20 years Dr. Sticht has implemented and proven the Functional Context approach, which he pioneered while working with the Department of Defense to improve the basic literacy skills of military recruits.

He is currently President and Senior Scientist for Applied Behavioral & Cognitive Sciences, Inc., and maintains memberships in a number of organizations including the Secretary of Labor's Commission on Achieving Necessary Skills, the National Commission of Working Women, the National Governor's Association's Advisory Group for Achieving National Education Goals, and the National Advisory Board of the Business Council for Effective Literacy.

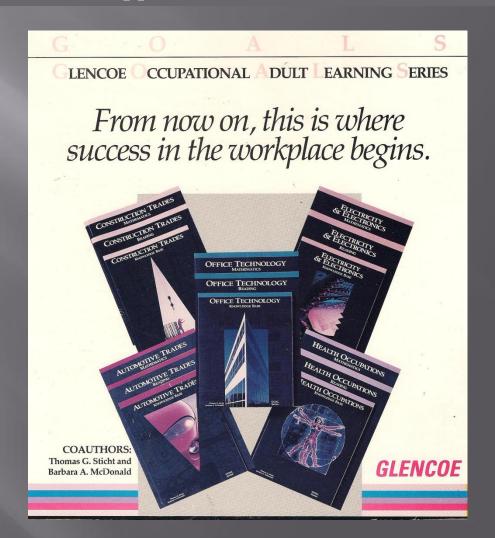
Dr. Sticht has also chaired the California Workforce Literacy Task Force.



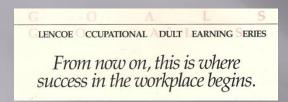
Barbara A. McDonald

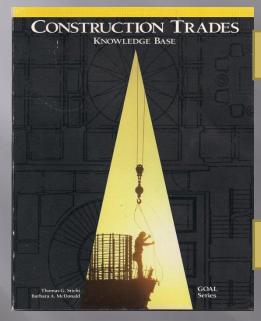
Currently the Director of Action Research Center, Research Activities of San Diego Consortium for Workforce Education and Lifelong Learning, Barbara A. McDonald brings a multifaceted perspective to the GOALS curriculum

In addition to her affiliations with prominent professional organizations, she is a lecturer for the Department of Psychology at San Diego State University and teaches courses in Adult Literacy and the Social, Emotional and Motivational Conditions of Learning.



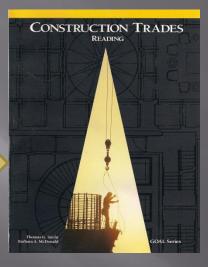
### Application of Navy XFSP Book Approach to Civilian Sectoral Trades

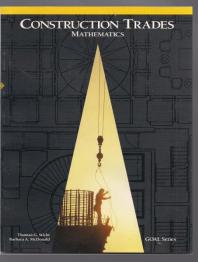




Reading

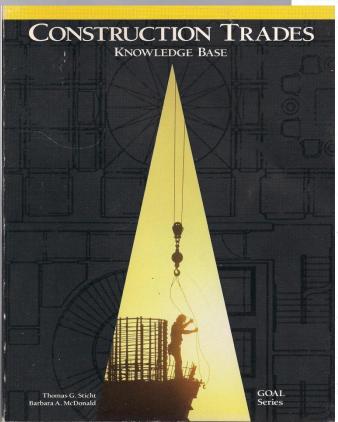






Workforce
Preparation
in the
Construction
Trades

### Application of Navy XFSP Book Approach to Civilian Sectoral Trades



#### TABLE OF CONTENTS

PREFACE vii

LIST OF FIGURES viii

CHAPTER 1 Working in the Construction Trades 1

Types of Construction 4

Residential Construction 5

Commercial Construction 9

Heavy Construction 6
Municipal Construction

Jobs in Construction 8

The Building Trades 8

Carpenters 9

Ironworkers and Steelworkers 9

Bricklayers 9
Stonemasons 10
Cement Workers 10
Operating Engineers 10
Electricians 10
Plumbers and Pipefitters 11
Sheet-Metal Workers 11

Glaziers 11 Roofers 11 Painters and Paperhangers 12 Insulation Workers 12 Other Building Trades 12

Management 12
On-Site Managers 13
Off-Site Managers 13
Professionals 13
Architects 14

Draftspeople, or Drafters 14
Engineers 14
CHAPTER 2 Working on a Construction Site 15

The General Contractor 17

Job Superintendent 18

Craft or Trade Workers 18

Stages of Construction 20

CHAPTER 3 Designing the Project 25

The Architect's Role 26

Putting the Design on Paper 27

Getting Bids 29

Getting Permits 29

Reading Plans 31

CHAPTER 4 Construction Tools and Materials 37

Materials of Construction 38

Exterior Materials 38
Interior Materials 40
Fasteners and Adhesives 42
Interior Furnishings 42

Construction Tools 42

Hand Tools 43
Measuring or Marking Tools 43
Meand Cutting Tools 44
Hand Drilling or Boring Tools 45
Hand Fastening Tools 46
Power Tools 46
Power Tools 46
Power Drilling or Boring Tools 48
Power Fastening Tools 48
Power Fastening Tools 48

Safety First 48

CHAPTER 5 Preparing the Site and Starting 51

Finding the Best Location 52

Preparing the Site 53

Putting in the Foundation 55
Footings 55

Slabs 56 Foundation Walls 57

CHAPTER 6 Framing the Building 59

Framing the Floor 60
Subflooring 61
Finishing the Floor 62

Framing the Walls 62

Outside Walls 64

Inside Walls 65

Roughing In the Mechanicals 65

Plumbing 65

Electrical Work 67

Framing the Ceilings and Roof 67

Ceilings 67

Roof Framing 68

CHAPTER 7 Enclosing the Exterior 71

Masonry Exteriors 72

Wood Exteriors 73

Aluminum or Vinyl Siding 75

Cement and Stucco Exteriors 75

CHAPTER 8 Interior Insulation, Walls, and Ceilings 77

Walls 79

Ceilings 83

CHAPTER 9 Adding Floors and Stairs 85

Stairs 86

Floors 89

CHAPTER 10 Plumbing, Electricity, and Heating 95

Electricity 96

Plumbing 98

Heating 101

Air Conditioning 102

CHAPTER 11 Interior Finishing 103

Adding Interior Trim 104

Fixtures and Appliances 105

Lighting 107

Finishing of Surfaces 108

Cabinets and Doors 109

CHAPTER 12 Landscaping and Paving 113

Patios and Walkways 114

Driveways 114

Planting Trees and Shrubs 115

Lawns 116

Fencing 117

CHAPTER 13 Safety on the Construction Site 119

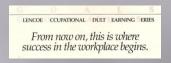
GLOSSARY 121

INDEX 131

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From now on, this is where success in the workplace begins.

### Application of Navy XFSP Book Approach to Civilian Sectoral Trades



# CONSTRUCTION TRADES READING Thomas G. Sticht Barbara A. McDonald **GOAL Series**

### **Table of Contents**

#### Preface INTRODUCTION Reading on the Job The Importance of Good Reading Skills Understanding Your Goals Information Processing Reading to Do LOCATING INFORMATION IN BOOKS The Table of Contents The List of Figures The Glossary The Index Exercises Reading to Learn **USING PO3R** 18 PO3R: Preview PO3R: Ouestion PO3R: Read PO3R: Recode PQ3R: Review Practicing PQ3R With Chapter 2 Practicing PQ3R With Chapter 3 Practicing PQ3R With Chapter 4 Practicing PQ3R With Chapter 5 Review Your Knowledge Part 4 Reading to Learn MAKING MIND MAPS AND OUTLINES Mind Maps Outlines Practicing PQ3R With Chapter 6 Practicing PO3R With Chapter 7 Practicing PQ3R With Chapter 8 Practicing PQ3R With Chapter 9 Review Your Knowledge Part 5 Reading to Learn CHANGING TEXT TO PICTURES, TABLES, AND FLOWCHARTS 68 Changing Text to Pictures Changing Text to Tables Changing Text to Flowcharts Practicing PQ3R With Chapter 10

Practicing PQ3R With Chapter 11 Practicing PQ3R With Chapter 12 Practicing PQ3R With Chapter 13 Review Your Knowledge

Answer Key

89



#### ☐ CHANGING TEXT TO PICTURES

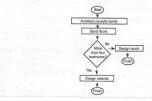


#### ☐ CHANGING TEXT TO TABLES

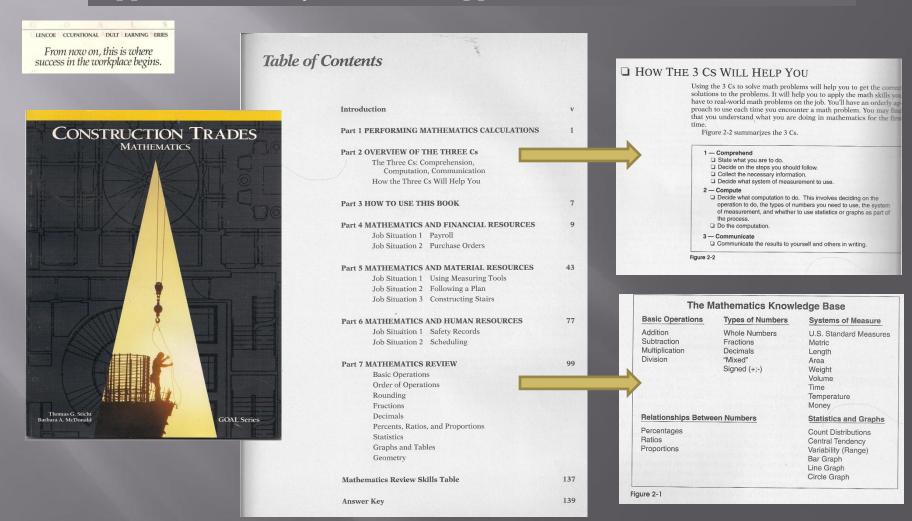
Power Tools				
ame of Tool	Portable	Stationary	Category of Use	
ircular Saw	x		Cutting	
adial-Arm Saw		x	Cutting	
lectric Drill	x		Drilling	
ower Plane	х		Cutting	
ortable Router	x		Drilling	
ortable Sander	x		Cutting	

#### CHANGING TEXT TO FLOWCHARTS

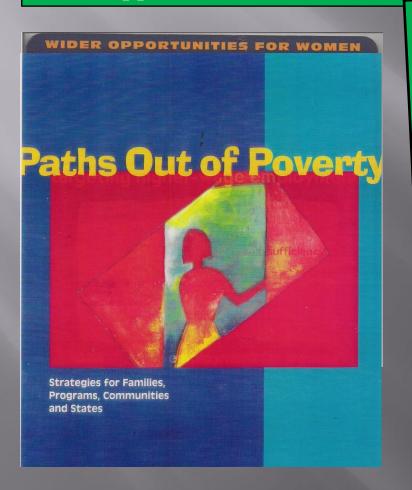
When an architect designs a house, the owner takes part in the basic decisions. The owners in this example have stated that either a colonial or a ranch would be fine. The architect will make the decision based on the number of rooms needed. If the family needs more than four bedrooms, the architect will design a colonial earliet will go a relative to the control of the second of the second of the number of the second of the second



### Application of Navy XFSP Book Approach to Civilian Sectoral Trades



# Functional Context Education with Wider Opportunities for Women



### Six Strategies for Self-Sufficiency

#### The Self-Sufficiency Standard The Self-Sufficiency Standard

calculates how much money working adults need to meet their basic needs without subsidies of any kind. Unlike the Federal poverty standard, the Self-Sufficiency Standard accounts for the costs of living and working as they very by family size and composition and by geographic location.

The Standard provides important guidance for policymakers and program providers regarding how to earget their education, job training, workforce development, and weifare-to-work resources it helps individuals choose among occupations for work experience and educational training, it also shows policymakers how subsidizing child care emaportation or health care impacts the wages necessary for working families to make ends meet.

### Individual Development

are matched savings accounts dedicated to purchasing a first home, education and job training expenses or for capitalizing a small business. IDAs are managed by community organizations and are held at local financial institutions. This innevative strategy is based

Supporting IDA legislation transforms welfare policy from one that is based on spending, consumption and subsistence to one that is

Microenterprise

Microenterprisi development is

strategy that helps low-income people start or expand very small businesses. Generally, the business is owned and operated by one person or family, has fewer than five employees and can start up with a loan of less than \$25,000. Microenterprise is an attractive option for

tivated and have skills in a

especially for low-income, low-skilled

unilles out of poverty.

#### Targeting High-Wage Jobs

This strategy identifies well-paying Jobs in growth sectors that lack trained workers, determines the wage needed by a worker to sustain her/his family (using the Self-Sufficiency Standar and analyzes the job training and support services infrastructure necessary to move individuals into these jobs. Key comparing include engaging industry representatives, targeting training for specific jobs, and developing sensible outcome standards.

ecause this approach looks at labor market issues from both supply and demand perspectives, it helps communities strengthen their local economies while reinvesting in families and neighborhoods.

## Nontraditiona Employment for Women

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### Functional Context

(FCE) is an instructional strategy that combines literacy skills with motivational content. The FCE model moves learners more successfully and quickly toward their educational and employment goals than traditional programs that teach basic skills and job skills in sequence. This strategy promotes better retention, encourages lifelong learning and supports the intergenerational transfer of

wen welfare time limits and restrictions on education and training it is more important than ever that individuals master basic and job-specific skills as quickly and efficiently as possible.

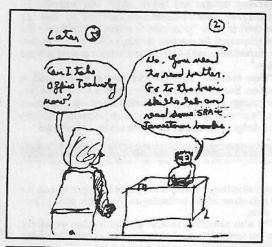
WIREPADDOCTUNITIES FOR WOMEN

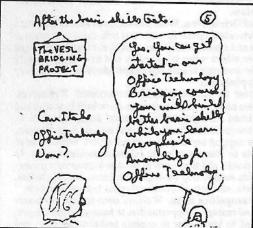
## Functional Context Education (FCE): (3)

The SDCCD Centre City/Skills Center Bridging Project Helps Parents Learn to Earn and Children Yearn to Learn





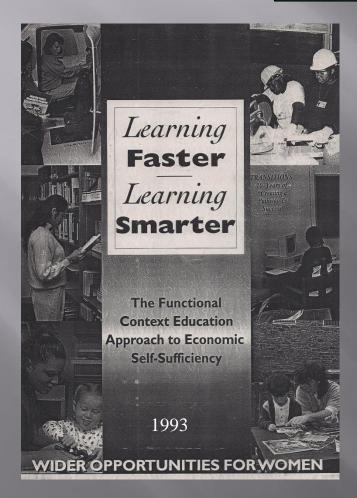




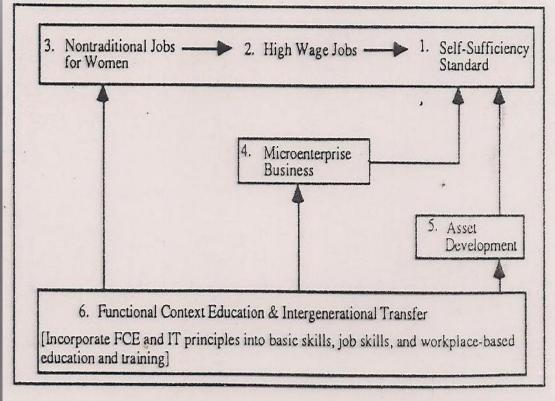




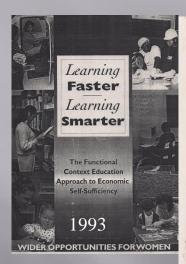
Functional Context Education with Wider Opportunities for Women

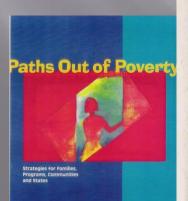


### Relationships Among the Six Strategies

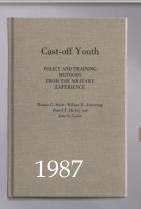


# Functional Context Education with Wider Opportunities for Women





Name	B	Program	_ Date
Chec	k off any blanks which describe your program	as it is now. Then, go back and circle the descriptions	you would like your program to become.
Not	very integrated	Somewhat integrated	Fully integrated
-	We send low-level literacy learners away, to upgrade their literacy elsewhere, before they can enter our employment or family development program.	We have a literacy class or component along with our employment or family development component.	We thread literacy skill development into our employment or family development program; it's all together.
y 1/4 10	The contest and activities of the literacy class do not at all relate to the employment or family development content (or if they do, it's by accident.)	Much of the content of the other component is used in the literacy class to teach literacy skills; there is literacy teaching during the employment or family development classes. We try to relate the components so they reinforce each other.	All literacy activities are <u>directly</u> related and reinforce the learner's primary motivating goal employment or family development.
_	The literacy class is taught with a different organization	organization	The Heracy activities are taught by the same instructor that teaches employment or family development, within the same organization and location.
	teacher	teacher	
	location	location	
	There is little no coordination in planning together, or sense of one integrated program.	BUT there is coordination and planning together to create an integrated program and curriculum.	
_	We use literacy tests to cream the best learners.	Very few students are turned away; almost all are admitted with any level of literacy skills, except where it's impossible to incorporate them in the program.	Teachers cross-teach (e.g. our vocations education teacher teaches literacy and vice verse sometimes.)
	Learners are divided into different literacy levels and kept apart.	We have one literacy class, with different subgroups during the class based on abilities.	They plan together a totally integrated curriculum and meet regularly to refine this.  No student is turned away; all are admitted.
		The state of the s	regardless of literacy skills.



### Related FCE Principle

•Use the contexts, tasks, materials, and procedures of the real-life setting that the training and education address. (motivates, facilitates transfer).



### III. Recommendations

Expand language instruction contextualized for workplace use. While generic language training programs that provide language "survival skills" for everyday interactions serve an important purpose, language training that is contextualized for workplace use is essential to the long-term self-sufficiency and economic success of many migrants and of the businesses that rely on their labor. Language training programs for general workplace skills (e.g., customer service, routine office interactions) or specific industries (e.g., hospitality, health care) have demonstrated success with adult migrant learners, as have curricula that focus more intensively on specific occupations, from taxi drivers to nurses and doctors.



### Related FCE Principle-1987

•Integrate instruction in basic reading, writing, and arithmetic into the technical or academic content so that students are better able to negotiate the requirements for the program at hand, and build competency to transfer basic skills to other settings. (facilitates learning)

### III. Recommendations

Combine language and skills training. Many migrants may be eager to acquire additional industry-specific work skills in addition to contextualized language training. Yet, too often they receive such training sequentially rather than simultaneously — a process that can take many years to complete. especially for migrants who are working full-time and /or raising families.

The integrated instruction model pioneered by Washington State's I-BEST programs shows the great potential for success in combining workplace-focused language and formal skills training. The creation and expansion of such programs rely on education and training policies that allow for integrated language and workforce skills instruction, capacity-building efforts to develop necessary curriculum models and teacher skills, and in some cases changes in per-student funding formulas to allow for team teaching of students receiving integrated instruction

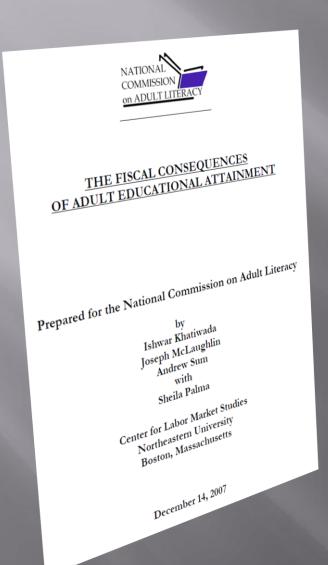


### Related FCE Principle-1987

•Derive objectives from the realistic knowledge and skills demands of situations for which the course is providing human resources. (motivates, facilitates transfer).

### III. Recommendations

Encourage workplace-based instruction. Mid- to large-size employers with a high proportion of migrant workers and whose industry or workplace requires fluency in the host-country language are the most likely to see a value in providing work-focused language courses. Improved language skills will arguably enhance their workers' productivity and enable them to draw on a wider internal talent pool. From the perspective of busy adult workers, worksite-based programs can be a boon, saving them the time and expense of traveling after work hours to an off-site training provider who may not understand the needs of their workplace.



Previous national and state level evaluations of literacy and job training programs suggest that workplace based literacy programs are more effective in raising participants' earnings than school or community-based programs with few ties to local employers.45 Job training programs for economically disadvantaged adults and welfare recipients that integrate literacy training with occupational skills training appear to be more effective than basic skills training alone.

With workplace training, Japan's Kosen colleges bridge 'skills gap'



Kosen are hybrid high school/colleges that serve a small but important slice of the higher education market, attracting students — often from working-class families — who combine an instinctive passion to build gadgets with above-average aptitudes in science and math.

With workplace training, Japan's Kosen colleges bridge 'skills gap'



"We are leaving a lot of kids behind," said <u>Anthony</u> <u>P. Carnevale</u>, director of Georgetown University's <u>Center on Education and the Workforce</u>. "High school in America is about preparing for a college degree that most young people will not get, and in the meantime these kids are disconnected from anything that is real in the world of work."

A potential cure for what ails secondary and higher education in the United States and in Japan looks a lot like what Kosen colleges have been doing for a half-century: requiring high school-age students to spend time in an actual workplace, integrating abstract subjects like algebra with the use of cutting-edge machinery, and including local industry in the design of a constantly updated curriculum.

