

Refereed Articles

Literacy and the Learning Process: A Description of the Learning Strategies Selected by Low- literate Adults During Their Lived Experiences

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Abstract

This study describes and examines the learning strategies selected by low-literate adults within the context of their lived experiences, i.e., their real-life learning. A modified version of the Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS) was selected to examine five strategy areas. The intent was to determine which individual learning strategies were selected, as well as their frequency of selection. Data revealed that low-literate adults consciously select discrete learning strategies that can be ranked according to frequency as well as learning context. Findings suggest that some specific strategy areas and individual strategies have greater importance than others.

Introduction

Recent research studies within adult literacy education have established that little is known about the dynamics of the learning process employed by low-literate adults either within the context of lived experience or within an educational setting (Barer-Stein, 1991; Fingeret, 1992; Horsman, 1991). Review of meta-analyses of research on self-directed learning confirmed that fewer than six inquiries have examined learning that occurs during the lived experiences of adults with literacy limitations (Confessore & Long, 1992; Long & Confessore, 1992). No published studies have

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specifically examined the learning strategy behaviors selected by low-literate adults within the context of their lived experiences. Moreover, literacy educators have suggested that this paucity of research may be related to the deficit perspective model that fosters the belief that low-literate adults are incapable of exercising informed, competent choices about learning tasks (Beder, 1991; Fingeret, 1992).

The purpose of this study was to determine a) if specific learning strategy areas are selected by low-literate adults, b) which individual strategies are selected within each strategy area, c) the relationship between strategy selection and learning context, and d) the relative values of the various selected strategies.

For purposes of this research, the term “learning strategy” was defined as the behaviors that a learner selects and invokes to facilitate the acquisition, storage, retrieval, and application of new knowledge (Weinstein, et al., 1988, p. 11).

The information gleaned from this study will be valuable in contributing to a clearer understanding of the strategic learning behaviors that low-literate adults bring to the learning transaction. Such information can be of benefit to practitioners who plan learning activities as well as to those practitioners who are directly responsible for learner instruction.

Methodology

This study represents the findings from a two-staged research project (Uhland, 1995) conducted at multiple sites within an urban-based literacy program in Western Pennsylvania. Twenty-five adults with documented reading comprehension levels at or below the sixth grade level (as evaluated by The Adult Basic Literacy Education test) participated in the study. All respondents spoke English as their first language. The average age was 38.7 years, with a range from 18 to 68 years. The majority of respondents were single (76%) and female (60%). In this inquiry, 56% of the respondents were African-American. These demographics were compatible with what Hayes (1988) described as typical for those enrolled in literacy programs. The average number of years of education was 9.4 years, with 48% having graduated high school, and one held a General Education Development Certificate.

Participants responded to a modified version of the Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS), originally developed by Gary Conti and Robert Fellenz at Montana State University. The modified instrument offers six different learning scenarios described by

low-literate adults based on their lived experiences (Uhland, 1995). Each learning scenario includes 15 discrete strategies. These strategies are the areas of metacognition, metamotivation, memory, resource management, and critical thinking. The strategies are described in the following list.

Metacognition (Thinking about learning)

Planning: Deciding how to solve the learning problem—making a plan

Checking: Monitoring the plan to see if it is working

Adjusting: Going back and forth to see if the plan needs to be changed

Metamotivation (Internal impetus to accomplish learning tasks)

Attention: Keeping your mind on what you are doing as well as setting aside time to learn

Confidence: Reliance on abilities to accomplish and complete the learning task

Reward: The intrinsic value of learning or accomplishing a learning task

Memory (Retention, recall, recognition and retrieval of information)

Organization: Using categories or structure to process information

External: Using external devices for recall, e.g., lists, reminders

Application: Relying on remembrances and mental images

Resource Management (Ways that information can be gathered to solve problems)

Identifying: Deciding who or what is the best source of information

Human: Assessing the support of human resources or social networks

Critical Use: Understanding the limitations associated with specific resources

Critical Thinking (Reflecting on one's actions to analyze and evaluate the task)

Generate Alternatives: Finding alternative solutions to learning

Test Assumptions: Challenging the value of learning or testing goals of learning

Conditional Acceptance: Predicting and evaluating the consequences of learning

The respondents were required to make a forced choice by prioritizing the 15 strategies into three categories each consisting of five strategies: a) "Yes, I would use"; b) "Maybe, I might use"; and c) "No, I would not use." The responses were examined using standard descriptive statistical analysis and a software program specifically designed for scoring this modified SKILLS.

Presentation of Data

The modified SKILLS employed for this research design includes descriptive parameters for each of the five strategy areas, as well as for the three learning strategy behaviors associated with each area. Following administration of the modified SKILLS, the 15 strategies were ranked according to frequency of selection of each strategy area and within each strategy area, by overall frequency of selection, and by frequency according to scenario.

Examination of the frequency of selection among the five strategy areas reveals that there is variation among the areas. Metacognition and Memory showed the highest frequency of area selection, followed by Critical Thinking, Metamotivation, and Resource Management. Each strategy area also encompasses significant variation among individual strategies (Table 1). When strategies are viewed individually, the adjusting strategy recorded the highest selection score as compared to any other strategy. Overall, the strategy area of Metacognition and the individual strategies within that area recorded the highest selection scores.

Individual strategies were ranked by frequency of selection (Table 2). To ascertain a ranking for individual strategies, two factors were considered: a) the forced choice criteria of the modified SKILLS and b) the means for strategy rejection. The ranking reveals that the strategies most likely to be given priority for solving learning tasks are planning, checking, organization, generating alternatives, and identifying resources. These strategies received the highest frequency of response in the choice category, "Yes, I would use."

Finally, the frequency of selection of strategy areas was examined using each scenario in the modified SKILLS. This instrument uses six learning scenarios described by low-literate adults as representative of their lived experiences (Uhland, 1995). Each scenario represents a different category of life experience (Table 3). Evaluation by learning context reveals, once again, that metacognitive strategies as a group hold primacy and that metamotivation strategies rank the lowest overall.

Table 1

Means of Individual Learning Strategies—Grouped

STRATEGY NO.	AREA-TYPE	YES
1	MC-Planning	19.1
2	MC-Checking or Monitoring	19.1
3	MC-Adjusting	22.2
4	MOT-Attention	16.5
5	MOT-Confidence	14.7
8	MOT-Reward	13.6
9	MEM-Organization	21.8
11	MEM-External	18.5
13	MEM-Application	18.4
6	RES-Identifying Resources	15.7
10	RES-Use of human resource	14.0
14	RES-Critical Use	11.4
7	CRIT-Generate Alternatives	17.3
12	CRIT-Test Assumptions	16.0
15	CRIT-Conditional Acceptance	15.7

Table 2

Rankings of Strategy Selections (limited to top 10)

Strategy	Rank	Mean
MC-Planning	1	13.8
MC-Checking	2	11.8
MEM-Organization	3	10.5
CRIT-Generate Alternatives	4	10.3
RES-Identifying Resources	5	10.0
CRIT-Conditional Acceptance	6	9.2
MOT-Attention	7	9.0
MC-Adjusting	8	8.5
MEM-External	9	7.3
RES-Use of human resource	10	6.7

Table 3

Means of Strategy Areas by Individual Scenario

Scenario	Metacog.	Metamot.	Memory	Resource	Crit. Think.
Vocational	1.7	.7	.8	.9	.8
Financial	2.0	.7	.9	.6	.8
Political	1.2	.8	1.0	.8	1.3
Domestic	1.6	.8	1.2	1.3	1.4
Interpers- onal	1.3	.9	1.2	1.2	.6
Religious	1.6	.9	.9	.8	.9

Findings

This inquiry reveals that low-literate adults make conscious, informed choices about the selection of strategic behaviors within the context of their lived experiences. Moreover, respondents were able to identify discrete learning strategies and make selections among various strategy areas as well as among individual strategies. Data analysis disclosed that there is variation among strategy areas as well as considerable variation among individual strategies. The strategy area of Metacognition demonstrates the highest overall frequency of selection and the least variation among specific strategies. Resource Management reveals the greatest variation among specific strategies. A ranking of individual strategies shows that the three metacognitive strategies are among the five highest-rated strategies.

Evaluation of strategy selections across individual scenarios indicates that the group of metacognitive strategies had the highest overall selection rate. Analysis of learning contexts and strategy areas demonstrates greater variation among the strategy areas selected. It appears that a relationship exists between the strategy area selected and the requirements of the learning context.

Implications

Findings demonstrate that low-literate adults do assume responsibility for control and management of their learning within the context of their lived experiences. A high degree of learner agency is reflected in this study. To make the forced choice selections, respondents employed decision points in their selection of learning strategies—understanding of learning context, valuation of individual strategies, and application of learning strategy to context. More specifically, this inquiry confirms that these low-literate adults can recognize discrete learning strategies, make choices among specific strategies grouped within a strategy area, and assess strategy selections based on the requirements of the learning context.

The implications of this study are twofold. First, low-literate adults are capable of learner agency with respect to managing the learning process. This conclusion contrasts with the existing deficit-perspective model which asserts that low-literate adults are incapable of taking responsibility for or managing their learning tasks (Beder, 1991; Fingeret, 1992). Thus, the findings reported here raise a number of questions about the existing perceptions of low-literate adults within literacy education: What is the nature of learning that occurs? Does assuming control of learning alter or modify participation in organized adult education? To what extent do existing programs maximize or minimize learner agency? What do practitioners know about how low-literate adults learn?

Second, prior educational research has linked strategy selection and learner effectiveness. Various studies conclude that the effective learner is skilled in recognizing and applying separate strategies within strategy areas and in varying strategy selection to accommodate to the requirements of the specific learning context (Garner, 1990; Levin, 1986; Paris, Lipson, & Wixon, 1983; Rothkopf, 1988). Within this study respondents were able to distinguish among, and make varied selections of, individual strategies within groupings. In addition, the variance in the frequency of selection of strategies among differing learning scenarios suggests that respondents were cognizant of, and able to accommodate to, the requirements of the specific learning context.

From a practice perspective this study found that adults with literacy limitations can and do make informed decisions about the process they use to learn. This research focused on examination of the tactics or methods employed by the respondents to solve learning tasks grounded in their lived experiences. Practitioners should seek to gain a clear understanding

of the nature and extent of the learning strategy behaviors that learners bring to the organized education setting. One way to accomplish this is to use the modified version of the Self-Knowledge Inventory of Lifelong Learning Strategies (see Uhland, 1995). The instrument was designed by low-literate adults for low-literate adults. This instrument can assist practitioners in developing a baseline knowledge of strategies that are selected and rejected by individual learners. Results can be assessed and opportunities then provided to maximize learner strengths, eliminate weaknesses, and develop an armamentarium of strategic behaviors.

This inquiry was but a first step. Further research is needed to develop a knowledge base concerning the learning process used in various contexts by adults with literacy limitations.

References

- Barer-Stein, T. (1991). Reflections on literacy and the universal learning process. In M. C. Taylor & J. A. Draper (Eds.), *Adult literacy perspectives* (pp. 345-364). Toronto: Culture Concepts.
- Beder, H. (1991). *Adult literacy: Issues for policy and practice*. Malabar, FL: Krieger.
- Confessore, G., & Long, H. B. (1992). *Abstracts of literature in self-directed learning, 1983-1991*. Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education, University of Oklahoma.
- Fingeret, A. (1992). *Adult literacy education: Current and future directions—An update*. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education. (Information Series No. 355).
- Garner, R. (1990). When children and adults do not use learning strategies: Toward a theory of contexts. *Review of Educational Research*, 60, 517-529.
- Hayes, E. R. (1988). A typology of low-literate adults based on perspectives of deterrents to participation in adult basic education. *Adult Education Quarterly*, 39, 1-10.

- Horsman, J. (1991). *Something in my mind besides the everyday: Women and literacy*. Toronto: Women's Press.
- Levin, J. R. (1986). Four cognitive principles of learning-strategy instruction. *Educational Psychologist, 21*, 3-17.
- Long, H. B., & Confessore, G. (1992). *Abstracts of literature in self-directed learning, 1966-1982*. Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education, University of Oklahoma.
- Paris, S. G., Lipson, M. Y., & Wixon, K. K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology, 8*, 293-316.
- Rothkopf, E. Z. (1988). Perspectives on study skills training in a realistic instruction economy. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning and study strategies: Issues in assessment, instruction and evaluation* (pp. 275-86). New York: Academic Press.
- Uhland, R. L. (1995). *Learning strategy behaviors demonstrated by low-literate adults engaged in self-directed learning*. Unpublished doctoral dissertation, The Pennsylvania State University, State College, PA.
- Weinstein, C. E., Goetz, E. T., & Alexander, P. A. (Eds.) (1988). *Learning and study strategies: Issues in assessment, instruction and evaluation*.