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SELF-DIRECTEDNESS IN ADULT VOCATIONAL EDUCATION STUDENTS: ITS ROLE IN LEARNING AND IMPLICATIONS FOR INSTRUCTION

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Abstract

This report is intended to enlighten the educator of adults about some of the essential elements of self-directedness, and more clearly define its relevance to adult learning and instruction. It endeavors to stimulate thought and dialogue regarding how the adult educator can utilize the potential of self-directedness in the classroom. By developing qualities built around adult oriented methodologies, teachers can help to enhance adult students' cognitive and affective processes. An expected student response should be the perpetuation of intellectual curiosity and development exhibited by further demonstrations of self-directedness regarding learning. Further, this report points out a potential ethical problem which could arise and identifies six issues that instructors and institutions should address if the needs of adult students are to be met. Lastly, it suggests how "Structured Flexibility" can create a mutually conducive learning environment that provides for student growth as well as instructor proficiency and professionalism.

**SELF-DIRECTEDNESS IN ADULT VOCATIONAL EDUCATION STUDENTS: ITS ROLE IN
LEARNING AND IMPLICATIONS FOR INSTRUCTION**

During the last several decades, data has begun to accumulate to substantiate a number of the characteristics of adult learners that sets them apart from traditional K-12 students and many undergraduate college students

as well. As one might expect the attributes are varied, however, there seems to be a general consensus in the literature on at least two common characteristics that have an impact on learning efficacy and the overall classroom experience for this mature group of students: lifetime experiences and the self-directedness of the learner (Cook, 1993).

By their very nature, these two characteristics are typically interwoven. However, because of the idiosyncratic nature of students' lifetime experiences and in the essence of space, this descriptive work directs its attention to self-directedness which exhibits more commonality among adult students. No attempt is made here to exhaustively delineate all of the ramifications and nuances that self-directedness could have on a learner or all of the possibilities for its inclusion in a teacher's instructional methodology. But rather this work is intended to assist the reader in gaining insight into a trait that is less often observed in the traditional K-12 classroom and to help institutions and instructors who teach adults improve overall classroom instruction and outcomes.

The workforce of today is changing dramatically. A watershed study, Workforce 2000 (Johnston & Packer, 1987), has estimated by the year 2000 over half of all jobs will require some form of postsecondary education. The median years of education will rise from the 1987 level of 12.8 to 13.5. Additionally, workers will change careers an average five times during their lifetime. That prediction is already being evidenced today by the downsizing taking place in business and industry which displaces well trained workers. They will have to be retrained for new occupations. Furthermore, most workers who are employed will need major retraining or upgrading of skills at least every five years just to maintain their positions. A tremendous increase in the demand for adult education is on the near horizon. Indeed, adult education is critical to America's ability to remain competitive in a global economy. Citing from the same study:

Education and training are the primary systems by which the human capital of a nation is preserved and increased. The speed and efficiency with which these education systems transmit knowledge governs the rate at which human capital can be developed. Even more than such closely watched indicators as the rate of investment in plant and equipment, human capital formation plays a direct role in how fast the economy grows. From an economic standpoint, higher standards in the schools are the equivalent of competitiveness internationally. (pp. xxi-xxvii)

Further, noted author and economist Anthony Carnevale (1991) points out, "Now more than ever, learning is the rationing hand that distributes earnings in the American economy. People with the most education and access to learning on the job are doing best; those with the least education and least access to learning on the job are doing worst."

This paper is not built around a "how-to" premise, but rather its purpose is to raise the reader's level of awareness of self-directed learning, and to stimulate the teaching professional to investigate further the questions that are raised, to find solutions to possible problems and challenges encountered, and to more fully utilize self-directed learning in the adult classroom. Additionally, this paper is meant to encourage the reader to employ self-directed learning potentialities in their own personal equation of adult education.

Definition

Though there is still considerable discussion with regard to a definitive definition for self-directed learning, the basic components of Knowles's (1975) definition seem to represent many of the universal elements apparent in the literature. The elements include: students initiate the learning; determine needs; set goals for learning; select strategies and evaluate learning outcomes. Mezirow (1985) states that self-directed learning is ". . .the capacity of adults for critical self-reflection and for changing their lives." Perhaps it can be said that self-directedness is that internal force which compels individuals to assimilate, synthesize, and internalize new information, given the circumstances in which they find or expect to find themselves.

Discussion

The major body of research in adult education and learning has taken place in just the last several decades (Knowles, 1990), with cognitive learning theory influencing much of that work (Fallenz & Conti, 1989; Sagaria, 1989). Given the relative "newness" of the research related to self-directedness, the concepts and paradigms of self-directed learning are not only varied, but sometimes contradictory. For example, Oddi (1987) cites 17 authors who use 12 different labels to describe the concept that self-directed learning represents; one author even implies self-directed learning and self-actualization are synonymous. In the same work, Oddi also states that most of the literature divides self-directed learning into process and personality perspectives with process being predominant. This paper will primarily discuss process oriented perspectives.

Mocker and Spear (1982) have developed a two-by-two matrix (figure 1) showing the degree of self-directed learning that takes place under different circumstances. It is essentially a function of how the learning experience itself is structured; a matter of who is in control. The matrix graphically indicates optimal self-directed learning occurs when the learner is in control of all components of the experience and does not occur during traditional, formal learning experiences (common in many vocational/tech schools and colleges) when the student has very little control. Garrison (1992) concurs that responsibility and control of learning are fundamental to self-directed learning as well as to the development of critical thinking. In contrast to the rigid structure and general indicators of the matrix, in actual application, the degree of self-directed learning a person would experience will develop along an infinite continuum of reciprocal circumstances and learning responses. Actually, all learning can and should be viewed as a continuum, parallel with the timeline of one's life. "Life-long learning", whether it is complex, formal, or incidental, is a continuous process. For instance, discovering a shortcut to get to work is a form of self-directed learning, though not as complex as the process of a researcher's struggle to discover a cure for cancer. Some theorists would argue that behavior is the result of some level, order, or type of learning; some would counter that it is the result of cognitive processes; others may espouse alternative views. Regardless of the learning theory put forth, the point is, with adults the origin of much of the drive to learn is self-directedness. Indeed, it is estimated that 70 percent of adult learning is self-directed (Cross, 1981).

MOCKER AND SPEAR'S SELF-DIRECTED LEARNING MATRIX

SELF-DIRECTED

learner controls both the learning
objective and means of learning NONFORMAL
learner controls objective but
institutions control the means of
learning INFORMAL
institutions control the objective
but the learner controls the means FORMAL
institutions controls both the
learning objective and means of
learning

Figure 1

In a frequently cited study, Tough (1978) found that 90 percent of all adults conduct at least one self-directed learning project per year and typically involve themselves in five projects, spending an average of 100 hours on each. In a smaller study, Sheckley (1985) found that during the previous year, community college students engaged in an average of seven learning projects, spending 285 hours on each; 56 percent of

the projects were self-directed. Similarly, [Leean's \(1981\)](#) study of rural adults over the age of 25 who had not finished high school revealed 98 percent reported completing at least one major learning effort with the majority involving "self-planning." Though not conclusive, results from these studies would seem to indicate that level of education is not a major factor in determining whether adults engage in self-directed learning. Similar findings were shown in work by [Brockett, \(1983\)](#), [Herbeson, \(1991\)](#), and [Spear, \(1984\)](#).

Also, for adults in general, age alone does not appear to be a factor in whether or not they engage in self-directed learning activities ([Ellsworth, 1992](#)). It does appear that "affirmation of self and its accomplishments, sense of satisfaction and pleasure, and a high level of enthusiasm and ego involvement in activities" are important factors, especially in older adults ([Fisher, 1988](#)). This is a significant ingredient when one considers the student population of future classrooms. Even though the age of students who attend college or seek vocational training has already begun to increase, as a result of the baby boom generation beginning to enter the 50 plus range, institutions can expect the average age of students in their classes to increase even more dramatically during the next decade. Relevance to Adult Educators and Educational Institutions

Adults bring to a learning situation many varied lifetime experiences with which to filter and interpret new information whether it is in a formal computer science classroom, experimenting with a new recipe, or rebuilding a carburetor. By virtue of their greater years, adults have the experience young children and teens cannot possibly have; their orientation to learning is also much more acute than secondary students. Adults feel they need to know only what is useful to them and will learn it when they feel it is important ([Knowles, 1990](#)). It is right now learning. They want to see and be able to use the benefits of the learning experience immediately as opposed to learning something for future use as is the case with much of secondary education. The future for most of them is "now".

The efficacy of self-directed learning is an important consideration when dealing with the education of adults. As a result of the factors already mentioned and others beyond the scope of this discussion, some instructors may need to adjust, reorient, and in some cases, redesign the way they instruct in order to meet ethical considerations of integrity in truly meeting adult learners' needs. [Marsick \(1985\)](#) points out that some institutions, especially inflexible institutions of higher learning need to provide the environment necessary to allow self-directed learning to take place.

[Lowery \(1989\)](#) has assembled a sizable list of suggestions to assist in modifying style and content of both instructional methodology and institutional environment in order to better enable self-directed learning to take place. A partial list of her suggestions are cited below. The reader is encouraged to review her entire work for the complete list and more elaboration.

For adult educators:

- Help the learner identify the starting point for a learning project and discern relevant modes of examination and reporting.
- Encourage adult learners to view knowledge and truth as contextual, to see value frameworks as cultural constructs, and to appreciate that they can act on their world individually or collectively to transform it.
- Create a partnership with the learner by negotiating a learning contract for goals, strategies, and evaluation criteria.
- Be a manager of the learning experience rather than an information provider.
- Teach inquiry skills, decision making, personal development, and self-evaluation of work.
- Help learners develop positive attitudes and feelings of independence relative to learning.

- Recognize learners' personality types and learning styles.
- Use techniques such as field experience and problem solving that take advantage of adults' rich experience base.
- Encourage critical thinking skills by incorporating [into class] such activities as seminars.
- Create an atmosphere of openness and trust to promote better performance.
- Behave ethically, which includes not recommending a self-directed learning approach if it is not congruent with the learners' needs.
- For educational institutions and employers engaged in providing self-directed learning experiences:
 - Have the faculty meet regularly with panels of experts who can suggest curricula and evaluation criteria.
 - Conduct research on trends and learners' interests.
 - Obtain the necessary tools to assess learners' current performance and to evaluate their expected performance.
 - Provide opportunities for self-directed learners to reflect on what they are learning.
 - Promote learning networks, study circles, and learning exchanges.
 - Provide staff training on self-directed learning and broaden the opportunities for its implementation.

In the above educators' list, notice how the word "help" is used along with other facilitative words like "encourage" and "create". There is more mutuality between student and teacher. Most adult students attend class voluntarily and usually have an inherent interest in their education and as a result, have a need to be made a part of the process; not left to be just a passive recipient of data.

It is obvious that no single instructional methodology, ideology, or philosophy of education will be effective in every situation. Andragogy, the science of teaching adults, (Knowles, 1990) is no exception. All adults and all situations dealing with adults do not necessarily call for the utilization of self-directed learning methodologies. For the professional instructor, the secret is knowing when and when not to use them; a separate discussion is called for to delineate appropriate use. The reality is, when a pedagogical methodology is inappropriately utilized, adult students may leave a class with a feeling of alienation, lack of self-esteem (Billington, 1990; Galbraith, 1994), intimidation, and with something less intellectually than they should have received from what should have been an enlightening educational experience. They were "treated like children" is the common complaint. Some may never return to the classroom as a result of the negative encounter. Further, it is this author's contention that some of these same factors have a far greater impact on class dropout rates than students' lack of ability.

A logical question to ask would be, "If there is an absence of andragogical methodology, which takes into account the self-directedness of the learner, why are adult educators not doing more to correct the problem?" The answer? In their defense, teachers often aren't aware anything is wrong. Teachers tend to teach the way they were taught. This tendency is a manifestation of modeling. To add to the problem, there are not enough institutions of higher learning formally teaching adult instructional methodologies. Ironically, a few institutions still do not acknowledge there are some differences between the way teens and adults learn.

Trainers with large companies in business and industry seem to do a better job at recognizing differences between pedagogical and andragogical learning because their incentive to do so is different -- profit. The company's bottom line depends on a well trained work force, thus the trainers do what works best. But

smaller companies, where most of America works, lack the resources to hire professional trainers. Consequently, their workers attend local colleges or vocational/tech schools where adult instructional methodology is sometimes weak. This contention is not meant to condemn those who teach adults, but rather, as mentioned in the purpose of this paper, to raise the level awareness and to call attention to the fact that administrators and instructors need to aggressively address the issue of teacher training in the domain of adult education. A teacher could not be expected to utilize or understand andragogical concepts, one of which is self-directedness, if they had never been exposed to the concept's existence and application.

Special Considerations. Listed below are some specific issues that need to be addressed by researchers, theorists, educators and institutions.

1. More research needs to be conducted. Adult education is a relatively new "science". In fact, the term andragogy has only been popularly associated with adult education since the 1960s. All of this "newness" leads to what Fellenz and Conti (1989) refer to as the fragmented nature of adult education. There has yet to be consensus on many important tenets.
2. The instruction for educators of adults has to change. Even in the face of already available research, formal classroom and faculty inservice programs are not designed around adult teaching models, methodologies, or the teachers' needs. There is the tendency for inservice programs to replicate college classes (Geis, 1983) which are typically authoritarian in nature and give inadequate attention to the learners' needs. Ironically, the very programs designed to teach instructors adult teaching methodologies (self-directedness being a prominent component), are themselves still pedagogically oriented with much lecture and overheads, and little participation or determination of needs. The assumption remains that the school's administration and the consultant who has been called in has the answers, and the student/teacher will be given what they need to know. This practice is the antithesis of what adult education in general and self-directed learning specifically is about.
3. The available literature reflects the traditional educational mind set regarding adult education. In a analysis of 228 articles McCallister and Newsom (1992) found that ". . . although accurately portraying the field [adult education] for the most part, articles largely ignore self-directed learning, adult education as a field of university study, and the existence of professional adult educators." This is indicative of, and would tend to perpetuate, a professional and public lack of awareness of the needs of not only adult students, but of the educators of adults as well.
4. Instructors need to devote more time, effort, and study to better develop and effectively utilize essential teaching qualities in their classrooms. Though each of the qualities could have much discourse on its own, Sisco (1984) has pointed out some of the personal attributes an adult educator should possess. They are: empathy, use of reward, respect for the dignity and worth of each individual, a sense of fairness and objectivity, willingness to accept new things and ideas, patience, sensitivity, humility, and commitment to their own lifetime learning. Robertson (1987) also found qualities similar to Sisco's are desirable. Unconditional acceptance of students (Billington, 1989) and genuineness (Brockett & Hiemstra, 1985) are also considered important. The author would add from personal experience, that the abilities to instantly adapt to situations and to be openly challenged without becoming intimidated are also extremely desirable. Although those that teach younger students need many of these same qualities, the diverse negative ramifications of not possessing generous quantities of these characteristics become greatly magnified in an adult student population. Add to this the fact that students or their employers are paying for the instruction not only with their money, but also with what can be a much more valuable commodity--their time--the mandate for effective instruction becomes consequential!
5. Teachers must legitimately be empowered, encouraged and supported. Postsecondary institutions cannot expect instructors to have the flexibility to adapt classes to the degree necessary to meet the needs of adult learners if they are not given the authority to do so.

6. There must be a shift from the traditional philosophy that the education of adults is simply adding content or skills mastery to an already developed person. Self-directed learning is more than a form of education. It is a component of human development.
7. Billingham (1989, 1990) found that in environments where nonauthoritarian, self-directed learning was evident, there were significant indications of ego development among students. This, then, sets in motion the energy with which self-direction begins to perpetuate itself. Individuals gain confidence in their ability to learn, which in turn tends to drive them to experience additional learning situations which they might otherwise have avoided or even considered impossible. The whole person develops.

A Critical Question

Does self-directed learning mean the lack of direction, structure, guidance, stimulation, challenge, or alternative inquiry from an instructor?

As pointed out by [Brockett and Hiemstra \(1985\)](#), in practice there is an ethical consideration involved in answering this question. Critics have charged that self-directed learning is simply a way for instructors to become less accountable for their own classroom performance; that it is a watered down form of education. Taking this criticism to an extreme, classes conceivably could have instructors who are not content competent, but are excellent interpersonal communicators. These charismatic communicators would "expedite" what some might call the education of adults. This encounter might leave students with a "good feeling" but with insufficient content knowledge or practical skills application. They "wouldn't know, what they don't know." This type of situation would not be conducive to effective learning processes. Unfortunately, widespread abuses may be possible if an ethical standard is not established. Ethical standards deserve further investigation.

The necessary ethics to see that these abuses do not occur must be woven into the fabric of university educator instruction, inservice sessions for all current adult vocational instructors (including part-time instructors), technical trainers, and other professional teacher development programming. From their 1985 writing, [Brockett and Hiemstra](#) state:

While some educators may misunderstand the meaning and process of self-directed learning and while a few may see the approach as a way of jumping on the latest bandwagon, the facilitator who truly understands and respects the self-directed learning process will strive to refocus, but certainly not to diminish, the nature of his or her responsibility to the learner. (pp. 38-39)

The value of understanding self-directed learning methodology in adult education is much too important to allow well-intentioned but nonetheless abusive, unethical conduct to persist. There are a number of very influential adult educators who interpret self-directed to literally mean self-taught, and that should not be the case.

Self-directed learning should be an element of the means, not the end or goal of education. Indeed, in contrast to many of the purist promoters of self-directed learning is an articulate voice of reason. [Brookfield's \(1985\)](#) writing in the field adds balance to self-directed learning in the classroom setting:

...we are in danger of accepting uncritically a new academic orthodoxy in adult education. Put simply, it is not uncommon to hear practitioners and theorists declaring as self-evident a number of doubtful propositions that make self-directed learning the goal and method [emphasis added] of adult education. (p. 5)

[Brookfield](#) provides rationale for the instructor to become more than a passive fixture who allows students total academic license:

If the educator is restricted from presenting the adult with alternative ways of interpreting the world or of creating new personal and collective futures, then the educator becomes a kind of

master technician who operates within a moral vacuum. While the educator is allowed a role in assisting students to refine their techniques of self-directed learning, that educator is constrained from offering value systems, ideologies, behavioral codes, or images of the future that the adult has yet to encounter. (p. 6)

Further, he asserts that adult students should "alternate ways of interpreting the world" if they are to make enlightened decisions regarding their circumstance and state of being:

Hence, self-directed learning is predicated on adults' awareness of their separateness and on their consciousness of their personal power. When they come to view their personal and social worlds as contingent and therefore accessible to individual and collective [emphasis added] interventions, then the internal disposition necessary for self-directed action exists. When adults take action to acquire skills and knowledge in order to effect these interventions, then they are exemplifying principles of self-directed learning. (p. 14)

As the mode of learning characteristic of adults who are in the process of realizing their adulthood, self-directed learning is concerned much more with an internal change of consciousness than with the external management of instructional events. (p. 15)

Brookfield goes to great lengths to explicate his position regarding self-directed learning's place in adult education. [Garrison \(1992\)](#) comes to a similar conclusion in his discourse on critical thinking and self-directed learning. He states, "In exercising choice the learner may maintain responsibility for learning while willingly sharing control."

Conclusion

The existence of self-directedness in adult students is well documented. Consequently, it is incumbent upon researchers, theorists, educators, and institutions to make certain, to the extent possible, that this dimension of adult humanity is not impeded, but is allowed to proliferate in the classroom. The "how to" needs to be addressed in further socioeconomically stratified empirical research since most of the work thus far has involved middle class America. And, we must not allow self-directed learning to become synonymous with self-taught. It behooves talented vocational educators who teach adults to take up the challenge of becoming proactive. That is, become facilitators, advocates, and expositors of the adult learning experience.

Self-directed learning should take place in an environment where there is some structure provided by the instructor (and sometimes by an institution), yet the student retains the freedom and flexibility to explore and develop as a person within some boundaries. Ideally the student should have some control and responsibility over learning objectives. This in turn should help to influence the development of competency and skill attainment which would be reflective of the degree of internalized change within the student.

In an appropriate environment, the students contribute, share, and mutually participate in many of the decisions within the overall structure the instructor has set for the course, e.g., class times, methods of evaluation, attendance requirements, objectives and goals. The resultant class structure is then intellectually functional for the students and is more likely to meet their needs. Concurrently, the instructor reserves the right to respectfully challenge work and comments, guide the general class direction, provide alternatives in thought and practice, suggest resources, provide commentary, and establish minimum standards of evaluation. Having intellectual and academic freedom within some mutually determined bounds will allow both meaningful intellectual growth and human development to take place. At the same time, having a mutually defined set of rules that are free to operate in predetermined, agreed upon boundaries limits the chaos that naturally occurs in most circumstances lacking such organization. Holding an instructor accountable for certain responsibilities further minimizes the potential for them to drift into becoming classroom monoliths instead of classroom innovators and a primary source of intellectual challenge and stimulation to their students. Establishing this type of learning environment is what this author refers to as "Structured Flexibility". While the concept itself is not new, adding the descriptive nomenclature hopefully will give some shape and direction to future research and practice.

For vocational instructors and institutions to implement what is discussed in this paper will require effort and in some cases a good deal of change on their part. Whether the reward is viewed as worth the effort can be influenced by how future theorists and researchers posture themselves in the literature. To an even greater extent, it depends on the methodology and techniques postsecondary educators use to teach adult vocational instructors.

Nearly two generations ago Lindeman (1926) stated, "None but the humble become good teachers of adults." His prophetic statement now rings more loudly than ever the message of how challenging, and yes, intimidating the process of becoming an effective educator of adults can truly be. In view of what contemporary researchers are discovering about adult learners, vocational education cannot afford to remain static. Vocational educators can and should become leaders in America's growth into the next century. If they take that lead, more of America can see that vocational education is a function of progress, not just the result of it.

References

- Billington, D. D. (1989, March). *The role of education in stimulating human development* Paper presented at the annual conference of the Western College Reading and Learning Association, Seattle.
- Billington, D. D. (1990). Developmental aspects of adult education: A comparison of traditional and nontraditional self-directed learning programs. *Journal of Continuing Higher Education*, 38(1), 31-38.
- Brockett, R. (1983, April). Self-directed learning and the hard-to-reach adult. *Lifelong Learning: The Adult Years*, pp.16-17.
- Brockett, R. G. & Hiemstra, R. (1985). Bridging the theory-practice gap in self-directed learning. In S. Brookfield (Ed.), *Self-directed learning: From theory to practice* (pp. 31-40). San Francisco: Jossey-Bass Publishers.
- Brookfield, S. (1985). Self-directed learning: A critical review of research. In S. Brookfield (Ed.), *Self-directed learning: From theory to practice* (pp. 5-16). San Francisco: Jossey-Bass Publishers.
- Carnevale, A. P. (1991). *America and the new economy: How new competitive standards are radically changing American workplaces*, (p. 134). San Francisco: Jossey-Bass.
- Cook, D. (1993). *Adult education* [class lecture]. Kent, OH: Kent State University.
- Cross, K. P. (1981). *Adults as learners*. San Francisco: Jossey-Bass.
- Ellsworth, J. H. (1992). Adults' learning: The voices of experience. *Journal of Adult Education*, 21(1), 23-34.
- Fisher, J. C. (1988). Impact of anomia and life satisfaction on older adult learners. *Educational Gerontology*, 14, 137.
- Galbraith, M.W. (1994). Connecting instructional principles to self-esteem. *Adult Learning*, 5(3), 24.
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An Analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-148.
- Geis, G. L. (1983, April). *If professors are adults*. Paper presented at the American Educational Research Association, Montreal.

- Herbeson, E. (1991). Self-directed learning and level of education. *Australian Journal of Adult and Community Education*, 31(3), 196-201.
- Johnston, W. & Packer, A. (1987). *Workforce 2000: Work and workers for the 21st century*. Indianapolis: Hudson Institute.
- Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. New York: Association Press.
- Knowles, M. (1990). *The adult learner: A neglected species* (rev. ed.). Houston: Gulf Publishing.
- Leean, C. (1981). *Learning projects and self-planned learning efforts among undereducated adults in rural Vermont*. (Final report, NIE Adult Learning project). Burlington: Vermont University, College of Education and Social Services.
- Lindeman, E. (1926). *The meaning of adult education* (p. 166). New York: New Republic.
- Lowry, C. M. (1989). *Supporting and facilitating self-directed learning* (Digest No. 93). Baltimore, MD: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 312-457)
- McCallister, M. & Newsom, R. (1992). A public view of adult education. *Journal of Adult Education*, 29(2), 19-26.
- Marsick, V. J. (1985, November). *Working with adult learners in higher education: Going against internalized norms*. Paper presented at the conference of the American Association for Adult and Continuing Education, Milwaukee.
- Oddi, L. F. (1987). Perspectives on self-directed learning. *Adult Education Quarterly*, 38(1), 21-31.
- Robertson, G. (1987). How "self" directed is self-directed learning? *Management Education and Development*, 18(2), 75-87.
- Sagara, S. D. (1989, March). *Teaching traditional and non-traditional age individuals: How should methods, expectations, and standards differ?* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Sheckley, B. G. (1985). Self-directed learning among adults enrolled in a community college. *Community-Junior College Quarterly of Research and Practice*, 9(2), 165-175.
- Sisco, B. R. (1984, November). *Facilitator's role in adult education*. Paper presented at the National Adult Education Conference, Louisville.
- Spear, G. E. & Mocker, D. W. (1984). The organizing circumstance: Environmental determinants in self-directed learning. *Adult Education Quarterly*, 35(1), 1-10.
- Tough, A. (1978). Major learning efforts: Recent research and future directions. *Adult Education*, 28, 250-263.



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