Using a quantitative content analysis approach, a study examined the literature on self direction, or self-directed learning (SDL), that appeared in 14 mainstream adult education journals between 1980-98. The procedure involved classifying, entering, and tallying information on each article through use of an Internet-based program. Results indicated about 1 percent of the articles published over the period dealt with SDL. During the peak year of 1986, over 3 percent of the articles were on SDL. Overall, the climactic years for publication in the area of SDL appeared to be 1983-91, a time of considerable interest and controversy pertaining to the methodologies of measuring self direction. A major part of this debate was generated in Adult Education Quarterly. A total of 82 percent of the articles on SDL were found in these 4 periodicals: Journal of Continuing Education in Nursing, Proceedings of the Adult Education Research Conference, Adult Education Quarterly, and Lifelong Learning. Descriptive articles of teaching programs or practices accounted for 25 percent; interpretive articles, 23 percent; research articles were the largest group, and personal opinion articles were the smallest. The most common research method was correlational/ex post facto which involved examining variables associated with self direction in learning and factors related to SDL readiness. (Appendixes are 2 tables, 7 figures, and 23 references.) (YLB)
Two Decades of Literature on Self-Directed Learning:
A Content Analysis

Ralph G. Brockett
Susan L. Stockdale
Dewey L. Fogerson
Barry F. Cox
James B. Canipe
Larissa A. Chuprina
Robert C. Donaghy
Nancy E. Chadwell

The University of Tennessee
College of Education
Department of Educational Psychology
A520 Claxton Complex
Knoxville, TN 37996-3400
(865) 974-2227

Presented at the 14th International Self-Directed Learning Symposium
Boynton Beach, Florida
February 3-5, 2000
Abstract

Over the past two decades, Self-Directed Learning (SDL) has emerged as one of the most prevalent topics in adult learning research. Earlier works by Long and Redding (1991), Confessore and Long (1992), and Long and Confessore (1992) analyzed the abstracts of over 500 pieces of literature, including dissertations, proceedings of previous Self-Directed Learning Symposia, and articles. Still, there is a need for insight into the place of self-direction in the broader scope of literature on adult education, particularly the periodical literature. The purpose of this study is to examine the literature on self-direction that has appeared in selected adult education journals over a 19 year period. Using a quantitative content analysis approach similar to that employed in other studies (e.g. Dickinson & Rusnell, 1971; Long & Agyekum, 1974; Rogers and Brockett, 1989), a literature review was conducted on articles published between 1980 and 1998 in 14 mainstream periodicals. The procedure involved classifying, entering, and tallying information on each article through the use of an Internet-based program. Results indicated that about 1% of the total articles published over the 19 year period deal with SDL. During the peak year of 1986, over 3% of the articles published in the selected periodicals were on SDL. Overall, the climactic years for publication in the area of SDL appear to be 1983-1991. The study identified possible directions and topics for future research in self-direction. This content analysis of the literature on SDL should help expedite literature reviews in the future.
Two Decades of Literature on Self-Directed Learning: A Content Analysis

Few topics have commanded as much attention in the literature of adult education, over the past several decades, as self-directed learning (SDL). Some would attribute the beginning of this interest to the publication of Houle’s (1961) *The Inquiring Mind*. Others might trace the line of inquiry to the publication of the classic report by Johnstone and Rivera (1965) on participation in adult education. Still others would point to the publication of Allen Tough’s (1971) *The Adult’s Learning Projects* as the point at which SDL became a vital part of the adult education literature.

In any event, it is clear that SDL has been a major force in the literature of adult education in the latter part of the 20th century. While there have been several efforts to synthesize literature on SDL in recent years (e.g., Caffarella & O'Donnell, 1987; Brockett & Hiemstra, 1991; Long, 1992), it might be helpful to take a systematic look at a segment of this literature and attempt to assess its place within the broader scope of the adult education literature in which it appears. Therefore, the purpose of this study is to examine the literature of SDL that has appeared in selected adult education periodicals between the years 1980 and 1998.

It is possible to study the literature base of a field in many different ways. One approach that has met with some success in analyzing adult education literature is the quantitative content analysis, where an attempt is made to describe literature according to identified themes while determining the frequency with which articles fit into selected categories. This approach has been used in several previous studies. Dickinson and Rusnell (1971) and Long and Agyekum (1974) used this approach to describe the content of *Adult Education Quarterly*.
Education (now Adult Education Quarterly) over a period of years. Similarly, Brockett (1982) conducted a content analysis of the first three years of Lifelong Learning: The Adult Years. Pipke (1984) analyzed the content of abstracts that were accepted and rejected for the Adult Education Research Conference, and Rogers and Brockett (1989) analyzed 10 years of articles appearing in Educational Gerontology. Taking a slightly different approach, Fisher & Martin (1987) did a content analysis of literature on adult basic education appearing in three journals between 1976 and 1986. Finally in the area of SDL, Long (1994) analyzed the abstracts of over 500 pieces of literature including dissertations, articles, and proceedings of Self-Directed Learning Symposia.

The content analysis can be a useful method when attempting to understand major trends in an area of literature. The quantitative approach that was used in the above studies and in the current investigation can be helpful in offering a broad-based description of the literature. While the approach is limited by how effectively the investigators define the parameters of the project, a group of researchers working systematically with a clear understanding of the scope of the study can provide those doing future research with a rough map of the territory that has been covered to date.

Research Questions

As was stated earlier, the purpose of this study is to describe the literature on SDL that has appeared in selected adult education periodicals over a two-decade period. The following questions served to guide the investigation:

1. What percent of the articles appearing in selected adult education periodicals between 1980 and 1998 were on SDL?
2. What is the frequency with which articles on SDL were published in the selected periodicals?

3. Are there identifiable trends in terms of time periods when articles on SDL were most frequent?

4. What are the most frequent types of articles appearing in the literature?

5. For articles that report research, what are the most frequent research methods utilized to study SDL?

6. Who are the most frequently identified contributors to articles on SDL?

The focus of the current study is on providing an exploratory, quantitative description of categories and trends. Data collected relative to the major findings of these studies and recommendations for future research will be analyzed and reported at a future date.

Procedure

Following is a description of the process by which the research group selected and classified articles for examination as well as the method utilized for reviewing them. This section also includes a brief description of how the data were stored and analyzed.

Selection and Review of Journal Articles

Fourteen mainstream adult education journals were identified for analysis in this study. The periodicals include: (a) Adult Basic Education (formerly known as Adult Literacy & Basic Education) (ABE); (b) Adult Education Quarterly (AEQ); (c) Adult Learning (formerly known as Lifelong Learning) (LLAL); (d) Continuing Higher Education Review (formerly known as Continuum) (CHER); (e) Convergence (CON);
(f) Educational Gerontology (EG); (g) International Journal of Lifelong Education (IJLE); (h) Journal of Continuing Education in Nursing (JCEN); (i) Journal of Continuing Higher Education (formerly Continuing Higher Education) (JCHE); (j) Journal of Extension (JOE); (k) Mountain Plains Journal of Adult Education (MPAE); (l) New Horizons in Adult Education (NH); (m) Proceedings of the Adult Education Research Conference (AERC); and (n) Training & Development (TD).

Groups of three members of the research team reviewed the index of each publication and selected articles for review. Articles selected were those in which the primary intent of the author was to focus on some aspect of self-direction in learning or instruction. Those topics related to SDL but not specifically identified as such, e.g. andragogy or distance education, were excluded from this study. Once articles were selected, three research group members reviewed and classified each.

The researchers identified categories consisting of article type, research type, target population, setting of the study, institutional affiliation of the authors, and future research needs as a convenient means for studying each article. One member of the research team developed a database into which data could be entered via the Internet. This on-line compilation allowed article summaries to be immediately categorized and tallied according to the various identified headings. The team ultimately developed a final synthesis for each article by noting differences between individual summaries and reaching consensus through discussion with three or more members of the research team.
Classification of Articles

The definitions used in this study evolved from a review of previous content analysis studies plus selected research design texts. The group initially classified articles by type as follows: (a) research, (b) interpretive, (c) descriptive, (d) personal belief or opinion, or (e) other. Then basic research types, as a sub-category, were identified as: (a) experimental, (b) correlational/ex post facto, (c) survey, (e) methodological, (f) qualitative, or (g) historical.

Following is a description of each article type:

Research. Articles classified as research involve the collection and analysis of data.

Interpretive. Interpretive articles contain a theoretical/conceptual analysis or synthesis of a body of literature.

Descriptive. Articles were classified as descriptive when they presented information about a specific program, practice, or issue.

Personal belief or opinion. Articles in this category included the expression of an idea without citations and/or the benefit of past research to substantiate an author’s belief or opinion.

Other. Articles which fall into a category uncharacterized by one of the above descriptions.

Additionally, those articles in the study categorized as research were further divided according to the type of research each represented. The types of research were identified as follows:
Experimental. These studies involved the use of control and experimental groups and the manipulation of one or more independent variables.

Correlational/Ex post facto. These articles reported studies examining relationships between two or more variables.

Survey. Studies of this type described the frequencies, distribution, and characteristics of educational, psychological, and sociological variables.

Methodological. Research in this category examined the method and instrumentation through which self-directed learning is studied.

Qualitative. These articles reflected a naturalistic approach to research depicting phenomena through inductive data analysis.

Historical. Research of this type involved a systematic process of gathering information from primary and secondary sources to describe, analyze, and interpret the past.

Data Storage and Management

Bibliographical and survey data were stored in an electronic database produced using Lotus Notes Domino (R5) development software. The program allowed team members to make entries via the Internet directly into a central file on the Lotus Notes Server which facilitated the sorting of the initial 428 survey forms. Additionally, the program automatically compiled a separate database containing a synthesis of the 122 articles reviewed.

The database expedited the work of managing the large number of entries as well as providing a means for studying the survey results from numerous perspectives. The
on-line article review form contained 43 fields permitting the entry of data such as the name(s) of authors, the name of the article and other publication data, various kinds of demographic information, details relative to the kinds of research, and recommendations for further study. The Domino program automatically grouped the data according to selected fields for easy comparison and analysis.

In addition to making the review results quickly and easily available, the database enhanced the group's ability to collaborate between meetings. Each member of the group was able to enter research data from any computer with a connection to the Internet. Team members could view the database and manipulate various views on the World Wide Web.

Using the on-line database also facilitated security and protection from loss of the research documents. Information entered was stored on a central Lotus Notes server and on the disk drives of two local computers. The Domino program has a replication capacity enabling the database manager to keep all existing copies of the data synchronized. Even in the event that the central server was not available, the database was always accessible by the database manager.

Results

After reviewing the selected articles, the research group analyzed data from various perspectives. Pertinent to the study is the classification of articles by journals, years and journals, authors, type, type according to years published, research and subtype and, subtype of research articles across years.
Distribution of Articles by Journals

From the 14 selected journals, a total of 122 articles on self-directed learning were identified. The majority of these articles (65%) were found in three adult education publications: *Proceedings of the Adult Education Research Conference* (33%), *Adult Education Quarterly* (24%), and *Lifelong Learning* (8%). Publications in the *Journal of Continuing Education in Nursing* also accounted for 17% of the total articles on self-direction.

Three periodicals, although selected as possible repositories for articles on self-direction, had none: *Convergence*, *Journal of Extension*, and *New Horizons in Adult Education*. The omission of articles from the *Journal of Extension* is especially puzzling given the historical association of rural extension services and adult learning. Self-direction in learning under these circumstances would seem to be a "natural extension."

Table 1 and Figure 1 present tabular and graphic frequency distributions across the journals. The last row in Table 1 shows that the percentage of articles on self-direction was only 1.1% of all the published articles in the 14 journals. If the three journals with no SDL publications are eliminated, the percentage rises to 1.3%. In only four journals was the percentage of articles on self-direction across total articles above one percent: *Adult Education Quarterly*, *International Journal of Lifelong Education*, *Journal of Continuing Education in Nursing*, and *Proceedings of the Adult Education Research Conference*.

Distribution of Articles by Years and Journals

The above data were further analyzed by year and are presented in Figures 2 and 3. The percent of articles on self-direction in learning per year roughly approximated a
normal distribution curve. The year with the highest percentage of SDL articles was 1986, when 3.1% of the total articles in the 14 periodicals were devoted to self-direction. The peak years for the occurrence of self-direction in learning articles were between 1983 and 1991.

This same distribution shape was roughly duplicated when individual journal contributions to self-direction were plotted by year for three major contributing periodicals (Table 2). Adult Education Quarterly devoted more than 20% of its articles to the topic of self-direction in learning in the years 1985, 1989, and 1991. However, it should be noted that 50% of the articles for these three years were responses to previous articles published by Brookfield (1984) or Field (1990).

**Distribution of Articles by Authors**

Six authors wrote or co-authored approximately one-third of the total articles published on self-direction: Rosemary Caffarella (n = 9), Ralph Brockett (n = 8), Huey Long (n = 8), Stephen Brookfield (n = 6), Lorys Oddi (n = 5), and Randy Garrison (n = 3). All of these authors, with the exception of Oddi, continued to write on this topic well past the peak period (1983 – 1991). Brockett, Brookfield, Caffarella, Garrison and Long wrote 40% of the 20 articles on self-direction between 1992 and 1998.

**Distribution of Articles by Type**

Figure 4 displays the distribution of all articles on self-direction by type over the 19-year period. Of the articles on self-direction, 25% (n = 30) were classified as descriptive of teaching programs or practices. It is significant to note that approximately one third of these articles appeared in the *Journal of Continuing Education in Nursing*. There was only
Interpretive articles (n = 28) appeared as approximately 23% of the self-direction articles. The words “critical paradigm” appeared in five of the titles, suggesting troubling issues raised in the articles. Research (n = 61) comprised the largest group of articles, at 50%, while the category of personal opinion (n = 3) the smallest, at 2.5%. A complete analysis of the research article category is presented in a later section.

**Description of Article Type by Years**

Figure 5 illustrates the distribution by six year periods of the various article types from all writings on self-direction published in those same six year periods. In other words, of all articles on self-direction published between 1980 – 1985, 48% were classified as research, 30% as descriptive, 19% as interpretive, and 3% as personal opinion. This graphic shows that descriptive articles have declined across the last two periods. Research articles have declined in the last period but the percentage of interpretive articles increased significantly in this same period.

**Distribution of Articles Classified as Research by Subtype**

Figure 6 displays the percentage of research articles (n = 61) over the 19 year period when the data are further broken down into the categories of experimental, correlational, methodological, qualitative, or survey. Experimental research comprised only 5% of the 61 articles. The largest subtype is correlational research (n = 16). Variables associated with self-direction or readiness include life satisfaction, personality and psychosocial...
factors, participation and deterents, educational achievement, achieving styles, and
demographic variables.

Articles discussing methodological research issues (n = 14) made up about one-
fourth of the research articles. All of these focused on the development and validation of
two scales to measure self-direction; Guglielmino’s (1971) “Self-Direction Learning
Readiness Scale” comprises 71% of the articles while the Oddi (1986) “Continuing
Learning Inventory” is the focus of the remaining 29% of articles.

Qualitative research articles (n = 15) comprised another 25% of the total research
articles. Themes which emerged focused on librarians, John Steinbeck, self-help groups,
clergy, low educational-attaining adults, and informed self-directed learners about the
quality of work, learner control, career development, and environmental determinants.

Survey research articles made up the last category (n = 12 or 20%). These articles
included such research as learning projects’ studies, attitude surveys, and descriptions of
the frequency and nature of SDL activities.

Distribution of Subtype of Research Article across Years

The subtype of research article percentages by six year period was examined in
Figure 7. In these periods, the small number of experimental studies declined further, as
did survey research. However, both methodological research and qualitative research
showed the opposite trend.

Conclusion and Discussion

The purpose of this study was to examine the literature of self-directed learning that
has appeared in selected adult education periodicals between the years 1980 and 1998.
The research group used an on-line database for the content analysis to discover important tendencies in the periodical literature. The research focused on the exploratory, quantitative description of categories and trends. Articles were initially categorized by article type and secondarily by the type of research. In all steps, a collaborative approach to the content analysis was followed. The computer database became an essential component in the collection and examination of information.

Roughly one percent of the total articles reviewed dealt with SDL. This was a rather smaller percentage than expected especially if the prevalent understanding remains that SDL is an integral aspect of adult learning.

The highest percentage of articles committed to SDL appeared in 1986 with a 3.1%. The zenith of articles concerning SDL occurred between 1983-1991. This was a time of considerable interest and controversy pertaining to the methodologies of measuring self-direction. Furthermore, awareness increased regarding the possible attributes of SDL. A major part of this debate was generated in Adult Education Quarterly.

A total of 82% of the articles on self-directed learning were found in four periodicals. There was considerable literature in the Journal of Continuing Education in Nursing (17%). Noteworthy is that 65% of the articles were in three adult education publications: Proceedings of the Adult Education Research Conference (33%), Adult Education Quarterly (24%), and Lifelong Learning (8%).

Descriptive articles of teaching programs or practices accounted for 25% of the effort. Interpretive articles constituted about 23% of the articles. Research articles were the largest group with personal opinion the smallest.
The most common research method was correlational/ex post facto which involved examining variables associated with self-direction in learning and factors related to self-directed learning readiness. Qualitative research and issues related to methodology each compose about 25% of the total number of research articles and have exhibited growth patterns. The methodological articles have emphasized the development and validation of measures of self-direction. Survey research has constituted 20% of the research but has experienced a decline in recent years. Experimental research contributed only 5% of the total articles while suffering a decrease from its already small percentage.

A relatively small group of authors have contributed articles out of proportion to their numbers. Six authors produced around one-third of the total articles with five of these authors yielding 40% of the articles from 1992-1998.

The pinnacle of research articles involving SDL was in 1986 with the years of 1983-1991 exhibiting the most activity. It was found that the number of research articles declined after 1991. Brockett and Hiemstra (1991) argued that the idea of self-direction will "continue to thrive as we move toward the year 2000 and beyond" (p. 216). This research differs with Brockett and Hiemstra’s hypothesis, at least for the periodicals reviewed. Of course, the case could be made that quantity of literature production is not necessarily related to the quality of ideas.

Brockett and Hiemstra (1991) indicated that one of the most important issues for educators is to develop a strengthening of the idea of self-direction within society. It seems that the abatement of articles within periodicals committed to adult learning indicates a change in the emphasis on SDL. It has been repeatedly stated that SDL is of
considerable importance in the research agenda of adult education (Brockett & Hiemstra, 1991; Candy, 1991; Merriam & Caffarella, 1999). The decline in published conceptual and research efforts within these mainstream periodicals demonstrate a precipitous dip during most of the 1990s. This deterioration in widely available research and commentary suggests a possible change in emphasis for self-directed learning. To further elaborate on the decline in publication, it may be of value to investigate literature involving SDL found in other forums. The continued use of this database shows that similar methods may expedite the development and organization of future research.

Garrison (1997) stressed that "self-direction is seen as a necessary process for achieving worthwhile and meaningful educational outcomes" (p.31). Nonetheless, this seemingly important process has seen a decline within these selected periodicals in the sense of a dwindling number of published articles. Merriam and Caffarella (1999) agree with this conclusion by offering the supposition that there is a stagnation in the development of a rich research tradition regarding SDL. The results of this content analysis may help decipher the ebb of articles in mainstream publications involving self-directed learning. Merriam and Brockett (1997) advocated the creation of new perspectives on self-direction. It is insightful to note that these new outlooks have not been generated in the mainstream literature to the degree of the discussion and controversy that were produced in the 1980s and early 1990s. It is possible to construe the lack of vitality of self-directed research within these periodicals as the acceptance of SDL into the fold of educational respectability. Another alternative could be the transfer of theories into meaningful application in the business world, from other practitioner oriented
publications yet to be reviewed. This research cannot adequately answer such speculation, but conceivably, additional research within this vein may offer more clues concerning the description of trends within the comprehensive literature of self-directed learning.
Table 1

Frequency Distributions and Percentages

<table>
<thead>
<tr>
<th>Journal</th>
<th>SLDF</th>
<th>TOTALf</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEQ</td>
<td>29</td>
<td>356</td>
<td>8.1%</td>
</tr>
<tr>
<td>AERC</td>
<td>40</td>
<td>998</td>
<td>4.0%</td>
</tr>
<tr>
<td>JCEN</td>
<td>21</td>
<td>1084</td>
<td>1.9%</td>
</tr>
<tr>
<td>IJLE</td>
<td>5</td>
<td>356</td>
<td>1.4%</td>
</tr>
<tr>
<td>LLAL</td>
<td>10</td>
<td>1130</td>
<td>.88%</td>
</tr>
<tr>
<td>ABE</td>
<td>3</td>
<td>363</td>
<td>.83%</td>
</tr>
<tr>
<td>JCHE</td>
<td>2</td>
<td>334</td>
<td>.60%</td>
</tr>
<tr>
<td>MPAE</td>
<td>1</td>
<td>166</td>
<td>.60%</td>
</tr>
<tr>
<td>EG</td>
<td>4</td>
<td>852</td>
<td>.47%</td>
</tr>
<tr>
<td>CHER</td>
<td>1</td>
<td>328</td>
<td>.30%</td>
</tr>
<tr>
<td>TD</td>
<td>6</td>
<td>3079</td>
<td>.19%</td>
</tr>
<tr>
<td>JOE</td>
<td>0</td>
<td>922</td>
<td>.00%</td>
</tr>
<tr>
<td>CON</td>
<td>0</td>
<td>735</td>
<td>.00%</td>
</tr>
<tr>
<td>NH</td>
<td>0</td>
<td>46</td>
<td>.00%</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>10749</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Table 2.

Percent of SDL Articles by Year – Three Major Journals

<table>
<thead>
<tr>
<th>Year</th>
<th>AECp</th>
<th>AERCp</th>
<th>JCElp</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>.00%</td>
<td>2.1%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1981</td>
<td>.00%</td>
<td>.00%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1982</td>
<td>.00%</td>
<td>10%</td>
<td>.00%</td>
</tr>
<tr>
<td>1983</td>
<td>7.1%</td>
<td>4.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>1984</td>
<td>4.5%</td>
<td>12%</td>
<td>.00%</td>
</tr>
<tr>
<td>1985</td>
<td>26%</td>
<td>10%</td>
<td>6.7%</td>
</tr>
<tr>
<td>1986</td>
<td>8.7%</td>
<td>3.3%</td>
<td>17%</td>
</tr>
<tr>
<td>1987</td>
<td>11%</td>
<td>2.0%</td>
<td>.00%</td>
</tr>
<tr>
<td>1988</td>
<td>11%</td>
<td>8.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>1989</td>
<td>25%</td>
<td>3.3%</td>
<td>.00%</td>
</tr>
<tr>
<td>1990</td>
<td>7.1%</td>
<td>7.0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>1991</td>
<td>22%</td>
<td>2.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>1992</td>
<td>11%</td>
<td>2.2%</td>
<td>.00%</td>
</tr>
<tr>
<td>1993</td>
<td>6.7%</td>
<td>3.3%</td>
<td>.00%</td>
</tr>
<tr>
<td>1994</td>
<td>5.9%</td>
<td>3.7%</td>
<td>.00%</td>
</tr>
<tr>
<td>1995</td>
<td>8.3%</td>
<td>1.8%</td>
<td>.00%</td>
</tr>
<tr>
<td>1996</td>
<td>.00%</td>
<td>1.8%</td>
<td>.00%</td>
</tr>
<tr>
<td>1997</td>
<td>.00%</td>
<td>.00%</td>
<td>.00%</td>
</tr>
<tr>
<td>1998</td>
<td>5.9%</td>
<td>.00%</td>
<td>.00%</td>
</tr>
</tbody>
</table>
Figure 1. Distribution by journal.

Figure 2. Percentage of SDL articles by year.
Figure 3. Percentage in selected journals.

Figure 4. Analysis by type of article, 1980-1998.
Figure 5. Analysis of type of article, 1980-1998.

Figure 6. Analysis by type of research, 1980-1998.
Figure 7. Analysis by type of research in periods of six to seven years each.
References


I. DOCUMENT IDENTIFICATION:

| Title: Two Decades of Literature on Self-Directed Learning: A Content Analysis |
|---------------------------------|---------------------------------|
| Author(s): R. G. Brockett, S. L. Stockdale, D. L. Fogerson, B. F. Cox, | |

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

<table>
<thead>
<tr>
<th>The sample sticker shown below will be affixed to all Level 1 documents</th>
<th>The sample sticker shown below will be affixed to all Level 2A documents</th>
<th>The sample sticker shown below will be affixed to all Level 2B documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR PUBLIC DISTRIBUTION IN ANY FORM IS GRANTED BY THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR PUBLIC DISTRIBUTION IN ANY FORM IS GRANTED BY THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
</tr>
</tbody>
</table>

Level 1 Level 2A Level 2B

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits.

If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.
I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

| Signature:          | Printed Name/Position/Title: Ralph G. Brockett
|---------------------|-----------------------------------------
| Ralph G. Brockett   | Professor                               |
| Professor           |                                         |
| University of Tenne |                                          |
| A520 Claxton Complex|
| Knoxville, TN 37996-3400|
| (865) 974-2227      | (865) 974-0135                         |
| brockett@utk.edu    |                                          |
| Date: February 11, 2001|

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Price:</td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM: