CHAPTER ONE
INTRODUCTION

During the last 15 years the health care industry has experienced profound changes. Fiscal responsibility coupled with the information age has created a challenging environment for health care professionals. With a larger body of knowledge available to more practitioners, multi-skilled health care practitioners are predicted to be the workers of the future as they will decrease labor cost and provide consistent care. This brings to light current issues in assuring professional competency. Public advocacy groups, while supporting multi-skilled practitioners for economic reasons, want assurance of on going competency by health care professionals. Professional associations need to protect the exclusive practice roles of members while addressing issues of competency in multi-skilled practitioners. Influenced by these changes in the health care industry, the field of dietetics is facing a time of self-evaluation and redefinition. The Professional Development 2001 Proposal has been offered by the Commission on Dietetic Registration (CDR)\(^1\) to address these issues. It couples lifelong learning with a reflective inquiry framework to better quantify practitioners’ needs while giving the needed flexibility to adapt to changes in health care and the marketplace. While this departure from traditional continuing education requirements offers a thoughtful and progressive solution, it also asks registered dietitians\(^2\) to work from a new paradigm for professional development. To date, neither the CDR nor the American Dietetic Association (ADA) have offered a systematic review of these concepts and their implications for practice. The field of adult education offers a framework to

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\(^1\)The Commission of Dietetic Registration is the credentialing agency for the American Dietetic Association and is responsible for establishing and enforcing standards and qualifications for registered dietitians (Commission on Dietetic Registration, 1991).

\(^2\)For purposes of this discussion the terms registered dietitians and dietitian will be used interchangeably and refer to practitioners who have been granted registration status by the Commission on Dietetic Registration.
better understand the Professional Development 2001 model as lifelong learning, self-directed learning and reflective inquiry are in this domain of knowledge. As practitioners begin to consider this proposal in relation to their practice, the broader perspective of adult education research and theory can provide insight, depth and context to enlighten its implementation. A critical analysis was undertaken to demonstrate how Professional Development 2001 embodies the concepts of self-directed learning, reflective inquiry, and lifelong-learning and why these concepts are important as a means of assuring professional competence.

Background

Self-evaluation

In 1994, The American Dietetic Association (Parks, Babjak, Fitz, O'Sullivan Maillet, & Mitchell, 1994) held a "Future Search Conference" entitled Challenging the Future of Dietetic Education and Credentialing: Dialogue, Discovery, and Directions. The purpose of the conference was to examine the role of dietitians in the 21st century, to consider future educational requirements and to establish objectives to achieve these requirements. The attendees envisioned a profession which could manage ongoing job change and have the skills to act as change agents for patients and employees. Requirements for dietitians in the 21st century would include lifelong learning coupled with advanced management and interpersonal skills. A vision of the future was developed with a focus on three areas: practice, education and credentialing.

Pragmatic changes in the practice of dietetics were highlighted by new concerns in the area of credentialing. Professional knowledge is expanding exponentially, while the diversity of jobs dietitians can assume continues to grow at an ever increasing rate. If this change in knowledge and job roles will be the norm, how will credentialing agencies assure professional
competency and protect public health and safety?

**Contextual influences.** ADA’s response to these issues was in part driven by two contextual forces. One was the change in health care delivery. The other, were changes in information technology and the overall ease and accessibility of information to the public at large. Since the early 1980's, the rapidly increasing cost of medical care has altered health care delivery. The traditional delivery model of fee for service has been largely replaced by managed care and other medical care systems. These newer models provide comprehensive and defined health services for a set fee (American Dietetic Association [ADA], 1993). The impact of this shift can be seen in shorter hospital stays, more outpatient and ambulatory care services, and the downsizing of hospitals. This has been accompanied by an increased competitiveness among providers to maintain preferred provider status with managed care systems. The underlying theme common to these changes is cost-effectiveness or delivering more services for fewer dollars.

As fiscal responsibility has become paramount in health care, practitioners’ roles have started to be redefined. Labor represents a major cost of doing business in health care settings. The effect of hospital downsizing and a shift of services to outpatient settings has resulted in a smaller work force. One that needs to be able to provide the breadth of services found in traditional settings while addressing a wider range of outpatient services.

Examples of this diversification in responsibilities can be found in both healthcare management and in clinical settings. Department managers are more frequently asked to assume

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1 Other models that are not as inclusive as managed care systems, but have contributed to the current changes in health care delivery are: health maintenance organizations, preferred provider organizations, and individual practice associations (ADA, 1993, p.1171).
the responsibility for an additional department. Or to redesign services to support more outpatient care. Diversification is especially notable in clinical settings. The multi-disciplinary team approach allows for overlapping roles in the long term management of chronic diseases, (e.g., diabetes, cardiovascular disease, obesity). This overlap allows for medical monitoring in non-medical settings and can be done by several team members, including the dietitian. Also, in a preventive care practice, core health education information, i.e., smoking cessation, exercise, low-fat food selection can be taught by several members of a multi-disciplinary team.

"Multi-skilled practitioners" is the term used to describe this diversity in training and practice. The issues of multi-skilled practitioners are of special significance to registered dietitians. In 1995, the Commission on Dietetic Registration conducted a survey of dietetic practitioners and employers to provide information on the current scope of job responsibilities of dietitians and future needs of the profession (Kane et al., 1996). The results highlighted the need for fiscal accountability, and emphasized the cost-benefit of services by suggesting that professionals be cross-trained to allow for more flexibility and versatility on multi-disciplinary teams (Balch, 1996). The American Dietetic Association predicts the current body of knowledge dietetic practitioners use will be "readily available to other health care practitioners and consumers by 2000" (Parks et al., 1994, p. 1046). This shift in knowledge will cause dietitians to redefine their role, both on the health care team and in their relationships with patients.

Societal Concerns and Professional Competency

As practitioners redefine their roles and challenge traditional job responsibilities issues of licensing and professional competency are being reexamined by the public and practitioners alike. Typically, state regulations define who is allowed to perform which tasks, while licensing screens applicants and assures entry-level requirements of performance. Certification
and recertification are similar to licensing but are usually administered through a non-
governmental agency (Shimberg, 1987). Traditionally, once a professional qualifies for
licensing and certification, continued competence is assumed by the regulatory board(s). Paying
renewal fees and meeting any continuing education requirements are the signs of competent
professional performance. Exceptions to this are professional malpractice or ethical
misconduct.

Two groups are questioning the value of this system. One group are professionals who
would like to provide services traditionally performed by practitioners in another area of
training. They suggest demonstrated competency should guide who is allowed to perform
various tasks. The second group are public advocacy groups. They cite an increase in
accessibility to healthcare services, from the use of multi-skilled practitioners, especially in
underserved areas. Also, there seems to be an increase in quality of care associated with services
provided by multi-skilled practitioners. These groups ask, why can’t other professionals with
demonstrated competency perform the same task? The benefits seem obvious. Unfortunately,
with a decrease in dollars for medical care and more competition for patients professional
regulatory boards are increasingly involved in protecting their area of expertise (Finocchio,
Dower, McMahon, Gragnolo, & the Taskforce on Health Care Workforce Regulation, 1995).

Public advocacy groups such as such as the Pew Health Professions Commission\(^4\) (Finnocchio et al., 1995) and the Citizen Advocacy Center\(^5\) (Swankin, 1995) highlight another

\(^4\)The Pew Health Task Commission was established in 1989 by the Pew Charitable Trusts to "assist health professionals, workforce policy makers and educational institutions in responding to the challenges of the changing health care system" (Finocchio et al., 1995, p. 58).

\(^5\)Citizen Advocacy Center supports public members who serve on health care regulatory boards and governing bodies as representatives of the consumer interest. It provides support services such as: research, training, technical support, networking opportunities (Swankin, 1995).
area of concern. They note little research supports a correlation between continuing education programs and competency. Possibly because only attendance is documented, not relevance or application to practice. With the advent of the information age these concerns will require only more attention as individual practitioners try to translate new knowledge into their daily practice (Klevans, Smutz, Shuman, & Bershad, 1992).

**ADA’s Response to Change**

As mentioned above, current recredentialing is usually based on entry level requirements. How can credentialing systems be modified to better address the practitioner’s ever-changing work environment and job responsibilities? Attendees at the Future Search Conference envisioned education as providing the foundation to address these concerns. It can empower practitioners with the tools and skills necessary for responding to rapid changes in knowledge and the job market. Self-directed learning and critical thinking were highlighted as ways to individualize educational needs to better match knowledge and market needs. Lifelong learning was expanded to include self-direction and self-evaluation to provide more accountability to the public. The American Dietetic Association was directed to restructure the credentialing and professional development aspects of the organization. The Commission on Dietetic Registration was assigned by ADA to develop a new recredentialing program.

**Professional Development 2001 Proposal.** In Spring 1996, the CDR mailed all members of the American Dietetic Association the first draft of the proposed recertification system: Professional Development 2001 (CDR, 1996). This document provided an overview of philosophy and guiding principles (Table 1, see Appendix for Tables 1-5) of the proposal and an in-depth review of the proposed system model (Table 2). The vision created at the Future Search Conference coupled with public demand for more accountability motivated CDR to take a proactive stance in designing the recertification process. This new system is scheduled to be
piloted in 1998 with full implementation in 2001, hence the proposal title.

The Commission’s goal was to achieve professional accountability with flexibility for the practitioner. CDR has long supported "responsible lifelong learning...described as continuous learning that is self-initiated, self-directed and self-evaluated" (CDR, 1996, p. 3). Using this definition as a framework, a six-step model was developed to accommodate the principles of self-directed learning and add more measures of accountability. The ADA membership was asked to respond to this proposal. In January 1997, Draft 2: Professional Development 2001 (ADA, 1997) was published. Currently, a final revision is in press.

Draft 2 is also a six-step model (Table 3) and incorporates four measures of accountability. This is achieved four ways: First, in the reflection and self-assessment of a professional’s practice. This information will be used to develop career goals; second, with a personal assessment to identify learning needs; third, with the creation of a five year learning plan that matches career goals and learning needs; fourth, with an evaluation of outcomes.

An adult educator’s perspective on the Professional Development 2001 Proposal

Like many other professionals, registered dietitians are required to participate in continuing education activities. Approved activities are considered "education beyond that required for entry into the profession" (CDR, 1991, p.1) and include a wide range of choices. Examples are: self-assessment modules, presentations, academic course work, and publications. The following CDR (1991) philosophy offers a guide for practitioners in selecting and participating in these activities:

The dietetics practitioner engages in lifelong development to maintain and improve knowledge and skills for competent practice. This includes continuous
self-assessment to identify professional strengths and learning needs, establishment of short- and long-term goals for individual professional development, and selection of appropriate continuing education to meet these goals. (p.1)

Like other professionals, the individual practitioner determines if the quality of an activity meets their perceived needs. The CDR simply documents that activities have met CDR criteria for continuing education. With one exception there are no standardized methods for assessing a practitioner's needs, evaluating a practitioner's ongoing competency in a practice area, or documenting their progress toward professional development goals.

At first glance, this system seems to accomplish the task of achieving continuing education. But there is a potential gap between philosophy and practice. Self-assessment in this sense requires more than assessing known information. Professionals do more than acquire knowledge. They make judgments about its use. Schon (1987) describes it as artistry in practice, the ability to function in "these indeterminate zones of practice—uncertainty, uniqueness, and value conflict—escaping the canons of technical rationality" (p.6). Tacit knowledge refers to the implicit nature of this practice. Continuing professional education can help to make this implicit knowledge explicit allowing for more appropriate assessment of competency and practice needs.

Reflective inquiry and self-directed learning are two examples of continuing education concepts that promote this type of assessment. Reflective inquiry is the internal aspect of

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6 In 1989 ADA began developing the Self-Assessment Series for Dietetic Professionals to help practitioners address this need. It will be discussed further in a later section.

7 Reflective inquiry is the term the Commission on Dietetic Registration has chosen to encompass the adult education concept of critical thinking.
learning and refers to the process of making conscience how one constructs meaning or judgment, in (professional) practice and the impact it has on action (Garrison, 1992; Mezirow, 1991). Reflective inquiry involves three broad phases. First, the practitioner engages in deconstructing underlying beliefs values, past personal and professional experiences, and socio-cultural factors that influence a particular behavior or judgment call. This can be done individually or in a group, though a group setting may be preferred as it offers an opportunity to confirm one's analysis. The second phase, involves a reconsideration of one's experience in light of the deconstructed analysis. This can lead to a new interpretation of the situation, new future action, or a return to previous behavior. The third phase is an evaluation of the process. Has practice been influenced? Or changed? Or was information just analyzed? Obviously, not all reflective inquiry leads to change, but the evaluation phase stands as a confirmation to the reflective process (Cervero, 1992; Garrison, 1992).

There are three general definitions of self-directed learning: "a self-initiated process of learning that stresses the ability of individuals to plan and manage their own learning, an attribute or characteristic of learners with personal autonomy as its hallmark, and a way of organizing instruction in formal settings that allows for greater learner control" (Caffarella, 1993, p. 25). Whether it is a self-directed learning project or taking advantage of an unexpected learning opportunity, both are examples of self-directed learning. Most often self-directed learning is associated with formal educational settings, as in the third definition, but informal settings are equally important. Learning linked with practical experience gives context and relevance to the learner, especially in professional settings. Learner autonomy will be discussed in a later section.

Reflective inquiry and self-directed learning have been explored and used by other professions grappling with similar issues concerning quality continuing education (Confessore &
Confessore, 1994; Blackwood, 1994). They provide an alternative means of strengthening an organization’s commitment to lifelong learning and assuring competency while remaining sensitive to individual practitioners’ needs.

Self-directed learning and reflective inquiry, as used in Professional Development Proposal 2001 offer an opportunity for practitioners to take control of their professional education process while addressing societal concerns for documentation of competency. It also represents a paradigm shift in the role of dietitians for fulfilling their continuing education requirements. What are the consequences of this shift in responsibility? What are the consequences for practitioners?

The ADA membership has been informed of this proposal through the ADA Courier (1997), a member newsletter, and a series of articles in the ADA Reports of the Journal of the American Dietetic Association (Parks, et al, 1994; Derelian, Fitz, & Babjak, 1995; Parks, Fitz, O’Sullivan Maillet, Babjak & Mitchell, 1995; Fitz, 1997). These efforts have provided an administrative update on this process, but little has been published addressing the societal context of the proposed changes, professional education issues, or the potential impact on practitioners. The lack of information may be a source of member resistance in the future as there does not appear to be a mechanism to help practitioners note this type of need and ask for more information.

The field of adult education offers an understanding and framework for considering these proposed changes as self-directed learning and reflective inquiry are in this domain of knowledge. Research and theory from this field can give dietetic practitioners the background necessary to evaluate this proposal and appreciate the impact on daily practice. Areas of particular note in the adult education literature include: learner resistance to self-directed
learning, the role of learner control and responsibility, and learner autonomy.

Need for and Significance of the Study

The CDR has proposed a thoughtful and progressive recertification system for dietitians. As this plan develops from theory to practice, pragmatic questions arise concerning practitioners transition to the new system. Predictably, the process of any change can be accompanied by a resistance to new ways and a need for more support and information. Dietitians may be more sensitive to these issues due to the radical nature of the proposed changes. To date, neither the Commission on Dietetic Registration nor the American Dietetic Association have offered a systematic review of these concepts and their implications for practice. As CDR readies to begin a pilot study of the Professional Development 2001 Proposal now is an opportune time to consider these concerns.

Statement of Purpose

The field of adult education offers a framework to better understand Professional Development 2001 as the concepts of self-directed learning and reflective inquiry are in this domain of knowledge. As practitioners begin to consider this proposal in relation to their practice, the broader perspective of adult education research and theory can provide insight, depth and context to enlighten its implementation. A critical analysis was undertaken to demonstrate how Professional Development 2001 embodies the concepts of self-directed learning, reflective inquiry, and lifelong-learning and why these concepts are important as a means of assuring professional competence.

Questions Guiding Inquiry

Questions from two areas frame this inquiry. The first area concerns the purpose and philosophy of Professional Development 2001. How does it embody the concepts of self-
directed learning, reflective inquiry, and lifelong-learning? How do these concepts help to assure professional competency?

The second area focuses on the dietetic practitioner. What are personal characteristics and attributes of dietetic professionals that might encourage or discourage the use of Professional Development 2001? What additional resources and/or support would enhance the implementation of Professional Development 2001?
CHAPTER TWO
METHODS

Professional Development 2001 is a multi-faceted document presenting several questions concerning its use. Since the document is still in draft form qualitative methodology, which focuses on the meaning and process of a topic or problem instead of outcomes, was chosen to explore this document. Professional Development 2001 was critically analyzed by constructing a tri-partite lens of its components from the adult education literature: First, with a demonstration of how Professional Development 2001 embodies self-directed learning, reflective inquiry, and lifelong learning; second, with a discussion of why these concepts are important in assuring professional competency; third, with an examination of issues concerning the implementation Professional Development 2001.

Seminal theorists and research were reviewed in the areas of continuing professional education, lifelong learning, self-directed learning, and reflective inquiry. Their selection was based on the timeliness and relevance to this document. Common areas of review included the historical significance of theory and research, societal issues, the role in individual learning, and the role in group learning environments.

As with the nature of qualitative research, contextual aspects were considered in the analysis. One example, is the first section. It reviews concepts and principles that guide continuing professional education from the adult educator’s lens. This provides a framework for the analysis and an introduction to pertinent adult education concepts guiding Professional Development 2001. A second example is in the description of actions already taken by the ADA that support components of Professional Development 2001. These are noted through-out the analysis and provide insight into current interpretations of this document. A third example is in the final section which discusses societal concerns for professional recertification and ADA’s
response to these concerns.

Also, as is the nature of qualitative research, the review of the literature and the analysis were intertwined with each informing the other. Much like a kaleidoscope, each area reviewed changed the picture of continuing professional education while themes common to all areas shaped the discussion. With each new perspective the other areas had to be reconsidered and as such the analysis evolved. Concurrently, the many overlapping areas of lifelong learning, self-directed learning, and reflective inquiry also supported this evolving nature of research. While each area represented diverse perspectives and a wide range of theorists, each had a core body of beliefs and knowledge in common with the others. Once again, as each area was examined the view changed but themes common to all areas shaped the discussion. The discussion of findings and the analysis are a reflection of this process.

Limitations

The review of the literature provided a framework for the analysis. As such, it is not an exhaustive critique of the literature. Each area focused on the work of selected theorists and practitioners in the field of adult education. Also, all data collected were from published sources. The analysis of Professional Development 2001 was limited to documents published by ADA.

Also, by excluding non-published data much rich and descriptive experiential information was not incorporated in the review and analysis. Both the ADA membership and CDR staff offer a valuable perspective to the implementation of Professional Development 2001. Their concerns and ideas would provide additional depth to this discussion.
The Role of the Researcher

In qualitative research the researcher’s role is primary in collecting and interpreting data. Thus, personal biases, assumptions, and values must be acknowledged. I was trained as a registered dietitian and have practiced in educational health care settings for over 18 years. As a practitioner in a non-traditional field I have often felt underrepresented by the American Dietetic Association. I have become cautious of this large organization with what appeared to be, in the past, one view of dietitians and their role in health care. Recently, the leadership appears to be changing and trying to be responsive to a rapidly changing marketplace (for example, Professional Development 2001). As a member I am still in a wait-and-see position, as a researcher studying Professional Development 2001 I struggle to balance objectivity with personal experience. To address this issue I enlisted two registered dietitians, with varied backgrounds, to review my work as I completed the sections outlined above. Their goal was to screen my writing for personal influences that were not appropriate to the subject of this paper.

Another area of bias is my pursuit of an advanced degree in adult education. I feel it best describes my personal philosophy of education and learning for adults. The principles embraced by Professional Development 2001 show potential for empowering dietitians through the use of adult education principles and theories. Once again, I struggled to balance personal beliefs about the value of adult education theory and practice with objectivity concerning the implementation of this document. The pragmatic aspects of the literature review offered an opportunity to address this concern. By noting the experience of other professions who have used these concepts the possibly of a more balanced view is presented.

Biases, assumptions, and values are not easily known. I kept a journal to better articulate the ones noted above and become aware of those not known. Of particular note are my biases about dietetic practitioners. Because I have spent most of my career in nontraditional roles I
often have had little in common with my colleagues. As a result of journaling, I have begun to look for the common ground in our experiences in order to join them in this continuing education process.

Validity

Validity in qualitative research is established through "quality criteria such as trustworthiness and ‘authenticity’" (Creswell, 1994, p. 157). Several procedures were incorporated into the analysis to promote the establishment of these criteria. They are framed by the categories of internal validity, external validity, and reliability. Internal validity refers to the "accuracy of information and whether it matches reality" (Creswell, 1994, p. 158). Often this is done by triangulating sources of information. In this analysis, three areas supported triangulation of the findings: conceptual, contextual, pragmatic. Conceptually, each subsection was reviewed for core information. As mentioned above, the review of lifelong learning, self-directed learning, and reflective inquiry included historical significance of theory and research, societal issues, role in individual learning, and their role in group learning environments. Themes were identified in each section and compared and contrasted both in and outside of the section.

Contextual information included reporting actions already taken by CDR and ADA in their efforts to prepare for implementation of Professional Development 2001. Pragmatic information included documents published by CDR and ADA concerning Professional Development. Also included were findings about personal characteristics and attributes of dietetic professionals that might encourage or discourage the use of Professional Development.

During the early 1980’s I opened a private practice and received training in group counseling with eating disordered patients. My private practice focused on corporate wellness programs and long-term individual diet counseling. These experiences provided the foundation for future employment outside of hospitals and the public health sector.
External validity is limited in qualitative studies as the findings are meant to form an unique picture of the topic or problem. This notwithstanding, many of the themes identified in the adult education literature were identified in all the sections. These themes provided a framework for constructing the analysis.

The issue of reliability is always difficult in qualitative research due to the subjective nature of the work. Professional Development 2001 is a complex document. Research can be generated from many perspectives and the same resources and a different picture would be created of this document. I chose the perspective of an adult educator who is also a dietetic practitioner. The scope of references also provides a framework is which to address reliability. Much effort was taken to only use published information with regard to the conceptual, contextual, and pragmatic findings. Also, the review of the literature focused on seminal writers and theorists to provide an easily recognizable picture of these topics.
CHAPTER THREE
THE FINDINGS AND ANALYSIS

Introduction

The Commission on Dietetic Registration has proposed a new system for recredentialing dietetic practitioners. Goals of this new system include ensuring competency through more accountability of the continuing education process, facilitating lifelong learning, while supporting the diverse practice of dietetics. Entitled Professional Development 2001, it is grounded in lifelong learning, self-directed learning, and reflective inquiry. While this departure from traditional continuing education requirements offers a thoughtful and progressive solution, it also asks registered dietitians to work from a new paradigm for professional development. The field of adult education offers a framework to better understand Professional Development 2001 as the concepts of lifelong learning, self-directed learning, and reflective inquiry are in this domain of knowledge. As practitioners consider this proposal in relation to their practice, the broader perspective of adult education research and theory can provide insight, depth, and context to enlighten its use. A critical analysis of this document was undertaken to demonstrate how it embodies the concepts of lifelong learning, self-directed learning, and reflective inquiry and why these concepts are important as a means of assuring professional competence.

A discussion of five topics comprise this integrated critique. Each illuminates an aspect of Professional Development 2001 and together they a form a lens in which to closely exam this document. Background for this analysis begins with a review of continuing professional education. Concepts and principles are discussed from the adult educator ‘s perspective. This provides a framework for the analysis and an introduction to the pertinent adult education
Continuing professional education usually refers to the pragmatic aspects of acquiring information and knowledge. In this document it is also used to refer to the process of acquiring knowledge. For this reason, continuing professional education will be used interchangeably with the term professional development, which represents a broader, more inclusive definition of a practitioner’s activities.

The definition of continuing professional education is much like a rich matrix, reflecting the whole of a practitioner. It includes the practitioner’s knowledge base, their experience gathered from daily practice, values, and beliefs. It also includes their relationship with other professionals, their work environment and most important their relationship to society. While each of these components offers a necessary and different perspective, it is the sum of their parts that supports a professional’s daily practice and defines competency. Three areas shape the discussion of continuing professional education. One is society’s view of the practitioner and assumed expectations toward professional practice. Another are the practice models in which professionals frame their practice and continuing education needs. The last is the issue of professional competence and how is it qualified.

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Society. The examination of continuing professional education begins with the relationship between society and the professional. Professionals provide services, using specialized knowledge, to society that is deemed necessary. In return they are granted "extraordinary rights and privileges" (Schon, 1983, p.4). These rights and privileges include professional autonomy and the right to regulate their profession. While this agreement had existed since early times, the number of professionals and their impact on society has been limited. Starting with this century, and especially after World War II, society began to depend on the professional more for specialized knowledge. The number of practicing professionals increased exponentially with the advancement of technology into everyday life and the advent of the information age. During this time society’s agreement with the professional was complementary and seen as fair. In the late 1960’s the public began to view professionals in a more negative light. Professional competence was questioned and the rights and privileges afforded practitioners was challenged. Schon (1983) attributes this shift in attitude with a loss of faith in professional judgment due to the misuse of autonomy and the negative impact of poorly conceived projects or decisions affecting large segments of the population. Houle (1980) also cites an increase in the number of professionals during this time. Management and regulation of practice become more difficult as the pool of practitioners increases. Also, the public began to question the role of altruism in a professional’s practice along with the general issue of financial gain for services rendered. The provision of services to those in need is balanced against the economic needs and drives of the practitioner. It is a tenuous balance, one the public began to view as favoring the practitioner (Houle, 1980, Azzaretto, 1990).

In the ensuing years, professionals have responded by instituting various forms of self-regulation aimed at ensuring competency. Licensing and certification have been used to ensure entry-level requirements. Recertification procedures address ongoing competency often in the form of mandatory continuing education. There has been much debate, by both the public and
professionals, over the value of this approach to ensuring professional competency. Few studies have supported the efficacy of formal educational programs for assuring ongoing competency (Finnocchio et al., 1995; Swankin, 1995). Alternative approaches and issues influencing this topic will be discussed in a later section.

**Practice models.** This use of education for assuring competency is grounded in the technical aspects of professional activity. Schon (1983) states "professional activity consists in instrumental problem solving made rigorous by the application of scientific theory and technique" (p.21). Cervero (1988) refers to this model as the funtionalist viewpoint. Two key assumptions support this model: "[a] that problems of practice are well formed and unambiguous, [b] that these problems can be solved by applying scientific knowledge" (p.22). If the goal of professional activity is the application of specialized knowledge to well-defined problems, then increasing knowledge should improve performance and ensure competency.

Cervero (1988) describes two other viewpoints in which to also frame the concept of continuing professional education. One is the conflict viewpoint, the other the critical viewpoint. The former addresses the socio-political aspects of professions and society. The professions are seen as "primarily an economic function in society in that it is a means of maintaining this system of social inequality"(p.28). The focus is on the professional’s monopolistic control over an occupation and the impact it has on society. Continuing professional education is considered secondary to this purpose.

Cervero’s third model, the critical viewpoint, recognizes that not all practice problems are well defined. As technology has advanced, greater amounts of information have become available. Practitioners are faced with more complex problems, ones involving a broader spectrum of issues and concerns for both the client and society. Schon (1983) describes most
practice situations as characterized by uniqueness, uncertainty, and value conflict concerning acceptable outcomes (to both professionals and society). He suggests much of professional practice is finding the problem, or problem setting, to account for these variables. Once the problem is framed or set, a solution can be developed from the professional’s knowledge base and experience. Each problem presents an array of choices and possible solutions. This model’s name is derived from the need of "professionals to be critically aware of the implications of these choices" (Cervero, 1988, p.30).

In the critical viewpoint, professionals are seen as having an interactive relationship with problems. Practice problems are not defined once and resolved. They include ongoing, unpredictable change; a process of negotiating old variables with newly found ones. Superimposed on the process is honoring personal and societal values and maintaining ethical standards. In this model, competency is further defined to include the professional’s ability to manage ambiguity and adapt to frequent change.

Schon (1983, 1987) notes professionals do more than acquire knowledge. They make judgments about its use. He describes it as artistry in practice, the ability to function in "these indeterminate zones of practice-uncertainty, uniqueness, and value conflict-escap[ing] the canons of technical rationality" (Schon, 1987, p.6). Tacit knowledge refers to the implicit nature of this practice. Continuing professional education can help to make this implicit knowledge explicit allowing for more appropriate assessment of competency and practice needs. In the forward of Effective Continuing Education for Professions (Cervero, 1988), Schon describes Cervero’s discussion of these viewpoints as

[providing the] view that the aim of continuing education should be to help professionals develop their ability to reflect in and on
their own practice and to be come critically aware of the evaluation frames within which their professional knowledge-in-action is embedded. (p.xi)

Schon (1983) developed a model to address this view of professional practice. It is based on his work with several different professions and underscores the need for a broader definition of professional knowledge and its use. Cervero’s "critical viewpoint" builds on Schon’s model of professional practice. Referred to as reflection-in-action it will be discussed in a later section.

Professional knowledge and judgment are just two dimensions of professional practice. Others include the professional as a person and their relationship with clients, other professionals, and society-at-large. Nowlen (1990) suggests a holistic model to describe this "ensemble phenomenon"(p.21) of professional performance. He describes four dimensions of professional performance that in turn influence the goal or purpose of continuing professional education. The "[first] is the narrow professional knowledge/skills. The [second,] the evolving and multiplying context of practice. [Third,] the interactive environments of adulthood. [Fourth,] the social nature of professional performance" (p.22). Practice is not isolated from the values and beliefs of a professional or other significant events in his or her personal life. Also, practice involves interacting with others, each who can form and reshape practice problems. Continuing professional education can address the last two dimensions by incorporating knowledge from the fields of human development and organizational development.

A model for dietitians. The process of being critically aware, managing ambiguity and adapting to frequent change are of prime importance to this discussion. These goals of professional practice are represented in the reflective inquiry literature and are a cornerstone of Professional Development 2001. In 1994, the American Dietetic Association held a Future
Search Conference entitled Challenging the Future of Dietetic Education and Credentialing: Dialogue, Discovery, and Directions. The purpose of the conference was to examine the role of dietitians in the 21st century, to consider future educational requirements and to establish objectives to achieve these requirements. The attendees envisioned a profession which could manage ongoing job change and have the skills to act as change agents for patients and employees. Reflective inquiry, self-directed learning, and lifelong learning were chosen as philosophies and practices that best supported this and other goals of the conference.10

Professional competency. Undergirding the discussion of continuing professional education is professional competency. As might be expected, one aspect of competency is technical knowledge. Typically, a professional’s need to update his or her knowledge base can be achieved through a variety of formal educational programs. Participation in these programs allows for documentation of attendance, but not assurance that competency has been affected. The assumption is the professional can assess their educational needs and take courses related to these needs. They will then participate in programs in ways to acquire information and translating this to knowledge that is useful in the workplace (Azzaretto, 1990). Much debate in this area focuses on the need to better document this process. Few professionals have been trained in the program planning process, i.e., needs assessment, evaluation methods. Thus, the appropriateness of their continuing education selection(s) is questioned. Azzaretto (1990, p.40-41) offers a description of the issues facing professionals and recredentialing agencies concerning continuing professional education:

1. a multiplicity of educational providers, each claiming its legitimate right to

10A copy of the Future Search Conference Proceedings, Challenging the Future of Dietetic education and Credentialing: Dialogue, Discovery, Directions is available from the American Dietetic Association, Chicago, IL. For a brief overview of these proceedings the reader is referred to ADA reports: Future search conference helps define new directions in practice, education and credentialing, Journal of the American Dietetic Association, 94 (9), 1046-1047 by Parks, Babjak, Fitz, O'Sullivan Maillet, and Mitchell.
assist the practitioner in remaining competent;
2. various degrees of unmet needs among professions and professionals;
3. lack of educational standards that define quality of teaching and quality of educational programs;
4. wide divergence among professional groups as to what their members need to know in order to maintain their competence;
5. dissension as to who should pay for continuing professional education;
6. issues regarding who should decide on the level of participation, what should count as continuing education, and what should be the frequency of professional participation.

Various methods to assess and/or ensure professional competencies are available to professionals and recertification organizations to better assist in this process. They include "self-assessment inventories, periodic reexamination, chart audits, peer review, practice audits, and computerized simulations" (Azzaretto, p. 41). Professional concern around the use of these methods include time, use of the assessment information by regulating agencies, and cost.

Another aspect of professional competency are the skills and practices that make up the indeterminant zones of practice. These include values, ethics, and the personal development of the professional. While the public focus has been on updating the professional’s knowledge, this internal focus is equally important. This is where wise action is developed and nurtured (Cervero, 1992). The professional brings to a practice situation more than technical knowledge. Their actions are based on all the components of their life.

Competency in dietetics. In 1996, the Education Competencies Steering Committee (ECSC) of ADA provided a broader view of professional development and continuing professional education for dietetic practitioners. Since the 1970's, dietetic education had used
competency models built on behavioral objectives and learning outcomes to define professional performance. Now, ECSC refocused the definition of competency toward cognitive theory and the process of mastering a discipline. Competency is now defined as "the midpoint on a continuum of "professional growth that normally extends over 10-12 years" (Chambers, Gilmore, O’Sullivan Maillet, & Mitchell, 1996, p. 615) and represents the point where a learner has acquired enough understanding, skill, and appropriate values to continue professional development independently" (Chambers et al., p.615). Broad in nature, it is assumed competencies will "combine dimensions of understanding, performance, and values as an integrated whole" (Chambers et al., p.615) and will be context specific to the practice setting. Behavioral objectives do not allow for this integration of dimensions of practice. Values and skills are intertwined in practice; behavioral objectives separate their use.

ECSC described a five-stage progression in mastering a discipline. As reviewed by Chambers et al.(p.615), it is based on the novice-expert literature and includes the stages of novice, beginner, competent, proficient, and expert. Table 4 shows a model for evaluating professional development and continuing education needs of practitioners across the span of their careers. As professionals develop beyond the competency stage, their learning is more integrative. It better reflects their practice environment and includes more than updating knowledge with facts. Formal learning is balanced with informal learning. Growing self-knowledge allows the practitioner to assess learning needs more appropriately. Eventually, self-directed learning evaluated on the professional’s internal standards becomes the hallmark of the "expert."

Professional Development 2001 was developed to support this view of competency. It is shaped by three areas of adult education: lifelong learning, self-directed learning, and reflective inquiry. As interpreted by this researcher, lifelong learning provides an overarching philosophy
to the purpose and practice of this document. Self-directed learning offers a conceptual framework and methodology to support this philosophy. Reflective inquiry offers both methodology and a theoretical base in which to consider learning as proposed by this document.

Lifelong Learning

The creation of Professional Development 2001 broadens the definition of lifelong learning as it had previously used by dietitians. This review will discuss a general definition of the term and then further refine the concept by a discussion of lifelong learning versus lifelong education.

Definition. The contemporary view of lifelong learning developed at the beginning of this century. Industrialization began to challenge the belief that the knowledge one acquired as a youth sufficed through a lifetime. The advancement of technology after World War II made this educational model obsolete. Knowledge and technology were changing at too rapid a pace; traditional education now became the beginning of one’s educational experience instead of the end.

The international community responded to this change with a broad, deep definition of lifelong learning. It focused on the role of learning and education in the support and development of both the individual and society. Since the 1940’s, lifelong learning has been championed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Sponsoring publications, research and conferences, it is a major force in the arena of lifelong learning. The following is an example of how this organization defines lifelong learning. It is taken from the proceedings of the Nineteenth Session of UNESCO’s General Conference in 1976.

Lifelong education is neither limited in time to the period of schooling, nor in...
space to the school and its methods: it links up the whole of the community’s educational activities resources, aiming alike at the full development of the individual’s potentialities and at the advancement of a society undergoing transformation, which is consciously resolved to change. [It is] a source of coherence and integration [making it] possible to synthesize many elements already in existing educational systems, [and a source of] guidelines for the restructuring and reform of the various components [of educational systems].

(Ireland, 1978)

In the United States, lifelong learning is also defined by the whole person and in relation to the community. This concept is further shaped by other factors in this country. Two are economic and educational. Apps (1985) uses the terms of "production and consumption [or the] productive citizen" (p.27) as example of the former. This focus on work life serves to further limit the definition to adulthood. Also, in general, there is less concern about the socio-political aspects of lifelong education. Unlike much of world, in this country educational opportunities are assumed to be widely available to all. While this assumption may be questioned by some educators, it also narrows the definition of lifelong learning in the United States (Hiemstra, 1985).

**Lifelong learning.** Lifelong learning and lifelong education are often used interchangeably. At times their distinction can be subtle, but they represent different aspects of acquiring knowledge. The term learning refers to: "a normal and natural process which does not need teachers or even awareness that the process is occurring [although these factors do not necessarily impede it, and may even help it]" (Cropley, 1979, p.10). Baskett and Marsick (1992) further elaborate by describing "learning as a personal, emotional, and cognitive act, the results of which are unique to the individual...[It is] primary to the way in which people construct meaning in their personal and shared organizational lives" (p. 3). In lifelong learning, the term
learning refers to the process of acquiring knowledge and reflects the overarching philosophy of the international lifelong learning movement and its activities.

The philosophy of lifelong learning is given shape and form in several ways as highlighted by the UNESCO definition. Learning throughout life can be viewed as a vertical dimension. A horizontal dimension is represented by the diversity and depth of subject matter available for study (Cropley and Dave, 1978). An inner or third dimension, "links study to human experience, expression, and growth" (Kidd, 1975; Boucouvalas, 1980).

Supporting these dimensions are several characteristics of lifelong learning. One is the totality of education. Learning happens throughout the lifespan, at all educational levels, and in traditional and non-traditional forms. Another is the integration of education into all aspects of life: home, work, and community. Learning is not an isolated experience. The whole of a person contributes to the learning process. A third is flexibility. Change is a hallmark of contemporary society. Adaptability when dealing with this change allows the learning process to be tailored to individual needs. Building on flexibility is the fourth characteristic: democratization of knowledge. The ability to use or create a wide range of educational opportunities allows learning to become accessible to all people in a society. Last is self-fulfillment or improving the quality of life. This is the net affect of the previous characteristics. Learning that is flexible and integrated into daily life provides the foundation to address change of any kind. It provides the opportunity for learners to respond to change in the best way possible for them (Cropley & Dave, 1978, p.13).

There are also characteristics of lifelong learning that pertain to the individual learner. One, is the learner’s ability to manage the learning process. The skills needed to acquire information is important, but only one part of the process. Others include the ability to identify
learning needs and learning resources and the ability to learn both on one’s own or in a group. Another area is the learner’s values and attitudes about learning and how they contribute to learner motivation. A self-image that includes being a lifelong learning also contributes to motivation. (Cropley & Dave, 1978, p.12). These characteristics are components of self-directed learning and will be discussed in a later section.

**Lifelong education.** The term education refers to the experiences which influence learning, and to those activities which have a conscious educative purpose. (Cropley, 1979, p.10). Lifelong education reflects the pragmatic aspects of acquiring knowledge and is seen as an organizing principle (Cropley & Dave, 1978, pp.13) for lifelong learning. The learner begins the learning process by gathering information. This is converted to knowledge, "by interconnecting it with known concepts and skills as part of achieving a goal" (Dede, 1990, p.136). Wisdom can be developed by moving beyond the learning experience and incorporating "the strength and limits of personal knowledge, its interrelationship with the knowledge of others, and ethical and affective issues" (Dede, 1990, p.136). In today’s society, an individual manages large amounts of information. This is selectively converted into knowledge and eventually incorporated it into personal wisdom. It is not enough to acquire information, the learner must discriminate how it will be used and why (Boucouvalas, 1987). The reflective inquiry literature offers insight into this process and will be discussed further in a later section.

Another aspect of lifelong education is helping learners prepare for and adjust to change. Change can encompass both the individual and society. In the United States it is most prominent in the forces that influence business. In other countries, it may be seen more in the economic or political arenas. "Continuous change requires continuous learning" (Cropley & Dave, 1978, p.2). By broadening the scope of educational goals to include reflective inquiry, lifelong education can better address the range and depth of changes required in modern society.
Professional development. Characteristics of lifelong learning in continuing professional development parallel those found in the broader definition of this concept. Drawing on the work of several authors, Smutz and Queeney (1990) offer the following definition. "Continuing professional development remediates deficiencies, fosters growth, and facilitates change for professional practitioners, coupled with the concept that it is related to the application of professional skills in daily practice" (p.185). Other similarities include the development of the whole person to strengthen professional performance, fostering the learning skills necessary for lifelong learning, i.e. self-directed learning, motivation, and self-image of the professional as a lifelong learner.

Lifelong learning in dietetics. Since 1969, recertification for all dietitians has included mandatory continuing education. Approved activities are considered "education beyond that required for entry into the profession" (CDR, 1991, p.1) and include a wide range of choices. Examples are: self-assessment modules, presentations, academic course work, and publications. The following CDR (1991) philosophy offers a guide for practitioners in selecting and participating in these activities:

The dietetics practitioner engages in lifelong development to maintain and improve knowledge and skills for competent practice. This includes continuous self-assessment to identify professional strengths and learning needs, establishment of short-and long-term goals for individual professional development, and selection of appropriate continuing education to meet these goals. (p.1)
This philosophy is grounded in the educational aspect of lifelong learning. Its’ focus is on expanding technical knowledge and the competencies needed to acquire information.

The vision created by the Future Search Conference attendees broadened this philosophy
to include lifelong learning. In the original draft of Professional Development 2001, CDR describes it "as continuous learning that is self-initiated, self-directed and self-evaluated. It is undertaken for the purpose of professional development, personal enhancement or quality of care improvement" (CDR, 1996, p.3). It is seen as the new "education model and the foundation of [the] certification process" (Fitz, 1997, p. 1014) for dietitians.

Contrasting the philosophy published in 1991 with the proposed philosophy of Professional Development 2001 a picture begins to form of the paradigm shift dietitians must have in order to use Professional Development 2001. They are being asked to redefine and broaden continuing professional education to include learning beyond the technical aspects of their jobs. They are being charged with new responsibilities to fulfill mandatory continuing education requirements. Self-directed learning and self-evaluation are but two areas of skills and knowledge in which dietitians will need proficiency. CDR recognizes not all practitioners are "skilled lifelong learners" (CDR, 1996, p.4) and plans to provide tools and learning experiences to help facilitate these skills. This will be further discussed in the next section.

**Self-Directed Learning**

Self-directed learning is what adults do whenever they learn something on their own. It is a powerful educational method in both informal and formal settings. It empowers learners by focusing on their strengths, using their experiences as resources, and makes allowances for their individual needs. Knowles (1980) described it as a deep psychological need in adulthood. There are three general definitions of self-directed learning: "a self-initiated process of learning that stresses the ability of individuals to plan and manage their own learning, an attribute or characteristic of learners with personal autonomy as its hallmark, and a way of organizing instruction in formal settings that allows for greater learner control" (Caffarella, 1993, p. 25).
Adult educators interest in self-directed learning is somewhat recent. Researchers and theorists involved in the current history of this field of study will be reviewed and discussed in relation to their contribution to the learner, teacher, and learning in groups. Competencies associated with self-directed learning will be reviewed and compared to those suggested for Professional Development 2001. Candy’s four dimensions of self-directed learning will be reviewed and compared to literature on the personal attributes and characteristics of dietitians. The concluding section will introduce Brookfield’s expanded definition of self-directed learning.

**History.** The study of self-directed learning is relatively recent in the field of adult education. Current interest is credited with a series of lectures Houle presented in 1960 on the various reasons why adults initiate learning activities and the factors that influence their decision. With this research, Houle (1961) joined a small number of researchers suggesting it was time to examine the individual’s role in the learning process as well as the "collective learning process" (p. 90). His method was unusual for the time, as was his subject matter. Educational research during this time had been focused on the sociological concepts of adult learning. As the relatively new field of adult education struggled to define itself most research was quantitative; Houle chose a qualitative method of reporting on interviews with learners. Also, self-initiated education was viewed in a different category from formal education and consequently had not receive much attention from educators in general (Candy, 1992).

Houle’s (1961) results were based on a small study he had conducted with 22 adults in the Chicago area the previous year. The impact of his findings were far-reaching and spawned vigorous research into the field of self-directed learning that continues today. Houle’s (1961) research showed adults are motivated by several reasons to learn and he suggested there are three broad groups of learners. One, is the goal-oriented learner who learns to gain specific knowledge (p.15). Another, the activity-oriented learner who "take part in learning primarily for
reasons unrelated to the purposes or content of the activities in which they engage" (p.19). Last, the learning-oriented learner or those who "seek knowledge for its own sake"(p.16). Though presented separately, learners use all approaches with one usually predominating. His research also showed that only one person "interviewed thought teachers had any influence in creating the desire to continue learning" (p.71). Each person presented a myriad of other reasons and motivators that had encouraged them to continue learning in adulthood.

Today, self-directed learning is seen as a multi-dimensional concept. It incorporates both the learner and the teacher. It is applicable to individuals as well as groups. Until the mid-1980's research in this area focused on documenting and refining the many aspects of this concept. Of particular note is the work of Tough and Knowles. The former, researched the individual as a self-directed\textsuperscript{11} learner. The latter, provided philosophical orientation and pragmatic applications for teachers and learners alike, especially in group settings. Together they offered a grounded, thought-provoking view of the self-directed learning process.

\textbf{The learner.} Through the 1960's and 1970's, Tough conducted a series of qualitative interviews focused on "learning without a teacher" (Tough, 1979, 1981). In 1979, he published his findings based on a study of 200 interviews. His findings identified key elements of self-directed learning and the nature of adult learning projects. It "provided the language, the concepts, descriptive terms for key elements and processes of self-[directed] learning" (Kasworm, 1992, p.56).

\textsuperscript{11}Tough initially used the term self-teaching when describing his research and later switched to the term "self-planned". Kasworm (1992) suggests this reflects a broader use of the concept by Tough. One that incorporates the wider range of skills and abilities that self-planned learning requires. Tough did not use the term "self-directed" in his writing. It is used here for consistency.
This research also give insight to the place of self-directed learning in a learner’s life. Most adults actively pursued learning projects on their own. The range of learning projects was 0-20, with a mean of 8. On average an interviewee spent 700-800 hours a year on learning projects (Tough, 1979). Projects began as a question or goal related to the learner’s current circumstance. Some were internally driven as with improving one’s self-esteem. Others were externally driven as the learner adapted to changes in their environment i.e. job technology.

In self-directed learning the learner assumes the responsibilities of the teacher. They plan, pick resources, initiate, and conduct the learning activity. Tough’s research documented the depth of experience each learner brings to this process. In general, learners plan most activities themselves. Additional resources were used or consulted if the learning project was more complex and/or required a long period of time to complete. Several areas of the planning process were noted as presenting challenges to most learners. One was knowledge of the overall planning process and the variables involved in each stage. More complex learning projects required more planning abilities to achieve the goal. Another was the identification of learning goals. A third was identifying resources. Last, identification of evaluation and feedback mechanisms of their learning experience. Often the learners consulted with others who could help them address these needs. Tough’s (1979) research showed learners interacted with at least four other people while completing their learning project.

The teacher. Knowles viewed learning as a continuum between teacher-directed and self-directed learning. While he acknowledged their were situations where teacher-directed education was appropriate, his bias was toward self-directed learning. Knowles philosophical orientation challenged and redefined the role of the teacher in the self-directed learning process. In the late 1960’s Knowles introduced the concept of andragogy to the field of adult education in the United States. His premise was adults learn differently than children. As part of
The issues of teachers transitioning to facilitators, either as a mandatory requirement or voluntary action, has received extensive attention in the self-directed learning literature. A discussion of this material is beyond the scope of this discussion.

Development through the lifespan, educational needs and abilities change. Knowles (1975) postulated the adult learner moves from dependence to increasing independence in learning. He asserted the learner’s life experience is a "rich resource for learning" (p. 60) and their readiness to learn "develops from life tasks and problems" (p. 60). Knowles described adult’s as being problem-centered and internally motivated. As might be expected he placed strong emphasis on learner responsibility in the learning process. He suggested teachers could best encourage the learning process by becoming facilitators\(^\text{12}\). Their goal being to help the learner become more self-directed.

**Competencies for self-directed learning.** Tough’s research highlighted the competencies an individual needed for self-directed learning. Knowles (1975) discussed competencies for self-directed learning in the framework of a group setting. These were presented in the form of a checklist for learners and provide an overview of the pragmatic tasks involved self-directed learning:

1. An understanding of the differences in assumptions about learners and the skills required for learning under teacher-directed learning and self-directed learning, and the ability to explain these differences to others.
2. A concept of myself as being a non-dependent and a self-directing person.
3. The ability to relate to peers collaboratively, to see them as resources for diagnosing needs, planning my learning, and learning; and to give help to them and receive help from.
4. The ability to diagnose my own learning needs realistically, with help from

\(^{12}\)The issues of teachers transitioning to facilitators, either as a mandatory requirement or voluntary action, has received extensive attention in the self-directed learning literature. A discussion of this material is beyond the scope of this discussion.
teachers and peers.
5. The ability to translate learning needs into learning objectives in a form that makes it possible for their accomplishment to be assessed.
6. The ability to relate to teachers as facilitators, helpers, or consultants, and to take the initiative in making use of their resources.
7. The ability to identify human and material resources appropriate to different kinds of learning objectives.
8. The ability to select effective strategies for making use of learning resources and to perform these strategies skillfully and with initiative.
9. The ability to collect and validate evidence of the accomplishment of various kinds of learning objectives. (p.61)

Smith (1982) suggest this list should be extended to include basic skills necessary to process information i.e., reading, writing, observation skills.

As with Tough’s research, Knowles’ noted the interactive nature of self-directed learning. Independent learning is but one aspect of self-directed learning. Learning with peers and facilitators is considered equally important. Boucouvalas (1988) contends the self-development of adults must include homonomy or "the experience of being part of meaningful wholes and in harmony with superindividual units such as family, social group, and culture"(p. 57). By fostering homonomy the foundation is built for teamwork and collaborative learning.

Competencies and Professional Development 2001. As described earlier, Professional Development 2001 is based on a six step model (Table 3) and reflects the basic components of program planning: conduct a needs assessment, develop objectives, formulate a learning plan, and evaluate outcome(s). Step One, of Draft 2, is to "reflect on and conduct a professional self-assessment" (ADA, 1997, p.3). Three tasks must be accomplished to complete this step. One is
to select a method for conducting a self-assessment of present performance. The next is to choose a competency\textsuperscript{13} model to use as a reference point for the third task, conducting a needs assessment. Here the practitioner compares their self-assessment with the reference point to determine gaps in knowledge and practice that should be addressed (Knowles, 1975). Dietetic practitioners can use assessment tools of their choice or one provided by CDR to help clarify short-and long-term professional goals. It is not clear what tools might be helpful besides the one offered by CDR. As will be discussed later, ADA has begun to develop a self-assessment series focusing on sub-specialties in the field that assist in this process. Other tools have not been suggested for dietitians who would like to perform a more rigorous assessment than the CDR tool provides or whose specialty is not part of the self-assessment series.

Information from the assessment will be used in the next step: developing a learning plan. Using a CDR form, the practitioner will describe how their professional development goals will be met during the next five years. Options include a formal educational track or a continuing professional education track. While self-initiated learning projects appear to have greater potential for learning in professional settings they must be balanced with mandatory recredentialing requirements. A learning plan allows the practitioner to balance their goals with professional requirements (Knowles, 1975).

Step Three is submission of the learning plan to CDR for verification purposes. Since the learning plan is practitioner driven, verification is only to assure minimum standards are met and to provide administrative information for CDR related activities.

\textsuperscript{13}The ADA offers six professional standards by which dietitian can judge their performance. The standards include: provision of services, application of research, communication and application of knowledge, utilization and management of resources, quality in practice and continued competence, and professional accountability. A rationale for each standard is available as are indicators and examples of outcomes (ADA, 1998).
Step Four is the "implementation of the learning plan through professional development" (ADA, 1997, p.3). A continuing education activity log is required to document this process. It is assumed the practitioner will be able to appropriately match educational and learning opportunities assessed needs.

Step Five is the "self-evaluation of the learning plan outcomes" (ADA, 1997, p.3). Using a tool provided by the CDR, practitioners will reflect on their learning experiences and how it has impacted on their practice. As mentioned earlier, reflective practice is making tacit knowledge known. The beliefs, values, personal history and assumptions that are taken for granted, but are woven into every decision a professional makes, must be examined. It is a sophisticated process, typically requiring practice and modeling for practitioner proficiency. The reference list published with Draft 2 cites one article on reflective practice (Shapiro & Reiff, 1993). It is from the field of psychology and presents a basic overview of this complicated topic. It is not intended to provide depth, nor does it address practice methods for learners. This is a concern as a learner’s willingness to take on the responsibility of self-directed learning is strongly influenced by their sense of competence as a learner. Will practitioners be able to articulate learning needs related to this part of the recertification process and seek appropriate resources for help?

Step Six is "submission of the portfolio to CDR for verification" (ADA, 1997, p.3). A portfolio will be submitted at the end of a five-year recertification period and will include the tools and forms mentioned in Steps Two, Three and Five. Portfolio assessment is an approach to education that recognizes "learning as a construction of the individual, not something to be absorbed from teachers and texts" (Jones, 1994, p.23). Critical reflection skills are essential to this approach as is documenting experiences. Research in formal education settings show learners initially may require many examples of the components of a portfolio. In addition,
feedback and on going support from peers has been found essential to the success of this method (Jones, 1994). Again, CDR has been careful to incorporate an important aspect of reflective inquiry by requiring a portfolio for evaluation. It is not clear if practitioners will receive or will know how to ask for the support needed to complete this task.

The literature on self-directed learning addresses the practitioner who is new to this type of learning process. Orientation sessions are suggested to relieve anxiety associated with this new task. Other suggestions include: providing more information on self-directed learning, helping practitioners to appreciate the experience they already have in this area, and participation in on going support groups (Knowles, 1989). CDR has tried to provide practitioner support for this new system in the way of forms and a verification step. It has also made provisions to allow for learning experiences in groups (ADA, 1997). It is not clear if practitioners have the background and experience necessary to take advantage of this options.

**Dimensions.** Candy (1991) defines self-directed learning as both a goal and a process. Learner independence, empowerment, and learner self-determination can be seen as an ideal or goal to strive for and a philosophical belief about an individual’s role in society. It is also a method emphasizing learner control and utilization of self-instructional techniques. Candy (1991) further describes it as four distinct but inter-related "phenomena" or dimensions: personal autonomy, self-management, autodidaxy, learner-control (p.23).

Personal autonomy has several facets. One is "thinking and acting autonomously" (Candy, 1991, p. 101) and includes the individual’s control over the learning process. Another is homonomy or the experience of autonomy in a group setting (Boucouvalas, 1988). It also includes intellectual, emotional, and moral autonomy. The term self-management is used to describe the skills and competencies necessary for self-directed learning(Candy, 1991, p.128).
Autodidaxy is defined as "intentional ‘self-education’" (Candy, 1991, p.158) by the learner. Learner control is when the learner is responsible for management of the learning process. In turn, each dimension can also be seen as a goal and a process. The goal represents the ideal practice of the dimension. The process represents the practice of striving for the ideal. Each dimension can also be viewed on a continuum. On one end is the ideal, on the other end is the opposite concept. Learners’ abilities will position them somewhere between the ends. The position are influenced by several factors. These factors include: "level of technical skills, familiarity with subject matter, sense of personal competence as learners, and the context of the learning event" (Caffarella, 1993, p. 26). Other factors include the learning environment and the learning history each learner brings to the current situation. The former, can include teacher facilitating skills and course design. The latter, reflects previous learning experience and what is most familiar to the learner. Also, it reflects the learner’s preferred personal learning style.

Pragmatic issues. There are many pragmatic issues that are raised by considering these dimensions. The process of self-directed learning may also require the learner to assume a high level of control and responsibility over their learning process. The underlying assumption is the learner wants this responsibility and has the abilities to perform the associated tasks. But what if the learner does not want the assigned level of responsibility or is not interested in the management of their learning process? More importantly, what if the learner is not capable of assuming this responsibility? In the late eighties, research on dietitians and leadership showed a significant subset of practitioners with high scores for dependency (Schiller, Foltz, & Campbell, 1993). More recently, when clinical nutrition managers were asked to rate their level of empowerment they scored themselves as average. Subordinates rating these managers also rated them as average for empowerment (Arensberg, Schiller, Vivian, Johnson, & Stasser, 1996).
Not all learners are equally self-directed or autonomous in all settings. As mentioned above, several variables influence learner control and learner willingness to accept responsibility over the learning process. There is much research addressing learner readiness for self-directed learning. Various programming solutions can be individualized to the learner’s needs. Again, there does not seem to be a component of the Professional Development 2001 that would help practitioners address these concerns.

Autonomy is one of several characteristics of adult learners (Caffarella, 1993). It is closely associated with learner control and responsibility as seen in self-directed learning projects. Another aspect of autonomy is the individual, possibly isolating nature of many self-directed learning projects. In practice autonomy is balanced with homonomy, or learning as part of a group. Several practice examples underscore the importance of this balance. One example is the aspect of reflective inquiry where the practitioner shares information about the reflective process with others. This helps to validate the critical analysis of information and give context to experience (Garrison, 1992). Another, as mentioned in an earlier section, is the use of groups to provide ongoing support for learners as they develop skills in self-directed learning. Last, the ADA membership is predominately female. Feminist research suggests women’s learning style may involve more interconnectedness (Caffarella, 1993) and may point to less focus on individual projects. CDR has incorporated the use of mentoring/coaching and study groups as acceptable continuing education options. It is not clear if practitioners will use these options to address these needs due to their lack of traditional use in this field.

Philosophy. In the mid-1980s, Brookfield (1985) challenged adult educators to expand the definition of self-directed learning. He argued "self-directed learning is concerned much more with an internal change of consciousness than the external management of instructional events" (p. 15). Brookfield suggested learner autonomy was more than control over learning
resources. The learner must know and understand all learning alternatives available and choose critically from them. He described learners who are competent technicians of self-directed learning, but not intellectually autonomous due to their unexamined perspective.

Brookfield offers a critical philosophy of self-directed learning in which to discuss the implications of this definition. It moves beyond the belief that it is enough for adults to be technically self-directed. Based on the work of Mezirow (1985, 1991), he adds the practice of critical reflection as key to self-directed learning. It forms an alternate framework for learners and facilitators to consider the learning process, both individually and jointly (Brookfield, 1986).

Facilitation aims to foster in adults a spirit of critical reflection. Through educational encounters, learners come to appreciate that values, beliefs, behaviors, and ideologies are culturally transmitted and that they are provisional and relative. This awareness that the supposed givens for work conduct, relationships, and political allegiances are, in fact, culturally constructed means that adults will come to question many aspects of their professional, personal and political lives.(p. 10)

Critical reflection is not limited to the learner. Brookfield (1986) suggests the facilitator must examine their own values, beliefs, and behavior in practice to better appreciate their role in the learning process. Further, he suggest the facilitator explore their practice in relation to their personal philosophy, using it as an ideal of quality performance. As mentioned, this view is grounded in Mezirow’s work with critical reflection and will be examined further in the next section.

Reflective inquiry

Reflection moves the professional’s practice beyond a technology-based focus. It
acknowledges the "whole being" of a professional and the role this plays in practice. Reflection allows for the integration of thoughts and action. Dewey described it as the "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (Cranton, 1996, p.76). Reflection is a key component of critical thinking and transformative learning. This section provides a review of each of these areas and concludes with a critique of the use of reflection in Professional Development 2001.

**Critical thinking.** Critical thinking involves identifying and challenging assumptions that underlie our ideas, beliefs, values, and actions (Brookfield, 1987). Once assumptions are identified, alternatives can be explored. This exploration can lead to "reflective skepticism"(p. 9). Critical thinking is associated with all aspects of life. It can be "triggered by positive as well as negative events" (p.6). Also, it is a "process, not an outcome"(p. 6) and is contextually driven. Last, emotions are as important as rational thoughts to the process of critical thinking.

Reflection, as part of critical thinking, can lead to either nonreflective or reflective action (Mezirow, 1991). Nonreflective action includes "habitual action" (p. 106) or that which is done rote, i.e. driving a car. It also includes "thoughtful action" (p.107) where more attention is needed but critical thinking is not required for completion of the action. According to Mezirow (1991), introspection is in this category as it does not involve a validation process. Reflective action begins when these processes don’t work. Reflection is required when our previous experience is unable to help us understand an experience or solve a current problem.

Schon’s (1983) model of professional practice offers a pragmatic look at this process. Schon noted the problems professionals solve seldom fit into well-defined patterns. The professional must "set[or construct] the problem"(p. 40) in a way that permits problem solving.
Schon argues professionals possess a "tacit knowing-in-action" (p.49) that supports this process. Knowing-in-action is the intuitive methodology professionals develop as a result of experience and knowledge. Reflection is triggered when there is a surprise in the process or an unexpected outcome and knowing-in-action is not enough. Reflection-on-action occurs after the activity (or by interrupting it). Reflection-in-action occurs during the activity and allows the professional to reshape the problem and solution as it happens. Schon contends, reflection-in-action "is central to the ‘art’ by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness, and value conflict" (p.50).

Mezirow (1991) describes three types of reflection that inform this process: content, process, premise. Content reflection refers to the content of a problem. Process reflection refers to the "examination of how [sic] we perform these functions of perceiving, thinking, feeling, or acting and an assessment of our efficacy in performing them" (p.108). Premise reflection questions "why [sic] we perceive, think, feel, or act as we do and the reasons for and consequences of our possible habits of hasty judgment, conceptual inadequacy, or error in the process of judging" (p. 108). Reflective action occurs when thoughts or actions are changed as a result of the reflective process.

Reflection-on-action and reflection-in-action present different opportunities for the practitioners. The advantages of the former is more flexibility in problem-solving due to less time constraints. The latter offers more potential for improving immediate practice. Schon (1983) portrays the professional who is reflecting-in-action as a researcher, one who is constructing a new theory to fit an unique situation. This is done by the professional "interacting" (p.56) or having a "conversation" (p. 79) with the situation. The professional’s reflection results in action on the situation, which reshapes the problem. The reshaping process can create a predictable solution or what Schon describes as a surprise. If it is the latter, the
professional’s problem-solving must take this into account and the process continues.

With reflective action the opportunity presents for emancipatory learning and eventually transformational learning. Mezirow (1991) defines:

emancipatory learning [as] emancipation from libidinal, linguistic, epistemic, institutional, or environmental forces that limit our options and our rational control over our lives but have been taken for granted or seen as beyond human control.

(p. 87)

With liberation from these influences, the foundation is laid for transformational learning. It is here the learner experiences a broader, clearer perspective of reality and a better integration of experiences into their whole being.

Transformational learning. Transformational learning theory (Mezirow, 1991) provides a wider perspective in which to consider reflective inquiry and professional development. It is a constructivist theory. "In this view, reality is less an objective fact and more a subjective construction by individuals and societies. People create knowledge" (Clark, 1993, p.50).

Transformational learning theory defines learning as being constructed from meaning systems and broadens the definition of learning to include changes in consciousness. Meaning systems are the "symbolic models and habits of expectations" (Mezirow, 1991, p. 4) we project onto situations to give meaning to them. They represent "both prelinguistically, through cues and symbolic models, and through language" (Mezirow, 1991, p. 4). With reflective inquiry, the learner is asked to examine the symbolic models and habits of expectations that define their chosen action or response to a situation.
Transformational learning, as conceptualized by Mezirow, is grounded in the work of Habermas, a critical social theorist, who describes three domains of knowledge. Each has "its own distinctive learning purpose, content, and methods and its own criteria for assessing the validity of an idea" (Mezirow, 1985, p.18). One domain is emancipatory learning, as has been mentioned above. Another is instrumental knowledge or technically-based knowledge. Learning in this domain is based in "empirical knowledge and its governance by technical rules. Problem solving is task-oriented and related to cause and effect relationships." (p.73). For professionals this is the body of knowledge that comprises technical expertise. It begins in the initial training for a profession and is updated, usually, through continuing education.

The third domain is communicative or the practical domain. This is where we strive to learn to understand what others mean and to make ourselves understood as we attempt to share through speech, writing, [and the visual arts]. Most significant learning in adulthood falls into this category because it involves understanding, describing, and explaining intentions; values, ideals; moral issues; social, political, philosophical, psychological, or educational concepts; feelings and reasons. (Mezirow, 1991, p.75)

The learner’s goal is to gain "insight and attain common ground through symbolic interaction" (p. 80). Identification and validation of meaning systems is the problem solving process in this domain. The identification of meaning systems involves a series of interactions with others or with the problem situation. This allows for the examination of epistemic, sociolinguistic, psychological factors that help to define meaning systems. Validation is through reaching a consensus with sources outside ourselves, i.e. other people, social norms. Noting the subjective nature of learning in this domain Mezirow (1991) has suggested ideal "conditions of rational discourse" to guide this process. They include the use of accurate information, the lack of coercion in the environment, the ability to examine evidence objectively, and an openness to
Meaning systems reflect experience and for the practitioner represent an important area of professional development. Schon’s model of reflection-on-action and reflection-in-action provides an pertinent example. When professionals can not solve a problem or must practice in an ambiguous situation, as noted above, they must "set a problem". By creating boundaries on the situation that are familiar they can better draw on past experiences and empirical knowledge to create solutions. Schon (1983) suggests professionals draw on metaphors based on their previous experiences. This allows them to shape the problem, and solution, in a way that is at once familiar but unique to the situation. Recalling metaphors of past experience is a form of reflection from the communicative domain. Schon (1983) describes professionals as having a dialectic relationship with the problem. As the professional seeks to shape the problem into something familiar, the impact on the problem is noted and the process starts over until a satisfactory solution as been found. Schon (1983) refers to this as the problem "talking-back" to the professional. Thus providing validation of the process. Schon (1983) also cautions about the subjective nature of this interaction. One example are professionals who distort their view to fit their perspectives.

Reflection and dietitians. In the original draft of Professional Development 2001, the first step was reflection on practice. It included the consideration of the past accomplishments, current professional functions, and future professional interests and needs (CDR, 1996). Draft Two was developed after input from the ADA membership. Changes included combining this first step with the original model’s second step of self-assessment. This refocused the beginning of Professional Development 2001 toward goal-setting and learning objectives. Suggested considerations in this step are external factors affecting practice, future goals, professional strengths and weaknesses. (ADA, 1997). In both versions, practitioners are asked to use either
the CDR assessment tools or tools developed by other organizations. While this incorporates reflection, by design it does not lead to critical thinking. It does not appear to identify and challenge underlying assumptions that influence action, thus it is nonreflective, thoughtful action.

As mentioned previously, another opportunity is presented for critical reflection with the submission of a portfolio at the end of the five year recertification cycle. It is not clear if practitioners will be able to articulate potential needs in using this tool. Also, as discussed earlier, it is unclear the role of CDR/ADA in supporting the practitioner new to this evaluation method.

Opportunities for self-development are lost by not actively encouraging critical thinking. One example is an another dimension of continuing education. Reflection and self-assessment require more than assessing known information. As mentioned above, professionals do more than acquire knowledge. They make judgments about its use. Schon (1983) described it as artistry in practice and referred to the practitioners use of tacit knowledge in daily practice. The process of reflection and critical thinking in continuing professional education can help to make this implicit knowledge explicit allowing for more appropriate assessment of competency and practice needs.

Another example are activities that encourage the process of change. ADA (Parks, Fitz, O’Sullivan Maillet, Babjak, & Mitchell, 1995) convened the Future Search Conference to examine the role of dietitians in the 21st century. The attendees envisioned a profession where change would be the norm. Transformational learning is about change. It provides a framework from which to consider all types of changes, in any aspect of life. It offers the opportunity for acknowledging all that influences a decision and, as mentioned, the potential for broader,
clearer perspective of reality and a better integration of our experiences into our whole being.

Licensure and recertification.

Continuing professional education is also shaped by factors other than philosophical beliefs about adult education. Societal concerns strongly influence this process and are articulated in the areas of professional licensing and recertification. Issues confronting society and credentialing agencies will introduce this topic. The various aspects of ensuring practitioner competency will be reviewed and used as a framework to examine the goal of Professional Development 2001 to increase accountability.

Public advocacy groups and credentialing agencies have noted for some time the need for demonstrated competency by practicing professionals. As early as 1981, the National Organization for Competency Assurance\textsuperscript{14} expressed concern about the rapid changes in technology and the need for professionals to demonstrate competency throughout their careers (Derelian, Fitz, & Babjak, 1995).

Traditionally, professionals are certified as competent at the beginning of their careers. Recertification takes the form of paying annual licensing fees and showing documentation of participation in continuing education programs. Research on the use of this system shows little correlation between current competency and continuing education participation. A striking example of this is the January 1994 decision of the Colorado Board of Nursing to repeal all mandatory continuing professional education requirements for RNs and LPNs (Swankin, 1995). In an open letter to the public explaining this decision, they state:

\textsuperscript{14}The National Organization for Competency (1998) sets quality standards for credentialing organizations. It acts as a clearinghouse for member organizations in the areas of certification, licensure, and human resource development. Also, it provides such services as conferences and publications.
There is no research available either in Colorado or anywhere in the nation that shows any correlation between linking continuing education with license renewal and the continued competence of any licensed group. The Board believes it must concentrate its emphasis and resources in areas that are demonstrably related to public protection. (Swankin, 1995, Appendix B)

Several other health professions are also reconsidering the issue of how to ensure professional competency. Table 5, is an overview of these activities. This information is from the first draft of Professional Development 2001 and provides insight into the factors CDR has considered in developing this document. There are also economic reasons for examining the recertification process. Multi-skilled practitioners are predicted to be the workers of the future as they will decrease labor cost (Balch, 1996). Training and on-going competency issues will be redefined as the health care industry takes advantage of this trend.

In 1995, The Citizen Advocacy Center, published a resource guide, entitled: The role of licensing in assuring the continuing competence of health care professionals (Swankin, 1995). In addition to reviewing the concerns mentioned above, it provides a list of policy issues for development of an alternative system for ensuring competency through a professional’s career. One issue is "what techniques should be employed to evaluate continuing competence" (p. 18). The three most common are testing, practice audits and self-assessment tools. One concern with testing is that it measures knowledge but not the use of the information acquired (Shimberg, 1987). Practice audits can be costly, but have been used with much success in Canada (Swankin, 1995).

Self-assessment tools have been developed by several professions (Confessore & Confessore, 1994; Jennett & Pearson, 1992; Klevans, Smutz, Shuman, & Bershad, 1992). Of particular note is the Self-Assessment Series for Dietetics Professionals developed by ADA
beginning in 1989. This is a series of modules using case studies with multi-choice questions to evaluate a practitioners competence in an area of practice. Users are provided with extensive, and confidential, feedback in the form of in-depth explanations of appropriate answers. Also, norming data is provided to allow users to compare their level of competency to their peers.

Other issues posed by Swankin (1995) included how frequently competence should be demonstrated? By whom? Only by those whose performance is unacceptable? What are the criteria for a needs assessment by practitioners? Who should pay the cost of recertification? And what if the practitioner can not meet competency standards?

Recertification philosophy in dietetics. The original draft of Professional Development 2001 offers the philosophy and guiding principles of CDR concerning continuing education. "The emphasis is on fostering and facilitating professional development because CDR believes that inspiring the value of responsible learning is the most effective means toward continuing competence"(CDR, 1996, p.3). The principles guiding development of Professional Development 2001 are shown in Table 1. They support the need for public accountability, respect for the individual practitioner and an acknowledgment of the changing role of the practitioner.

Public accountability was of particular concern in the development of Professional Development 2001. Continuing education activities are "often selected in a haphazard and unsystematic way"(CDR,1996, p.4), with cost, location and time strongly influencing their selection. CDR sought to better match these activities with learning needs. The following are measures incorporated into Professional Development 2001 to add accountability:

[1.] Reflection on one’s practice to develop short and long-term career goals
[2.] Personal assessment to identify professional strengths and develop learning
needs

[3.] Creation of a learning plan and directed continuing professional education to meet identified goals and learning needs

[4.] Evaluation of outcomes. (CDR, 1996, p. 5)

As described in an earlier section, dietetic practitioners will be asked to submit a learning plan based on learning goals and objectives identified through their self-assessment. This tool is the beginning of accountability and becomes the reference point for all continuing education activity during a designated five year period. The last two steps of Professional Development 2001 also require self-evaluation and verification of continuing activities. The former includes the use of a CDR generated tool. The latter requires the completion and submission of a portfolio documenting the other five steps of Professional Development 2001.

Professional Development 2001 is a progressive document that seeks a proactive solution to the issues of professional competency. "CDR’s challenge is to develop competency assessment systems that are nationally recognized and whose value is readily apparent to the public, practitioners, employers, and regulatory agencies"(Derelian, Fitz, & Babjak, 1995, p.924). This document also supports a model of continuous learning and seeks to empower the practitioner by giving them responsibility over all aspects of the learning process. It remains to be seen if this philosophy is or can be carried out by the individual practitioner.
CHAPTER FOUR
SUMMARY, RECOMMENDATIONS, AND CONCLUSION

Summary and implications for practice. The CDR has proposed a thoughtful and progressive recertification system for dietitians. A five part integrated critique was undertaken to demonstrate how Professional Development 2001 embodies the concepts of lifelong learning, self-directed learning and reflective inquiry and why these concepts are important as a means of assuring professional competence. In Professional Development 2001, lifelong learning provides a broad foundation in which to consider self-directed learning and reflective inquiry. It not only encompasses learning throughout the practitioners career, but includes all aspects of the practitioner’s life and being. It considers learning and education in group settings and honors the individually of the learner.

Self-directed learning provides the pragmatic underpinnings of this document. It reflects basic components of program planning and as such presents with concerns common to this process. One example are the use of self-assessment tools. They are suggested in the literature but few are available. CDR will be providing one but it has not been yet published. It is not known if or how this tool will address the needs of dietitians in highly specialized areas of practice. Another is self-evaluation of professional educational activities. CDR is to provide a tool to help practitioners reflect on their experiences. Reflection is a sophisticated method of self-evaluation and requires much guidance and practice in its use to be proficient. Once again, it is not clear the type of support CDR will offer to the practitioner new to this technique. A third example is the submission of a portfolio for verification of completing learning objectives. While this is not a new tool, it will be new to many dietitians, especially in relation to the area of continuing education. Literature describing the use of portfolio evaluation suggest learners need guidance and facilitation during the initially phases of developing a portfolio. It is unclear the
role CDR or ADA will have in supporting practitioners in developing their portfolios.

The first step of Professional Development 2001 asks the practitioner to reflect on their practice. As mentioned, a tool will be provided to guide the practitioner but it is unclear how the process of reflection will be framed. Reflection, critical thinking, and transformative learning require learners to reflect in different ways. These are new terms and concepts to most dietitians and they will require much support in exploring their meaning. It is not clear what plans CDR has to support this process.

With the creation of Professional Development 2001, CDR has underscored its’ confidence in the ability of dietitians to be self-directed learners. The adult education literature addresses potential concerns with this philosophy of learning. One is the issue of learners who don’t want to be self-directed or to self-initiate learning. Another is the influence of self-efficacy in relation to planning and executing learning plans. Learners are more willing to do that which they know and feel confident about. Several steps of Professional Development 2001 ask dietitians to participate in their continuing education in ways they have never seen and/or tried. Issues of support need to be considered by practitioners.

Accountability was a primary goal in the formation of Professional Development 2001. This is achieved four ways. One, in the reflection and self-assessment of a professional’s practice. This information will be used to develop career goals. Two, with a personal assessment to identify learning needs. Three, with the creation of a five year learning plan that matches career goals and learning needs. Fourth, with an evaluation of outcomes.

**Recommendations for Consideration.** The questions and concerns raised in the previous section may best be answered by looking to areas of studies that are beyond the scope of this
discussion. Further examination of theoretical and pragmatic issues would provide a broader view of the Professional Development 2001 model. As mentioned previously, lifelong learning, self-directed learning, and reflective inquiry have not been systematically reviewed by CDR or ADA; this discussion was intended to provide only a review of their use in Professional Development 2001. Reviews of each concept would contribute to a deeper understanding of the philosophical underpinning of Professional Development 2001 and would provide a backdrop for considering this document. Also, it should be noted that other professions are currently using lifelong learning, self-directed learning and/or reflective inquiry. Review of their experience could further illuminate the use of Professional Development 2001 by dietitians.

The implementation of Professional Development 2001 is about creating a new order of things. CDR has a unique role in this process as the administrator of this document. Further examination of CDR and ADA’s role in operationalizing this document would help to better articulate expectations of both practitioner, CDR, and ADA. Questions for further consideration include: how will the associated change process be facilitated? By whom? CDR and/or ADA? Or will individual practitioners develop their own change processes? What of the required self-directed learning and the various levels of support needed by learners when they first use this concept? Again, what is the role of CDR and/or ADA in this process?

A third area considers the learner/practitioner in the implementation of Professional Development 2001. Smith (1982) refers to this as "learning how to learn". He describes "three interrelated components-needs, learning style, and training" (p. 20) that define learners abilities and needs in the educational process. The term "needs" refers to the competencies required for learning, i.e. literacy skills, self-knowledge, and the emotional processes for self-directed learning, collaborative learning, and institutional learning(p.22). Training refers to "deliberate efforts to help people become better at learning"(p.25). To date, little research has addressed the
dietetic practitioner as a learner in these terms. As with CDR and ADA, further examination of the role of the dietetic practitioner as a learner would help to better articulate expectations and needs of the practitioner.

One final area relates to patient care and staff management. As mentioned, ADA envisions the dietetic practitioner as a change agent for patients and staff. Part of patient self-management involves learning to manage change. As already noted, the workplace of the future will also require workers to manage on-going change. What skills will dietetic practitioners need to help patients and/or staff to understand how to manage change? Professional Development 2001 offers dietetic practitioners the opportunity to explore their own change processes. Can this self-knowledge then be transferred to daily practice? How?

**Conclusion.** Professional Development 2001 is a progressive document that seeks a proactive solution to the issues of professional competency. It supports a model of continuous learning and seeks to empower the practitioner by giving them responsibility over all aspects of the learning process. It remains to be seen if this philosophy is or can be carried out by the individual practitioner.
References


of Prussia, PA: Organization Design and Development, Inc.


Lifelong education: A stocktaking. (pp. 8-27). Hamburg, Germany: Unesco Institute for Education.


Bass.


APPENDIX
Table 1

Commission on Dietetic Registration guiding principles for recertification redesign:

1. The system must provide assurance to the public of continuing competence of credentialed dietetics practitioners.
2. The system must foster and facilitate lifelong learning.
3. The system must empower the individual practitioner with the maintenance of his/her own continuing competence.
4. The system must use assessment mechanisms that are valid, reliable and linked to performance.
5. The system must be flexible and multi-faceted to accommodate the diverse needs of dietetics professionals.
6. The system must have a facilitative rather than policing, punitive focus.
7. The system must be accessible and affordable to dietetics professionals.
8. The system must be financially and administratively feasible for CDR.

Table 2

Draft: Professional Development 2001

The System Model (in sequence of use)
1. Reflection. To include reflecting on practice, developing short and long term goals, and documenting these activities in a Learning Profile.
2. Personal Assessment. Identification of developmental needs related to career goals documenting a Learning Profile.
3. Selection and implementation of a recertification option. Options include: professional development portfolio option, completion of an academic certificate option, progress toward or completion of degree option, certification attainment option.
4. Evaluation. To include reflecting on success and areas needing improvement, evaluating outcomes of learning, documenting these activities in a Learning Profile.
5. Submit Learning Profile to CDR at end of five year recredentialing cycle.
6. Application of evaluation results to next recertification cycle. Return to Step 1.

Note. From "Professional development 2001: Guide to the proposed recertification system (draft)," by Commission on Dietetic Registration, 1996. Chicago, IL: American Dietetic Association (p. 6)

A Learning Profile is described as an on-going record of the learning objectives practitioners have identified for themselves, the steps the practitioner are taking to fulfill these objectives, learning gained from their experience(s) and the impact on it has on their practice (CDR, 1996).
Table 3

Draft 2: Professional Development 2001

Professional Development System Model
1. Reflection and professional self-assessment.
2. Development of a learning plan, including selection of a professional development option.
3. Submission of the learning plan to CDR for verification.
4. Implementation of the learning plan through professional development.
5. Evaluation of learning plan outcomes and application to practice.
6. Submission of the portfolio to CDR for verification.

Note. From "Draft 2: Professional Development 2001," by the American Dietetic Association, 1997. ADA Courier, 36 (1), 3-
Table 4

Model for evaluation based on stage in the novice-expert continuum

<table>
<thead>
<tr>
<th>What is learned?</th>
<th>Method of learning?</th>
<th>Evaluation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novice</td>
<td>isolated facts</td>
<td>didactic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>objective demonstration</td>
</tr>
<tr>
<td>Beginner</td>
<td>some synthesis</td>
<td>seminars,</td>
</tr>
<tr>
<td></td>
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<td>problem-based</td>
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<td></td>
<td></td>
<td>projects,</td>
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<td></td>
<td></td>
<td>simulation</td>
</tr>
<tr>
<td>Competent</td>
<td>combined procedures</td>
<td>realistic settings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>portfolio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>work samples</td>
</tr>
<tr>
<td>Proficient</td>
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<td>informal, on the job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>job related</td>
</tr>
<tr>
<td>Expert</td>
<td>focus, mastery work norms</td>
<td>self-directed internal standards</td>
</tr>
</tbody>
</table>

The American Board of Emergency Medicine requires Certified Emergency Medical Technicians to demonstrate their continuing competence every four years through a competence-based written and demonstration examination.

The American Board of Family Practice requires family practice physicians to demonstrate competence every seven years through testing and office record audits. Other medical specialty boards offer time-limited certification - usually lasting 7-10 years.

The American Association of Dental Examiners have adopted a resolution to develop criteria and mechanisms to evaluate the ongoing competence of licensees.

The Washington Board of Pharmacists are considering a proposal to use portfolios in a practice audit approach for determining continuing competence of pharmacists.

The Occupational Therapy Certification Board is studying a cafeteria approach to demonstrate the continuing competence of its credentialed practitioners, including mandatory self-assessment.

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PERSONAL

Nineteen years progressive and diverse experience including outreach and education, public speaking, program administration, teaching and curriculum design, individual and group counseling, and clinical nutrition. Consistently recognized by supervisors, colleagues, and patients for exceptional interpersonal skills. Demonstrated excellence in delivering programs and presentations to organizations. Extensive experience working individually and leading groups with senior officials from corporate, legislative, government, and non-profit sectors. Excellent writing and analytical skills. Proven ability to develop viable client base.

EDUCATION

Bachelor of Health Science, Clinical and Community Dietetics,
University of Florida, 1979

EMPLOYMENT

Consulting Nutritionist, Private Practice 1981-1985
Brandon, FL

Maintained private office providing diet instruction to physician referred clients. Provided nutrition and weight control classes for local corporations.
Behavioral Program Leader, Institute for Health Maintenance 1985-1986
Tampa, FL
Responsibility for conducting weekly behavior modification classes for clients on very low calorie supplemented diet. Coordinated weekly maintenance program. Provided individual follow-up for program participants.

Nutritionist, Tampa Bay Neuropsychiatric Institute 1986-1987
Tampa, FL
Co leader for weekly group therapy program for eating disorders. Coordinated weekly behavior modification classes for participants on a very low calorie supplemented diet. Provided individual diet counseling for patients referred by staff.

Food Service Officer, Captain, US Army Reserves 1983-1992
Responsibility for administration of food production services for hospital-based medical unit and all aspects of mandated weight control program.

Designed and conducted experiential nutrition education program for patients on a protein-sparing modified fast. Provided individual instruction and counseling in all phases of weight loss and maintenance program. Also provided nutrition related programs to public and private sector organizations.
**Staff Dietitian, Captain, US Army**  
*Walter Reed Army Medical Center, Operation Desert Storm*  
1991  
Responsible for managing nutritional care for surgical and intensive care ward, development and coordination for enteral products distribution and accounting systems.

**Patient Care Coordinator, George Washington University Obesity Management Program, Washington, DC**  
1991-1994  
Designed and maintain database for monitoring patient progress and use of client services. Responsible for weekly summary reports of these activities. Provided patient and staff support services to ensure program standards of care. Participated in all levels of marketing clinic services. Provided individual and group instruction/counseling in all phases of weight loss and maintenance program.

**Program Manager, George Washington University Obesity Management Program, Washington, DC**  
1991-1994  
In addition to responsibilities of patient care coordinator, oversee recruitment and training of professional staff, coordinate and supervise clinic internship opportunities. Perform evaluation of clinic groups and classes for appropriateness and timeliness of content. Supervise registered dietitians, including peer supervision.
PUBLICATION AND EDITORIAL EXPERIENCE


AWARDS AND PROFESSIONAL ACTIVITIES


Active Member, *District of Columbia - Metro Area Dietetic Association*, 1987-present.

SPECIALIZED TRAINING

*Health Management Resources*, Program Leader, Tampa, Florida 1986

*Eater's Choice*, Bethesda, Program Leader, Maryland 1988

*Johnson &Johnson-Critikon*, Group Leader, Tampa, Florida 1983

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