Critical Reflections on Human Capacity Development for HIV/AIDS Prevention, Care, and Support

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Introduction

In response to the HIV epidemic, efforts are underway worldwide to increase the human capacity to deliver HIV/AIDS prevention, care, and support services. Doctors, nurses, allied health professionals, traditional healers, pharmacists, laboratory staff, nutritionists, social workers, community volunteers, and family members all play an important role in providing care to HIV-affected persons, and they are needed in greater numbers to expand the response to HIV/AIDS.

HIV/AIDS program planners have turned to training as one solution to the workforce shortage, whether in medical settings, in community-based organizations, or through courses offered by training institutions. This paper focuses less on the operational issues related to training and more on the point at which knowledge and experience are shared with learners—the engaged space between a teacher and an adult learner. Why is this critical? The effects of HIV/AIDS on the workforce, a maturing HIV epidemic, and the flight of educated professionals to more prosperous countries has led to a great demand for trained health care providers and caregivers. In order to meet this need, HIV/AIDS training efforts must be significant, yet many assumptions underlying the effectiveness of these programs remain unchallenged.

The potential to increase human capacity depends on a clear understanding of how adults learn and the positive conditions that facilitate the transfer of learning from classroom to work site. This paper briefly describes the origins of current approaches to training in adult education and raises questions regarding the application of these approaches, which were developed largely in the United States and Europe, to other regions. Although Western-based training approaches predominate in HIV/AIDS training efforts worldwide, little is known about their application or effectiveness in varied cultural settings. The goal of this paper is to identify questions that may help trainers to strengthen their practice and to advocate for meaningful assessment in advance of designing training programs.

Current State of Research

Emergence of Adult Learning Theory and its Impact on Training

Until the early 1900s, the prevailing assumption in literature and popular culture was that humans accomplished the majority of learning during childhood, with only a limited amount occurring later in life. Hence, pedagogy became synonymous with education. North American educator Edward Thorndike challenged this assumption and redirected the discussion toward how adults learn rather than whether they learn. Following this challenge, and in tandem with developments in the field of psychology, educational research on adult learning expanded greatly through the 1950s, 1960s, and 1970s. Those findings continue to significantly shape the design and delivery of training today through the principles of andragogy—the theory and practice of teaching adults. North American adult education practitioners Malcolm Knowles and Jane Vella popularized these concepts during the final decades of the 20th century, resulting in their broad dissemination and adoption. As a result, andragogy greatly influences the design and practice of training throughout the world.
Andragogy is based on the following principles:

- **Immediacy**: Adults seek new information and skills in order to solve immediate challenges from daily life.
- **Self-direction**: Adults identify their learning needs and pace themselves in the acquisition of new information and skills.
- **Experience**: Adults bring to any learning situation a reservoir of experience and insight.
- **Motivation**: Adults are internally motivated to learn rather than dependent on external motivation or discipline.

These principles may be universal, but we do not know for certain. A critical examination of the principles of learning is necessary if efforts to increase human capacity for HIV/AIDS prevention, care, and support are to succeed.

### Development of Learning Theory in the Western World

The values associated with modern Western education stem from the written works of the early Greek philosophers and are closely associated with the study of rhetoric—the art of expression and the persuasive use of language. Education in ancient Greece was based on the theory of logical argument, and the use of proofs, reasoning, and persuasive discourse. These early ideals form the foundation of Western philosophies of education that persist to the present.

Psychological thinking in the 20th century strongly contributed to learning theory. Psychology informed the assumptions about how human beings learn new information and skills, and provided insights into the selection of teaching methods and approaches to instruction. Summarized below are two distinct bodies of work that evolved from the field of psychology, and today, they still give shape to adult learning theories and teaching practices.

- **Behavioral theory**: Behavioral theory is based on the work of North American psychologist B.F. Skinner and assumes that positive or negative reinforcement motivates behavior or learning. Behavioral psychology affects educational practice in three ways: it dictates that learning objectives be clearly established and learning directed toward meeting those objectives, that content be divided into small pieces of information and taught in a sequenced manner from basic to complex, and that rewards and immediate feedback (i.e., grades, punishment, and acknowledgment) be used to guide learning.

- **Cognitive theory**: Cognitive theory is based on a belief that the learner is an active and accountable participant who brings his or her experience and personality into the learning process. Two schools of cognitive psychology considered how individual mental processes shaped learning. Humanistic psychology contributed an understanding that people have an innate, natural tendency to learn if the environment provides psychological safety and nourishes learning. Developmental psychology identified stages of adult development, demonstrating that people need new information and skills to address particular challenges in each stage of life. They also highlighted the effect of environment on slowing or facilitating learning.

### Critical Reflection on Principles of Training

Although many influential scholars have written about the complex role of education in society, including North American educator Jack Mezirow (personal transformation), Brazilian educator Paulo Freire (social transformation), and North American philosopher John Dewey (progressive education), only in the past decade have educators turned their attention toward a better understanding of how learning occurs in different cultural contexts. Putting aside questions regarding the value placed on education in different societies, an operational question persists regarding the applicability of teaching...
philosophies and approaches developed largely in the North to the cultural contexts and educational settings of the South.

**Culture and Cognition**

Nisbett et al. (2001) challenged the universality of learning theory and its underlying assumption that all adults share similar cognitive processes. Based on a review of social science literature, the researchers suggested that the way in which people understand the world, and the prioritizing of valuable knowledge, is shaped by the organization of a particular society. For example, ancient Greek society encouraged individual action and personal freedom, while ancient Chinese society valued harmonious communities organized by strict social rules and responsibilities.

Peng and Nisbett (1999) conducted a series of studies to examine the effect of culture on cognition, as influenced by different philosophical traditions in the West and in China. Although this work was not tied directly to a discussion of training methods, it is useful as a reminder of the role of culture when considering approaches to teaching. The researchers found qualitative differences in how Western and Chinese university students made sense of contradictory statements, in keeping with the different cognitive traditions. In Western philosophy, logic dictates that one statement is true, and the other is false, which is determined through verbal debate or the building of arguments and counterarguments. In comparison, Chinese beliefs acknowledge a dynamic world in which change is ever present. Hence, words are not assigned a fixed meaning, and some level of truth is found in both statements.

In another series of studies, Masuda and Nisbett (2001) demonstrated that Japanese and American university students perceived images holistically and analytically, respectively. Using computer-generated, animated underwater scenes, researchers determined that the Japanese students remembered primary objects of interest in relationship to other background items, and noted the action or movement of items and when they occurred within the animation sequence. In contrast, the American students isolated the objects of interest from the background and had limited recall ability of background items.

**Culture and Approaches to Education**

Reagan (2000), a scholar of comparative education, drew on a broad survey of non-Western educational approaches and traditions (historical and contemporary, oral and written, formal and informal) to illustrate the richness of instructional methods and learning settings globally.

Diouf et al. (2000), using an ethnographic study of informal, community-based learning in a rural Senegalese community, suggested that cultural norms and values influence what adults learn, when they learn, why they learn, and

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<td><strong>How Conceptions of Teaching Vary Across Cultures:</strong> Examples of Research Findings</td>
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**Epistemic Beliefs:**
- Weak/strong categorization of knowledge.
- Role of basics or foundational knowledge.
- Locus of responsibility for learning.
- Type and role of examination and assessment procedures.

**Normative Expectations:**
- Nature of a teacher’s authority.
- Duty and responsibility as a teacher.
- Responsibilities inside and outside class.
- Nature of relationship with students.
- Moral aspects of teaching.

**Pedagogical Procedures:**
- Use of instructional time.
- Nature of the instructional process.
- Nature of feedback to students.
- Ways of adapting to group or individuals.
- Ways of questioning students.
- Ways of responding to students.

Source: Pratt 1999, 5-6.
who provides the instruction. The researchers identified three factors in this setting that could alter how formal adult learning approaches are structured. First, respondents stated that they learned all skills necessary for farming, housekeeping, and childrearing as children, and that learning takes place solely within the domain of childhood. Second, elders are regarded as the most important source of information. When adults seek a specific piece of information, they turn to elders, who in turn, set the pace of instruction and carefully assess the motivation and intent of the learner (i.e., whether this person will benefit the common good). Finally, respondents preferred a learning process in which they could observe and practice before asking questions.

Pratt (1999) developed an analytical framework for examining how conceptions of teaching vary across cultures and settings, based on 400 interviews with teachers of adults throughout the world. The primary ways in which these practices differ are identified in Box 1. This type of information could help guide the development of an assessment tool for training design and delivery.

Based on these data, Pratt (2002) later identified five distinct approaches to teaching:
- Transmission: Teachers transfer large amounts of content to students.
- Developmental: Teachers strengthen the thinking and reasoning skills of students.
- Apprenticeship: Students learn through practice and develop a social identity.
- Nurturing: Teachers create a safe and encouraging climate for learning.
- Social reform: Teaching is regarded as a tool for social change.

Deconstructing the Educational Practice

Pratt (1993) critiqued the assumptions central to andragogy and found that the emphasis on the adult learner as an individual eclipsed any discussion of how a particular culture or setting may affect learning. Such reductionism is attributed to the influence of psychology, in which the focus on the individual takes precedence over exploring the role of broader societal factors. Furthermore, andragogy developed out of a particular historic time period in the United States and reflects the highly valued characteristics of individualism, self-reliance, and entrepreneurship.

Trainers can begin to better understand the approaches they use by examining the implicit assumptions underlying their teaching methods and practices. Brookfield (1995) called this a process of “critical reflection.” He identified three layers of assumptions that support teaching practices (Box 2). Paradigmatic assumptions, so basic and essential to our thinking, are the hardest to identify and challenge.

<table>
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<td>Categories of Assumptions</td>
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<td><strong>Paradigmatic assumptions:</strong> Deeply held beliefs that provide the structure to an approach.</td>
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<td>• For example, adults are self-directed learners.</td>
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<td><strong>Prescriptive assumptions:</strong> Beliefs around what one thinks should occur given a specific approach.</td>
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<td>• For example, good teaching involves students in the designing, conducting, and evaluation of the learning process.</td>
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<td><strong>Causal assumptions:</strong> Beliefs built on cause-and-effect relationships between actions.</td>
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<td>• For example, the inclination for students to practice self-directed learning is encouraged by the use of learning contracts.</td>
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Brookfield (1995; 4–5, 9–11) went one step further, demonstrating how assumptions held by a teacher might be interpreted differently by the learners:

a) **Assumption:** Visiting small groups of students as they work on a task conveys respect, attentiveness, and commitment on the part of the teacher.
   b) **Alternative interpretation:** Visiting small groups of students as they work on a task conveys a sense of mistrust on the part of the teacher.

a) **Assumption:** Lecturing leads to passive learning.
   b) **Alternative interpretation:** Lecturing is an efficient way of communicating basic information and a place to model the process of critical thinking.

a) **Assumption:** Group discussion positively engages students and encourages active learning.
   b) **Alternative interpretation:** Power dynamics in a group may dominate in this setting and discourage a free exchange of conversation.

a) **Assumption:** Teachers should treat students as co-educators.
   b) **Alternative interpretation:** Students expect a teacher to have experience, skills, and knowledge and may distrust someone in authority who underplays or minimizes the role of teacher.

a) **Assumption:** Sitting in a circle validates the voices of students and encourages participation and mutual respect.
   b) **Alternative interpretation:** Sitting in a circle robs students of their privacy and may make students feel self-conscious and open to judgment.

These and many other assumptions underlie the practice of training worldwide. They are commonly used to guide the planning and delivery of training programs, yet they may not adequately address the cultural and cognitive diversity of audiences and settings. The alternative interpretations offered above provide an opportunity to imagine other ways of perceiving training choices. Once engaged in critical reflection, it becomes apparent that age and gender, social standing, professional discipline, language, and many other factors should be taken into account when planning for training and transfer of learning activities. All are likely to affect the delivery, level of participation, and extent of learning that occurs in a group and should be considered when making decisions about approaches to teaching, methods of teaching, and selection of instructor. A greater investment in meaningful assessment could result in the identification of criteria for making decisions and the formulation of practices tailored to the particular cultural setting in which training occurs. It is not clear the extent to which human capacity development efforts will succeed without such an examination.

**Conclusion**

People are the key resource in programs designed to improve the care, treatment, and support of people living with HIV/AIDS. Although the concept of capacity development goes beyond the need for training and retention of health care providers, training remains a challenge throughout the developing world and should be addressed critically and vigorously. Those who plan and deliver training programs already have a difficult role. They often teach highly technical information to adults in settings in which powerful societal, familial, spiritual, and economic forces are at work affecting cognition, motivation, and transfer of learning. The approaches currently employed to plan and deliver training rarely assess these forces adequately or question how culture and environment may influence the learning process. We are not urging the abandonment of current training practices; rather, we are urging a more critical and rigorous approach to assessment prior to the design and delivery of training.
References


The Advances Through HIV/AIDS Research Series

This series uses an innovative methodology to bridge the dynamic worlds of HIV/AIDS research and the practice of HIV/AIDS prevention, care, and support in developing countries. The 2002–2003 series includes nine papers on a range of topics. The goal of the series is to disseminate key research findings and expert analyses to busy practitioners and policy makers working in the field. Each paper places significant, new, or controversial research findings in a broader context and explores their practical and policy implications for those working on the frontlines. These are not “best practice” recommendations. Instead, the series aims to help decision makers recognize research breakthroughs and emerging technical challenges, and consider their implications for HIV/AIDS program planning, design, and applied research.

The Methodology

In the development of each paper, an internationally recognized expert frames the paper, identifying key issues, recommending the most pertinent and recent publications, and describing significant ongoing research. The key issues and research findings are then modified into an accessible format for a broad audience. These papers are not lengthy or exhaustive literature reviews; rather, they provide a rapid, rich, and selective examination of key issues and findings on the topic from the perspective of one well-known expert in the field.

The Expert

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