Interactive Andragogy: Principles, Methods, and Skills

Alex Gitterman

ABSTRACT. The subject of the paper is andragogy. In social work education (as in all education), complex issues emerge regarding the nature of learning and teaching. One pervasive and persisting issue is the relation between subject matter, i.e., what is to be taught, and teaching methodology, i.e., how it is to be taught. The paper discusses and illustrates interactive teaching principles, methods, and skills such as creating a climate and providing structure for collaborative learning, dealing with obstacles to collaborative learning, and helping students to experience, operationalize, and build abstractions. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2004 by The Haworth Press, Inc. All rights reserved.]

KEYWORDS. Andragogy, collaborative learning, self-directed, obstacles, structure, abstractions

The subject of this paper is andragogy. In social work education (as in all education), complex issues emerge, regarding the nature of learning and teaching. One pervasive and persisting issue is the relation between subject matter, i.e., what is to be taught, and teaching methodology, i.e., how it is to be taught. In the United States, a preoccupation with what students must learn overshadows attention to how they

Alex Gitterman, MSW, EdD, is Professor of Social Work Practice, University of Connecticut School of Social Work, 1798 Asylum Avenue, West Hartford, CT 07117.

Journal of Teaching in Social Work, Vol. 24(3/4) 2004 http://www.haworthpress.com/web/JTSW © 2004 by The Haworth Press, Inc. All rights reserved. Digital Object Identifier: 10.1300/J067v24n03_07

⁹⁵

should be taught. The paper begins with a brief historical examination of the economic and philosophical roots of subject-centered education. Dewey (1947) refers to the subject-centered approach as "one of imposition from above and from outside . . . Learning here means acquisition of what is already incorporated in books and in the heads of the elders" (pp. 4-5). Dewey offers a divergent view of teaching and learning. He posits that students experiences and learning needs must be integrated with the structured curriculum. Life experiences and natural curiosity provide the organic link between learners and their subjects.

Adult learners have the potential to be self-directed, particularly when their life and practice experiences are utilized as vital resources. An essential teaching task is to develop connections between the "abstract world" of concepts with the "real world" of personal experiences. These connections are more likely to be actualized when students are engaged in an active, collaborative learning processes. This paper discusses and illustrates interactive teaching principles, methods, and skills such as creating a climate and providing a structure for collaborative learning, dealing with obstacles to collaborative learning, and helping students to experience, operationalize, and build abstractions.

SUBJECT-CENTERED EDUCATION

The United States' transformation from primarily an agrarian, rural economy to that of a highly complex, industrial society dramatically changed the conception and process of public education. The public school originated in an one-room structure, built, staffed, and held accountable by the local community. Consequently, the educational curriculum was flexible and receptive to community needs. For example, school schedules were based on the community's harvest season and daily chores. As the United States' economy shifted and as people migrated into industrial centers, and as immigrants arrived from foreign lands, the entire character and scope of the public educational system underwent a fundamental uprooting.

In principle, the public supported free compulsory education. In reality, the tax burden of educating rural and immigrant children attenuated public support. At the turn of the twentieth century to the present, the major public concern has been on how to make the public schools more efficient and more accountable. By the turn of the twentieth century, schools were unfavorably compared to business and industry and were found wanting in its production and economy (Ayres 1909). The de-

96

mand was on applying proven industrial practices to education. Munroe (1917) epitomizes this viewpoint:

the fundamental demand in education . . . is for efficiency–physical efficiency, mental efficiency, moral efficiency . . . the pupils who constitute raw materials of the business of education . . . (pp. 20-21)

The literature at the turn of the century is replete with analogies comparing education to industry, e.g., "Education is a shaping process as much as the manufacture of steel rails" (Bobbit 1913, p. 12). Cubberly (1922) captures this movement:

Our schools are . . . factories in which raw products (children) are to be shaped and fashioned into products to meet the various demands of life . . . it is the business of the school to build its pupils to specifications laid down. (p. 338)

This basic philosophy prevails in contemporary education and shapes public discourse. Heavy emphasis is placed on classroom management and teaching students by rote repetition to be docile and obedient rather than active and inquisitive. Ball (2000, p. 1012) cites Freire's (1993) concept of "banking pedagogy" that "fosters passive acceptance of the status quo." The current preoccupation with testing and holding schools accountable deflects attention from unequal and inadequate funding of inner city schools and lack of creativity in teaching approaches (Kozol 1991).

The subject-centered approach provides the educational rationale for an emphasis on testing and outcome accountability. Its underlying assumptions can be traced to the early educational philosophy of mental discipline which posited that the purpose of education was to train the mind through mental exercise (Gitterman 1972). In the seventeenth century, John Locke (1912) perceived the mind to be empty at birth, tabula rasa, and that ideas and concepts were derived through the senses. The mind was a storing house for external sensory impressions (Scheffler 1965). Locke (1959) asked the following rhetorical question: "Let us then suppose the mind to be . . . white paper, void of all character, without any ideas; how comes it to be furnished? . . . To this I answer, in one word, from experience . . . Our observation . . . supplies our understanding with all the materials of thinking." Locke and his disciples perceived the learner to be morally neutral and psychologically passive. Consequently, education consisted primarily of organizing and feeding sensory experiences and shaping the mind of passive learners.

Johann Herbart (1901) further advanced Lockean philosophy. He also perceived the mind to be a passively receiving, storing entity. He wrote (1895), "The soul has no innate natural talents nor faculties whatever . . . It has originally neither concepts, nor feelings, nor desires. It knows nothing of itself and nothing of other things . . . no laws of willing and action and not even minute predispositions to any of these" (pp. 63-63). However, in contrast to Locke, Herbart believed that ideas had lives of their own, i.e., they were dynamically active in connecting with other ideas. The mind was simply a storing place for the transaction of ideas. In fact, the mind was "little else than the battle-ground for contending ideas" (Adams 1897, p. 50). Since ideas had the power to attach themselves to other ideas, they needed to be firmly disciplined through drilled repetition and formation of habitual responses.

Based upon this conception, the experts determined what needed to be learned by when and students were expected to passively conform to the expectations and prescriptions. A primary teaching function was the selection and arrangement of prescriptive "lesson plans," containing the content, and "right" answers. Through the Socratic teaching method of asking leading questions, students would be skillfully led to the correct answer. Highet (1950) describes the Socratic method: "Here the teacher does not talk. He asks questions, and the pupil talks. But the questions are so arranged as to make pupil conscious of his own ignorance and guide him toward deeper truth, which he will hold all the more firmly because it has not been presented to him ready made but drawn out of his own mind" (p. 88).

In the beginning of the twentieth century, Edward Thorndike (1913) and John Watson (1924) introduced behaviorist psychology. They were more interested in the physiology of the body than the association of ideas. Thorndike linked mental processes with its physical counterpart. He proposed that learning was a conditioned response to environmental stimuli: "Any fact of intellect . . . means a tendency to respond in a certain way to a certain situation–involves a situation or state of affairs influencing the man, a response or state of affairs in the man, and a connection or bond whereby the latter is the result of the former" (p. 1). By the middle of the 20th century, Skinner (1954) popularized behavioral concepts. Teaching was equated with the processes of producing and withholding stimuli for the purpose of achieving or preventing desired responses. Through skillful rewards (e.g., praise, gold stars) and

98

punishments, the teacher controlled the learning environment and outcomes.

In summary, subject-centered education emphasizes processes of disciplining or training minds. Philosophically, students are perceived to be relatively passive and controlled by their environment. In this approach, the learners is totally dependent on the teacher for "making all the decisions about what should be learned, how and when it should be learned, and whether it has been learned. The only role for the learner is . . . submissively carrying out the teachers directions" (Knowles 1985, p. 8). The relationship between teaching and learning is linear. The teacher, the expositor of knowledge, determines the "pace and style of exposition"; the student is a passive listener (Bruner 1968, p. 83). Similarly, Knowles (1985) states:

Learners enter into an educational activity with little experience that is of much value as a resource for learning . . . the backbone of pedagogical methodology is transmission techniques–lectures, assigned readings, and audiovisual presentations. (p. 8)

Teachers *transfer* their knowledge to students whose minds are viewed as empty containers that need to be filled. Lectures supplemented with Socratic questioning represent the primary transferring and shaping methods that lead students to predetermined "correct" answers.

INTEGRATION OF SUBJECT AND STUDENT-CENTERED EDUCATION

John Dewey (1966) posited that students' learning needs had to be integrated with social demands. While he supported the notion that learners required some degree of freedom, a correspondent degree of structure was equally essential. He urged that freedom and structure (students' interests and needs and subject demands) must be integrated rather than made "antagonists." Dewey believed that a potentially organic relationship existed between learners and their subjects. For this potential to be realized, Dewey formulated two educational principles: experience and interaction.

Dewey postulated that for meaningful learning to take place the "abstract world" of concepts had to be connected to the "real world" of personal experiences. He perceived learning to be a process of moving

100 JOURNAL OF TEACHING IN SOCIAL WORK

from the learners' personal experiences to organized concepts and theories, and concomitantly, from abstract ideas to personal meanings. Through the second principle, interaction, Dewey further formulated that subject and learner had to interact with each other. A major task of teaching was to create the opportunities for students to interact with the subject and to personally experience its abstractions (Dewey 1938, p. 33). For example, children could more effectively learn about the discovery of a geographic area by actually reenacting the explorer's journey than by simply memorizing relevant facts. By recreating and experiencing an abstraction, it becomes part of the learners' lives and integrated with their very being. In another example, when introducing children to the world of colors, a teacher may impart knowledge by identifying the various color combinations in relationship to the primary colors. However, these remain the teacher's insights until the child grasps the relationship herself. Alternately, a teacher might introduce the world of colors by structuring the experience so that children have the opportunity to make discoveries for themselves and to experience an "Aha" or insight.

To engage students with their subjects, teachers must invite them to become contributing partners in the teaching:learning enterprise. Education is a journey and the teacher serves as a guide or leader. Using their substantive expertise, teachers create opportunities for students to make their own discoveries and to find their personal meanings. A primary teaching function is to structure the students' learning opportunities to interact with the subject and to personally experience its abstractions. Along the way, teachers point out the wonders, ambiguities, and inconsistencies of the content.

To these two principles, Dewey added a caveat: Experience and interaction do not in themselves represent education; rather, the quality of the experience and interaction determine learning. Dewey (1947) cautioned that one did not simply "learn by doing" (p. 16). He (1966) emphasized "If you simply indulge this interest by letting the child go on indefinitely, there is no growth that is more than accidental. But let the child first express his impulse, and through criticism, question, and suggestion bring him to consciousness of what he has done and what he needs to do, and the result is quite different" (p. 41). Because initial insights may be limited to isolated and idiosyncratic understanding, they must be placed into larger generalizations. These generalizations provide the opportunity for the transfer of learning.¹

INTERACTIVE TEACHING PRINCIPLES, METHODS, AND SKILLS

In the United States, social work faculty and students have been primarily educated in the subject-centered tradition. The teacher exposits; the students listen and take notes. This arrangement is familiar and comfortable to all parties. As resident scholars, faculty aspire to gain expertise in various substantive fields. Lifetimes are devoted to the pursuit of scholarly proficiency. Understandably, our students are presented facts or formulations about what has taken us many years to acquire or develop as if they were obvious, simple and self-evident "truths." The presentation of neatly organized abstractions and classification schemes do not take into account the somewhat less neat and not so logically organized process by which our knowledge and insights have been acquired. Since social work students' field work experiences are rarely as neat and logical as faculty presentations, we offer them material they neither fully understand nor know how to use and unwittingly we may lose contact with them.

In contrasting subject-centered and problem-centered education, Knowles (1972) explicates four assumptions about adult learning. These assumptions are particularly relevant for social work professional education. First, the adult learner is self-directed and has a need to be perceived by others as self-directing. When adult learners find themselves in situations in which they are not allowed to be self-directing, their reactions are "bound to be tainted with resentment and resistance" (p. 34). Second, the adult learner has accumulated life experiences that represent an essential resource for learning. When an adult learner's experience is ignored or devalued, s/he feels rejected as a person. That is so because "to an adult learner, his experience is who he is" (p. 35). Third, timing is an essential factor. Adult learners and, specifically, social work students are ready to learn because of their aspirations for professional careers as well as the immediate demands of field work. Finally, adult learners have a problem-centered approach to learning rather than a subject-centered approach. The social work adult learner wants "to apply tomorrow what he learns today, so his time perspective is one of immediacy of application" (p. 36).

Maintaining a working balance between subject demands and student interests and needs should be an ongoing preoccupation for the teacher. As educators we must provide the conditions which facilitate opportunities for students to bridge personal experiences and styles with

JOURNAL OF TEACHING IN SOCIAL WORK

102

facts, concepts, and theories. The following represents a more explicit exposition of these and ragogical principles, methods, and skill.

1. Creating a climate for collaborative learning: To encourage collaborative learning, the instructor has to create a climate conducive to mutual problem solving. Creating this climate begins with attention to the physical learning environment. The standard classroom set up with a lectern up front and chairs in rows is "probably the least conducive to learning . . . It announces . . . that the name of the game here is one-way transmission . . ." (Knowles, 1985, p. 15). A circle or semicircle arrangement of chairs, desks, or tables immediately announces a different set of expectations—that participation is valued and expected and that something different is going to take place in this class. Class rooms that are well lit, ventilated and tempertured, and clean also promote collaborative learning.

Creating a supportive and trusting psychological and social climate is even more important than the physical setting. When students feel respected and trusted by the instructor, they more readily respect and trust each other. In contrast, when students feel a lack of respect and trust, "their energy is spent dealing with this feeling more than with learning" (Knowles 1985, p. 15). Collaborative learning begins in the *first class* when the instructor invites student reactions to the course syllabus and encourages their input into course planning. Out of this discussion the instructor and students forge an *initial mutual understanding* about lines of inquiry, and teaching and learning responsibilities. This initial agreement also serves as a base for periodic evaluations of course content and methods (Germain & Gitterman 1996, pp. x-xi).

In developing an initial mutual agreement, an explicit discussion about the instructor's commitment to collaborative learning and an explication of its advantages goes along way to creating the desired climate. The students' relationship with the instructor as well as assignments and grades also requires discussion and moves the enterprise along. An instructor needs to think about the following initial educational tasks related to engaging the students in collaborative learning:

(a) *Class tone:* What does one have to do to encourage a spirit of inquiry, of risking, of mutual learning? How does one encourage students not only to learn from the literature, from each other, from the instructor, but also from their most important teachers, their clients? Students have a great deal to offer each other, the instructor's job is to keep the discussions focused, purposeful, and directed. The instructor might consider reserving 10 minutes in each class for an open-ended discussion. For example, If students come across a helpful reading,

they can be encouraged to share it without worrying that their classmates will think they are trying to impress the instructor. Similarly, in practice classes, if they come across difficult relevant practice situations and would like some help, they can be encouraged to share it.

(b) Collaborative peer learning: How does one communicate his/her commitment to students learning from each other as well as from the instructor? How does one communicate her/his commitment also to learn from the students? To begin with, the instructor has to be willing to give up the role of being the only expert in the class and that students will learn if one simply tells them. The instructor has to consistently convey her/his unshakable faith that students will be more able to learn, to think critically, and to venture into new substantive areas when they have been involved in an active, cooperative educational process. The instructor's tasks include the following: (1) to keep class conversations focused and directed; (2) to provide new ideas and perspectives; (3) to help students find the connections between their field experiences, readings, and class discussions; and (4) to help students create a classroom climate where they feel invested in each other's learning and in the educational adventure. In this process, the instructor shares responsibility with the students for their own learning. Students need to be encouraged to help each other to present and develop their ideas while they are in the process of being formed and shaped. As they build on each others contributions, they will create new generalizations, underlying principles, and rationales. Through focused and structured discussions, the students learn to incorporate other's viewpoints and problem-solving methods. In this way, they can help each other with private distortions, biases, and preconceptions. If the process goes well, they will also learn how to work collaboratively-a critical professional skill (Gitterman 1992).

(c) *Relationship to instructor:* How does one create a classroom climate in which students are direct in their communications with the instructor? Collaborative learning will not be actualized if students are indirect with the instructor. If students are confused, they need to be encouraged to share their confusion. If they desire more lecture and less discussion or the reverse, they need to be encouraged to risk verbalizing their preferences. And most important, students need to be encouraged to disagree with the instructor. Conformity and creativity are antithetical. (d) *Identifying potential obstacles:* How does one help students to avoid potential obstacles to their collaborative learning? For example, some students may be concerned about issues of class confidentiality; others might be concerned about the instructor's fairness in grading; still others might be concerned whether they will be penalized for speaking frankly. Inviting a direct discussion about anticipating potential obstacles places students in a better position either to avoid them or, at least, to develop strategies for dealing with them should they evolve.

(e) *Self-directed learning:* How does one help students become self-directed in their learning? Obviously, class discussions will only be informative if students keep up with the readings. Students are most likely to be self-directive in their learning if they see the connection between the literature and their becoming skillful professionals. Students need to be encouraged to read to inform and improve their practice. The task is to teach students to read not for the instructor, but to assume professional responsibility to read for the purpose of more effectively helping their clients. Carefully constructed syllabi and opportunities for students to discuss the relevance of their readings help accomplish this task.

(f) *Class assignments:* What kind of assignments can one develop which will help students integrate theory and practice? In practice classes, aside from term papers, other learning tools such as academic journals, critical incidents, and records of service help students to search for the illusive connections between theory and practice, and between assessment, interventions, monitoring, and evaluation. For example, the critical incident is designed for students to analyze in depth an incident from their micro or macro practice. The analysis requires application of pertinent theory, research findings, and examination of ethical issues as well as self-examination.

2. *Providing structure for collaborative learning:* How does one provide sufficient focus and direction to class discussions? The instructor must provide focus and direction as well as support and encouragement for students to be willing to share and to risk their ideas with each other. Peer discussion is a means to learning and to critical thinking and not an end on to itself. It is not just through participation in class discussion that students learn, but rather by the structure and quality of these exchanges. Classroom processes have to be structured and the boundaries defined and contracted

within which students interact with each other in pursuit of learning the subject. The structured exchange of different experiences, the sharing of data, the debating of viewpoints, broadens understanding, and alters mental structures.

Skillfully asked questions are a primary method for lending structure to class discussions. Gitterman (1995) suggests that instructors can: (1) ask questions in early classes which invite opinions and have no right or wrong answers; (2) direct students to talk to each other and build on their respective contributions; (3) deepen the conversation by using more discriminating questions which call for facts, inferences, explanations, and evaluative judgments as students comfort and confidence increases; (4) periodically pull together and summarize salient themes.

3. Dealing with obstacles to peer learning: When class obstacles interfere with learning, how does one help students overcome the obstacles? Throughout the semester, the instructor reaches for students' hesitations, concerns, and confusion and deals with obstacles that interfere with peer learning (e.g., monopolist, cliques, withdrawal, competitiveness, illusion of learning, etc.) Class members may lack awareness of obstacles in their learning. When this occurs, sometimes all the instructor has to do is to identify a problematic pattern. For example, "I noticed over the last couple of classes, when class members share their difficulties in inviting a client's intense pain, you tend to jump in with quick reassurances. Are you having difficulty sustaining the painful material and exploring your reactions to it? I am interested in your thoughts on this." Identifying the pattern raises consciousness. If the pattern continues, the instructor can repeat the observation. For example, "Last week I mentioned our flight into reassurance-I think it's happening again-let's look at it." The instructor's directness and persistence convey genuine caring and faith in collaborative learning. Addressing and working on a learning obstacle often releases students' energies and opens up avenues for learning. A discussion that examines the parallels between the obstacles in their class learning with the obstacles that exist in their practice, between what was done in the class and what they could do in the field, further deepens their learning. Through the discussion, the teacher helps students to become more aware of what s/he modeled in action.

4. *Experiencing abstractions:* How does one help students to experience abstractions? As previously stated, theory can be experienced by students as fixed doctrine and as formulations separated from the unorderly process and actual struggle of its creation. New students grasp on to "truths" that they can use in their practice. They begin field work with much anxiety, self-preoccupation, and dependency on their teachers. Fearing that they

might "drown," they seek prescriptions to help them stay afloat (Reynolds 1942).² Educators must be careful about presenting students with a "closed system" of knowledge, the points fixed and distant from their own experiences. An actual teaching experience in which an instructor was more preoccupied with what he was teaching than with what students were learning may illustrate the negative consequences (Gitterman 1995).

A few years ago I was teaching the concept of contracting to first semester practice students. The process I taught was simple, logical, and sequential: (1) you state the agency's offer of service in clear and operational terms, identifying applicant's or client's potential perception of their interests, needs, or problems; (2) you state your professional role; (3) you reach for member'(s) feedback and so on. In response to my thoughtful, well-organized, sequential exposition and to my total surprise and chagrin, I confronted 25 students in a glazed trance, bordering on the catatonic, while others in absent reverie.

The instructor had somehow forgotten that the students' practice experiences were rarely orderly, sequential, and predictable. The instructor learned that teaching about contracting is not the same as helping students to struggle with *how* to contract and *how* to apply the generalizations to their unique situations (mentally challenged adult, quiet child, angry teenager, etc.). During the next several weeks, the class examined the specifics of their experiences in beginning with different clients and based on the collaborative work, they were able to develop principles about developing mutual agreements with diverse populations.

Students can more capably comprehend and utilize a theory, concept or fact when they have discovered its personal meaning. They require assistance with restoring abstractions to their original states and meanings, and to rediscover them for themselves. Thus, an important teaching objective is to structure situations in which students use the literature, classroom assignments and discussions, and field experiences to facilitate their *personal involvement* with the subject matter. Educational situations which provide students the opportunity to "catch the point," to experience an "Aha," to capture the pattern of relationships. Personalizing abstractions may become a transformative learning experience leads to construction of revised or new interpretations of both the abstraction and the experience.

5. *Operationalizing abstractions:* How does one help students turn knowledge into action? The distinction between "knowing that" (having facts and information) and "knowing how" (using facts and information) can be extremely useful (Ryle 1949). Learning about what makes a competent and ethical social worker is not the same as learning about how to be a competent and ethical social worker. Students may have more than adequate knowledge about professional assessment and interventions, without "owning" these professional methods and skills. Knowing "how" represents a trained capacity, a competence, and a potential source of "professional power." Hence, a central teaching objective is the partialization and application (i.e., operationalization) of knowledge. Essentially, this objective emphasizes turning knowledge into action.

Role play is a powerful method for turning knowledge into action. If structured properly, role play helps students experience the thoughts and feelings of others, explore their own feelings and reactions, and rehearse new interventions. By being actively involved, students integrate the affective (feeling), imaginal (perceiving), conceptual (thinking) and practical (behaving) modes of learning (Heron 1996, 1992; Kolb 1984). In introducing students to class role playing, the instructor may begin with two-person role plays and gradually build to class role plays. Having the entire class role playing at the same time in dyads eliminates observers and decreases self-consciousness. After students gain comfort with structured role plays, more spontaneous role play can be utilized. For example, when a student introduces a practice concern, the teacher might suggest class members move into client and worker roles to better understand the transactional dynamics, role playing what actually happened and what might be done differently. Similarly, role play may also be contrasted with an actual case excerpt. Students may be assigned roles of individual, family, or group clients and asked to read a case vignette. Class members and role players can comment on the case dynamics as well as the workers' interventions. Or the instructor can structure a role play with limited scripted dialogue, and after class discussion, the teacher reads (or distributes) the actual case excerpt, inviting discussion.

For role play to be used effectively, the teacher must sufficiently describe and structure the learning situation so that it yields the relevant learning points. The situation should contain a relevant and challenging problem or issue which will stimulate students' motivation, interests, and thinking. The design of the role play has to be fairly simple, "with just enough description to make the situation specific, clear, short, and with only one or two learning objectives and experiences" (Germain & Gitterman 1996, p. xvii). Flexibility is also required so that the students can behave as they imagine the role should be carried out.

6. Building generalizations and critical thinking: How does one help students to generalize knowledge and to think critically? While operationalizing knowledge is important, it is not sufficient. Just as students can have knowledge about professional methods and skills without having these methods and skills, so too students can have professional skills without having knowledge about them. "Knowing how" is not quite enough-professional competence, proficiency, and mastery requires having generalizeable knowledge about one's action. Students must acquire the ability to identify principles or concepts in specific experiences that can be generalized to other experiences. Moving from the concrete to the abstract is essential to learning and critical thinking. Building abstractions emphasizes learning to organize one's thinking conducive to transferability, condensability and expandability. This is what Bruner (1968, p. 77) refers to as "the active pragmatic idea of leaping the barrier from learning to thinking" or, in other words, critical thinking.

To generalize and to think critically, teachers must help students to (1) recognize and define a broader conceptual issue; (2) gather and consider relevant information; (3) form a tentative generalization; (4) try it out (fly it on a flagpole); and (5) evaluate, refine, and decide whether it holds up. To engage in this process, the instructor has to create a classroom culture in which students suspend premature solutions and judgments, maintain a curiosity and skepticism, experience ambiguity as a challenge rather than a threat, and eschew simple prescriptions and easy solutions (Dewey 1910, 1982).

Based on earlier educational socialization, many students enter our classes expecting to be intellectually passive and disengaged. Caution and passivity replace natural inquisitiveness and willingness to take risks. Taking notes on our ideas replaces thinking for themselves. Teachers must convey to their students that they themselves have more questions than answers and are committed to a lifetime of inquiry and learning. The connections between theory and practice are often illusive and require ongoing willingness to struggle rather than try to figure out the "right" answer for the teacher. Meyers (1986, p. 47) suggests that it is helpful to point out how experts of equal stature disagree and to present opposing views. As previously stated, the teaching task is to help students to embrace uncertainty and ambiguity–to accept that complex social realities do not lend themselves to simplistic formulations.

7. *Balancing lecture, discussion, role play, and visual methods:* How does one effectively respond to diverse learning styles? Bruner (1966) sug-

108

gests that adult learners have different ways of learning and cognitive styles. Some are symbolic learners and primarily learn by abstracting and conceptualizing. Others are visual learners and learn primarily by visualizing and organizing perceptions into patterns and images. Still others are active learners and learn primarily by active participation. To be responsive to diverse learning styles, instructors should use various teaching methods. Lectures provide information not available in readings, clarify complex concepts, summarize main points of discussion, and model, by example, critical thinking. Diverse materials are integrated and readings and class discussions are brought together. Gitterman (1995) offers the following suggestions: (1) at the outset, inform students what you plan to cover and your basic thesis or argument (the prologue helps students follow your presentation); (2) by repetition and voice modulation, the lecture's main points are emphasized; (3) by uses of analogy, metaphors, illustrations, build bridges and connections between the content and methods of your discipline and students' experiences; (4) humor provides a common class reaction, a relaxing moment, and mobilizes interest and attention; and (5) visual presentations help students to visualize the content to be learned.

In social work courses, what is needed is some sort of balance between lecture, peer *discussion*, *visual* representation, and *action* methods. Lecturing is a traditional and very important method of teaching. Students require time to interact with the lecture and process its meanings through discussion, role plays, and visual representation. Inviting students to think out loud, to use the concepts, to seek clarification, to discuss them with their peers, to role play them, to view them, to deepen their meaning, to make them their own is essential to learning (Meyer 1986, p. 57). The effective integration of lecture and discussion and action and visual methods narrows the distance between instructor and students as well as the subject and students. Discussion and role play methods have been previously discussed. Visual methods include the use of power point, overhead projector, videos, charts and graphs, force field analysis, ecomaps, genograms, and so on.

8. *Role modeling professional competence:* What does one need to role model for students? Social work teachers represents important professional role models for students. We must represent in *action* what we are trying to teach. Students appear particularly responsive to a teacher who demonstrates substantive expertise and andragogical skills, makes rigorous demands for scholarship, demonstrates passion for the subject, and shows curiosity and openness to divergent perspectives. We must be able to reflect an openness to criticism of our own ideas by drawing attention to critical reviews of our work and by sharing changes over time in our formula-

tions. We must recognize that much important learning is "caught" not "taught." If we teach empowerment but are authoritarian in our approach; if we exhort intellectual curiosity and critical thinking and, in turn, we are dogmatic and rushed in our own preparation and thinking, students will internalize what we do and not what we say. Our message and our behavior have to be congruent.

CONCLUSION

This paper has attempted to shed some light on the complex relation between subject matter, i.e., what is to be taught, and teaching methodology, i.e., how it is to be taught. As teachers we need to share our accumulated knowledge and experiences. The paper represents an effort to further this dialogue.

NOTES

1. During the same period, Lewin (1951) introduced an integrative field psychology. The major thesis is expressed in the word field which refers to a "gestalt," an organized pattern, a configuration, a whole rather than isolated parts. People, situations, and objects are perceived to derive *relativistically* their characteristics from their relationships to other people, situations, and objects. Events are perceived to occur *contemporaneously* (simultaneously and interdependently).

2. Reynolds (1942) conceptualized stages of progression in student learning that are similar to Piaget's four steps for children's learning in which they move from being self-preoccupied and focused on concrete personal experiences, to focusing outside of themselves, to thinking abstractly, and to entertaining alternative possibilities (Piaget 1947, 1976).

REFERENCES

Adams, J. (1897). Herbartian psychology applied to education. Boston: D. C. Heath.

Ayres, L. (1909). Laggards in our schools. New York: Russell Sage.

- Ball, A. F. (2000). Empowering pedagogies that enhance the learning of multicultural students. *Teachers College Record*. 102: 6, 1006-1034.
- Bobbit, F. (1913). Some general principles of management applied to the problems of the city school system. *The Twelfth Yearbook, Part 1*, pp. 11-15. Chicago: University of Chicago Press.
- Bruner, J. S. (1968). On knowing: Essays on the left hand. New York: Atheneum.
- Bruner, J. S. (1966). Toward a theory of instruction. New York: Norton.

Cubberly, E. P. (1922). Public school administration. Boston: Houghton.

- Dewey, J. (1982). How we think. Lexington, Massachusetts: Heath. (Originally published in 1910)
- Dewey, J. (1966). *The child and the curriculum and the school and the society*. Chicago: Phoenix.
- Dewey, J. (1947). Experience and education. New York: Macmillan.
- Dewey, J. (1938). The theory of inquiry. New York: Holt, Rinehart, and Winston.
- Dewey, J. (1922). Democracy and education. New York: Macmillan.
- Fox, D. (1983). Personal theories of teaching. Studies in Higher Education. 8, 151-163.
- Freire, P. (1993). Pedagogy of the oppressed. New York: Continuum.
- Froebel, F. (1887). The education of man. New York: Appleton-Century Crofts.
- Germain, C. B., & Gitterman, A. (1996). *Instructor's manual for the Life Model of social work practice: Advances in theory and practice, second edition*. New York: Columbia University Press.
- Gitterman, A. (1995). Reflections about teaching and learning. *Reflections*. 2 (Spring), 9-18.
- Gitterman, A. (1992). Working with differences: White teacher and African-American students. *Journal of Teaching Social Work*. 5 (2), 65-80.
- Gitterman, A. (1972). A comparison of three models of education and their influences on social work supervision. In F. Kasslow (ed.). *Issues in human services*, pp. 18-38. San Francisco: Jossey-Bass Inc.
- Herbart, J. (1901). Outlines of educational doctrine. New York: Macmillan.
- Herbart, J. (1895). A textbook in psychology. New York: Appleton-Century-Crofts.
- Heron, J. (1996). *Cooperative inquiry: Research into the human condition*. Thousand Oaks, CA: Sage Publications.
- Heron, J. (1992). *Feeling and personhood: Psychology in another key*. Newbury Park, CA: Sage Publication.
- Highet, G. (1950). The art of teaching. New York: Random House.
- Knowles, M. S. (1985). Introduction: The art and science of helping adults learn. In M. S. Knowles and Associates (Ed.), *Andragogy in action: Applying modern principles of adult learning*, pp. 1-22. San Francisco: Josey-Bass Publisher.
- Knowles, M. S. (1972). Innovations in teaching styles and approaches based upon adult learning. *Journal of Education for Social Work*. 8 (2), 32-39.
- Kolb, D. (1984). Experiential learning: Experience as a source of learning and development. Engelwood Cliffs, New Jersey: Prentice Hall.
- Kozol, J. (1991). Savage inequalities: Children in American schools. New York: Crown Publishers, Inc.
- Lewin, K. (1951). Field theory in social science. New York: Harper and Row.
- Locke, J. (1959). An essay concerning human understanding. New York: Dover.
- Locke, J. (1912). Some thoughts concerning education. In J. W. Anderson (Ed.). *Educational writings of John Locke*. New York: Longmans.
- Mezirow, J. (2000). Learning to think like an adult. In J. Mezirow and Associates (Ed.), *Learning as transformation: Critical perspectives on a theory in process*, pp. 3-33. San Francisco: Jossey-Bass.
- Meyers, C. (1986). Teaching students to think critically. San Francisco: Jossey-Bass.
- Munroe, J. P. (1917). New demands in education. New York: Doubleday, Page, & Company.

- Piaget, J. (1976). Psychology of intelligence. Totowa, New Jersey: Littlefield Adams. (Originally Published 1947)
- Reynolds, B. (1942). *Learning and teaching in the practice of social work*. Farrar and Rinehart.

Rousseau, J. J. (1911). Emile; or, education. New York: Dutton.

Ryle, G. (1949). The concept of mind. London: Hutchinson University Library.

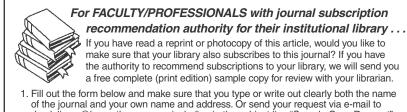
Scheffler, I. (1965). Philosophical models of teaching. Harvard Educational Review. 35 (2).

Skinner, B. F. (1954). The science of learning and the art of teaching. *The Harvard Educational Review*. 24 (2).

Taylor, E. (2000). Analyzing research on transformative learning theory. In J. Mezirow and Associates (Ed.), *Learning as transformation: Critical perspectives on a theory in process*, pp. 285-328. San Francisco: Jossey-Bass.

Thorndike, L. E. (1913). Educational psychology. New York: Teachers College Press.

Watson, R. J. (1924). *Psychology from the standpoint of a behaviorist*. New York: Lippincott.



of the journal and your own name and address. Or send your request via e-mail to docdelivery@haworthpress.com including in the subject line "Sample Copy Request" and the title of this journal.

2. Make sure to include your name and complete postal mailing address as well as your institutional/agency library name in the text of your e-mail.

[Please note: we cannot mail specific journal samples, such as the issue in which a specific article appears. Sample issues are provided with the hope that you might review a possible subscription/e-subscription with your institution's librarian. There is no charge for an institution/campus-wide electronic subscription concurrent with the archival print edition subscription.]

VES! Please send me a complimentary sample of this journal:

(please write complete journal title here-do not leave blank)

I will show this journal to our institutional or agency library for a possible subscription. Institution/Agency Library:

Name:

Institution:

Address: City: ____

_ Zip:

Return to: Sample Copy Department, The Haworth Press, Inc.,

State: _

10 Alice Street, Binghamton, NY 13904-1580