The Transformation of Training: New Kinds of Consumer Based Services Require New Kinds of Training--Based on Participatory Simulation.

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If human services in America are to become more responsive to the needs of the consumer, the training of the service worker will have to be radically transformed. Currently, the training of human service workers resembles that of prolonged apprenticeships. Teacher training, for example, requires general education and broad knowledge rather than specific skills that would make the service more productive. Changes in the character of human services require that these services be more consumer oriented, that they be offered in the style of the consumer, and the consumer have the opportunity to critically evaluate the service and, most important, that the consumer be directly involved as service giver. The training of human service workers must prepare the worker for consumer participation. A training model is needed that is geared to the development of the specific skills required for effective service delivery. Participatory simulation can be applied to all kinds of training—that of teachers, social workers, doctors, and nurses.
THE TRANSFORMATION OF TRAINING

New kinds of consumer based services require new kinds of training---

Based on
Participatory Simulation

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There is considerable new concern that the human services in America become more efficient and sensitive, less determined by the service giver and more accountable and responsive to the consumer. If this is to take place, the training of the service worker will have to be radically transformed. At the present time, most such training is not sharply pinpointed in relation to the specific skills required to perform services such as teaching—rather, broad education is stressed and the training is essentially diffuse, indirect, and prolonged. Furthermore, neither the content, form, nor style of the training reflects adequately the new service styles nor are they preparatory for it or derivative from it.

A comparison of the training of two other kinds of workers—plumbers and airplane pilots—provides clues regarding what a positive training model might look like.

Plumbers vs. Pilots

It takes four years to train a plumber but only 18 months to train an airplane pilot. If one looks at the training designs in the two areas, one can readily see why plumbers are generally trained in an apprenticeship model which unnecessarily stretched out the training process. Airplane pilots, by contrast, learn to fly essentially by the use of simulators, such as the Link Trainer. The Link Trainer is essentially a cockpit on the ground. The trainee climbs into the
hooded cockpit and various problems are radioed to him in sequences of
ever-increasing difficulty. He, in turn, attempts to handle them and
receives feedback on his performance. As he masters each problem, he
gains valuable skills which are tested in the next stage. *

The airplane pilot is trained in a carefully phased sequence using
simulated exercises, directed toward training him for highly specific
skills. His training is directed by experienced trainers, and there
is a phased relationship between the simulative dimension and later
in-flight training.

By contrast, the apprentice model permits an inexperienced trainer,
who happens to be an able plumber, to train the novice entirely on the
job. Not only is the plumber untrained as a trainer, but he actually
has a job to do which, in many ways, interferes with and prolongs the
training he is to give the apprentice. Furthermore, the particular
job that he does on any day is not sequenced so that the trainee will
learn the necessary skills in any particular order; rather, the appren-
tice sees and hopefully learns those dimensions of the job that are
relevant to the performance of the work that the plumber is doing on
any one day. Ultimately, the apprentice may have the opportunity of
fitting the different parts together and, in a highly prolonged fashion,
acquire the necessary skills. He performs the task under the watchful
eyes of the experienced plumber but if he had the opportunity to do the
task in a simulated, protected setting he would be able to try out
various approaches without the danger of messing up the work itself.

*See Kevin Ryan, "A Plan for a New Type of Professional Training for a
New Type of Teaching Staff," in Occasional Papers published by the
National Commission on Teacher Education and Professional Standards,
Neither the plumber nor pilot, of course, are human service workers. The training of human service workers resembles much more the prolonged indirect pattern of the plumber model rather than that of the airplane pilot. The fact is that most human service workers have been trained in traditional professional model, which is not especially oriented to the rapid development highly specific skills leading to efficient consumer-focused services. Friedson, Hughes, and others have noted that accountability to one's professional peers was more the emphasis of the professional. In the teacher training model, for example, general education and broad knowledge is stressed more than specific skills that would make the service more productive. Thus, teachers are not effectively trained in teaching skills, are not selected for them or evaluated in terms of them; rather, the criteria for teacher selection is whether the individual has a B.A. degree and has taken the proper mix of courses in the field of education.*

Most professional training grew out of an elite tradition in which the major concern was that the professional-to-be acquire a definite point of view and perspective about the work he was to do. For example, he is trained to be a lawyer, not so much to do lawyer- ing. Ralph Nader has described the process in legal education, where he says, "Law professors take delight in crushing egos in order to acculturate the students to what they called 'legal reasoning' or 'thinking like a lawyer.'" There was no particular hurry about the acquiring of the necessary skills. In fact, it was part of the entire tradition that he acquire these skills in a rather leisurely fashion via slow internships and apprenticeships from other peers.

*In some instances, the teacher-to-be takes a test, which is really a form of I.Q. test. These tests have never been validated in relation to teacher performance.
Most professional practice and training is directed toward (and often results in) maintaining a monopoly over the necessary skills and knowledge. Similarly, an effort is made to limit the number of people who could acquire professional skills and knowledge. Thus, restrictive licenses and expensive, prolonged training practices are highly suitable, just as they are very useful for the plumbers' union in maintaining its monopoly.

As there was no hurry to train the human service workers—whether doctors or teachers or social workers—and since there was no consumer carefully demanding accountability of the task performed, it was very easy to maintain the traditional highly stretched-out model of training and education, thereby protecting the semi-monopoly of the existing professional stratum.

In the present period, however, there is a whole wave of new demand from consumers, particularly the poor and the minorities who have complained bitterly about the character of care provided by the professional. In addition, these same groups are demanding entrance into the professions; that is, they want to become doctors, lawyers, teachers, and they're not at all so sure that it would take so long to acquire necessary skills. Both of these pressures have led to the demand for performance criteria in evaluating the practice of the teacher, rather than traditional intelligence type tests which serve to screen in the middle class and screen out the poor. This is
all part of the general ethos demanding accountability to the consumer
on the part of the teacher, or other practitioner, and new forms of
education and training which will much more rapidly produce the new
worker and produce him in a much more relevant, task-oriented, efficient
fashion, perhaps something more like the airplane pilot—always recognizing
that teaching has dimensions to it that are qualitatively different from teaching.

The Relation Between the New Services and the New Training

In order to see how training can be related to the new services,
it is important to outline what the basic changes are that are emerging
in the human services. Essentially services, like training, have been
too professional centered and too removed from the consumer.

The first and most essential change that is necessary in the
character of the human services is that they must be much more consumer
oriented. Margaret Mead writes of the "revolt of all the pe-
t are being done good to." She talks of pupils, patients, clien-
prisoners, all wanting a share in what's going on, and an end to the
era of "great numbers of professional people who knew best and did good."

This new consumer orientation should mean, in the first place,
accountability—that the service is effectively used by the consumer,
that children learn, that disturbed people get better, that sick people
become well, that fewer people become sick, that fewer children drop
out and get turned off from learning.

A second element in improving the effectiveness of a service is
that it be offered in the style and mode of the consumer. This fre-
quently means that a service be offered in a much more individualized,
decentralized, culturally relevant fashion. Thus, neighborhood health
centers and family planning clinics, staffed by neighborhood residents have been used much more by poor people, who seem to find them much more attractive.

A third consumer oriented dimension requires that the service not only be effective and offered in a relevant fashion, but that the consumer also have the opportunity critically to evaluate the service whether it be as a student in the classroom, a member of a community board or a worker in a human service agency.

Finally, the fourth and perhaps most crucial dimension is related to the increasing evidence which indicates that an important aspect of effective service is the direct involvement of the consumer as service giver, for example, children teaching children, people with problems helping other people with similar problems such as Alcoholics Anonymous, Synanon, etc. There is increasing recognition, even in the field of medicine, that patients' knowledge and involvement can be very beneficial in preventing illness and in dealing with potential illnesses at an early point. The use of bio-feedback techniques is a growing new field, and doctors are now giving readings to patients regarding their illnesses, thus training them in self-help. Victor Fuchs states that what people do and don't to do and for themselves is the most important factor in improving the health of the America people.

If this consumer participatory dimension is a crucial feature in the drastic improvement of human services, then the training of human service workers must prepare the worker for it. This means courses and curriculum material with this focus. But even more than talk and reading about consumer participation, the training must isomorphically, as far as possible, reflect this dimension. This means in the first instance that the training itself must be highly participatory rather
than be trainer or professional centered. Since we want the teacher in the classroom to be responsive to the pupil, the social worker to the client, the doctor to the patient, we must insist that in the training the professor be responsive to the trainee and that the training be responsive to the trainee’s needs including their perception of those needs.

Because we want services which are highly accountable and efficient, it also means that we need a training model that is geared to the development of the specific skills required for effective service delivery. And since consumers are expressing a strong need for many more effective services that cannot be long delayed, we need much more accelerated training designs.

The particular style, mode, and pattern of training is both derivative from the nature of the practice for which it is preparing the trainee, as well as preparatory for that practice. For example, as the old aphorism has it, "Teachers teach as they are taught, not as they are trained to teach." Thus, regardless of the words about participation, accountability and relevance, when teacher training programs emphasize routine facts, are professor-centered, and use traditional training designs, trainees, when they become teachers, are likely to teach that way.

There are then three key characteristics of the new services, each with their derivative consequence for training. First, the service is to be consumer centered. This leads to a participatory training design. Second, the service is to be accountable and efficient. This means that the training must effectively develop the workers' skills and, third,
as there is an expanding demand for services, the training must be as rapid as possible.

The Special Significance of Participatory Simulation

If modern training is to avoid the limits of the academic classroom as the major mode of instruction and the prolonged character of on-the-job apprenticeships, it will have to develop a new core. We believe that simulation, which, of course, is used in a good deal of skill training such as that of the airplane pilot, should be a central feature, a key mode around which human service training can take place.

In medical schools, computer models have been designed which present situations which might not otherwise be readily available to students. Situations have already been developed which offer the student the opportunity to manipulate data, make mistakes, get into trouble, and get out of trouble—all without endangering patients or using up valuable hospital time.

Dr. Stephen Abrahamson and associates at the University of Southern California have developed a simulation model known as Sim One to facilitate clinical training in anesthesia. This life-size manikin has several functions, such as respiratory activity, skin color, and pupillary size, which are under the computer's control. Each function responds to drug administration as well as to other interventions used by the anesthesiologist in managing patients in surgery. This model can be used by a trainee to interact with a variety of situations that he will shortly encounter in the real-life operating room. He is allowed to deal with these situations repeatedly without risk to real patients and with immediate feedback about the effects of his judgments and his actions.
Pr. William Harless and associates at the University of Illinois have developed a computer-aided simulation of the clinical encounter (CASE). During the interactive session, the computer assumes the role of the patient, and the student assumes the role of the practicing physician. Virtually any type of patient with any variety of health problems can be simulated.*

Simulation designs alone, however, do not fully fit our needs. Typical models, as in pilot training, or the computer designs of the medical school, set up situations to which there are "correct" answers; the training issue is to teach the student this proper way. However, there often are many "correct" ways of handling a problem or the "correct" way is not known. Thus, a less closed dimension of simulation must be used in which one of the goals is the development of individual styles, the collectivization of knowledge, the building of new techniques.

What is necessary is a participatory training design which grows out of the nature of the new services we seek. The greater use of teams and groups in service delivery in health, mental health, education, and social work will also be abetted by a participatory training design. And, as we see value in team members of different disciplines and differing backgrounds, one of the characteristics of the training should be the cross-socialization of the trainees. This group-centered training design should promote the development of practitioners who see, in their peers, sources of help and colleagueship rather than, as in

public school teaching, the teacher being the lord of and prisoner in her own classroom. Also, as relates to teaching, we believe that the learning process is most effective when all parties to the transaction are learning and, of course, a professor-centered training design constrains against seeing the teacher as a learner.*

Participatory simulation can be applied to all kinds of training--it can be used in the training of teachers, social workers, doctors, nurses, whatever. In the training of teachers for example, mock classroom situations are set up in which a number of teachers in training play the roles of children and one individual plays the role of the teacher. Various problems are role played or simulated: for example, some of the people playing the children may act disruptive or difficult and the "teacher" then practices various ways of dealing with these disruptive children. At first, she will probably tend to try out fairly standard approaches, such as punishing the disruptive child or bribing him by giving him a special assignment or taking him to the principal's office or asking to see his parents and so on. The group as a whole

* This point of the helper being helped, the teacher learning, appears most strongly in education as in the learning through teaching design (See Alan Gartner, Mary Conway Kohler, and Frank Riessman, Children Teach Children: Learning by Teaching, Harper and Row, 1971). However, the process can also be seen in the "helper therapy" principle in mental health and social work. Indeed, it may be true of the human services as a whole that the transaction between service giver and service recipient is most powerful when it is one of reciprocal gain.
then discusses what has occurred in the simulation to see if it could be done differently, what other approaches are possible. The group collectivizes its experience and brainstorms the problem at first suggesting other specific things and then moving more and more to possible things that could be done.

The trainers may introduce some new ideas or questions: Could the problem be dealt with by dealing with the group as a whole and not with individual disruptive children? Should a teacher change the lesson and try a different approach? Should the whole class discuss problems of discipline in the school? Perhaps the activity of the groups could be changed and a new activity introduced at a point where a number of youngsters are becoming disruptive. Perhaps even the disruption is an indicator to the teacher that the lesson is not effective, is not contacting the youngsters. Perhaps more indirect approaches such as changing the seating arrangement of the classroom might be effective in changing the whole atmosphere.

Then the trainees try out the various new approaches that they have themselves suggested and some that the trainers have suggested. They may actually change the seating structure of the make-believe "classroom" and see how differently it feels when people are seated around in a group than when they are in the standard rows and files; or they can move the chairs back further to be further away from the center, or move them close and see how that feels. That is, they actually do the problem, acting out the proposed solutions.

In this situation, the trainees slowly develop extended awareness of what can be done in the classroom situation as well as actual practice in working out the problems. From this, they begin to carve
out an expansion of their styles. Each will probably select some very different approaches from a large range of possible suggestions that the group comes up with. She fits these suggestions to her particular style which she becomes more conscious of and her repertoire is expanded. In doing the actual role playing or simulations, the trainee gets feedback, a mirror of how she looks and what is effective and what is not. Someone else in the group may actually play her. It is even possible to video tape the simulation and the trainee can get a direct look on video of how she behaves—a full mirror, so to speak. Teachers in training (or in-service training) may move from the simulated sessions to a micro-teaching design where they are able to practice some of their new skills in a controlled small-scale classroom with a small number of children. (The micro teacher can be videotaped, as can the simulated sessions, providing a mirror for the lessons). They then may do some practice teaching where they are supervised carefully.

In cases where the trainees are also involved in classroom work, the teacher takes back her new learnings and practices them in the actual classroom. Some things will work very well, but there will be other problems that were not anticipated; the teacher brings these new experiences back to the simulational sessions for further discussion and the development of new approaches for solving the unanticipated difficulties.

Training in the Mental Health Field

In training paraprofessionals, for example, to work as mental
health aides in neighborhood service centers, it is important to teach them how to interview clients and how to deal with various social agencies. The situations which they will encounter are carefully broken down and simulated so that initially, for example, one paraprofessional would role play a community person coming into a center for help and another paraprofessional would play the interviewer who would be providing help in a center. (Parenthetically, it is important to note that the role reversal aspect of this, that is the opportunity of the worker to play the client, is extremely valuable for providing understanding in how that person feels and experiences the situation. Thus, in the above examples, playing the role of children is valuable for teachers in training in helping them to understand how children perceive teachers, the classroom, and the school.)

Slowly, the paraprofessional acquires skill in various aspects of interviewing. Initially very simple problems are presented, such as the client coming in who needs somebody to sign a paper because he himself cannot write, or a little later on a client appears with a very simple problem that lends itself to easy solution. As the worker in training acquires skill in dealing with these simple problems and develops his own style through simulated practice, new and more difficult problems can be introduced. Ultimately, extremely difficult situations are presented. For example, a community person comes in and interrupts a simulated interview. The interruptor demands immediate attention and help, and does so in a rather disorganized chaotic fashion. Later the group talks over this kind of problem and develops various approaches for dealing with it, which they then further practice. In
a sense, the worker is (positively) overtrained. When he goes into the
real life situation he may rarely experience problems as difficult as
those presented in the simulated exercises, but he has acquired the
power and skill to deal with them, which to some extent offsets the
non-reality of the simulation in contrast to life.*

In training the paraprofessionals, the entire training should
be carefully phased so that initially situations are simulated with
appropriate overtraining and then the workers move into the neighbor-
hood storefront centers for one-half day, carefully supervised and
backed up by trained, experienced workers. Then they come back to the
simulation sessions in the afternoon and discuss the problems that they
confronted in real life in the centers in the morning. Slowly but
surely they spend more time in the centers, on the job, with less in-
tensive supervision.

The various human service fields are giving increased attention
to training. In education, a great deal of activity has been in-
spired by the Education Professions Development Act, including pro-
grams such as The Career Opportunities Program (COP). The use of special
training centers has gained attention in social work training, similar
to education's laboratory schools and medicine's teaching hospitals.
Innovative techniques are increasingly used, such as micro-teaching in
education and the use of video-tape in several fields.**

*In fact, in the training at the Lincoln Hospital Mental Health Center,
many of the paraprofessionals, when they later went into the centers,
reported that the training was more difficult than the actual life
situations. One is reminded of the way that Vince Lombardi trained
the Green Bay Packers, where it was said that the practice sessions
were much more difficult than the actual games.

** "Innovation in Education," by Norman F.R. Maier, American Psychologist
One of the more comprehensive training designs has been proposed as part of a Council on Social Work Education comprehensive training project (Jack Rothman and Wyatt Jones, *A New Look at Field Instruction*, 1971). The authors propose replacing the traditional reliance on agency placement with a phased design moving from a laboratory-observatory to a skills-development laboratory including the use of simulation games and programmed instruction, concluding with a practicum experience; in short, a much more conscious and explicit training design with attention given to particular experiences, specified learnings, discrete skills.

In the laboratory-observatory the student will be exposed to a wide range of practice contexts, programs, and skills. The focus is on obtaining an understanding of the nature and settings of practice rather than on learning practice skills.

The skills-development laboratory is oriented toward teaching specific practice skills to students in consciously selected and controlled content areas. Schools would expect to determine a delimited range of skills that they judge important for students to acquire by the end of the first year and prior to entry into actual agency practice (practicum). The skills-development laboratory is similarly attached to an academic methods course where theory or conceptualization relevant to the application of skills is treated in a systematic way. Thus, if students in the laboratory are being trained in methods of decision making in planning, the methods course will cover various theories of and approaches to decision making. In the skills laboratory students would not be assigned to a given agency on a continuing basis but would engage in common experiences that might include simulation games, programmed instructional materials, community activities not connected with agencies, as well as tasks in selected agencies. Unlike the observatory, in the skills-development laboratory the students would be engaged in the actual "doing" of practice and the mastery of skills, but in a structured and controlled context.
The practicum will begin in the second year and is conceived of as a holistic and realistic agent experience where the student is expected to put the skills he has previously acquired into operation under circumstances approximating those practitioner experiences on the job. Thus, the student is expected to apply his skills (and learn others) under conditions of reality which include temporal and political pressures, structural restraints, interpersonal complications, etc. The disciplined use of self and need to grapple more immediately with value dilemmas come to the fore in this phase.

The Benefits of Participatory Simulation

What are the special benefits of a participatory simulation training design? The use of simulation facilitates the trainees learning from each other as opposed to a model which places the teacher in the role of sole dispenser of knowledge.

The teacher or human service worker has the opportunity in a protecting, permissive setting, to observe and try out a variety of real life problems without real life consequences. Most teachers, for example, do not have the opportunity in the classroom to experiment with different techniques, practices and approaches to tackling classroom problems; the risks are too great that any one method may produce disastrous results. Consequently, the teacher does not even mentally explore a variety of methods, but rather very quickly seeks
to develop something that works at least at a minimal level and then it becomes the way the individual deals with the problem. The particular way is frozen and becomes a rigidified part of the teacher's style forever. On the other hand, in simulation, the teacher in training not only has the opportunity of seeing a great variety of approaches, but can actually begin to use some approaches in a situation which is relatively easy at first, and thereby build up coping skills which can then be applied as the situation is made increasingly more difficult.

The simulational sessions can also serve to develop new conceptualizations and theory; thus, the group may discuss, under the leadership of the professor, why some children appear to be disruptive or apathetic. Is this due to the fact that the material being taught, or the way that it is being taught is not stimulating or contacting? From this, a discussion of the contact curriculum can emerge. There can ensue a discussion of why children of ghetto background may be antagonistic to the school, and hence sociological concepts emerge in a meaningful way around practice.

The traditional curriculum involves a professional functioning in a "deductive" model where he presents the basic ideas first, has the students react to them, and perhaps attempt to deduce applications for practice, if possible. The professor and his material is central in this design.

On the other hand, combining simulation with an "experience-based" or inductive curriculum, the center of gravity is shifted. The student's experience and phenomenally felt problems become focal, and the professor has to apply or develop ideas, concepts, and curriculum around these experiences.*

*The "clinical" professor has to learn a whole new way of teaching; he will also develop new knowledge based on practice and experience brought in by the students.
This design shifts the focus of instruction away from both traditional academic classroom instruction, on one hand, and on-the-job trial and error on the other. It demands far different skills of those responsible for the training of human service workers. For they must be capable of moving with ease between theory and practice, rather than being either ruminators about their experiences and practice, or pontificators over their own or others' theoretical notions.

The new service to be built is not limited to "the presenting problem", but must both respond to that phenomena and go beyond it. If it were a service which focussed exclusively on the immediate problem, technical skills might be sufficient. However, because the new service emphasizes both the immediate and the deeper phenomena, so in the training there should be a building of theory from a grounding in practice. Thus, the training design must move participants back and forth between theory and practice gaining insight into practice from the perspective of theory as the participant gains understanding of theory from the grounding in practice.

The simulational model combined with the inductive curriculum allows for the best integration of skills and knowledge so that the resultant product—the human service practitioner—is not simply a skilled technician, but rather a true professional for the essence of a professional is the integration of systematic knowledge and skill; either without the other is highly limited.

Simulations also allow for the development and practice of new roles. The teacher, for example, can practice working with other people in the classroom such as paraprofessionals, children who teach
children, volunteers, specialists, as well as the use of various kinds of programmed materials. The teacher has an opportunity to explore the new "orchestrator" role where he can be a diagnostician, a supervisor, a planner, a developer of small groups. This is the key to reorganizing effectively the teacher role and, we believe, is the basis for a leap in both teaching and learning. The entire simulation design that we have presented is clearly oriented in a participatory direction, and most of the new training exercises, games and sensitivity training are similarly highly participatory and non-hierarchal in character.

Simulation by itself is extremely valuable for developing skills, knowledge, and practice and hence is a major training technique for the improvement of service delivery. Participatory simulation, in addition, adds the group and peer dimension which are especially valuable if the training is to match the new participatory character of services. In other words, simulation as such is related to the efficiency of services while participatory simulation relates to the character of the services.

Conclusion

Professional training in the human services typically has not been explicitly skill-centered, nor participatory in character. Both of these features are essential for the services if their efficiency is to be sharply improved and their character transformed to make them more inclusive of the consumer.
Participatory simulation is both skill-centered and peer-oriented. By contrast, sensitivity training, while possessing clear participatory dimensions, is not at all oriented toward the development of skills. On the other hand, traditional simulation, although strongly skill-centered, is not necessarily or self-consciously participatory.

What then are the desired characteristics of the new training model? It must be sharply related to a real improvement of the service for the consumer; it must assist in the changing of the traditional professional whether as service provider or trainer; it must be participatory and open in character. Trainees must be trained in ways in which they will perform.

The modern simulational-centered training design leads to much more rapid development of the trainee's skills. The new training is attuned to a new kind of trainee who cannot tolerate a long drawn-out apprenticeship under a professional who will slowly socialize him to traditional professional norms. It employs a skill-centered curriculum with systematic professional knowledge built around it.

Training, in order to be relevant and effective, has to be highly attuned to the tasks, the work, the activities to be done. This requires a careful task analysis of what that work is, so that skills can be built in a specific fashion. The curriculum is based upon the task analysis of what the trainee needs to do the job and a developed job description of what the new work will be like, rather than simply an imitation of what the existing professional does or is. The era where professional behavior was valued for itself because it was so difficult to assess its results is rapidly coming to an end.

*Sensitivity training, despite its lack of skill emphasis and its extreme orientation to self awareness, is a highly participatory, non-hierarchal process. That is, the boss and all the workers are equal in the sensitivity session at least. And anybody can say anything to anyone else.
Moreover, the new trainer is himself trained as a trainer; he is not just a smart man who happens to do some teaching like the able plumber who does the apprentice training, but who doesn't know anything about training.

Traditionally, most human service workers were given quite a bit of general education, but very little skill training.* Currently, the pendulum has swung the other way and we are certainly recommending the need for much more relevant pinpointed skill training for teachers and other human service workers. But unless this is combined with systematic professional knowledge, there is the danger that what will be produced is a group of narrow skilled technicians rather than new professionals. Hence, it is extremely important that the simulated sessions lead to and be focused upon broader issues and understandings, not simply skills and immediate practice. In addition, of course, much systematic professional knowledge will have to be developed and then become part of the total education and training pattern. Much professional knowledge at the present time is not sufficiently related to practice and field experience, nor is it sufficiently skill based. The revamping of professional knowledge will hopefully emerge from new practice and new training designs.**

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*Law schools, for example, have traditionally seen their role as training students in the law, not in lawyering, which was to be learned in an apprenticeship during the first years of practice.

**Rapping, sensitivity training, and the contact curriculum all have value, but they are not enough. A real leap in the character of the services requires sound systematic professional knowledge that is well understood and flexibly applied. Skilled technicians can improve the human services beyond what they are now, but they will not produce the necessary leap, the reorganization, the real new effective human services that are so needed.
Epilogue

How is the new training to be produced? Where is it to come from? It is typical to think that the necessary expertise resides somewhere, perhaps in the minds of people who write articles like this one. It is further in tune with one of the fashions of the day to see this training emanating out in "multiplier" style from some central source, a "TTT" model (Training the Teacher Trainers). The assumption being that the training coming from some group or center will radiate out in waves to education professors or other teacher trainers who, in turn, teach teachers who teach the children. It is essentially a top down authority laden schema, just a more sophisticated version of the traditional professional model where doctor (teacher, professor) knows best.

The problem is, of course, that the new training models are not fully developed; they are in need of constant modifications and transformations, related to a rapidly changing practice. What is required, then, is the collectivizing or pooling of the experience of many field-based trainers who are close to the service giver, a constant building of ever-changing models from the bottom up, rather than the top down. The new models that emerge must be fed by practice and then dispersed to be tested in practice--in pre-service and continuous in-service training.