This article lists some of the major ideas and topics of interest in transpersonal psychology and illustrates them with examples of transpersonal education applied to schools. Transpersonal psychology includes psychological aspects of such things as new world views, altered states of consciousness, an impulse toward higher states, self-realization and self-transcendence, spiritual growth, parapsychology, new forms of energy, and other cultures and their psychologies. Relaxation and concentration techniques, exploration of altered states of consciousness, meditation, and dreams are described as used in classroom situations. Suggestions for a human potential unit are offered and ways to use the topics of parapsychology and research in transpersonal psychology are considered. Finally, use of transpersonal educational psychology is seen as a new realm for teacher education. This paper is in draft form; a revised version in mini-book form will be available in the spring from Phi Delta Kappa. (Author/KSM)
TRANSFORMATION: THE NEW

EDUCATIONAL PSYCHOLOGY

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What are the upper limits of what people can learn? Can we learn to use our minds in ways which surpass our present ways? Are there completely new techniques of teaching which are superior to our current methods? Are there whole kinds of learning which we are failing to develop?

These questions, and others, are intriguing a new kind of educational psychologist, the transpersonal educational psychologists.

****Kantor quotation goes about here.****

The current transpersonal revolution in psychology is soon likely to set-off a transpersonal revolution in education. In fact, its forerunners may already be upon us, as shown by recent educational journals that have picked up on some transpersonal themes. The first Conference on the Educational Applications of Transpersonal Psychology was sponsored by the College of Education at Northern Illinois University in May, 1973. At the University of Redlands in Southern California, a transpersonal educational program on the college level is in effect. At these meetings educators and transpersonal psychologists met to stimulate ideas in each other about how they can apply their knowledge to schools. This survey article samples some aspects of transpersonal psychology as they are applicable to most schools now. Many topics and procedures are omitted. Districts which like to lead in innovations will want to advance further than these beginnings.

Transpersonal psychology: What is transpersonal psychology and how can it serve current education? To a large extent it is an attempt to enlarge the field of psychology to include topics which are taboo to most academic psychologists.
Since psychology is basic to education in the same way that biology is to medicine, a revolution in psychology usually foreshadows a revolution in education. And to my mind, there is a revolution in psychology underway.

Robert E. Kantor
The Affective Domain and Beyond
Traditional academic psychology, according to transpersonal psychologists, ignores large areas of human experience. This restriction of psychology, in turn, restricts education. So we end up with a partial education of a partial man, instead of a whole education for a whole man. Although the areas which are trying to be included in a broader-based psychology seem varied when they are thought of in the usual psychological ways of thinking, they often intersect each other when thought of from transpersonal points of view. Most topics being investigated by transpersonal psychologists consist of the psychological aspects of at least one of the following: a new image of man and a new worldview, altered states of consciousness, an impulse toward higher states, self-realization and self-transcendence, subjective experience and inner states, spiritual growth, parapsychology and psychic phenomena, other cultures and their psychologies (especially Eastern psychologies), a new form of energy, and recent physiological research as it intersects with these topics.

Transpersonal educational psychologists are fascinated by the fact that we use only about 10% of our capacities. "What abilities may be hidden in the other 90%?" they ask. "And how can we learn to use them?" To answer this question they are studying people who have unusual abilities, and cultural, social, and psychological situations in which these behaviors appear.

Relaxation and Concentration Can you remember a time when you were concentrating so intently or something (perhaps your work, a hobby, a sport, or other activity) that you lost all sense of time and you were able to think, and act super-efficiently? Or can you remember a time when you were so clear-headed you learned a complex task easily? This state of mind does not have
The most important obligation of any science is that its descriptive and theoretical language embrace all the phenomena of its subject matter; the data from [Altered States of Consciousness] cannot be ignored if we are to develop a comprehensive psychology.

Charles T. Tart
Altered States of Consciousness
to happen only randomly.

A person's "state of mind" is a major variable in how well he does, but we seldom teach people to put themselves into one or another of kind of productive state. Investigating these states is an interest of a group of transpersonal psychologists. Each year the research Department of the Menninger Foundation sponsors a conference on the voluntary control of internal states. Self-controlled states of consciousness seem to be a common trait running through many of the people and events that transpersonal psychologists study, from psychic healing and parapsychological abilities to yoga, biofeedback, and meditation. And teaching people to control their own states is one educational application of transpersonal educational psychology. The ability to relax is important in this for two reasons. It is useful in itself in everyday functioning, so useful, in fact, that several teachers are now giving themselves as well as their students short periods of intensive relaxation. Just as reading, relaxation is a beginning step for more advanced transpersonal abilities, such as meditation.

A German 12 teacher had a class in which the students seemed too keyed-up for their own good, "Whenever we would have a Unit Test, always a biggy in their minds, no matter how much I would try to play it down, the tenseness would permeate the classroom." In one unit test his ten students scored 5 A's, 3 B's, and 2 C's. The following unit test had proved to be more difficult in previous years, so he tried to improve their recall and ability, not by pushing and drilling them harder, but by relaxing them at the time of the test. The results: 7 A's, and 3 B's.
Well I chanced the great experiment. My only worry was the time element. The 48 minute class period was cut to 38 minutes as I darkened the room and played a commercial relaxation tape received from a friend. The students sat in their seats, heads down on their forearms, legs uncrossed; then I took them on and through an original fantasy journey in the German language. This particular part had to be condensed into 8 minutes, because of the time element. With about 28 minutes of time left, the students proceeded to work on the test which usually takes at least 30 to 35 minutes to complete. Observing the students while they were writing and thinking, I detected the total absence of nail-chewing and the usual pencil tapping on the desktops and nervous, quick glances at the clock. Everybody finished the test on time. Grading the test was fun, 7 A's and 3 B's was the obvious result. The quality of writing in some of the usually more sloppy papers improved markedly. The students just could not believe this. It was only after I explained to them that a lot of their learned knowledge was not able to surface because of their nervousness and fear and the tension, and once they were relaxed, the learned storehouse of information was able to be tapped.

"An Experiment in Relaxation and Fantasy"

- Eric Roy
This exploratory application is not strong proof that relaxation will automatically improve the scores of all students in all subjects all the time, but this sort of intriguing finding keeps reappearing. It indicates just one area where further investigation and experimentation may lead to the development of transpersonal teaching techniques.

By controlling their breathing, by relaxing their muscles, and by directing their own attention students are able to improve their recall. This exemplifies two transpersonal principles: Major influences on our behavior are within each of us, and our degree of voluntary control over ourselves is larger than most people give themselves credit for. Second, mind and body have myriad interactions. When we control one, the other is also affected. Other teachers who have taught their students to relax find similar results, and some students catch-on to the techniques and use them to reduce tension in other classes and in up-tight social situations too.

These methods of controlling one's mind via one's body are basic to yoga; yet this is merely touching on the possibilities of mind-body learning. Deep relaxation is also valuable for physical reasons. It can help people fall asleep quickly whenever they wish. It gives the body a chance to reinvigorate itself. Some coaches I have talked to say they found that it allows their athletes not to waste their energy in pre-game nervousness, but to consciously direct their own levels of activity by selecting the right amount of energy for the task at hand. Relaxation is a prime mental-physical ability that people can carry with them and use daily throughout their lives. As such it deserves a place in the physical education curriculum alongside the rules of techniques of wrestling take-downs.
Aldous Huxley is one person transpersonal psychologists have studied in hopes of gaining clues about how the rest of us can develop some of our mental abilities. Huxley could select his degree of relaxation and breadth of concentration when he worked. If his wife were home, he would not hear the doorbell or telephone, but if she went out, he would hear them. In his "deep reflection," as he called it, he had almost perfect recall.25 Probably everybody has had instances of becoming so involved in reading or work that he temporarily "forgets himself" while remembering or accomplishing much more than usual. Perhaps we could all learn this ability, maybe not as well as Aldous Huxley, maybe better. The challenge to transpersonal educators is: Can we learn how Huxley and others willingly do this so that we can learn to do it whenever we want? Can we teach others this skill too?

In schools relaxation is easily combined with concentration. After the students are relaxed, then they can direct their attention toward academic content, or they can let their minds idle in creative association. Directed or guided fantasy trips are useful for learning specific content, and open-ended fantasies evoke creativity and aid self-exploration.26,27

*****Mesnarich quotation goes about here.*****

The "fantasy journey" is an educational technique that seems to help concentration, creativity, and classroom control. With so much stimulation going on in the lives of children in school and at home, it's no wonder they have difficulty concentrating. During a fantasy journey the room is often dimmed with lights off and/or shades pulled, and the teacher tells the outline of a story, leaving quiet times for the students to imagine their own details. Not only is this an exercise in imagination, but teachers who have tried it find that their classes are more willing (or able) to pay attention to the rest of the class. Even though the fantasy may take 5 or 10 minutes, these teachers
I took my beginning electronics class on a fantasy trip into that mysterious land of invisible magnetic and electric fields surrounding the windings and core of a transformer. The procedure was as follows. The room was darkened and everyone put their heads down on the desks and were told to relax and empty their minds. Prior to beginning the journey a relaxation exercise was performed...Everyone was told to imagine themselves as an electron and to concentrate on what it might feel like to be such an incredibly small piece of [negatively charged] matter....they were to encounter two very large coils of wire, and around the wire there was a huge and rapidly changing force field. They were to enter the force field and feel the effects of it. They were then told to enter the wire of the coil and experience the movement of the rest of the electrons within the coil of wire as they were affected by the rapidly changing force field, which is the electromagnetic field. ... I told the students that another coil of equal size and strength was coming toward them. The two fields were interacting and the interaction became very violent the closer the coils came to each other. The students were told that the increase in strength of one coil caused an increase in the strength of the other coil. This produced a super-strong force which moved the electrons (students) very fast... .

[After a waking period, the teacher turned on a small light and discussed the experience with them.]

The next day the students read the chapter in the book dealing with inductive coils. The students said they had no trouble visualizing the forces described in the book, and their qualitative work in the lab seemed to bear this out. It is quite evident to me that the trip was worth taking since I have taught this subject matter before but not with this much success.

"Teaching Electronic Theory Thru Fantasy"

-Richard A. Meznarich
report that the total learning is increased because of the improved concentration. Teachers who have tried fantasy journeys say that their classrooms are quieter and more orderly during the rest of class too. The journeys may or may not have to do with the subject being studied. A teacher of mentally retarded students found that they learned the parts of their bodies and clothing as he had them lie on the floor and imagine that they were exploring their feet, shoes, ankles, etc. Their drawings of themselves began to show body and clothing details after 8 sessions, where previously none, or very few of these were apparent. Perhaps these mentally retarded students and the teachers who have used the fantasy journeys hold a key to improved instruction -- less stimulation, not more, and temporary escape from the stimulus-overload of a hectic, rushing world of school halls and ringing bells.

The transpersonal interest of controlling one's own consciousness includes learning to pay attention to what one wants and when one wants to, instead of being at the mercy of a roaming, untrained mind. Learning how to relax, concentrate, and free associate are intellectual skills which we seldom specifically teach, but which give evidence of improving current instruction. They also are basic skills to developing further transpersonal potentials, either in schools or on one's own outside of school or in later life.

Why do fantasy journeys work? Here is a good question for transpersonal educational researchers. One lead comes from recent work of neuro-physiologists. The left hemisphere of the brain thinks with words and clearly defined symbols (such as chemical and mathematical symbols). It is active, calculating, and reasoning and is predominantly sequential and analytic in its abilities. The right hemisphere, on the other hand, tends to see things as wholes, thinks with pictures, and is spatially oriented, intuitive, emotional, and receptive.
With its emphasis on verbal knowledge and reasoning, most of our education is left-sided education. It may be that fantasy journeys are one way to employ the right half of our brains in learning. We know that experience is the best teacher and that we can teach easier when students have had relevant experiences. Some things, however, are difficult or impossible to experience directly. But by using fantasy, we can give students an imaginary experience to call on so that the verbal, logical material is presented to the left part of the brain, they can "hook it up" with the more diffuse, intuitive knowledge of the right side. Providing students with right-side experiences to match our usual left-side, didactic instruction, may be a key to teaching creative insight and intuitive understanding. It could be that when something suddenly "makes sense" or "rings true" that this is an instance of our becoming aware in our left side of what the right side had intuitively known, but had not been able to verbalize. Philosophers and psychologists of education as well as teachers, curriculum planners, textbook writers, and materials-makers can learn from Ornstein's work on the two sides of the brain and their complementary functions, "Further, we have not incorporated evidence that the linear, verbal-intellectual mode of knowing is not the only mode available to man." What are the other ways of teaching for these other ways of learning? Here too, the field is open for reconceptualizing what it means to teach and to be educated, for creative classroom innovations, for research on new teaching styles, and for the development of new topics of study and supporting educational materials.

Creativity Some kinds of creativity, or some of the variables in the creative process, are particularly amenable to a transpersonal approach. Letting semiconscious associations flow, seeing new configurations of existing materials,
Our highest creative achievements are the products of the complementary functioning of the two modes. Our intuitive knowledge \([\text{right side}]\) is never explicit, never precise in the scientific sense. It is only when the intellect \([\text{left side}]\) can begin to process the intuitive leaps, to explain and "translate" the intuition into operational and functional knowledge that scientific understanding becomes complete.

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It is the polarity and the integration of these two modes of consciousness, the complementary workings of the intellect and the intuitive, which underlie our highest achievements.

Robert Ornstein
The Psychology of Consciousness
and temporarily withholding critical thinking and analysis exemplify parts of creativity. These seem to be right-sided activities and are characteristic of creative scientists as well as creative artists. 29

Einstein quotation goes about here. ******

Weiskopf presents a useful way of thinking about creativity in education. 30 She says that it consists of a four-stage process. If we add some speculations suggested by Ornstein's work, each of these steps appears to be associated with a particular way of using the brain and with an appropriate mode of teaching/learning:

<table>
<thead>
<tr>
<th>(1) Preparation</th>
<th>(2) Incubation</th>
<th>(3) Illumination</th>
<th>(4) Verification</th>
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<tbody>
<tr>
<td>left side</td>
<td>right side</td>
<td>left becoming</td>
<td>right becoming</td>
</tr>
<tr>
<td>Learning facts, relaxation</td>
<td>Cognitive knowledge and letting</td>
<td>Insight turning, mind wandering</td>
<td>Testing hypotheses, experimentation, cognitive reasoning, verbal analysis, critical thinking</td>
</tr>
<tr>
<td>Verbal, memory</td>
<td>Holistic, nonverbal, association</td>
<td>From pre-verbal to verbal</td>
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<td>Conscious</td>
<td>Unconscious</td>
<td>Preconscious</td>
<td>Conscious</td>
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The so-called "scientific method" we often teach is, more likely than not, just half the method, some of step one and predominantly step four, the left-half, reasoning half. If we look at how the most creative scientists such as Einstein actually describe their work, they report visualizing, intuitive, right-half activity came first, followed by reasoning. Some scientists had this developed so well that they could actually see the abstractions they thought about. For example, Von Kukle, discoverer of the benzene ring and other insights in organic chemistry, used a creative visual reverie, a kind of mild altered state of consciousness. 29 Apparently he was skilled at going back and forth between stages two and three and had
The words of the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The physical entities which seem to serve as elements in thought are certain signs and more or less images which can be 'voluntarily' reproduced and combined. ... The above mentioned elements are, in any case, of visual and some of muscular: The conventional words or other signs have to be sought for laborious only in a secondary stage, when the mentioned associative play is sufficiently established and can be controlled at will.

Albert Einstein

quoted in

The Psychology of Invention in the Mathematical Field

--J. Hadamard
the background knowledge to provide the raw materials for his thoughts and
the laboratory skills to verify his insights. This type of thinking is typical
of creative mathematicians and scientists.

While we can't expect a. Einstein, Von Kukle, or Huxley in every school child,
we may be able to improve creative problem solving by showing people how to
mine the unused potentials of their minds. This can have very practical bene-
fits. An experiment several years ago used psychedelic agents as a way to
"trigger" creative consciousness among a variety of professionals who had
been working on particularly intractable problems for some months. With
stages one and two already completed, they were at stage three and used mescaline to stimulate illumination. In a follow-up study several months later
it turned out that most of the ideas generated had resulted in practical
solutions in architecture, engineering, and even theoretical physics.31 The
point here is not that we should serve LSD in the school cafeteria, but that
inside each of us there are reservoirs of untapped knowledge and seldom-used,
but practical skills and ideas. While some psychoactive drugs may open
communication between the left and right hemispheres of the brain, there
are less risky, more controllable ways of unleasing our students' creative,
intellectual potentials.32,33 Fantasy journeys may be one way.

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**Altered states of consciousness (ASC's)** Other explorations of the unused
90% of our mental capacities are taking another group of transpersonal
psychologists into the realms of ASC. Just as most of our education is
lopsided toward the left hemisphere, it is also overly weighted toward only
one kind of consciousness, our ordinary waking state. In typical western
psychologies we recognize a small number of states, such as awake, dreaming,
dreamless sleep, meditation, hypnosis, etc., while in India and
different states of mind. Eastern psychologies may be more con-
ceptually and theoretically sophisticated than western psychologies in matters of subjective states and ASC's.  

*****James quotation goes about here.*****

ASC's, particularly dreams, are eagerly picked up by students at all levels as a topic of study.

**Meditation** Meditation already has received some coverage in educational journals, especially the transcendental variety of meditation.  

Studies of TM and other kinds of meditation show better control of oneself; improved social relations with fellow students, teachers, and parents; decreased drug abuse; improved grades, and increased self-actualization.  

The Illinois House of Representatives resolved, "...that all educational institutions, especially those under State of Illinois jurisdiction, be strongly encouraged to study the feasibility of courses in Transcendental Meditation...".  

Counselors who were trained in a Zen type of meditation scored higher on self-actualization and on empathy.  

Meditation of one form or another also is a help to athletes and in other kinds of physiological control.  

Different kinds of meditation, however, are forms of ASC's that may be useful in education.  

Hatha yoga is being introduced into physical education, and is a way of teaching mind-body relationships.

Some kinds of ASC's, of course, are currently off-limits for use in schools, but not for discussion.  

Hypnosis, for example, should be done by a qualified hypnotist, but it is a fascinating topic for class discussions. Psychoactive drugs, including alcohol, coffee, and marijuana are on many students' minds.  

Andrew Weil author of The Natural Mind, says, people have an innate desire to alter consciousness.  

Forcing this topic underground, like forcing the topic of sex underground, results in misinformation, rumors, and unfortunate drug experiences.  

Bringing ASC's out for open discussion can throw some light
Our normal waking consciousness, rational consciousness, as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. ... No account of the universe in its totality can be final which leaves these other forms of consciousness quite discarded.

William James
Varieties of Religious Experience
on this dark topic and suggest to students that there are other, nondrug ways of exploring, using, and controlling one's consciousness. 32 A complete drug education program should recognize the natural human desire for exploring consciousness and provide alternate, acceptable routes.

**Dreams** An ASC that is being used successfully by teachers as both technique and content is dreaming. From a transpersonal point of view using dreams is important because it gives students practice in using an altered state of consciousness, and dreaming is a state readily available to almost everyone. Also there is a large body of research on dreams. 44 Dreaming is one door to our inner selves. ***** Hayes quotation goes about here. *****

When using dreams as a source of creativity or as a beginning of self-exploration, it is usually best not to interpret the dreams, but to accept them as messages, or stories one is telling oneself. Interpretations may lead to blocking or forgetting dreams. Keeping a dream diary can help even young children see recurring dreams and recurring themes from different dreams. Often the feeling that different dreams are related is a more reliable indicator of their relationship than reasoned comparison of their content. Having students retell their dreams in a dimmed classroom following relaxation helps the sharing process. One teacher completed her instructions this way, "After we have discussed one person's dreams and given our own visualizations as well as emotions during that time, we will move to someone else. It is also important that you know that you are invited to share your dreams which are, in effect, your inner life, only to the degree that you feel comfortable doing so."

Using and studying dreams carries with it the implicit message that the dreaming
I told them that I wanted them to be very quiet and try to crawl back inside their dream for about five minutes to "see" the way it was and to recapture the feeling the dream gave them. Then, they were to write just as fast as they could without worrying about literary style or mechanics. Their purpose was to get as much of their dream as possible down on paper in vivid, sharp, detailed language.

We turned out the lights and pulled the drapes. The room became semi-dark and very, very still.

I had expected some resistance or at least some embarrassed uneasiness; there was none. Some students leaned back and stretched their legs out in front of them; others put their heads on their desks; some just sat with eyes closed. After about five minutes, one or two began to write. One by one in the next few minutes, they all began. No one broke the silence until a few seconds before the bell rang when I asked them to bring their papers (many of which were finished by this time) with them the next day.

At the beginning of the period the following day I asked them to go through what they had written and to select the most vital parts of the dream and the most vivid wording. Using what they selected, they were to write a poem. (We had only begun poetry, having spent two days of individual browsing/reading in poetry collections.) My only instructions to the students were that they should not try to use rhyme and they should "squeeze out" every excess word.

The assignment, I felt, was a success for a number of reasons:
1. Everyone had something to write about. 2. The students were fascinated by dreams and uninhibited about sharing them. 3. The vivid quality of dreams lends itself to poetic expression.

It was, I think the best first experience in poetry that I have ever tried.

"Do You Have Your Dream For English?"
ASC may be useful in other ways and worth studying more. By implication, other ASC's may be hidden resources for us to tap too. Huxley's "deep reflection" is an example. An educational corollary to William James' quotation is: And no education of man can be complete which leaves these potential forms of consciousness undeveloped.

Human potentials unit... After visiting a growth center and having read some articles on transpersonal psychology, an 8th grade teacher developed a unit, "Growth Potential." The main theme was that all human beings have vast potentials that are seldom used. He included unusual cases of physical prowess and new athletic records, new inventions and medicines, suggestability, parapsychology, a fantasy trip, and other too often neglected human skills. "Everyone seemed to enjoy the experience," he reported, "and the only problem for me was the insistence to do it again. Imagination, creativity, frank and open discussion were all results of what we had tried."

Teachers are often surprised at how eagerly students become interested in transpersonal teaching techniques and content. Perhaps these approaches reach the natural desire in each of us to explore our inner selves:

I have been overwhelmed by the willingness and ability of the children to remain completely still, without a motion, for 30 minutes. Six months ago I would have laughed at the idea. Julio Sanchez, an extremely active child, seems calmed down considerably. He also gets down to work much more quickly. 10 .... We talked about the directed dreams of Malayan children and the different ways in which dreams could better be remembered or evoked. During all of our talks the class [6th grade] was in a state which only elementary teachers really understand. All eyes on whoever the speaker was, no outside interruptions, mouths open. Once started it was amazing how eagerly children want to look inward and learn about themselves.

This teacher's experience is typical. The first time an unusual teaching technique
is tried, there may be some resistance or silliness, but it almost always disappears the second time. Is this because we all have a natural desire to explore inner potentials? Perhaps dreams are successful as content because it is content that each person experiences, not just learning about something "out there," but something each student participates in each night.

A good possibility for further development of classroom exercises is to adapt adult-oriented exercises to schools and to figure out what skills would enable students to continue transpersonal growth on their own time or after they graduate. Such books as Mind Games, Awareness, and Passages give adult learning exercises. Educators can use these to continue their own growth and as sources for classroom adaptations. Under a grant from the Quebec Ministry of Education, the Canadian Institute of Psychosynthesis has developed classroom techniques for humanistic and transpersonal growth. In the U.S. psychosynthesis groups in New York City and Redwood City, Calif., are adopting other of Assagioli's growth techniques to the classroom and to counseling.

**Biofeedback** Biofeedback has been so widely reported in the professional and popular press that there is little need to go into much detail here other than to suggest some ways it overlaps transpersonal educational interests. By amplifying activities inside the human body so that we can "listen in" to internal processes such as heart beat, blood pressure, brain activity, and many more, much of the formerly "autonomic" nervous system can be brought under voluntary control. These previously hidden abilities of self-control open up whole new ranges for teaching physical education, health, and/or biology.

After seeing the film Involuntary Control at Sycamore High School in rural Illinois, some of the students tried some inexpensive biofeedback equipment borrowed from
Northern Illinois University. One adolescent boy showed remarkable ability to raise and lower his galvanic skin response, a measure of general emotional excitability. "You can sure tell the girls I like," he said as he looked from one to another around the room. By listening to the tone of the machine and by correlating them with his internal feelings, he was able to combine his own feelings with external knowledge about the GSR. If physical education means learning how to control our bodies for the optimum in health and physical happiness, the biofeedback has an important place coming in the curriculum of the late 1970's.

***** Green quotation goes about here. *****

An even more exciting link is being explored between conditioning of brainwaves and parapsychology. The biochemical activities of the brain produce electrical current that pulses at different speeds:

- **delta**: 0 - 4 times a second
- **theta**: 5 - 7 times a second
- **alpha**: 8 - 14 times a second
- **beta**: 15 - 30 times a second

Different frequencies predominate as a person goes into different kinds of awareness. For adults beta is the normal waking state; alpha is a relaxed state bordering sleep; theta is associated with dreams; and delta is very deep sleep or coma. These frequencies are associated with various altered states of consciousness too. In some provocative research carried on by the Greens at the Menninger Foundation, by Krippner and Ullman at Maimonides Hospital in Brooklyn, and others it looks like telepathy may be enhanced by alpha and theta conditioning. Yogic masters develop complicated and precise control of their physiology, including brainwaves. Could this partially account for the paranormal powers that advanced yogis are reported to have and for some instances of "psychic" healing?
If every young student knew by the time he finished his first biology class, in grade school, that the body responds to self-generated psychological inputs, that blood flow and heart behavior, as well as most of other body processes, can be influenced at will, it would change prevailing ideas about both physical and mental health. It would then be quite clear and understandable that we are individually responsible to a large extent for our state of health or disease. Perhaps then people would begin to realize that it is not life that kills us, but rather it is our reaction to it, and this reaction can be to a significant extent self-chosen.

Green, Green, Walters

"Biofeedback for Mind-Body Self-regulation: Healing and Creativity"
Interestingly, biofeedback training provides a strong hookup between transpersonal psychology and behavioral psychology. For the way a person learns to control these previously uncontrolled abilities is simply by being rewarded for doing the right thing to achieve his purpose, whether it is cure migraines, slowdown his heart, or let blood flow to injured organs. Even though he usually can't explain what he is doing or how he is doing it, the feedback that he is doing it is enough reward to improve his performance.

Parapsychology The readings run from newspaper articles, through inexpensive paperbacks, to highly statistical journal articles. Various parapsychological topics can make excellent class reports, and students enjoy learning about parapsychology and doing their own experiments. These formerly taboo subjects for "respectable" psychologists are again reopening, and they provide an excellent example of how fields of knowledge change with the times. One of the hardest ideas to get across to students is that things are not always true or false. With scientific controversy surrounding parapsychology, it provides a natural topic to teach how science expands to include new observations and how our ideas of acceptability adjust from time to time.

Since many people see parapsychology in the gray area between belief and disbelief, a good teacher can capitalize on this to teach her students that it is perfectly respectable intellectually to be undecided about conflicting information and that knowledge progresses by exploring these gray areas. A good way to teach about parapsychology (and other transpersonal topics) is to treat them similarly to the way the theory of evolution was taught earlier in this century. Not as necessarily proven true or false, but as a set of ideas which some people believe and others don't. "Here is what some psychologists are saying.... and here is the reasoning
that the disbelievers use..." This is a classic confrontation between people who cite empirical evidence and want to change ways of thinking and those who side with accepted ways of thinking and criticize the evidence: the classic battle between observation and reason.

Selections from books such as *Psychic Discoveries Behind the Iron Curtain,* ESP: A Curriculum Guide, and *Dream Telepathy* can guide teachers. Investigation into parapsychology leads into other transpersonal areas too, as parapsychology is often linked with dreaming, relaxed receptivity, and other altered states. For example, it looks like states of consciousness associated with the alpha and theta brainwave patterns are also frequently associated with parapsychological events. Movies on parapsychology are oriented primarily toward high school and college audiences.

Stanley Krippner, President-Elect of the Association for Humanistic Psychology, and Garver Murphy, Past-president of the American Psychological Association, suggest links between successful teaching and student-teacher ESP. And there is some evidence that certain kinds of parapsychological behaviors are not just "gifts" or inherent abilities, but that they can be learned.

***** McWaters quotation goes about here. *****

**Spirituality** Peak experiences, transcendent experiences, cosmic consciousness, mystical experiences, enlightenment, and high states of consciousness all have psychological aspects to them. Some transpersonal psychologists are bringing these experiences within the realm of systematic study. LeShan says that physicists, other scientists, and mystics often report their perceptions of the universe in almost identical terms. James and Huxley say that once cultural differences are adjusted for, mystics from all over the world agree on the phenomenology of mystic experiences. And in their research on
Within the past five years there has been a resurgence of both personal and empirical exploration of altered states of consciousness in which the individual experiences himself as having transcended the limitations of his ordinary waking consciousness. Psychical phenomena, such as clairvoyance and astral projections and religious phenomena, such as speaking in tongues and mystical union, are examples of transpersonal experiences.

Barry McWaters
"An Outline of Transpersonal Psychology: Its Meaning and Relevance for Education"
on psychic healers at the Menninger Foundation, the Greens find that some healers describe a "field of mind" that surrounds the earth just as the magnetic, radiation, and gravitational fields surround it. Healers seem to be able to "tune in" to this force, and this raises the possibility that other people can learn to do this, perhaps through biofeedback or other self-controlled altered states of consciousness.

This interest in the spiritual side of man forms one of the historical and conceptual links between transpersonal psychology and humanistic psychology. A. H. Maslow, one of the major humanistic psychologists, proposed a five-stage theory of human motivation: physiological, safety, love-belongingness, esteem, and self-actualization. In his studies of self-actualizers he discovered that this group of people reported peak-experiences more frequently than did other groups. Chasing down this lead by investigating these elevated states brought him to the study of transcendent experiences. In some of his later works he describes two kinds of self-actualizers and seemed on the verge of adding a sixth stage of motivation: transcenders, or a motivation for cosmic consciousness. Humanistic educational psychologists have used the first five stages in planning curricula, counseling, and elsewhere. Perhaps a sixth, transcendent, stage would also assist when considering student motivation. For one thing, assuming such a motivation helps explain why students like certain kinds of drug highs, and it simultaneously suggests that schools can help reduce this kind of drug abuse by teaching alternate means of achieving these states. In social studies or in other classes which consider why people do things, the desire for spiritual, high, or transcendent experiences helps explain certain human behaviors. For example, much religious and cultural conflict among people stems from disagreements over what these mystical experiences are and who has the best ways (religion) of achieving
them; religious wars and intercultural conflicts are often centered on this. The interpretation of these experiences is central to the religions and worldviews of different cultures. Transpersonal psychology is useful in its acceptance and study of transcendent, or spiritual experiences as a legitimate part of human nature and of psychological investigation. Peak experiences and altered states also occur in poetry and prose and are useful concepts in the literature of self-actualization.

**** Acts quotation goes about here. ****

**** Kubie quotation goes about here. ****

Research. At the present research in transpersonal educational psychology is at the exploratory and descriptive stages. Some roughhewn applications of transpersonal ideas show promise. Whenever new practices come along, the door is open to the common sorts of research, which evaluate the new methods. On descriptive and exploratory levels teachers report increased content learned, student enthusiasm, student self-control, the excitement of self-exploration, and investigation into topics usually shunted to the side in traditional as well as innovative schools. Relaxation, focusing, meditation, and other transpersonal techniques are open fields for traditional educational research. More implication-filled than this, however, is one transpersonal view that a major variable of all behavior including learning, is the state of consciousness. This is the previously unseen variable at every experiment. If we erroneously assume there is only one state of consciousness or that all awake people are in the same state, we are likely to neglect the variable. The various states of consciousness, their intensities, or optimal combinations of them may be the major set of variables for a new generation of educational researchers. Instead of changing the stimulation going to a student, can we effect bigger changes by teaching him to control his own consciousness?
"In the last days," God said, "I will pour out my Holy Spirit upon all mankind, and your sons and daughters shall prophesy, and your young men shall see visions, and your old men dream dreams."

Acts 2:17
A discipline comes of age and a student of that discipline reaches maturity when it becomes possible to recognize, estimate, and allow for the errors of their tools. Yet there is one instrument which every discipline uses without checking its errors, tacitly assuming that the instrument is error-free.

This, of course, is the human psychological apparatus. As a result of the failure to consider the sources of error in the human being himself, when our academic disciplines assemble together in our great educational institutions they re-enforce the tacit, fallacious assumption that man can understand the world that lies outside of himself without concurrently understanding himself. Actually, each man is his own microscope with his own idiosyncrasies, to which he alone can penetrate.

Lawrence S. Kubie
"The Forgotten Man of Education"
Perhaps relaxation, receptivity, focusing, concentration, holistic perception, linear perception, reasoning, analysis, various kinds of brain wave activity, and left-sided and right-sided thinking are the most basic mental variables. Just as reading and arithmetic are foundation skills for the intellectual, left-sided activities, so there may also be primary level skills such as fantasy, dreaming, crafts, movement, yoga, concentration, intuition, and other skills that will allow us to develop and use the right sides of our brains.

**Teacher Education** During in-service education, teachers frequently go through a series of three stages when they're introduced to transpersonal psychology. At first they are puzzled, put-off, or simply confused. Since a transpersonal approach to education requires them to look at their work in a different light, this is not surprising. Then they create an idea or two about how they can apply a transpersonal technique to their classrooms, or they decide to introduce some transpersonal content into their lessons. I have found this most often to be dreams, some form of ESP such as a classroom experiment, psychic phenomena, or combined relaxation and fantasy journey. Finally, having tried a transpersonal innovation, they are enthusiastic and eager to do more. So far, in my experience at least, I've found undergraduates to be more willing to accept transpersonal content (especially ESP, psychic phenomena, and altered states of consciousness), while in-service teachers are more willing to believe that developing the right-side's potentials is worth doing and that it can be done.

Here too is a new realm for teacher education. Along with the cognitive, affective, and psychomotor domains, we now have the transpersonal domain. Each subject area has its transpersonal content. Work needs to be done on a basic information level for teachers, objective writers, textbook publishers, testing services, and
others in the educational support services who prepare materials. Much of the original transpersonal research needs to be rewritten so that school students can understand it. Some existing materials can be enlarged; while entirely new lines of transpersonal materials remain to be created.

How do we prepare teachers for their roles as transpersonal educators? A new kind of teacher education and a new breed of teacher-educators are needed too. Here is a wide-open opportunity for colleges of education. If we look back at the rises and falls of educational psychologies and the rise and fall of various colleges of education, we see that frequently certain schools staked out a new educational psychology and built much of their reputation on developing it. A good part of the reputation of Teacher's College at Columbia University was due to faculty members who were influential in the uses of Freudian psychology in education. Illinois, Stanford, and other universities are making themselves well known in teacher education by applying behaviorism to education. Humanistic psychology applied to education are some of the strong points of the Colleges of Education at the University of Massachusetts and at the University of California at Santa Barbara. While several institutions of higher education are flirting with transpersonal educational psychology, none has yet staked a claim and consciously built a reputation for transpersonal education. Here too, there are more tantalizing possibilities than tested programs.

Summary This article listed some of the major ideas and topics of interest in transpersonal psychology and illustrated them with examples of transpersonal education applied to schools. These currently applicable ideas are the first steps in using transpersonal educational psychology and can be accepted as consistent with present goals, techniques, and content. They can also be seen as the first
steps toward a new vision of what it means to be a person, what our place in the
universe is, what we are capable of doing, what we can learn, and ways we can
learn it. Although the emphasis here is on immediate day-to-day use in schools, it
is important to remember that this article focused on a small part of a much
broader panorama of mankind and suggested some first steps, some hints on
applying this transpersonal panorama to education.

Have we been underselling our human capacities due to our unrealistically limited
views of ourselves? Exploration and research at the transpersonal frontiers of
human behavior are raising new views of what it means to be human, and the value
of being a human is rising too.
A man, having looted a city, was trying to sell an exquisite rug, one of the spoils. "Who will give me 100 pieces of gold for this rug?" he cried throughout the town.

After the sale was completed, a comrade approached the seller and asked, "Why did you not ask more for that priceless rug?"

"Is there any number higher than 100?" asked the seller.

Folk Tale from Central Asia

quoted from *The Psychology of Consciousness*, Robert Ornstein
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6. The best one source for keeping up to date in transpersonal psychology is: The Journal of Transpersonal Psychology, P. O. Box 4437, Stanford, Calif. 94305.


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