The Multidimensional Training Model: Linking Teaching/Learning Styles with Teacher Expectations.

PUB DATE
Apr 91

NOTE

PUB TYPE
Information Analyses (070) -- Reports -- Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE
MF01/PC01 Plus Postage.

DESCRIPTORS
Academic Achievement; *Cognitive Style; Elementary Education; Elementary School Teachers; *Inservice Teacher Education; Literature Reviews; *Program Implementation; Racial Differences; Sex Differences; Staff Development; *Teacher Expectations of Students; Teaching Methods; *Training; Urban Schools

IDENTIFIERS
*Multidimensional Models; San Diego Unified School District CA; *Turning Point Program

ABSTRACT
This paper presents an overview of the research and literature on teaching/learning styles and teacher expectations. It also provides a rationale for linking teaching/learning styles with teacher expectations and establishes the basis for the pedagogy of Turning Point. Turning Point is a teacher training program that allows teachers to recognize the variety of learning and teaching styles that will enable them to teach diverse students of differing genders and different racial and ethnic groups effectively. The necessary conditions for program implementation are discussed in the context of application of the multidimensional staff development training model in a large urban school district. In addition, it presents an analysis of the data collected in summer 1990 when the model was implemented in six summer school classrooms of the San Diego (California) Unified School District. Data include attendance and academic achievement information and results of surveys of 58 parents and teachers. Results indicate that the transformation process is complex and requires close supervision, appropriate skill training, and practice opportunities, but that Turning Point is off to a great start in San Diego. (Contains 15 references.) (S1.10)
"I have come to a frightening conclusion that I am the decisive element in the classroom. It's my personal approach that creates the climate. It's my daily mood that makes the weather.

As a teacher, I possess a tremendous power to make a child's life miserable or joyous. I can be a tool of torture or an instrument of inspiration.

I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or deescalated and a child humanized or dehumanized."

Haim Ginott

---

THE MULTIDIMENSIONAL TRAINING MODEL:

LINKING TEACHING/LEARNING STYLES WITH TEACHER EXPECTATIONS

By

Barbra Balser

Presented at:

American Education Research Association
Annual Meeting
April 3 - 7, 1991
Chicago, IL.
This paper presents an overview of the research and literature on teaching/learning styles and teacher expectations. It also provides a rationale for linking teaching/learning styles with teacher expectations and establishes the basis for the pedagogy of Turning Point.

This paper chronicles the necessary conditions for programmatic implementation of the multidimensional staff development training model in a large urban school district. In addition, it presents an analysis of data collected during the summer of 1990, when the model was implemented in six classrooms. These data include: attendance, achievement (as measured by the San Diego Quick Assessment), parental, and teacher surveys.

The results of this study indicated that the transformation process of an innovation from theory to practical application in the classroom is complex and requires close supervision (coaching), appropriate skill training, and practice opportunities.

**Rationale for Linking TESA/GESA with Learning Styles**

There is a great deal of evidence now available that gives testimony to the importance of going beyond the basics of reading, writing, and arithmetic. However, this does not mean eliminating the basics, but developing the basics of the 21st century including reading, writing, and arithmetic, communication, problem-solving skills, scientific and technological literacy. Because of our changing demographics, these basics will be taught in a diverse classroom setting. Not only diverse in race and ethnicity, but in family configuration, achievement, and socioeconomic status.
Recognizing the need to address the increasingly diverse populations and the widening gap in achievement among students of varying gender and racial/ethnic groups, the rationale for linking teaching/learning styles with teacher expectations, establishes the basis for the pedagogy of Turning Point.

The framework of Turning Point combines the elements of Teacher Expectation and Student Achievement (TESA) and Gender/Ethnic Expectations in Student Achievement (GESA) with research/theory and practice in learning styles to transform teaching and learning and enhance academic achievement. This pedagogy includes:

* an awareness and knowledge of the link between the strategies of TESA/GESA and learning styles;
* a holistic approach to teaching and learning by integrating TESA/GESA strategies with the student's learning style;
* flexibility for meeting the needs of students and teachers;
* practical classroom applications of TESA/GESA strategies with learning styles;
* increasing the achievement levels of students;
* a strengthened and enhanced classroom instructional program that provides learning "with students" on a conscious level instead of "to students;"
* a safe/supportive environment for trying, evaluating, modifying and trying again.

This process, as with any that is worthwhile, requires considerable devotion, time, and effort. As Arthur Costa (1985) says, "It takes much coaching for human movement to be performed with precision, style, and grace. It takes years of practice, concentration, and coaching to become a skilled gymnast or ice skater, for instance. Improvement is demonstrated by the increasing mastery of
complex intricate maneuvers performed repeatedly on command with sustained and seemingly effortless grace." Turning Point offers teachers the opportunity to practice and refine the teaching skills to meet the needs of their students with seemingly effortless grace.

Overview of the Research and Literature on Teaching/Learning Styles and Teacher Expectations

Robert Rosenthal and Lenore Jacobson's *Pygmalion in the Classroom* (1968) research created wide interest and controversy about self-fulfilling prophesies. Their book described research in which they manipulated teacher expectations for student achievement to see if these expectations would be fulfilled. Their research indicated that in the early grades, teachers placed artificially high expectations (teachers were given bogus test scores) on students whose performance were associated with high achievement. Although this research study has come under fire for its methodology, subsequent studies support the contention that teacher expectations affect student learning.

Two decades of research on teacher expectations conducted by Thomas L. Good, Professor of Educational Psychology, from the University of Missouri, Columbia and Jere Brophy, Professor of Education and Co-Director of the Institute for Research on Teaching at Michigan State University have shown that expectations are significantly affected by information about test performance, performance on assignments, track or group placement, classroom conduct, physical appearance, race, socioeconomic status, ethnicity, sex, speech characteristics, and diagnostic or special education labels. This research has clearly disproved the notion that prevailed in the late 60s that only two factors accounted for academic achievement which were intelligence and home background. Teachers said
that they have little to do with students' achievement and some teachers still believe this today.

Additional studies that focused on expectations identify the following teacher attitudes which affect student outcomes:

* perceptions about changeability versus the rigidity of students' abilities;
* students' potential to benefit from instruction;
* appropriate difficulty level of material for students;
* whether the class should be taught as a group or individually;
* whether the students should memorize material or interpret and apply key concepts that are presented.

The beliefs of individual teachers interact in intricate ways in the classroom. For example, a low-achieving student may receive different treatment in a class where a teacher believes in emphasizing meaning and understanding than in a classroom where a premium is placed on speed and accuracy. Students believed to possess less potential are more likely to receive an unending stream of drill assignments in the later than in the former classroom.

Research (Olien 1979) also shows that teacher expectations vary in terms other than with achievement. In one set of classrooms, girls tended to have less stimulating classroom environments, whereas high-achieving boys tended to have a productive and intellectually responsive environment. It is clear, from Olien's research, that teachers treat boys and girls in the same classroom somewhat differently. In addition, questioning of students in the classroom differs in the kinds of questions asked and the limited range of responses allowed of poor and minority students. According to Dunken and Biddle, these
students were given little opportunity to become active participants in classroom dialogue, and often lead to negative evaluation of student abilities (Dunken and Biddle, 1974).

A second-year project participant reported, "I was sure I gave all the children in my forty-minute lesson, a chance to respond. I checked the tally sheet and I had totally missed calling on one child in my class. I realized that this child is the least responsive child in my class. I had allowed this child to become invisible."

The relationship between beliefs and behavior is complex. However, staff development programs can address specific teacher strategies to construct change in the way teachers interact with students and in doing so, free themselves from stereotypical race and gender roles and expectations. The Turning Point pedagogy includes two such programs: Teacher Expectation and Student Achievement (TESA) [Kerman, Kimball, and Martin, 1980] developed by the Los Angeles County Office of Education staff in 1970 and Gender Ethnic Expectations and Student Achievement modeled after the TESA interactional strand. The five GESA interactions include:

- response opportunities and acknowledgement;
- wait time and physical closeness;
- touching and reproof;
- probing and listening;
- higher level questioning and analytical feedback

These interactions are practiced and examined in the teachers' own classrooms. The teachers bring their own professional judgement to the process by analyzing
teacher/student interactions, thus discovering how the GESA strands impact teaching and learning.

In addition to TESA/GESA, learning/teaching styles also affects teaching and learning. Studies in learning styles developed as a result of interest in individual differences in the 1960s and has continued to the present day. The bulk of the literature concerning learning styles is focused on improving the immediate and long-term results of teaching and learning. The majority of these studies have a reasonable research base and come to positive conclusion about the relationship between learning style and improved educational outcomes. (Curry, 1983)

German psychologists were the first to explore cognitive style. One of the most noted of these psychologists was Carl Jung. His research first appeared in 1921. Jung proposed that to understand different behaviors, we should focus on the basic functions people perform in their lives. He said that every psychologically healthy human being has to operate in a variety of different ways depending on the circumstances, the people involved, and the situations. But despite situational adaptations, each of us tends to develop comfortable patterns that lead us to behave in certain predictable ways. (Guild, Gager, 1988) Jung describes four basic human functions which he organized into thinking areas: sensation/intuition and logical thinking/perceptive feeling. He said both kinds of thinking are necessary to a mature approach to life and there is no direct value attached to one as being better than another. Jung said we need other strengths because:
"the clearest vision of the future comes only from an intuitive, the most practical realism only from a sensing type, the most incisive analysis only from a thinker, and the most skillful handling of people only from a feeling type. Success for any enterprise demands a variety of types, each in the right place."

(Myers, 1962)

Jung also found that the four thinking functions were expressed differently by those with extroverted preferences and those with introverted preferences. These four functions and preference expressions provide the basis for Jung's theory. In 1920, Katherine Briggs began to study Jung's theory. She and her daughter Isabel Briggs Myers, after experimenting with family members, developed the Myers-Briggs Type Indicator, the MBTI is based on Jung's theory of human behavior. This instrument has become a well-respected psychological instrument.

In 1980, Dr. Anthony Gregorc began to study style based on his own comfort and discomfort in education as a teacher, administrator, and college professor. He observed an unevenness in children's success which led to his examining individual differences. Gregorc's theory describes the mind as "seeing" things in a mental, symbolic, intuitive, and emotional way and as "seeing" things in a realistic, direct, physical way. These different kinds of perceptions, abstract or concrete, describe opposite ends of a continuum. He also describes the mind as ordering information, knowledge, ideas, and concepts in a linear, step-by-step way, or in a nonlinear, tangential, and leaping way. These two kinds of ordering, sequential or random, form opposite ends of a continuum.

His "Gregorc Style Delineator" (Gregorc, 1982) assess a person's perceptual and
ordering-meditation abilities as ends of the continuum Concrete Sequential (CS), Abstract Sequential (AS), Concrete Random (CR), and Abstract Random (AR).

Dr. Kathleen Butler (Butler 1987) extends Gregorc's theory into the classroom connecting personal style with teaching style, using Gregorc's research. She describes teaching style as,

A set of attitudes and actions that open a formal and informal world of learning to students. It is a subtle force that influences student access to learning and teaching by establishing perimeters around acceptable learning procedures, processes and products.

The powerful force of the teacher's attitude toward students as well as the instructional activities used by the teacher, shape the learning/teaching experience and require of the teacher and student, certain mediation abilities and capacities. Thus, the manner in which teachers present themselves as human beings and receive learners as human beings, is as influential upon the students' lives and learning as the daily activities in the classroom.

Using the Gregorc theory, Dr. Butler offers teachers practical skills in developing lesson plans to reach and teach all children with regard to their learning style.

Drs. Rita and Kenneth Dunn began their research in learning styles in the 1970s. They are perhaps the best known researchers in the field. The Dunns describe learning styles as the manner in which 21 elements affect learning new and difficult information. Their theory looks at four strands of a person's ability to absorb and retain information: environmental, emotional, sociological, and physical. The Dunn's have developed a self-reporting instrument called the
Learning Styles Inventory (LSI). This instrument indicates which of the 21 elements are important factors to the individual's learning. Dunn's work is based on self-choices of the learners perceptions of comfort with the environment. The teacher can begin to offer a variety of ways that students can access information.

Because of the diversity of the student population we serve and the realization that all students are not achieving, a revitalization of learning styles practices has occurred. Education is now beginning to understand and recognize individual differences thus, the pedagogy of Turning Point builds on a solid foundation of theory and practice in both, the realm of learning styles and in teacher expectation. This research on expectation and style frames the primary purpose of the program which allows the teacher to explore equitable educational practices in conjunction with strategies for reaching students through their learning styles.

**Turning Point Pedagogy**

The pedagogy of Turning Point is based on the following beliefs:

- all children can learn and each learn in unique ways;
- all intelligences are reflected in all style types;
- one style does not have value over another;
- teachers are the decisive element in the classroom

The program emphasizes both teaching and learning, underscoring the idea that excellence in teaching cannot be achieved without practicing equity and teaching/learning style strategies. Turning Point is deliberately designed to
focus on the teacher and the learner in a holistic approach which examines the act of teaching, that causes the teacher to become more introspective, and to change their teaching repertoire to meet the needs of their students. As a Turning Point Project teacher reported, "the worst thing I could think that could happen to me in the classroom now, is to have to go back to the way I was teaching before the Turning Point Program." The program takes a positive approach, one which requires the teacher to get "up close and personal" with the learner and to provide a variety of activities/approaches that enhances and values the special contributions of each child, including their talents, diversity, and uniqueness. The program is designed to stop doing things "to" the learner and make a dramatic paradigm shift to doing things "with" the learner at a conscious level.

Turning Point takes an eclectic approach by introducing a variety of theories and strategies to enhance the achievement of all students. Thus, enhancing the teachers repertoire for addressing students' needs on a daily basis. The pedagogy focuses on the belief that learners will respond differently to a variety of instructional methods and we need to respect and honor the individual differences among both student and teacher. In other words, there is more than one way to teach/learn a concept.

The Turning Point training follows the design suggested by Pat Guild, [Guild 1988] and Dr. Lynn Curry's Onion theory, [Curry 1983].

Dr. Curry explains the "Onion Theory" of learning style organization by using an onion as a metaphor to explain the layers of this theory. The outer most peel of the onion, the most observable and unstable is characterized by the learning
styles theory that assess preference with environmental factors like light, temperature, and design. The Dunn and Dunn model forms the basis for the Turning Point pedagogy for this layer. Teacher participants in the Turning Point Program examine the environmental factors affecting learning in the classroom through observing and interviewing students, based on Drs. Rita and Kenneth Dunn’s research, [Dunn/Dunn 1978]. It was discovered that through the process of interviewing students for twenty minutes, with teacher constructed questions based on the Dunn/Dunn model, offered more information about students than all of the special education diagnostic/prescriptive tests which had been administered to place students in special education. Getting "up close and personal" with the student for twenty minutes offered the teacher valuable information about teaching and learning.

The second layer of Curry's "Onion Theory" is called the Information Processing Style. This layer is characterized by the individual's intellectual approach to assimilating information. This layer is a more stable indicator of style than the environmental factors layer of Curry's model. The research conducted by Anthony Gregorc forms the primary basis for the pedagogy of Turning Point. Teachers assess their own information processing style and connect their style with their teaching style in the classroom. As one project teacher stated, upon discovering her own processing style, "I now know that I can be 'freed up' to teach in a more random way." Thus, validating for this person that having a random style and teaching in a more creative random way could help children access information.

The third and innermost layer is the cognitive personality style. Curry describes this layer as the individual's approach to adapting and assimilating
information; but this adaptation does not interact directly with the environment, rather this is an underlying and relatively permanent personality dimension. The Myers Briggs Type Indicator is the learning style theory connected with this layer.

In addition to Curry's theory, the pedagogy models Pat Guild's three-pronged approach to understanding learning styles. The first being personal awareness, advocates knowing your own and others perspectives. This theory emphasizes that knowing your processing style must precede the evaluation of the student's style. The Gregorc's Style Delineator is administered to Turning Point participants in an effort to heighten the personal awareness of individual style. Another aspect of learning style is knowing that people process information in different ways and then applying this to curriculum and instruction. Turning Point utilizes Dr. Kathleen Butler's theory to develop practical application of style to the classroom and curriculum.

Guild describes the third approach as diagnostic/prescriptive in which an individual's learning style is matched to instruction, and materials are developed to support the instruction. This method is described by Drs. Rita and Kenneth Dunn. The pedagogy of Turning Point deemphasize the use of testing or diagnostic instruments in regards to assessing style because most learning style tests are written and are therefore slanted in favor of the student who reads well and is a visual and/or sequential learner. In addition, test results put people into boxes and label children potentially for life. Rather than administering tests, Turning Point concentrates on teachers practicing observation and interviewing skills to determine the learning style of students. This technique requires the teacher to interact with the child on a more personal
basis and get "up close and personal" with the learner.

As personal bonds form with the student, the teacher begins to know a little bit more about the difference between learning style and intelligence; students who have different styles are equally intelligent, the relationship between culture and style emerges. As Dr. Asa Hilliard cautions,

"It is an error to think of one group's cultural creativity as superior to that of another. Any cultural characterization of a person or group is than, a statement about the results of human choice, not about natural properties, such as mental capacities."

Style and culture go hand-in-hand, that is, there are many different styles in any culture and culture styles do impact students styles.

Consequently, these personal bonds and cultural understanding begin to bring into focus the realization that teacher's beliefs do affect student expectation. Turning Point pedagogy looks at cultural understanding and connections for teachers and students. The cultural concept is examined through small group sharing of project teacher, staff development interactive activities, and group discussions of videotape materials.

The linking of the expectation research and the learning styles research into one program called Turning Point provides a safe environment for teachers to practice skills without fear of failure, allows time for each teacher to practice newly acquired skills and encourages them to evaluate and modify and try again. This pedagogy is transferred to teachers in a variety of ways that include large, as well as, small group discussions, videotapes, direct instruc-
The Multidimensional Training Model: 
Linking Teaching/Learning with Teacher Expectations

Page 14

tion, teachers teaching teachers, observation by resource teachers, and self-introspection.

Needed Conditions for Programmatic Implementations

Amitai Etzioni (1988) acknowledges the importance of extrinsic and intrinsic motivation that impacts effective leadership. Ultimately, he contends that what counts most to people is what they believe, how they feel, and the shared norms and cultural messages that emerge from the groups and communities with which they identify. Morality, emotion, and social bonds he maintains are motivators far more powerful than the extrinsic concerns. (Sergiovanni Educational Leadership, 1990)

The large urban school district must be prepared to consider the importance of the intrinsic motivation of teachers and principals in developing higher-level goals that are common to both. The focus must be on developing human potential, satisfying higher order needs such as: esteem, autonomy, and self-actualization that motivates the teacher to higher-levels of commitment and performance. The efficacy of the teacher is imperative. A large school district must allow time for bonding between teachers to develop a common philosophy, goals, and commitment to a new program.

Conditions must be right for a grass roots revival of teacher commitment to excellence in teaching. The district should take a reading on the readiness of people within the organization to work together toward a common good. Therefore, it is critical that neither the central office nor the principal mandate participation in the program. The teacher must elect to participate. Program
developers are responsible for selling their product and staff development design to teachers. The design must include concrete practical methods to use in the classroom, time for reflecting on teaching practices, a safe environment to try new strategies, fail, evaluate with peers, try again, and respect for knowledge that the participants bring. This process should continue until the skills are executed automatically and with precision. The Turning Point Program insures teacher's interest and administrative support through a series of interest surveys and principal interviews. The principals were asked to complete an interest survey and participate in an interview which was conducted by the resource teachers to determine the principal level of support and commitment to the project. If after the principal interview, it was determined that the principal was supportive of the program, the total school staff was polled to determine interest. And in addition, each school was required to have 5 to 8 teachers who volunteered to participate on a more intense level as project teachers. Each project teacher volunteer filled out an interest survey application to assess their level of commitment.

It takes three to five years for a multidimensional staff development model to show significant change in teacher behavior and achievement. Because the project focuses on enhancing teacher awareness, accepting responsibility, and believing and caring about what they are doing, significant time must be given to reading and digesting research and theory, along with experimenting with practical applications of theories in the classroom. Teachers need time to develop trust with the resource teachers and colleagues in order to share successes and challenges in a nonthreatening environment. Thus, a primary goal of
The Multidimensional Training Model: 
Looking Teaching/Learning with Teacher Expectations

16

The training session is to develop an interactive/introspective learning process.

Administrators are responsible for creating an atmosphere of acceptance of new strategies that might appear chaotic at first. They can do this by evaluating teachers in a spirit of understanding and commitment to a culture of innovation and change. The principal supports the teacher with approving release time for continued project training, assuring that substitutes offer quality lesson and classroom management when teachers are off-campus. The principal needs to observe in classrooms, ask children and the teacher questions about what is going on in the classroom and not make assumptions. Thus, doing what is right for children.

As the program extends into the second year, the district must continue to allow teachers time to practice new skills and implement new teaching techniques. The program continues to focus on positive approaches which encourage teachers to do things with the learner, instead of to the learner. The teacher has learned in the training session that proximity to a student increases achievement. The teacher shares this learning with the students and asks the students to keep track of the times she/he stops and stands at least an arms length from them. Consequently, the students are involved in encouraging teacher excellence in their own classroom. As one project teacher shared, "I had all my students keep track of the times I acknowledged them, and they were soon reminding me to call on students who were not being acknowledged." Successes and challenges in the classroom are continually shared in the second year of the program. Teachers support each other with "tried and true" suggestions, so that they can return to their own classrooms with new strategies to try from
their colleagues. Resource teachers continue to provide ongoing training for project teachers, model lessons in the classrooms that support the pedagogy, provide materials to teachers, act as coaching partners, and monitor the learning of the project teachers.

Preliminary Data Collection of 1990 Summer School Session

The San Diego City School District summer school office funded a summer school for six weeks in the summer of 1990 for Turning Point teachers to put philosophy and theory into practice. The project resource teacher collected both quantitative and qualitative data. The San Diego Quick reading assessment was administered to twenty-six students during the first week of school and again during the last week of school to the same students. Test results indicated that 73% of the students tested made at least a two-month gain in word recognition. In addition to the data from the San Diego Quick, fifty-eight parents of children attending the summer school were surveyed. The parents indicated overall, satisfaction with the program, making statements such as:

- I think the curriculum and the way they approach teaching is very effective.
- I think my child benefited greatly from her experience in this summer school program.
- It is very helpful to the children. It instills confidence that they can get the job done. Also, working at their own pace is satisfying to them.
- This program showed that children can develop good reading skills and feel confident about reading—very successful for my child. It will keep him on his feet and keep him in school.
- He was able to explore different learning techniques.
The Multidimensional Training Model: Linking Teaching/Learning with Teacher Expectations

There were no bad phone calls, only positive reinforcement for my child.

It made Patrick have a better attitude towards thinking and learning.

Some parents, who were impressed with the program, requested to have their child attend a traditional winter program where Turning Point philosophies are being implemented.

Along with a parent survey, district teachers and administrators who visited the school were surveyed regarding their impressions and observations about the program. In general, visitors comments were that students were engaged in learning and thinking, the program was well organized, and that positive classroom management was evident.

The summer school experience was valuable for several reasons. First, the students were engaged in learning, received positive feedback from teachers, learned about their individual style, and improved their academic skills. Secondly, the parents found the experience to be positive for their child/children. Lastly, teachers had the opportunity to develop a program based on Turning Point philosophy and put theory into practice.

Conclusion

The Turning Point program, as evidenced by its strong research base, an effectively developed pedagogy, the linking of learning styles and teacher expectations, successful summer school experiences which took the program beyond theory into practice, and continued support from district level, is off to a great start.
Teachers report that the Turning Point program is very successful. Stating that, given the opportunity to interact and reflect on their own teaching strategies with other teachers and the "up close and personal" assistance of resource teachers has been critical to the success of the program.

The Turning Point program provides explicit links between theory and practice. Teachers are given the skills and practice to function in the real world of the classroom. They are given help from fellow teachers and resource teachers which increases the success of effective teaching and learning practices.

It is also evident that sufficient time must be given to trainers and teachers when effecting significant change in the art of teaching and learning. Teachers must be allowed to process new information, try new strategies, and return to reflect on the success of teaching methods. It takes time to become a great teacher.

Another essential element for the continued success of the program is the commitment of project teachers. Thirty-one teachers continue to participate in the Turning Point program for the second year. Therefore, it is incumbent upon the resource teachers to continue to offer a pedagogy that is driven by the needs of the participating teachers and not directed by district mandates.

This paper has presented a multidimensional training model that transforms the complex process of taking an innovative program, from theory to practice. This requires close supervision and support, appropriate skill training, and practice opportunities.
REFERENCES


