ABSTRACT
Shared responsibility between school districts and universities for training teachers in large metropolitan school districts seems to offer advantages over the traditional preservice education curriculum. Seventy-two preservice teachers were selected from six universities participating in a consortium teacher center program. Each student teacher was randomly assigned to either an experimental or a control group. The experimental group was provided with training implemented through the teacher center aimed at developing teaching skills that contribute to the creation of a positive learning environment. The control group received no such training and proceeded instead through the teacher preparation curricula provided by their respective organizations. A Competency Indicator Scale was used to observe teaching behaviors directed at developing affective outcomes in learners. Based on the data collected, the teacher center consortium did not seem to offer any special advantages to helping preservice teachers acquire and demonstrate specialized teaching skills. The cooperative teacher center effort, however, did seem to have positive effects on the program participants. (A discussion of the Dallas Teacher Education Center is included.) (MM)
Acquisition of Specific Teaching Behaviors Through a Teacher Center Consortium

Paper presented at the Conference on Innovative Education: Preservice through Inservice

Georgia State University
Atlanta, Georgia

January 31 - February 2

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Through a Teacher Center Consortium

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The Eighth Annual Gallup Poll on the Public's Attitudes
Toward the Public Schools (Gallup, 1976) indicates that
there is an increasing demand on public schools to place
greater emphasis on basics in the school curriculum.
Poor curriculum, which was ranked seventh in the 1975 sur-
vey, has moved to fourth in the most recent poll. These
and other demands for improved achievement in basic skills
has led educators to consider many new proposals for in-
suring competence in the teachers they prepare for the
classrooms of the nation. Prominant among these proposals
is a system of licensing teachers on the basis of their
ability to demonstrate specific teaching skills which have
measured relationship to learned achievement. These pro-
grams of Performance Based Teacher Education (PBTE) are
predicated on the assumption that these specific teaching
skills can be acquired readily by preservice and inservice
teachers.

Concomitant with this assumption is the notion that
the development of teacher competence can be most effective
when it becomes the shared responsibility of both the university and the public schools. Subsequently, this recognition has led to the establishment of teacher centers in many major metropolitan school districts.

The teacher center movement is spreading rapidly in the United States with much support from educators at all levels. In 1972 the Task Force of the United States Office of Education identified the teacher center as one of the most promising concepts in teacher education. In 1974, the Journal of Teacher Education labeled teacher centers as one of the hottest concepts in education (1974). Endorsements of the Teacher Center concept have also come from the American Federation of Teachers and the National Education Association.

Bell and Peightel (1976) indicate that the teacher center is a place where programs for educational personnel are provided. These personnel include preservice and inservice teachers, supervisors, administrators, university faculty, paraprofessionals, students, parents, and others. In addition, the authors have identified four basic types of teacher centers.

1. The Special Focus Teacher Center - A center with one primary focus.
2. The Autonomous Teacher Center - A single controlling unit or organization.
3. **The Partnership Teacher Center** - Two co-operating institutions or organizations. Here a school or education agency collaborates with an institution of higher education.

4. **The Consortium Teacher Center** - Three or more co-operating institutions or organizations.

In Texas the establishment of the Texas Teacher Center Project has led to a state-wide network of teacher centers administered jointly by a consortium of universities and school districts. Their function is to make use of the theoretical and research expertise available in the university and of the practical considerations offered by classroom teachers and administrators to better prepare classroom teachers.

**THE DALLAS TEACHER EDUCATION CENTER**

The Teacher Education Center established by the Dallas Independent School District is an educational co-operative between the school district and eight institutions of higher learning in the North Texas area. These institutions include Bishop College, Dallas Baptist College, East Texas State University, North Texas State University, Prairie View A & M University, Southern Methodist University, Texas Woman's University, and the
University of Texas at Dallas. The Teacher Center also receives active support from professional organizations, the Texas Education Agency, Region X Educational Service Center and many community agencies.

This co-operative Teacher Center provides many obvious advantages. For example, it offers:

1. A comprehensive information and resource system available for the improvement of both inservice and preservice teacher education.

2. Field based centers for area university and college teacher preparation efforts. Students not only utilize the wealth of resources available at the center but also gain valuable experience from working in actual classroom settings.

3. Programs of inservice preparation and improvement which give specific emphasis to problems common to teaching in an urban setting.

4. Resident Graduate credit through the teacher center for teachers unable to travel long distances to individual campuses.

5. A co-operative competency based teacher preparation program to aid in staff improvement and evaluation.

6. The placement and supervision of field experiences and student teaching for participating colleges.
7. Comprehensive teacher education programs which focus on the particular needs of a large urban school system. These programs cover a wide range of topics related to eliminating all policies and practices which discriminate against any individual or group because of race, sex or economic background.

Teacher center activities also include School Based Teacher Education for the improvement of supervising teachers, curriculum development efforts and general in-service education which emphasizes flexibility, capacity for self-renewal, receptivity to change and improved human relations.

CENTER ORGANIZATION

The Dallas Independent School District is divided into five subdistrict. Four strategically located teacher centers presently service these subdistricts and conduct ongoing activities such as those mentioned above. Each center is operated by a staff of professionals which include several resource teachers, college and university representatives (two universities assigned to each of the four teacher centers), and clerical support services.
The Dallas Teacher Center is governed by a forty-five member advisory council which includes representatives from the District, the eight colleges and universities, professional education associations, the Texas Education Agency, the regional education service center, and the community. The council governs the center within by-laws established by the partners and within the legal constraints imposed on the various partners.

The Teacher Center by-laws provide the following functions for the council:

1. To establish procedures for accepting new members and programs.
2. To establish and amend the by-laws.
3. To advise the professional staff in carrying out programs.
4. To assist member institutions in designing and implementing certification programs which conform to the certification standards of the State of Texas.
5. To review and evaluate the programs implemented in the Teacher Center.
6. To prepare and submit annual progress report.
RESEARCH AND EVALUATION EFFORTS

The major activities at each of the centers are directed at preservice and inservice teacher education. For this reason, research funded by the Texas Center for the Development of Educational Systems has been recently initiated through the Teacher Center to investigate the effects of conducting teacher education as a co-operative effort between a school district and a consortium of universities. Little research has been done to indicate that such an approach to teacher education has any particular advantages not presently offered by university teacher education programs.

During the 1975-76 school year research was conducted to investigate the effectiveness of the teacher center consortium for training preservice teachers. The participating universities and colleges pooled their collective resources to seek answers to the following questions:

1. Can teaching competencies be acquired by preservice elementary and secondary teachers through a co-operative program of multi-institutional decision-making and strategy implementation?
2. To what extent are those behaviors observable in actual classroom performance?
3. Does this behavior have any causal relationship to desired learner outcomes?

PROCEDURES

Six universities from the consortium randomly selected seventy-two (72) preservice teachers from those receiving training in the field based teacher center program. Each student teacher was randomly assigned to either an experimental or control group. The experimental group was provided with training implemented through the Teacher Center which was directed at developing teaching skills which were believed to have a measurable effect on pupil perceptions of a favorable learning environment. The control group received no such training and proceeded instead through the teacher preparation curricula provided by their respective institutions.

IDENTIFICATION OF TEACHING COMPETENCIES

After several years of study, the university representatives working in the Teacher Center Consortium constructed a competency cluster model which specifies teaching behaviors related to the acquisition of cognitive and effective learner outcomes. For this study, behaviors related to the establishment of a favorable learning
environment were selected from the model and categorized under the following headings:

1. Making assignments and giving directions
2. Physical movement within the classroom
3. Teacher-student interaction patterns
4. Degree of respect for the values of students
5. Respect for the language usage of students
6. Use of praise and reinforcement
7. Acceptance to the ideas of students
8. Demonstration of polite concern for students
9. Questioning skills
10. Management of classroom behavior

Within each category, a scale of teaching behaviors was derived specifying a range from least desirable to most desirable behavior. For example, in the category of making assignments and giving directions the range of behaviors includes the following:

<table>
<thead>
<tr>
<th>Makes impromptu assignments</th>
<th>Planned Assignment; Gives illustrations</th>
<th>Well planned, varied assignment; gives illustrations</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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</table>

The experimental group was trained in the use of these behaviors in an initial three day workshop which was conducted co-operatively by representatives from the
universities and colleges and by Teacher Center staff. These behaviors were then reinforced through supervision and video tape feedback for the duration of the eight week student teaching period.

Much care was taken to provide an effective research design that would control for as many variables as possible. The research design and the methods employed are not reported here in an effort to conserve space but are available in a Dallas Independent School District research monograph to-date still in print (Caldwell, Childs, et. al., 1977). This monograph also includes the complete statistical analysis used, significant research data, and the data collection instruments.

RESULTS

Question One: Can teaching competencies be acquired by preservice elementary and secondary teachers through a co-operative program of multi-institutional decision-making and strategy implementation?

The acquisition of the specified teaching competencies by the experimental and control groups was measured by their score on the Teaching Situation Reaction Test, a standardized paper-pencil test. Table 1 indicates
slight observed differences between experimental and control but these were not statistically significant.

Table 1

Post test Achievement on the Tea Test (TSRT) on Reaction

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>F</th>
<th>P</th>
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<tbody>
<tr>
<td>Experimental</td>
<td>443.06</td>
<td>0.170</td>
<td>0.6814</td>
</tr>
<tr>
<td>Control</td>
<td>442.96</td>
<td></td>
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</tbody>
</table>

Our conclusion, therefore, was that both groups had achieved at least a cognitive recognition of the competencies even though the means by which this was accomplished were different. The Teacher Center Consortium seemed to make little difference in the preservice teachers' acquisition of the specified teaching behaviors.

Question Two: To what extent are these behaviors observable in actual classroom performance?

Data on observed teaching skills were collected from three separate sources using a criterion referenced observation instrument. This instrument was constructed from the specified teaching skills described earlier and designated the Competency Indicator Scale (CIS) (See Figure 1). The observed teaching behavior of both experimental and control groups was evaluated over an
eight week period during the spring semester of 1976 using the CIS. Observational data were collected from a variety of sources as a cross reference. These sources included: a) supervising teachers, b) pupils, c) objective observers, d) preservice teacher self-ratings.

Table 2 summarizes the ratings collected from supervising teachers.

Table 2
Supervising Teacher Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>41.85</td>
<td>0.802</td>
<td>0.3751</td>
</tr>
<tr>
<td>Control</td>
<td>40.24</td>
<td></td>
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</tbody>
</table>

Significant differences between experimental and control groups were not present, but it was encouraging to note that differences favoring the experimental group were observed in eight of the ten categories of behavior even though they did not reach significance.

Table 3 indicates that similar results were obtained from the preservice teacher self-ratings; statistical differences could not be found between experimental and control preservice teachers.
Table 3
Preservice Teacher Self Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>F</th>
<th>P</th>
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</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>41.9</td>
<td>0.198</td>
<td>0.6582</td>
</tr>
<tr>
<td>Control</td>
<td>41.4</td>
<td></td>
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</table>

Objective observers were used to collect observational data from video tapes which were made on each member of the experimental and control groups. It was hoped that use of impartial observers would reduce institutional bias in the evaluation of classroom performance and consequently add greater validity to the findings. Video tape was used so that the observers could review the tapes as many times as was necessary to make an accurate assessment of the behaviors being observed and so that they could be viewed at the observers' convenience.

Each preservice teacher in both the experimental and control group was taped twice during the eight week student teaching period leaving at least two weeks time between taping sessions. To test the effects of video tape feedback, half the members of the experimental and half the members of the control were provided with feedback while the other half were not. The outside
observers had no knowledge of the preservice teachers institutional affiliation or of which video tape they were observing, first or second. The results of these observations are summarized in Tables 4 and 5.

Table 4
Outside Observers' Ratings: First Video Tape

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>F</th>
<th>P</th>
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<tbody>
<tr>
<td>Experimental</td>
<td>30.1</td>
<td>3.537</td>
<td>0.0656</td>
</tr>
<tr>
<td>Control</td>
<td>33.1</td>
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Table 5
Outside Observers' Ratings: Second Video Tape

<table>
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<tr>
<th></th>
<th>Mean</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>34</td>
<td>0.008</td>
<td>0.937</td>
</tr>
<tr>
<td>Control</td>
<td>34</td>
<td></td>
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</tbody>
</table>

Table 4 indicates a statistically significant difference between experimental and control groups on the first video tape, but this difference is not observed in the second video tape. The implication in this finding seems to be that some degree of growth occurred in the
experimental group while the control showed little
difference between the first and second video tape.

Table 6 reveals encouraging findings regarding the
effects of video tape feedback.

Table 6

Effects of Video Tape Feedback vs No Feedback for
Experimental and Control Preservice Teachers

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>P</th>
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<tbody>
<tr>
<td>First Video Tape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>33</td>
<td>.05</td>
</tr>
<tr>
<td>No Feedback</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Second Video Tape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>36</td>
<td>.15</td>
</tr>
<tr>
<td>No Feedback</td>
<td>32</td>
<td></td>
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</table>

In both instances, students who received video tape feed-
back on their classroom performance were observed to
manifest more desirable teaching behavior than those who
did not, regardless if they were experimental or control.
This finding could have significant implications for using
video tape to help preservice and inservice teachers
acquire teaching behaviors.
Question Three: Does the acquired behavior have any causal relationship to desired learner outcomes?

In this study, we were particularly interested in observing pupil perceptions of the learning environment created by the preservice teacher. Measures of pupil perceptions were taken using a CIS modified so that it could be understood by elementary and secondary students. Table 7 summarizes the results.

Table 7
Pupil Perceptions of the Learning Environment

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<tr>
<th></th>
<th>Mean</th>
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<th>P</th>
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</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>79.62</td>
<td>4.905</td>
<td>0.0322</td>
</tr>
<tr>
<td>Control</td>
<td>83.70</td>
<td></td>
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</table>

These were by far the most discouraging of all our findings. The observed difference favoring the control is significant at the .03 level. Further analysis of this data will examine differences between elementary and secondary pupil ratings, but at present these data are not available.
CONCLUSIONS

Based on the data collected, the Teacher Center Consortium did not seem to offer any special advantages to helping preservice teachers acquire and demonstrate teaching skills that contribute to the creation of a positive learning environment. The co-operative effort, however, did seem to have some positive effects on the program participants.

Preservice teachers who participated in the consortium training program were given a questionnaire at the end of their training to assess their attitudes toward the consortium approach. An analysis of these data revealed that student teachers perceived the training to be a very valuable experience. The major findings regarding student's perceptions are as follows:

1. Eighty-five percent of the participants found the workshop to be extremely valuable or of some practical value. This suggests that the consortium setting can be a practical way to cover topics related to student teaching.

2. Eighty-five percent of the student teachers indicated that the topics covered in the training gave them new insights or perspectives not covered in their
campus based education courses. This clearly suggests that a consortium model can allow university and school district personnel an opportunity to identify and develop topics for preservice teacher education that might provide a more meaningful experience for prospective teachers.

3. Eighty-five percent of the participants indicated that hearing presentations from representatives from universities and the Dallas Independent School District was extremely valuable or somewhat beneficial. This seems to indicate that the consortium approach to preservice training offers an advantage that cannot be held by one institution.

4. Eighty-five percent of the participants expressed the opinion that the opportunity to work with student teachers from other universities was extremely valuable or of some practical benefit. The workshop offered students an opportunity to exchange ideas with peers from sister institutions that would not have been available otherwise.
IMPLICATIONS

Implications for Universities

For a long time universities have maintained the major responsibility for preservice teacher education. Teacher education can provide additional advantages for student if this responsibility is shared with school districts. Students will have the opportunity to:

1. Expand on the knowledge gained in their education courses.
2. Exchange and share ideas with peers from other institutions.
3. Work with a variety of experts from both the school district and university.

Universities will receive many advantages as a result of this relationship. Universities will have:

1. Real classroom settings available for use in their preservice program.
2. Materials and human resources from the school district and sister institutions.
3. The opportunity to put theory into practice with preservice teachers before they enter the profession.
Implications for School Districts

School district personnel are products of the teacher training institutions. Frequently, they find that the practitioner needs additional skills not gained in education courses. The shared relationship between institutions of higher education and school districts offers districts the opportunity to provide meaningful input into shaping teacher training programs. School districts also receive valuable assistance from university professors in the planning and implementation of inservice programs.

Implications for Teacher Center Consortia

The researchers were encouraged by the overall enthusiasm and progress shown by the student teachers toward the consortium approach. Their overall acceptance of the concept of being trained in a co-operative effort indicated, we thought, that teacher training in a setting of shared responsibility could have extensive benefits for perspective teachers. Some of these benefits include:

1. A more serious attitude on the part of preservice teachers toward learning to teach. The participating school district personnel added a sense of reality and immediacy about the problems these teachers would face and the kinds of solutions they could expect.
2. Sharing experiences with students from other institutions and exposure to a wide variety of university staff who possessed many levels of expertise and experience.

3. A more intense concentration on mastering specific teaching behaviors through microteaching and video tape feedback and teaching skills analysis.

4. Exposure to a wider range of learning materials (e.g. tapes, films, human resources) than any single university could provide.

5. A setting that is highly conducive to co-operative efforts (the Teacher Center).

In short, a shared responsibility between a school district and several universities for training teachers in a large metropolitan school district seemed to offer enough diverse advantages to make it a worthwhile alternative to teacher education and possibly teacher certification. Certainly more extensive research is needed before definitive answers can be found.
### COMPETENCY INDICATOR SCALE

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<tbody>
<tr>
<td>Makes impromptu assignments - unclear confusion. Uses homework as a punishment.</td>
<td>Assignments are made hurriedly. Poorly planned. Threatens class with increased assignments.</td>
<td>Assignment planned; gives illustrations.</td>
<td>Gives clear, well-planned assignment with appropriate examples.</td>
<td>Gives well planned and varied assignment based on preassessment of student needs/abilities.</td>
<td></td>
</tr>
<tr>
<td>Teacher talk dominates instructional situation. Other interaction activity prohibited.</td>
<td>Some student recitation minimal teacher to student to teacher interaction. Relies heavily on regular volunteers.</td>
<td>Accepts limited interaction. Calls on students regularly and recognizes only solicited responses. Visits with only select students.</td>
<td>Fosters wide variety on interaction: A. encourages non-volunteers. B. Works with individuals. C. Walks around room visiting informally with many.</td>
<td>Encourages class and group interaction; encourages and creates situations where students help each other. Open and supportive to all students on serious and trivial matters.</td>
<td></td>
</tr>
<tr>
<td>Stays behind the desk or other physical barriers.</td>
<td>Moves only in a restricted area in a non-goal related way.</td>
<td>Moves generally in teaching area; not correlated with teaching purpose.</td>
<td>Moves freely over teaching area; uses movement for more extensive interaction.</td>
<td>Free movement of teacher among students uses activity centers in several areas of the room.</td>
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<tr>
<td>Ignores students; allows little or no choice in actions; shows little interest in the needs or interests of students.</td>
<td>Shows polite concern for pupils (How are you this morning) Allows limited choices.</td>
<td>Listens to concerns of pupils. Discusses values with class or individuals. Makes little attempt at values clarification.</td>
<td>Holds individual conferences with pupils, shows concern for pupils.</td>
<td>Determined effort to identify values and backgrounds of pupils. (e.g. administers interest inventories, engages in well designed values clarification exercises, inquires about student hobbies, interests, provides opportunities for students to demonstrate their interests and abilities).</td>
<td></td>
</tr>
<tr>
<td>Ridicules student speech and language usage.</td>
<td>Enforces language etiquette by correcting students' statements.</td>
<td>Provides language usage alternative through modeling and non-threatening behavior.</td>
<td>Accepts content of message without correction of medium.</td>
<td>Utilizes efforts of students to communicate with redirect and restatement. Extends pupils ideas.</td>
<td></td>
</tr>
<tr>
<td>Openly discriminates against individuals or groups because of race, ethnicity, or affiliation, makes derogatory comments.</td>
<td>Selects one child or group to perform specific non-academic activity. Favors students with common beliefs, affiliations Imposes a value structure contrary to students value structures.</td>
<td>Allows students to form cliques or groups students in a discriminatory fashion. Ignores, interrupts, rejects pupil comment, questions, or answers to questions.</td>
<td>Encourages interaction between groups tolerates group differences.</td>
<td>Attempts to clarify ideas and values and point out commonalities in beliefs, listens carefully to each student, waits for each student.</td>
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</tr>
<tr>
<td>Openly critical or sarcastic, scowls.</td>
<td>non-reinforcement (tick, uh-huh, silence)</td>
<td>Accepts students' errors or feelings. Encourages student.</td>
<td>Praises and encourages student action, response or behavior. Uses humor to release tension but not at the expense of students.</td>
<td>Accepts and uses pupil ideas. Redirects and clarifies in an attempt to build on student response or behavior.</td>
<td></td>
</tr>
<tr>
<td>Scolds students frequently. Uses threats.</td>
<td>Defensive and hostile towards students. Discourages criticism and challenges to authority.</td>
<td>Encourages in a serious, no-nonsense manner</td>
<td>Demonstrates confidence and conducts the class with efficiency and good judgement. Demonstrates a sense of humor.</td>
<td>Conducts class in a relaxed, confident manner. Admits mistakes and is willing to compromise. Shows affection for students and is polite and considerate. Protects students and is willing to help them resolve non-academic matters.</td>
<td></td>
</tr>
<tr>
<td>Instruction directed at recall. Questions from text, emphasis on facts.</td>
<td>Students made to summarize, paraphrase and put material into their own words. Students must see relationships and differences.</td>
<td>Instruction directed at students utilizing previously learned material to solve a problem or create something new.</td>
<td>Instruction is directed at students making judgements, evaluations and assessment. Students initiate ideas and research.</td>
<td></td>
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</tr>
</tbody>
</table>

Punishes class of rules, tolerates occasional undesirable behavior. Speaks over class notetakers. Consistent enforcement of recognized rules, warns student before action. Teacher manages class, with emphasis on social direction and socially responsible behavior.
BIBLIOGRAPHY


Gallup, J.H. Eighth annual galup poll of the public's attitudes toward the public schools. Phi Delta Kappan, 1976, 58, 188.