The Southwestern Cooperative Interaction Observation Schedule (SCIOS) is a classroom observation instrument designed to record pupil-teacher interaction. The classification of pupil behavior is based on Krathwohl's (1964) theory of the three lowest levels of the affective domain. The levels are (1) receiving: the learner should be sensitized to the existence of certain phenomena and stimuli, (2) responding: the student's responses go beyond merely attending to the phenomena, and (3) valuing: the student's behavior is consistent and stable enough to have taken on the characteristics of a belief or attitude. Classification of teacher behavior was based on Sullivan's (1953) social-psychological theory of personality. There are two major categories of teacher behavior: (1) behavior that results in tension-reduction and need satisfaction for the student, and (2) behavior that increases student tension or anxiety. Use of the SCIOS in the classroom takes 16 minutes with an additional 5 minutes for form information, such as teacher's code number and the date and time of the class. During the first 5 minutes in the class, an observer records subjective impressions of visual aids and classroom atmosphere. The observer then records teacher and pupil behaviors in eight sections on the schedule, each requiring a 2-minute time segment. A copy of the observation schedule is included in this report. (HH)
SOUTHWESTERN COOPERATIVE EDUCATIONAL LABORATORY
INTERACTION OBSERVATION SCHEDULE (SCIOS)

A System for Analyzing Teacher-Pupil Interaction in the
Affective Domain

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A paper presented at the Annual Convention of the American Educational
Research Association, Minneapolis, Minnesota, March 2-6, 1970.
The Southwestern Cooperative Interaction Observation Schedule (SCIOS) was designed to assess pupil-teacher interactions. A series of pupil behaviors was subjectively judged as belonging in one of the three lowest levels of the affective domain (Krathwohl, Bloom, and Mesta, 1964). Sullivan's (1953) social-psychological theory of personality served as a basis for selecting teacher behaviors.

Selection of Pupil Behaviors

Briefly, Krathwohl (1964) describes the three lowest levels of the affective domain as:

**Level One. RECEIVING (ATTENDING)** At this level we are concerned that the learner be sensitised to the existence of certain phenomena and stimuli; that is, that he be willing to receive or to attend to them.

From an extremely passive position or role on the part of the learner, where the sole responsibility for the evocation of the behavior rests with the teacher -- that is, the responsibility rests with him for 'capturing' the student's attention -- the continuum extends to a point at which the learner directs his attention, at least at a semiconscious level, toward the preferred stimuli.

**Level Two. RESPONDING** At this level we are concerned with the responses which go beyond merely attending to the phenomena. The student is sufficiently motivated that he is not just willing to attend, but perhaps it is correct to say that he is actively attending.

This is the category that many teachers will find best describes their 'interest' objectives. Most commonly we use the term to indicate the desire that a child become sufficiently involved in or committed to a subject, phenomena, or actively that he will seek it out and gain satisfaction from working with it or engaging in it.
Level Three. **VALUING** Behavior categorized at this level is sufficiently consistent and stable to have taken on the characteristics of a belief or an attitude. The learner displays this behavior with sufficient consistency in appropriate situations that he comes to be perceived as holding a value.

An important element of behavior characterized by 'Valuing' is that it is motivated, not by the desire to comply or obey, but by the individual's commitment to the underlying value guiding the behavior. In the socialization process, the learner may conform externally to a number of socially desirable rules of behavior which he has only partially accepted as his own--has only partially internalized.

The Krathwohl (1964) definitions were structured to enable teachers to develop educational objectives but were not stated in behavioral terms. The three lowest levels of the taxonomy of affective objectives were translated into behaviors which first grade pupils might be expected to exhibit in a classroom in response to a teacher.

Pupil behaviors were isolated to assess the degree to which pupils (1) receive, (2) respond to, and (3) value a stimulus, the teacher. Level one behaviors of pupils were defined as those occurring if pupils are not "receiving" the stimulus, the teacher. An example of such a behavior would be demonstrated by the pupil who interrupts others. This was defined as an overt action in which, for example, a pupil pokes his neighbor with a ruler or disturbs his neighbor in some way.

Level two, "responding" behaviors, were chosen which seemed to indicate when a pupil was not responding to the stimulus, the teacher. An example of such a behavior is demonstrated by the pupil who does not work on his assigned task.

Level three, "valuing" pupil behaviors, were defined as those which seem to reflect a pupil's commitment or active involvement with a stimulus, the teacher. An example of this type of behavior is evidenced by the pupil who asks the teacher
questions about the academic subject being studied.

As can be noted, the first two levels of the affective domain, receiving and responding, were placed into negative behavioral terms which seemed to represent avoidance of, or not responding to, the teacher. It is probable that fewer pupils in a classroom will evidence these negative behaviors at the same time. For this reason, scoring was facilitated.

Level three, a higher level of the affective domain, was expected to be represented less frequently in terms of pupil classroom behaviors. Level three behaviors were stated in positive terms, to facilitate scoring.

Levels four and five of the Affective Domain (Krathwohl, 1964) were not translated into pupil behaviors for use in the observation schedule, because these behaviors were believed to be of a higher level than might be expected to occur frequently in a class of first grade students.

Section I (VI) Receiving

rc1 ps fidget in seats (pupils fidgeting in seats).
   A sustained motion, e.g., squirming, drumming on desk, etc.
rc2 ps lvg seats (w/o perm) (pupils leaving seats without permission).
   Any separation of pupil and his desk (verbal permission from teacher has not been heard by the observer).
rc3 ps spkg inappropriately (pupils speaking inappropriately).
   A non-relevant to subject matter comment or sound which is audible to many of the pupils.
rc4 ps lkg at obs at rear of rm (pupils looking at observer at rear of room).
rc5 ps intrrptng others (pupils interrupting others).
rc6 ps dropng objects (pupils dropping objects).
rc7 ps refusing t rqst (pupils refusing teacher request).
   Any action in which pupil does not follow teacher's orders.
Section II (VII) Responding

rs1 ps ign t rqst (pupils ignoring teacher request).
A pupil does not perform appropriately in response to teacher request.

rs2 ps not wrkng on assgn d sk (pupil not working on assigned task).

rs3 ps mking inapp disrupt rsp (pupils making inappropriate disruptive response).

rs4 ps shy, frfl (pupils shy, fearful).

rs5 ps dydrmg (pupils daydreaming). e.g., gazing out the window.

rs6 ps cpyng from oths (pupils copying from others).
Looking closely at another's work. (Observer does not necessarily need to see actual writing down of copied work.)

Section III (VIII) Valuating

vl ps rsg hnd bef spkg (pupils raising hand before speaking).
Count number of different pupils who raise hands during two minute interval.

v2 ps askg q abt s cntnt (pupils asking questions about subject content).
Any questions whether in individual or group situation concerning academic subject.

v3 ps askg t fo help (pupils asking teacher for help).
Any request for help, e.g., pupil may go to teacher's desk for help, raising hand.

v4 ps askg t fo appvl (pupils asking teacher for approval)
Not limited to academic area, e.g., "I have a new dress, teacher." Verbal or non-verbal, e.g., holding up paper for teacher to see.

v5 ps vntng info (pupils volunteering information).
Any unsolicited information spontaneously offered by pupil (academic or non-academic).

v6 ps ofng assist or coop to fellow p (pupils offering assistance or cooperation to fellow pupil(s)).
Selection of Teacher Behaviors

Sullivan's (1953) social-psychological theory of personality served as the basis for selection of two categories of teacher behavior. (1) The behavior seemed to be of a type which would result in tension-reduction and need satisfaction or success for the pupil; e.g., the teacher praises the pupil; (2) the behavior seemed to be one which would increase pupil tension or anxiety; e.g., the teacher punishes a pupil. Many of the items are the same as those recorded on the Teacher Observational Personality Schedule (TOPS [Cooper and Bemis, 1967]). Abbreviations precede definitions of the behavior.

Section IV

1. t alls p lv st whot perm (teacher allows pupil to leave seat without permission).

Pupil leaves seat to sharpen pencil, get reading material, go out of room, ask another student for help, etc., without raising his hand or requesting and receiving permission from the teacher. Any separation of a student from his desk or chair. (The observer has not heard the teacher give permission.)

2. t praises p (teacher praises pupil(s)). "That's good, fine." "Very Good."

   "Excellent."

3. t cala s p bny, der, etc. (teacher calls pupil "Honey," "Dear," etc.). Any endearing term directed at member(s) of the class.

4. t tchs p (teacher touches pupil). Any accidental or intentional physical contact between pupil and teacher.
5. t asks or allows p to hlp ech other (teacher asks or allows pupils to help each other). "Why don't you two work on your number facts?" "Bill, you help Joe with that problem." "Mary, drill Susie on the parts of speech."

6. p ask for hlp a t hlpd imm (pupil asks for help and teacher helps immediately).

   Pupil makes first move. Pupil raises hand, and teacher goes to pupil's desk to help him. Pupil goes up to teacher, and teacher helps him.

7. t uses enc rk (teacher uses encouraging remarks).

   "Class look at the fine job Roger has done on his drawing." "I know you can do it."

8. t uses or prames rwd (teacher uses or promises reward).

   This includes giving of a reward which had been earned previously. The promising of a reward to be given at a later time for a present accomplishment, or the giving of a reward for present achievement.

9. t apol (teacher apologizes).

10. t alls p spk whot perm (teacher allows pupil(s) to speak without permission).

    This includes any comment without permission, loud enough to be heard by the class. Teacher allows pupil to insert comments, questions, answers without being called upon. The teacher is working with a group, and members of the rest of the class carry on conversation.

Section V

1. t wrns p (or thrtms) (teacher warns pupil).

   Verbal consequences must be stated. This must concern itself with non-academic behavior of the pupil or class. "You had better not poke John with that ruler again." "Behave, or you'll suffer the consequences." "I'll do more than just talk to you the next time."
2. t frns, gls at p (teacher frowns, glares at pupil).

This may be either a frown or glare which is accompanied by verbalization, or these same actions with no verbalization. The teacher initiates this action towards a single individual.

3. t punish p (teacher punishes pupil(s)). This may be punishment which takes physical or verbal form. "Take your books and sit at that table in the back of the room." "Stand up right there by your desk until I tell you to sit down." "Go to the principal's office. Tell him why I sent you." (It has been observed that children are often isolated from the rest of the class by having their desks at an obvious distance from those of the other children. This observation is not checked by the observer on the schedule, because it is seldom possible to determine the teacher's motives for isolating the children. For the same reason, a record is not kept of children who seem to be undergoing punishment when the observer arrives, when no verbal mention of this has been overheard by the observer.)

4. t calls on non-vol (teacher calls on non-volunteer).

The teacher calls on a pupil who has not raised his hand or otherwise indicated his willingness to participate. Teacher may say, "I want to call on someone who hasn't answered yet." This does not include instances where the teacher calls on pupils in a consecutive order.

5. t uses scam (teacher uses sarcasm).

This item is recorded each time a teacher makes a bitter, cutting remark or a statement which has an intended implication which seems to be the opposite of the literal sense of the words; a cutting criticism which is made in the form of a jest or a statement which has a distinguishing quality of bitterness or a taunting reproachfulness. "John Jones, are you in this reading group, or do you think this is recess time?
6. t crit or corr p (teacher criticizes or corrects pupil(s)).
   This includes both criticism and correction. May be academic or non-academic.

7. t spks ovr p noise (teacher speaks over pupil noise).
   Teacher raises voice to be heard over individual conversations, rustling of
   papers, movement about the room, pupil movement. She does not comment on the
   noise or wait for noise to subside.

8. t igns, int, rej p ans or q (teacher ignores, interrupts, rejects pupil
   answer or question).
   E.g., pupil goes to teacher's desk and she turns him around and sends him back
   to his seat. Pupil raises hand and teacher ignores the pupil or she may say,
   "Put your hand down."

**Item Organization**

Sixteen minutes are required to record pupil and teacher behaviors in the
classroom using the SCIOS. It is suggested that an additional five-minute period
be utilized to fill out the information included on the schedule such as the
teacher's code number, school code number, observer name, date, time, class size,
number of boys and number of girls in the room, and identifying information about
room setting. The major subject taught is checked at the end of each two-minute
time period.

The following items are recorded during the first five minutes the observer is
in the room. They are subjective, of course, and are to be marked plus (+) if
observed or minus (-) if not observed.

Vis ad nt a org (Visual aids neat and organized)

Clr is clrf and stim (Classroom is colorful and stimulating)

The category system is used in recording teacher and pupil behaviors on this
schedule. The items in each of the eight sections are tallied each time they occur
during a two-minute time segment. No individual pupil's behavior is scored more than once during a two-minute period. For example, in Section I, if the observer makes a tally for a pupil fidgeting in his seat, (rc1), he should not tally this behavior again for this pupil in Section I, during that two-minute interval. He should, however, make a tally if the same pupil drops an object (rc6).

To promote ease in scoring, the thirty-nine items are coded. A copy of the observation schedule appears at the end of this report.
### OBSERVATION SCHEDULE

<table>
<thead>
<tr>
<th>Section I</th>
<th>Section VI</th>
<th>Total</th>
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<tbody>
<tr>
<td>rc1 ps ig'g in seats</td>
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<td></td>
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<tr>
<td>rc2 ps lvg seats (what pers.)</td>
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<tr>
<td>rc3 ps spkg in impristol.</td>
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<tr>
<td>rc4 ps lkng at crs at rear of rm</td>
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<tr>
<td>rc5 ps intrrpting others (lkg, pokng, etc.)</td>
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<tr>
<td>rc6 ps drpping objects</td>
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<td>rc7 ps refusing : rgs:</td>
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<tr>
<th>Section II</th>
<th>Section VII</th>
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<tbody>
<tr>
<td>rs1 ps ign t rgs:</td>
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<tr>
<td>rs2 ps not wrkg or assigned</td>
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<tr>
<td>rs3 ps making inapp. disrupt. typ unsol comm</td>
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<td></td>
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<tr>
<td>rs4 ps shv, feartuli (head)</td>
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<tr>
<td>rs5 ps dydrmg (gze out 's)</td>
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<td>rs6 ps copying frm othrs</td>
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<table>
<thead>
<tr>
<th>Section III</th>
<th>Section VIII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1 ps rsg hand iel spkg</td>
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<tr>
<td>v2 ps askg q abts cntnt</td>
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<td>v3 ps askg tec hilp</td>
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<td>v4 ps askg t spnvv</td>
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<tr>
<td>v5 ps visting rts</td>
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<tr>
<td>v6 ps offng assist or try to tell p</td>
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<tr>
<td>v7 Majority of clss mks a rgs</td>
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Teacher: ____________________________  School: ____________________________
Observer: ____________________________  Date: ____________________________
Time: ____________________________  Boys: ____________________________

Timing

<table>
<thead>
<tr>
<th>Section</th>
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<tbody>
<tr>
<td>I</td>
<td>0-2 min.</td>
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<tr>
<td>II</td>
<td>2-4</td>
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<tr>
<td>III</td>
<td>4-6</td>
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<td>IV</td>
<td>6-8</td>
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<td>V</td>
<td>8-10</td>
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<td>VI</td>
<td>10-12</td>
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<tr>
<td>VII</td>
<td>12-14</td>
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<tr>
<td>VIII</td>
<td>14-16</td>
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