

CHAPTER 22

The Classroom

The topics discussed in this chapter provide the teacher suggestions of ways to prepare students and the classroom for an activity-centered approach to learning mathematics. The topics are (1) helping students prepare to learn, (2) arranging the classroom for learning, and (3) managing student behavior.

The ideas offered under each topic are suggestions other teachers have found helpful. Each teacher must decide which ideas are applicable to his or her unique classroom situation.

HELPING STUDENTS PREPARE TO LEARN

The most important component in a student's ability to learn is that he or she have a self-image of a person capable of learning. For a variety of reasons, many students in the intermediate grades enter a new classroom already convinced they are *not* capable of learning—this concept must be attacked from the first day of school.

Dividing students into ability groupings teaches them, however subtly, that some are less capable and others more capable or learning. Most of the lessons in this book are presented to the whole class at once in order to break down that concept. Within the group lesson, the teacher varies the questions on which each student is working so he or she finds the exercise challenging. Students work side by side, using the same materials, but at different levels.

There is a second advantage to whole-group instruction. The best way for students to learn in is an environment set up to challenge their curiosity and to feed back information that tells them if their discoveries are valid. A classroom with only one teacher and thirty students cannot provide this feedback unless many students are using the same materials and sharing essentially the same experiences.

Students develop language skills and learn to communicate their ideas by working with others. The teacher cannot spend an adequate amount of time talking to each student about a project, but by having all students do essentially the same thing, the teacher provides students a greater number of people with whom they may share ideas. Whole-class lessons present an opportunity for students to engage in meaningful conversation.

Teaching the class as a single group contributes significantly to altering the slower students' concept of themselves as nonlearners. Students who expect to endure another year of failure find instead that they can use the same materials and work the same assignments as their "brighter" classmates.

The teacher may help alter the slower students' non-learner concept even more by removing the pressure caused by the constant fear of failure from the student and assuming it openly. On the first day of school and as often

thereafter as necessary, the teacher conveys the following message:

If I try to teach you how to do something and you don't understand, that's *my* fault. I'm the teacher. Everybody who wants to learn, *can* learn, but not everyone learns in the same way. If I teach you something one way and you don't learn it, I need to find another way. *You* can learn—it's up to me to teach you so you *do*.

Students must feel it is possible for them to learn. They are more apt to take the risk of failure that comes with each new effort at learning if the responsibility for that failure is not their burden.

ARRANGING THE CLASSROOM FOR LEARNING

The important factor in the arrangement of desks and chairs in a room is its flexibility. When the teacher or a student feels a need to rearrange the desks to accomplish some particular learning goal, the furniture should be rearranged. The only measure of the effectiveness of any arrangement is how well it facilitates learning.

One example of a possible classroom arrangement can be seen in the figure on the following page.

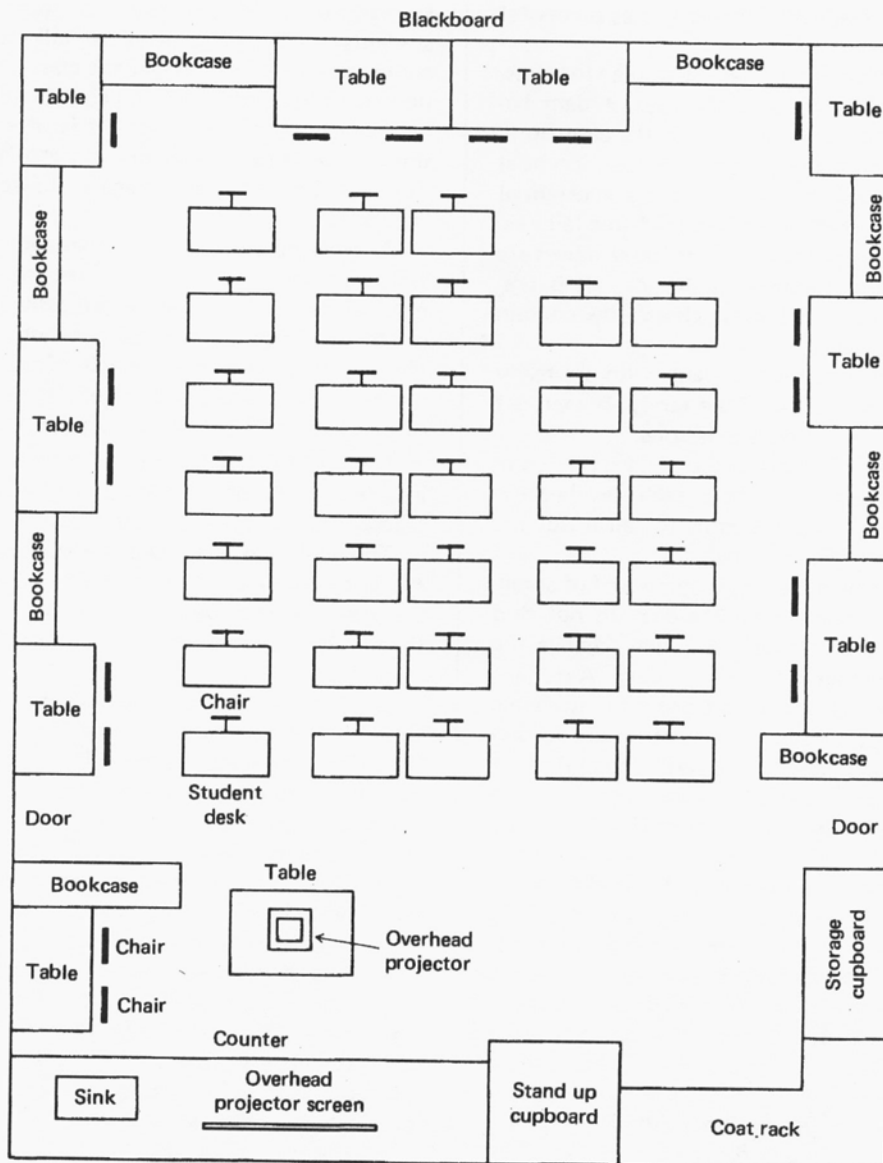
This arrangement is designed to accommodate both whole-group instruction and small-group activity.

The rows of student desks are positioned to give everyone a clear view of the overhead projector screen or blackboard. The desks are surrounded by tables, chairs, and bookcases. Tables are usually in short supply in schools, but card tables or doors with legs attached work as well. To eliminate the need for students to carry their desk chairs to the tables, the folding chairs that usually sit unused in school auditoriums may be used. Bricks and boards make usable bookcases.

Bookcases separate the tables from one another and provide ample storage space for tiles, cubes, geoboards, and other materials. They also store the activity-time equipment to be discussed in the student behavior section of this chapter. Closed cupboards are not desirable, because students should be able to see the stored materials.

If the teacher does not wish students to have general access to a certain material it is best not stored in the classroom. To establish an atmosphere of trust, everything in the classroom should be open and available to all.

When tables are not in use, they are kept clear so they will be available to any student. Any material needed for work on the tables is kept in the book cases or in the students' desks.



Bulletin boards are an important consideration in arranging the classroom for learning. Each student can see that he or she is equally valued if there is a space for each child's best work on the wall. Selections of the best work should be made by the student. Yarn or ribbon can divide a major portion of the wall-space into sections for each student; the remaining space should be reserved for displaying class or group projects.

A student's section of wall space may have posted in it a sheet of paper containing his or her picture (taken the first week of school), name, age, height, and weight (taken monthly).

MANAGING STUDENT BEHAVIOR

Learning can only take place in a classroom where the students exercise control over their behavior. Once students view themselves as learners and begin feeling successful in class, many discipline problems disappear. The problem is, however, to make the class manageable while teaching the

19 — (name) — 19 —

Student's picture

Birthdate

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Age									
Height									
Weight									

Special Qualifications

students enough so their feelings of themselves as successful learners take effect.

The following description of a management plan for classroom behavior is one of many possible ways student behavior may be adapted to permit learning in the classroom. This method has been successful in classes whose potential for student disruption was high and where a substantial number of students considered themselves academic failures.

This system is called a *points system* because points are used to record students' appropriate behavior. It is predicated on the assumption that most classrooms contain three basic groups of students.

The first group is composed of students who are ready to do whatever the teacher asks. They rarely, if ever, get into trouble and always try to do the lessons.

The second group, which is often the majority, is composed of students who come to school each day because they are supposed to. They don't come to cause trouble, but they don't come to avoid it, either.

The third, usually a small minority, is composed of antagonistic students. They, for various reasons, do not find school an ego-building experience. So, they change the school experience to one that is more rewarding. A student who has never earned any praise from a teacher for academic work can still earn the attention of classmates for leadership in other areas. If a student can't earn recognition for being "good," he or she can earn it for being "bad."

A common pattern in the classroom setting is for the students in the third group to "act out" in a disruptive manner. This acting out is reinforced by the middle group who usually do not initiate any acting out but are willing followers. The third group provides the leadership, the second group provides the followers, and the first group acts as spectators to the teacher-student battle that follows.

Although group three might seem the prime area of concern, this is not the case. The points system of classroom control is aimed at group two, the majority of the class. When this middle group begins to ignore the third group, the third group's effect is greatly diminished. What often causes problems in the classroom isn't the initial outburst, but the chain reaction of subsequent outbursts.

The thrust of this system of classroom management, therefore, is to stop the middle group from reinforcing the third group. This does not mean disruptive behavior is ignored. The disrupters are effectively isolated, enabling the teacher to deal specifically with their difficulties.

The points system focuses on six kinds of behavior. These six behaviors were selected because they were found to be important in many of the classrooms utilizing the point system. Teachers for whom these specific areas are not a concern or who have other areas that need to be dealt with can substitute or add those areas.

The six behaviors are. (1) starting work promptly, (2) working dilligently, (3) cleaning up promptly, (4) using people's correct names, (5) helping others to learn, and (6) tending to one's own business.

1. *Starting work promptly* When students come into the classroom at the start of the day or after recess they are often excited about something that happened on the

schoolyard: a fight, a game, or some gossip. Although students should be allowed to talk to each other, even about nonschool matters, if the class is permitted to slowly unwind from each recess, much valuable learning time can be wasted. For this reason, it is often worthwhile to reward students for coming in and starting work immediately. This has the added advantage of hastening each student's return from recess.

2. *Working dilligently* One student may spend an hour working a page of problems and get them all wrong; another may spend five minutes working the same problems and get them all right. Which has put more effort into learning? If *all* students are to feel capable of succeeding, the measure of their efforts should be something other than the number of problems marked right on a given page.

If a student is willing to put in the effort it takes to learn a technique, he or she should not be judged a failure if the teacher has not yet successfully conveyed the technique.

The goal is to encourage the maximum learning for each student each hour. For some this may be a few problems, for others, several pages. By valuing hard work rather than the number of problems done correctly, all students may be rewarded for their efforts.

3. *Cleaning up promptly* When the teacher decides it is time for the class to stop one activity and start another, as little time as possible should be wasted in the transition. To insure quick cleanup the teacher announces the time allowed for putting things away and rewards with points those students who meet the deadline.

4. *Using people's correct names* Some students' home situation has encouraged name-calling. Often this is in fun, but names may also be used to taunt or tease. At the beginning of the year the teacher should ask each student the name he or she would like to be called. That is the only name used to refer to that person—anything else is name-calling. No one in class is named "Boy", or "Girl", or "Hey you!", or "Anna Banana", or even "Teacher." Everyone's correct name is the only name to be used.

5. *Helping others to learn* This is a catchall phrase meant to discourage any deliberate act by one student that keeps another from learning. The importance of being ready to learn and helping other students be ready to learn should be stressed often. If a student takes a pencil from another student, the second student is distracted and cannot learn. If a student hits another or hides another student's books, these acts, too, prevent learning.

6. *Tending to one's own business* Some students seem to delight in tattling on their classmates. While specific instances exist when it may be necessary to inform on a classmate, the occasions are rare and should be confined to very specific situations. Tattling is bad for class morale and, if allowed, leads to the formation of a group of students who seek to win the teacher's approval by turning in their classmates for the smallest infractions.

A student is justified in reporting another to the teacher if the student reported has done something that directly affects the reporting student.

When the points system categories have been explained and are in use in the classroom, some students will say "He did it first!" in defense of their own actions. The

There are two reasons for not dealing with the issue of who started something. First, if the teacher accepts as important who started it, then it is the teacher's responsibility to hear both sides and assign blame. This can be a time-consuming and frustrating process, and perhaps unjust. Second, if the teacher accepts the excuse that someone else started it, the teacher is saying, in effect, under some circumstances it is permissible to call names, tease, or hit.

By eliminating the excuse "He did it, too," the teacher eliminates the support system for those who act out in class. If a student pokes or teases a classmate to start something, he or she quickly finds no one responds. The lack of response from one's classmates is the goal of the point system and its most far-reaching effect.

Once the categories for points have been determined, the time intervals over which the points are to be earned must be decided.

A recording sheet for a school day with one morning recess can be seen in this figure. Teachers who have more breaks in the school day should structure their recording sheets so a new recording period begins at the end of each break.

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The left-hand column is for the students' names. The six category headings are written across the top of the page in each of the time blocks. Underneath each heading is a number between one and three, representing the number of points a student can earn for behaving appropriately. The actual number of points in each column is based on the different behaviors. On the recording sheet in the figure "working diligently" is emphasized and "starting promptly" is not as significant. The relative values of each column may be shifted from time to time depending on which behaviors the teacher is concerned about.

For each separate block of time there is a column for the total number of points earned. For the record sheet in the figure, 12 points may be earned in each of the 3 time slots. This means a maximum of 36 points is possible on any given day. Perfection is not expected, however, and a good standard to strive for is 30 out of 36.

The recording sheet, complete with students' names, is dittoed to provide enough copies for a new record sheet each day.

The points earned each day gain students the right to participate in activity time, a 15 to 20 minute period at the end of each day in which the students may select whatever they wish to do. This may include such things as catching up on their school work, playing checkers with a friend, drawing pictures, or playing tic-tac-toe on the overhead.

During activity time the teacher makes available all the games and projects that might otherwise be held in reserve for rainy days. The materials include everything in the room for use in any subject, old typewriters, puzzles, all kinds of games, looms, yarn, scraps of cloth, bits of lumber, building blocks, tinker toys, chalk and erasers, view masters, tape recorders, an old adding machine, broken clocks to be disassembled... anything! Flea markets, garage sales, and relatives are good supply sources.

It takes at least 30 points to earn activity time.

On the first afternoon of the first day of the school year, the teacher explains to the students about the activity time they will have the following afternoon and shows them the materials gathered for their use. When they are thoroughly excited about the potential of the next afternoon the teacher explains the points system.

It is not expected that all students will fully understand the relationship between the points they may earn and the following day's activity time after one explanation. They will, however, understand that they need 30 points to make it.

The record sheet in the previous figure has its first block of time from 12:50 to 2:00, because the points for each day start in the afternoon of the preceding day. Once the teacher finishes explaining the points system, the students are informed they have already started earning points; before they leave for the day they are told they have all made an excellent start towards earning activity time.

Throughout the next day the students are frequently informed they are earning points in the various categories.

As soon as they are given their first assignment, the teacher says "I am now awarding points to those people who are starting their work promptly." A few minutes later the teacher says "I am now awarding points to those people who are working hard." Shortly before the end of the period, the teacher says "You have three minutes to clean up and return to your seats. At the end of the three minutes I will award points to the people who cleaned up promptly."

Similar statements are made throughout each period with respect to the other categories: "I can see you are really helping each other learn. I am now awarding points to those people who are helping others learn." "You are making a real effort to call everyone by his or her right name. I am now awarding points to those people who are calling other people by their right names."

At the beginning of the next time block the teacher praises the students' efforts and reads them their total points from the preceding time block.

During the first few days of school the teacher makes constant reference to the points awarded and reads the point totals regularly. Later, the students are only occasionally informed when the teacher is actually recording points and subtotals are no longer read at the beginning of each time block. Instead, the grand total is read just before activity time begins. As the weeks progress, it is no longer necessary to read totals at all—the teacher simply announces who has earned activity time.

At the start, not all students will earn activity time every day, but it is important that *all* students earn it at least once or twice during the first week of school. Some students are so accustomed to failing they will not expect ever to earn activity time. If they are left with this belief, they have no reason to try.

As the students gain familiarity with the categories of behavior that earn them points, the teacher may for a few days give reminders before recording the points. These are the teacher's excuse for making sure every student earns activity time sometime during the first week. If a student earns it at least once, that event may be used to help the student earn it again and again. The teacher's goal, stated openly to all students, is for every student to earn activity time every day.

A student who does not earn activity time on any given day has a private talk with the teacher about what went wrong. They develop a plan together so the student can earn it the next day, discussing the areas in which the student had difficulty earning points. The plan is to help the student overcome the difficulties on the next day, with the teacher's assistance if needed.

The lack of points, not the teacher, prevents a student from having activity time. The points system, therefore, allows the teacher to tell particular students they cannot have something they want while siding with them in their efforts to achieve it on the following day.

At the same time the teacher and the student develop a plan for earning activity time the following day, they decide what the student will do in lieu of it this day. If the student wants to sit and do nothing or work quietly on an assign-

ment, this is acceptable. The "punishment" comes in not having earned the right to the freedom of choice activity time represents.

If a student is angry because he or she hasn't earned activity time, two factors dissipate this anger. The first is the meeting with the teacher to discuss what went wrong and how to correct it: the second is the fact that the student is already beginning to earn points for the next day's activity time. Each new recording sheet for activity time points begins in the afternoon of the previous day. A student who has failed to earn activity time on one day is already in the process of earning it for the next. This means a student may leave school knowing he or she has already made an excellent start for the following day.

At the start of the year there may be a few students who do not earn activity time every day, those who are being isolated by the points system itself. It quickly becomes worthwhile to the substantial majority of students to fail to respond to provocation and instead report it to the teacher. Those not earning activity time are therefore either the instigators or the students who have not yet learned to control their reactions.

The points system will not eliminate all behavior problems in a classroom—its purpose is only to isolate the sources of the problems. Once specific students have been isolated, the teacher must work with them until they, too, earn activity time on a daily basis.

When all the students begin to make activity time each day, the teacher unobtrusively stops recording points and begins activity time by announcing everyone has earned it. Occasionally an individual student will have to forego it for an afternoon, but the goal remains everybody, every day.

The points system is like a drug a doctor gives a sick patient. The drug is used to help the patient recover. As the patient improves the amount of the drug needed diminishes. When the patient is well, there is no longer any need for the drug. For the classroom, the points are the drug. There will be a time when they are no longer needed.

Even though the points system is meant to fade from use, activity time continues all year long. It is an important opportunity for students to work together in an informal atmosphere, and it allows them to explore their own interests or examine in greater depth a concept introduced during another period of the day. In addition, activity time allows the teacher the opportunity to observe students at work and at play without being responsible for the learning taking place. Activity time is a beneficial time of day for the students and the teacher.

Recording points for appropriate student behavior involves observing each student for each category and recording the number of points earned by each student's name. It is important to record points for each student in the categories in each time block during the first few days of school, but after the first week, the points may be recorded more efficiently.

Instead of noting which students have earned points in any category, it is simpler to place a small dot in the

appropriate square for a student who has failed to earn the points. This means, for example, in the column, say, for starting on time, if all students but one started on time, the teacher would put a single dot in the space of the non starter rather than record numbers of points earned by everyone else in class. Therefore, a blank row means the student has earned all 36 points.

Although the dots on the record sheet mean the teacher is recording who *didn't* earn points, all comments to the class should be phrased in terms of who *did* earn points. The teacher reads aloud how many points each person has earned, and never says how many points anyone failed to earn. Phrased positively, every student in class even one who fails to earn activity time, is earning points.

The psychology behind taking away points is decidedly different from that of assigning points. If each student starts out with 36 points and the teacher only keeps track of point losses, the process is one of hanging on. Many students lose (or fail to earn) some points during a day. For those who slip below 30, the situation can easily become one of seeing how many points can be lost—a contest among students to see who can be the first to reach zero. For the same reasons, points once earned should never be taken away.

There is a seventh area of behavior not yet mentioned but very important—fighting. This is not included on the recording sheet because a student who fights with a classmate is treated as a very special case. Fighting destroys learning; the people directly involved get too worked up to concentrate on learning. The other children who observe the fight get excited, the teacher becomes upset, and the bad feelings can last for days.

Fighting between classmates anywhere, even at home, destroys learning in the classroom. Because it is so serious, if any student fights with a classmate, both students' names disappear from the points list. This may last as long as two or three days to demonstrate to *all* students the severity with which the teacher treats fighting. To add emphasis to the situation, in some cases the teacher may refuse to provide the students any assistance for the rest of the day. The rationale for this action is: if the students are not at school to learn, they have no need of a teacher. Fighting at school is taken as evidence of not being at school to learn.

In schools where fighting among students is common, this harsh approach has proved effective in eliminating inner-classroom battles. No explanations are accepted for the fight.

Fights between students in different rooms in the same school should not affect a person's status on the points list because the teacher can have no control over the behavior of students in other rooms.

A conflict can arise between the teacher's attitude that fighting at school is bad for learning and the attitude of some parents. In some neighborhoods, fighting is a necessary way of life. Some students are taught by their parents that in certain situations they *must* fight. The teacher can avoid a conflict by being sensitive to this reality and stating only that fighting among classmates is bad for learning, not that fighting is bad in all cases.

Within one classroom the teacher can control the environment so that the need to fight is eliminated among one group of students. Fighting and learning cannot coexist.

A points system permits the teacher to redirect the attention of as many students as possible. Once the teacher

has their attention, the lessons must convince them they can learn. No system of rewards will help students learn to take control of themselves if the school day causes them to regard themselves as failures.

Learning requires a certain frame of mind. The points system is one tool at the teacher's disposal to help put the student in the *right* frame of mind.