Sept. 4, 1973.

Ahead of you stretch 36 weeks, 180 days of teaching. Of triumphs and failures, of highs and lows, of frustrations and opportunities.

How to maximize the triumphs and take advantage of the opportunities?

One of the routes to the golden

land is simply change—creative, intelligent change. But it takes a lot of courage, energy and persistence to alter the habits and customs of decades. The distance from a conventional, lock-step classroom to a more child-centered classroom may therefore seem to many of

us measurable only in light years.

It isn't really that far, and more important, there's no need to cover the whole distance in one desperate leap. There are numerous and comfortable stations along the way, as Kim Marshall discovered in his Boston classroom.

## The Learning Station Way

After an almost totally disastrous first year at the King School in Boston, I discovered learning stations in summer school and decided to try them in my sixth grade class in the fall of 1970. So I took a deep breath, pushed the desks into groups, each one for a different subject, and wrote worksheets for each station-math, Engglish, social studies, spelling, creative writing, general and reading. On the first day, the kids came in and found seven worksheets tucked into "pockets" taped to the side of a desk at each station. That arrangement led them to circulate around the room musical-chairs fashion, stopping at each station to do the worksheets

The system, such as it was, had an immediate and dramatic effect on my teaching. I found myself spending most of my time actually teaching and talking to kids individually or in small groups, and the struggle for control was superseded by a beehive of academic activities, conversations and flirtations, all going on at the same time, all legal. Yet the place didn't fall apart; and in retrospect, I think the most important thing holding it together was that I insisted that each student hand in seven finished worksheets by the end of the day. At first it seemed like a lot of work to some of the kids, but they soon realized that there would never be more than seven sheets, that the material was tailored to their interests and abilities, and was quite often fun to do. So they cheerfully accepted hard work in return for freedom, and I had very little trouble convincing them to get



through their stations.

So things went well for a few weeks. Kids circulated happily from one station to another, and there was a kind of treasure-hunt quality to moving around the room. The worksheets at each station were always fresh and often contained incidents and names from the class or stories of recent events in the news (Arab hijackings and Angela Davis were big that September). Very quickly I began to feel like a good teacher and spent almost no time bellowing to the whole class or dealing with "discipline" problems.

I found it necessary to address the class as a group less and less; I did so only if there was something I wanted to discuss or go over, or if

things got too noisy or hectic. Even though there were seven different pieces of work being done simultaneously in the room, most of it was self-explanatory to most of the kids, and the remaining problems I could solve if I moved fast and succeeded in juggling jealous personalities. In the early weeks, the work time filled almost the entire day and kept the place surprisingly stable, to the point where there could be a small riot out in the corridor and the kids in my room wouldn't even notice it.

What kind of class was this I was running? There was a lot of freedom and movement and a constant hum of noise, which I suppressed only if it got too loud; there was a lot of work

being done and a lot of nonacademic activities and conversations as well; and some of the work at the social studies and general and reading stations was quite unconventional. But while many people in the school regarded this kind of classroom as nothing less than revolutionary and subversive, it was hardly an open classroom.

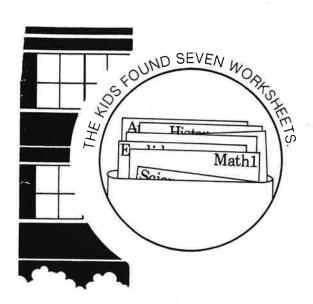
The only real choice the kids were making was the order in which they did the seven worksheets. They still had to finish all the papers or I would keep them after school. The kids couldn't do other work or projects instead of a worksheet because they never asked and I never suggested any. They couldn't leave the room without a pass. They couldn't play cards or other games. There were no books or magazines in the room. And the worksheets in the four primary subjects were quite narrowly focused, the essential objective being to pre-

poisoned apple of conventional education. Yet in September of 1970, nobody could have convinced me that I hadn't made a real breakthrough in classroom techniques and successfully neutralized the pressures on the classroom from uptight parents, administrators, colleagues and kids who had a deeply ingrained notion of the way the class was "spozed to be."

I was wildly excited because I felt I had a system that satisfied the most conservative pressures (stiff work requirements, conventional curriculum, progress charts), yet gave the kids freedom to interact naturally, make some choices, do creative writing and topical reading and get truly individualized attention from me. I felt the system also liberated my own teaching talents by allowing me to write my own curriculum and teach kids in manageable groups or all alone. And last, it seemed to have ended the constant battle for order

tion you had left to visit and you couldn't sit with him? What if you were tired and just didn't feel like moving around? Moreover, why go all the way to the math station when all that was there was a jive worksheet that could be done at the North Pole as well as the math station? So the kids quickly modified my system by making a quick trip around the room to collect the seven papers, then staying put at one station with their friends.

At first I saw this as a grave threat and fought it. But one night I asked myself, why not? What intrinsic value was there in having them move around the room, unless I was going to put a great many props at the different stations—math games and puzzles at the math station, maps and globes and artifacts at the social studies station, dictionaries and word games at the spelling station—and wrote the worksheets so that they led





pare them for very conventional tests on Friday. Their grades on these tests went onto progress charts on the wall—full boxes for A's, half boxes for B's and C's, a diagonal line for a failing grade. (I did allow students to retake the tests and change their standing on the charts.) In each of the 36 weeks of the year, we covered a new skill in math and English, a new topic in social studies and a new list of 20 spelling words, most of which I gleaned from "official" sixth grade curricula.

A pretty uptight regime, no? Not a classroom that John Holt would think was groovy, nor one that would escape the charge of radical educators that it was mere sugar-coating on the

in the classroom by decentralizing activity and setting up the place so that it virtually ran itself. Learning stations also opened the door to one of the most delightful sets of personal relationships I have ever had, thus creating an atmosphere in which both the kids and I grew enormously.

I have used the learning-station system for three years now, but it hasn't stayed the same for more than a month at a time.

The first change came when the kids decided they didn't want to keep moving around the room to all those seven stations. What if you felt like doing creative writing and all the seats at that station were full? What if your friend was just finishing the one sta-

the kids to use these materials?

I didn't feel able to write that kind of worksheet and couldn't afford all that stuff, so the value of moving around the room was simply social, giving kids a chance to meet each other and make friends. Now that friendships had more or less formed for the rest of the year, I allowed the children to sit in groups all day, and began putting the worksheet pockets on the walls. It turned out not to be the end of the system—just an admission that it wasn't a learning-station system per se. (I admit that it's a misnomer, but I have continued to use it for sentimental reasons.)

The next crisis came when a lot of the kids got too fast and began finishing all the worksheets by lunch. Later, some of them were finishing by morning recess. This presented me with the problem of kids rattling around an otherwise empty room all afternoon with an "I've-done-mywork-so-why-should-I-do-anything?" attitude. It also tested my belief in the system I was using. I knew that seven worksheets were more than anhonest day's work for sixth graders and certainly more than many conventional classes in the same school were plodding through in lock step in two days. So why did I have to put up with these noisy, empty afternoons? What was I doing wrong?

The problem was that I wasn't playing the game of stretching work throughout the day and chewing up spare time with little five- or tenminute breaks, meaningless busywork and housekeeping activities. I wasn't controlling the pace at which the kids were doing their work, and I was giving them enough help both in cipline problems and loud, obnoxious behavior in the second half of each day. My own sense of humor and ability to see crazy situations as funny tended to evaporate at around 1 p.m., and that only fed the flames.

My first counterstrategy was to try stalling at the start of the day, instigating discussions and going over papers from the day before and thus keeping from putting out the station worksheets until around 10 o'clock. The kids promptly complained that I was holding them back and spoiling their free time and retaliated by doing the work even faster or finding where I had hidden the worksheets and doing them secretly while I stalled. I tried making the worksheets longer and meatier, and I started typing them, which allowed me to squeeze more time-consuming material onto each page. This was fine but caused the kids to heave even noisier sighs of relief when they finished plowing through the work.

Slowly, as my pay increased and I got my personal spending under control, I bought some old typewriters, games, more and more paperback books and a rug for one corner. And the loose time began to take care

During the 1972-73 school year, I got together in a two-room teamteaching arrangement with a guy who had the energy and imagination to bring in decent art projects and movies on a regular basis. We also instituted a quiet reading time in the last 50 minutes of every day when kids would have to choose a book or magazine and read it in tomblike silence. This was a great success, providing welcome relief from a rising noise level and for frayed nerves in the last part of the afternoon. Moreover, it proved an excellent strategy for getting kids immersed in books. Our original hope was that just by having groovy books around we would get kids to read, but that proved somewhat naive. Nor had



person and in the content of the worksheets to enable them to zip through the day's labors quickly. The system also encouraged the kids to work very hard for two or three hours because there was a finite amount of work to do and a definite reward at the end. The freedom at the end of the work struck most kids as a fine deal, so they threw themselves into the work with real gusto, certain that I wasn't going to trick them by heaping more work on them as soon as they finished.

So I convinced myself that I wasn't doing anything wrong, that my class should simply be allowed to go home two hours before the rest of the school. When this proved impractical, I had to face increasingly ugly dis-

Not only did I lack a plan for the latter part of the day, but both the kids and I lacked the will to make proper use of that time because we thought we had already done a fine day's work. I prayed for a schedule that sent them out to their art, science, music, gym and shop classes in the last two periods of the day knowing full well as I did so that every other teacher in the school was praying for the same thing.

Eventually a number of obvious solutions emerged. I played songs on a tape recorder and had the kids read along with the lyrics. We played charades and other guessing games. We read plays. We occasionally had discussions, despite the fact I am the world's worst leader of discussions.

forcing students to do book reports accomplished anything, because the reports were easily faked by those who didn't want to read. The quiet reading time thus became the solution for two

problems.

For my own part, I have found writing the worksheets one of the most stimulating parts of the whole system. At first it was time-consuming, but after a couple of months I developed a knack and cut the writing time for the seven worksheets down to about an hour and a half. Last year, I shared the writing with my colleague, Paul Casilli. That cut the work load

even more and increased the input of different ideas because we constantly discussed the worksheets and compared notes on how they went over with our kids.

I still haven't reached what I think may be the ideal system - five or six teachers sitting down after school during free periods and tossing around ideas, then delegating the job of writing the sheets to various members of the group and sharing the out-

put among the classes. Paul Casilli and I learned that one problem with a sequential, unit-aweek approach to math, English and social studies is that kids forget what they learned a few weeks ago and usually don't get a chance to review it. So we got rid of the creative-writing station, incorporating it in the general station two days a week, and substituted a review station, which every day relentlessly harped on old skills. This was a real success in helping

kids retain basic skills. The review station also provided a way of teaching kids things they missed the first time around.

Another problem I ran into with my learning-station system back in 1970 was that there was an awful lot of correcting to do; with 25 kids, I had around 175 papers to do four days

a week. At first I plowed through all these to the tune of about one and a half hours a day, the theory being that this kept me in touch with how the worksheets were being received. But as I got better at writing the worksheets and assessing the kids' abilities, I began to wonder whether that one and a half hours was really worth it-

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of the papers, leaving two or three for me. But this tied her down with paper work and limited the time she could spend helping kids. When she had to leave us briefly for a family emergency, we developed what

seems the best method yet of dealing with all that correcting. During the quiet reading time, Paul and I both

sat down and corrected like mad. We found that in 45 minutes we could get through most of the work, leaving only about 15 to 20 minutes of correcting for after school. Then the next morning we tried to go over the previous day's papers with each student.

The summer before we began our team-teaching project, Paul and I

reading time at the end of the day.

The biggest advantage of the tworoom format is the escape from isolalation within one classroom that we had both felt in previous years; it is a real delight to be able to chat with another adult during the day. Other benefits include exposure to a greater number and variety of kids, the happy



spent a lot of time planning how we would use our adjoining rooms to best effect. We came up with what seemed to be a logical scheme. One room would be the "quiet room," with the seven learning-station worksheets and all the books; the other would be the "open room," with science experiments, games, animals, art projects and several typewriters. The kids would split the day between the two, my class having the quiet room for three hours and then trading places with Paul's class in the open room.

We abandoned this plan within a week, when Dolores pointed out that (1) three hours wasn't enough time for both finishing the worksheets and reading, and that (2) the kids who were assigned to the quiet room in the afternoon were in no mood to work at that point in the day—the first three hours of the day were the prime time for academic work. So we put seven pockets for station worksheets in both rooms and had the kids stay in their "home" room until about 12:30 doing the worksheets. Then we opened the door and allowed a free flow between the rooms and a free choice between books, games, typewriters and other attractions. Both rooms ended up having the same noise level at this stage, but we got our quiet in the discovery that we can survive on one engine (when one of us is sick, the other stuffs all the kids into one room), and the greater range of choices provided for the kids, since the two rooms have developed quite different personalities. Thus the kids can always leave one when they're sick of it rather than raising hell or going out into the corridors.

But perhaps the best thing we gained with the two-room arrangement was the recognition of how convenient it was to take field trips around the city during the school day. (Previously I had taken them only on Saturday afternoons.) Almost every Tuesday afternoon I took about nine kids field-tripping in a friend's minibus while Paul and Dolores held down both rooms-with dire threats that the kids who didn't behave wouldn't go on a trip when their turn came. Then on Thursday Paul took a trip while I held the fort. By the end of the year, most members of both classes had taken about ten field trips around the area.

During my first two years with learning stations, my classes were in the middle of the tracking spectrum, 6-G and 6-D (the range is from 6-A to 6-K). The 6-G class had only two or

three kids with severe reading problems, and even they could read at about third grade level and do the worksheets with a certain amount of help from other kids and me during the day. The 6-D class was an academic section—part of the elite; the kids could read quite well. Consequently, the station worksheets I wrote for 6-D were considerably more meaty and difficult than those of the previous year.

Last year, Paul and I requested and were given 6-K and 6-J, the rock bottom of the sixth grade, the dumping ground for its academic and emotional problems. This both changed the way the learning-station system worked and hardened our attitudes toward the tracking system. The two classes had a number of repeaters, some of whom, purely for disciplinary reasons, were in the sixth grade for the third time. The average reading level in November was around third grade, with fully half the two classes reading below that level and seven or eight youngsters being virtual nonreaders. During the year, several more kids with severe emotional and academic problems were thrown into the rooms, complicating an already difficult academic situation.

The only solution we could see was to give the nonreaders almost all our teaching time and encourage brighter kids to help them, too. Our morale was often low; we were giving so much and seemingly getting back very little from the kids. Most of them were absorbed in their own problems and rivalries and seemed to take a lot of what we did, including spectacular inprovements in the physical layout of the rooms, for granted. At the same time, some of the brighter kids lowered their standards and clamored for help they didn't need because we weren't paying enough attention to them.

What really got us through this difficult period was the fact that Paul and I shared the same problems and could talk about them and thus shore up each other's morale. The first encouraging signs came after the Christmas break. Several of the original group of nonreaders broke through enough so that they could do most of the work on their own. Our numbers remained small, around 19 in each class, and the concentrated attention and help we had been delivering day after day began to pay off. Before spring had arrived, and with a lot of help from some of the brighter kids, we were able to get everyone through all the work. And a few of the "problem" kids began to warm up to us and give us the much-needed

feeling that we were good people and

good teachers.

Out of the experience came a deepening anger over the tracking systems that create the 6-K's and 6-J's of the world, an anger made deeper by the really brilliant kids we saw buried in the self-hate of these classes. We explained to the kids during the year why we refused to refer to the class by these labels. Then they would go to other classrooms in the school and be called just that by insensitive teachers. Outraged by this situation, I waxed demagogic one day: "Are we the dumb class?" I asked. "No," came back weakly, uncertainly. "Are we the dumb class?" I asked again. "No," a little stronger. "Are we the dumb class?" I asked once again. "No!" shaking the walls. This attitude and the hard, grade-level work and constant attention and praise we gave them increased their self-respect enormously. We got real rewards out of watching several cowering, uncertain kids blossom during the early months. But clearly our efforts were small and didn't attack the beast itself-the tracking system.

This year, I hope to have a genuinely heterogeneous class. Ideally, it will have only two or three nonreaders, a lot of kids in the middle, and three or four really bright ones. In a class like this, I could return to the more active and mobile role I had my first two years, giving attention more equally around the room; kids might be able to get more help from each other; and the nonreaders would be swept along by the momentum of the class rather than pulling their more literate peers down. My own ideal is to be able to spend at least 15 minutes each day alone with pairs of kids, listening to them read and talking to them, and thus giving everyone in the class a modicum of close personal attention and help on specific

A really heterogeneous class in which most kids are self-sufficient would also allow me to handle more children. I concluded after dealing with last year's small class that open classrooms don't generate enough interaction and bustle with fewer than 20 kids. A perfect number would be 24 or 25, assuming that among them there were not more than three non-readers.

This leads to a question that I have been asked frequently by other teachers: How can you teach kids of widely varying abilities with only one level of worksheets? How can you cater to individual differences when everyone in the class is doing the same seven worksheets? What about enrichment

activities for the brighter kids, remediation for the slow kids?

My answer is that a choice can be made between having a multilevel curriculum that caters to every different ability level and allows the teacher to give similar amounts of time to each student, and a singlelevel curriculum in which the teacher gives widely different amounts and kinds of attention to students according to their individual needs. The crucial element in either approach is being able to recognize exactly where the kid is and taking him from there to where he can go. So far I haven't found any published books or materials that can communicate with my kids at several different levels. So my system has been to write a common set of materials geared to the general tone and interests of the class, then zero in on the individual differences in my conferences with kids. I have found that hard work and a willingness to devote large amounts of time to a few kids will make a single-level curriculum work, even with an ability range from nonreaders to grade-level students.

There are other reasons this is so. First, kids can derive different academic benefits from the same worksheet. An advanced student who does an entire reading worksheet by himself and gives sophisticated, original answers to the open-ended questions gets more out of it than a student who must read it with the teacher and then copy answers from the text. A spelling worksheet that asks kids to use words in sentences is a flexible tool because each kid will produce sentences at his or her own level of skill and originality. The same is true of creative writing and many of the social studies sheets. It is only the cut-and-dried worksheets that may be too easy for the bright students. But even then, many bright kids enjoy doing work at different levels and may gain additional confidence from exercises below their top potential.

Second, the same well-written worksheet serves different levels of competence if the teacher is sensitive and selective in the amounts of help he gives around the room. A reading worksheet written for a sixth grade level becomes manageable and instructive for a kid reading at the third grade level if the teacher reads along with the student, explaining hard words and encouraging him. Conversely, many kids on the lower rungs of the tracking system are very sensitive about doing separate, special work and insist on trying to do what the rest of the class is doing, even if it is too hard for them.

Third, it is the brighter students who finish early and have more time to use the books, games and typewriters in the room, all of which are in themselves an enrichment program. I think these kids get a good feeling from knowing that they have finished the day's work by lunch and can then structure their own program and not be harassed by a teacher anxiously trying to keep them out of trouble with busywork. Sure, they waste some time, but the activities they ultimately get involved in are freely chosen and therefore more meaningful to them.

Fourth, the brighter kids sometimes help explain worksheets to friends who are having trouble, and in teaching others they gain a deeper understanding of the material themselves. Besides, it is good for advanced kids to understand through experience the differences between other kids and themselves, and perhaps in the process see areas in which they are not the bees' knees.

So let's sum it up: The main advantage of the learning-station system is that it enables a class to plow through a good deal of academic work, trains kids in basic skills and reading, and defines a very concentrated, self-disciplined work period and a very free activity and reading period. The system has the additional advantage of presenting a regular, predictable and finite amount of work in a do-able and familiar format, and of giving equal weight to relevance and fun and basic skills.

The main disadvantage is the sometimes lethargic and uninvolved feeling kids have after they have finished the worksheets, which might prevent some of the creative departures found in a less structured class from occurring. There is also an insufficient allowance for individual differences, which puts the burden of individualizing the program on the shoulders of the teacher. I am happy to assume that burden; perhaps others aren't.

But then the stations system is not one you have to take or leave—rather it is my own personal compromise between freedom and structure. There must be lots of changes and improvements that others would want to make for themselves. The thing is to begin.

Kim Marshall is a teacher at the Martin Luther King, Jr., Middle School in Boston and author of Law and Orderin Grade 6–E—A Story of Chaos and Innovation in a Ghetto School (Little, Brown), which goes into more detail on setting up a learning-station classroom and which was reviewed in Learning's December, 1972 issue.