Introduction

How to Use This Book

Perhaps no task is more challenging (or more intimidating) to a school administrator than that of building the master schedule. There have been few if any definitive texts written about this complex process—probably because it is so difficult to pin down. Find two school systems, and invariably you will find two different ways of doing business. What works in a large urban school setting doesn't necessarily do the job for its suburban counterpart. What holds for a middle-size rural school doesn't necessarily hold for a summer school or alternative program.

This book takes an altogether different approach. Rather than recommending a single scheduling strategy or addressing one specific population, it instead presents the "generic" brand. What follows are *ten steps to building the master schedule*, with a separate chapter devoted to each step. It must be underscored that these ten steps will be applicable to *any* situation: urban or suburban...city or rural...large or small...high school, junior high, or middle school...public, private, or parochial...conventional secondary or small learning community. These ten steps work for everyone, from the most traditional to experimental and alternative schools with block scheduling. Nobody is left out.

Nor will it matter whether the school reorganizes once a year (annual promotion) or twice a year (semiannual promotion). For example, with the exception of half-year electives, most courses in my suburban area run for a full year; just across the border in New York City, most high schools reschedule for both September and February. But the differences don't stop there. Some schools reorganize/reschedule three times (trimesters), four times (quadmesters), or even five times a year (quinmesters). No problem: *The basic ten scheduling steps remain the same*. In the latter cases, however, the same ten would have to be followed three, four, or even five times a year. Yes, some adaptations will have to be made for each particular school or district. Nevertheless, the basic ten stay the same.

Similarly, this book is meant to be read by those new to scheduling as well as by experienced veterans. Each of the ten steps is methodically explained and is illustrated with several concrete examples readily understandable to novices. Even practitioners who have mastered schedule building should be able to pick up some new tips, tricks, and techniques along the way. I know that I have learned some novel ways of doing things from my students in the course of thirty years of running workshops.

Navigating This Book: Organization

Each chapter opens with an *introduction* listing the objectives of that step and culminates with a *summary* and list of *tasks* to be completed. Generous use of *headings* is

made for easier reading. *Charts* and *tables* with simulated data illustrate each point. *Exercises* are provided to test your knowledge of the new material. There is also a series of *helpful hints*, practical tips that have made my job easier and me more efficient—and hopefully will prove equally helpful for you. My Mom read "Helpful Household Hints from Heloise." Well, these are practical *scheduling* ideas from *me. Sample forms* are provided that can be readily adapted for your individual needs. Finally, *endnotes* are included to provide additional examples and personal anecdotes.

Caveats

As was noted, this book was designed for secondary school administrators from coast to coast. There are some significant differences among schools systems, but none that affect the ten steps themselves. To make the examples and illustrations universally applicable, I used the most common parameters. If yours are different, no problem; adjust accordingly. For example:

- 1. In discussing the twelve-month scheduling cycle, I use the September-to-June model. In some parts of the country, however, districts operate on an August-to-May calendar. Just realign the dates to meet your needs. Move up the suggested deadlines to make them work for your own situation.
- 2. I use eight- or nine-period days for many examples. If your schools uses something different (four double periods for block scheduling or an extended day with ten or more periods), adjust accordingly.
- 3. Deadlines for the school budget can have a bearing on the staffing issues. Again, a nonissue. Adjust the suggested deadlines to make them fit your needs. The "what" (i.e., the content of the discussions) is more important than the "when."
- 4. From coast to coast (and even within the same regions), school administrators don't speak the same language: the same jobs, the same procedures—but different labels. For example: department heads, chairpersons, lead teachers... academic, college prep, regular classes... general, skills level, third track...leveling, balancing, equalizing classes... years, units, credits... are just a few of the many different labels for the exact same concepts. Use what works for you. Shakespeare asked, "What's in a name?" So do I: nothing.

Theory Versus Practice

As promised from the start, this book is heavily skewed toward *practice*, not *theory*. Heavily, but not totally. A few theoretical points need to be made. Several theories in educational leadership maintain that the administrator must possess three skills in order to be successful: conceptual . . . technical . . . and interpersonal. Nothing proves this to be true more than building the master schedule.

I always ask my students the rhetorical question: "What does a three-legged stool need to stand?" The answer is obvious: the strength of *all three legs*. Two, no matter how strong, are not enough without the third; without the third leg, the stool will topple. This is clearly illustrated with the schedule-building model. The

schedule-builder must *conceptualize* the way the organization (in this case, the district and school) is run: its power bases, hierarchy, roles, and relationships. There must be a global view of "how things run around here" and "what makes this place tick." Second, the scheduler must master the *technical* skills requisite for building the schedule. Before putting pencil to paper, he¹ must be familiar with preregistration figures, enrollment projections, tallies, conflict matrices, simulation figures—just to name a few. In short, he must know the tools of the trade *and* how to use them. Third and finally, there has to be some understanding of people. Here, *interpersonal* skills and human relations come into play. Manipulating the above-mentioned conceptual and technical variables will entail a huge number of interactions with superiors, colleagues, and subordinates. How effectively those connections are made will affect the quality of the finished product.

To repeat: Two without the third just won't work. I have known colleagues who grasp the concepts (the global picture) and master the technical tasks (the detail work); but it is their interpersonal relations (or lack thereof) that bring them down. Similarly, I have come across schedulers who are masters of human relations—but sloppy with their technical work; they, too, encounter difficulties that could have been avoided. Finally, there are administrators who know the technical stuff, deal well with people—but fail to see the larger picture, the conceptual. Yes, that includes the political. One more time: A three-legged stool needs three sturdy legs on which to stand.

We just discussed what the master schedule *is*. Just as important, we also need to see what the schedule-building process *isn't*. There was a time when it was viewed as a job delegated to the low person on the totem pole who had to pay administrative dues. At my scheduling seminars, I always begin by asking the participants to explain why they've come. Many sheepishly confess that they were sent, having being assigned the task/chore/burden of building the schedule next year—almost as if it were a punishment. Whoever gets stuck with the job visualizes being exiled to a remote corner of the school building at the end of the school year, stocked with pencils, paper, and coffee rations, and sternly warned not to resurface until a finished master schedule is in hand. The entire process is performed over a relatively short period of time in complete isolation. Nothing could be farther from the truth.

The schedule-building process is to be viewed as a ten-step, twelve-month interactive process of interfacing with every other office of the school. As we shall see in the sections to follow, the process starts in the fall of one school year . . . and ends in the fall of the next school year—just in time to start all over again. It involves two-way communication with just about every branch of the school's organization: central office personnel, building administrators, department heads, guidance counselors, attendance supervisors, grade reporting teams, and data processing units. Don't worry if the people in your school have different job titles; what's important is that the jobs get done.

Depending on the size of the school system, one person may wear two or more hats. It doesn't matter. What *is* important is that the scheduler exchanges complete and accurate information with the right people at the appropriate times. As we shall see, the domino effect looms over the scheduling process; even a simple mistake at the beginning can have far-reaching (and potentially disastrous) effects down the line.

¹I will avoid the politically correct-but cumbersome-he/she references. Rather, I will alternate between "he" and "she" when using pronouns referring to our cast of characters.

√ Helpful Hint 1

Here comes the first of those practical tips I said I'd be passing along.

More and more schools are forming a scheduling committee to deal with some of the policy issues that will come up. You will come across many of these in the pages that follow.

- In some schools, these issues are decided by the principal and his colleagues.
- In others, they are up for discussion among the members of the principal's cabinet, including the department heads.
- In still others, there is a shared decision-making team or site-based management committee that will be delegated these responsibilities.
- And as just stated, some schools create scheduling committees empowered to make many
 of the choices that will come up. Such committees can include any constituencies deemed
 appropriate: administration, supervision, rank-and-file teachers, teachers' association,
 clerical/data processing, parents, students. While not all of these have to be part of the
 committee, there are advantages to making it inclusive, as we shall see.

Definitions

There are certain variables that *must* be defined before we begin, because they may vary even from school to school within the same district.

Elective

The first term is *elective*. It can have *three* very different meanings. All three definitions reflect the course requirements in a particular school. The first definition of elective is "in lieu of." For example, all twelfth graders are probably required to take some form of Senior English. In some schools, however, they may elect to take Creative Writing or Advanced Placement (AP) English in lieu of the required course. The second definition of elective is the course taken "in addition to" the required course. In another school, Creative Writing may not be taken in lieu of Senior English—but can be taken in addition to it for elective credit. Another example: Students may be required to complete three years (or credits or units) of mathematics; however, they may opt to continue with elective courses in that department, such as Computer Programming or Statistics. The third definition of elective covers courses taken for elective credit only. In many high schools, Business Education per se doesn't appear at all in the graduation requirements, yet students may elect to take such courses as Keyboarding or Accounting for elective credit. Often, those departments live or die based on student demand for their courses. More on that below. Electives will be a key variable in the process. All three definitions will be used in this text; it should be clear as to which definition is meant.

A bit more about electives: Some high schools offer mostly required/core courses and only a smattering of electives. Social Studies provides a good example. With a four-year requirement in many states, the department may offer few, if any, electives. For an elective to survive, there must be enough students willing to double up and take two courses in that department. This is a perfect example of definition 2: the in-addition-to elective. When that's the case, then courses such as Sociology and Ethnic Studies might flourish. If students are not willing to spend their elective choices on those courses, the courses won't survive. Generally, English, Math, and Science also

fall into this category; they consist largely of required courses with the number of in-addition-to electives varying from school to school.

Foreign Language (aka Second Language and World Language) varies the most. Depending on the state (or even the school system within the same state), it may exist by offering required courses—or courses that are purely elective. *Is completing one or more courses/credits/units/years in Language part of the diploma requirements?* The answer will determine how this department operates. Fine Arts, Music, Technology, Business Education, and Home Economics (a department also operating under several aliases) tend to be largely elective in nature and survive based on student demand. Some states do not require any courses whatsoever in these departments.

Now, a word or two about that student demand. At this point we need to introduce the "elective pie." Its size remains constant (unless the school adds an additional period of instruction). Suppose, for example, the school runs an eight-period day with students required to have a lunch period. That means a student takes a maximum of seven classes. Put another way, students have just so much room for adding electives beyond the requirements. The size of each elective department is determined by competition to draw students and increase (or at least maintain) its share of the elective pie. To be blunt, it becomes a case of survival of the fittest. Departments with the most appealing electives will flourish, while those with less attractive offerings will wither. This is not always a popular thing to say, but it is true. I was once called in and asked why the Home Economics Department in a high school was steadily losing students, sections, and staff. It didn't take long to figure out why. The outdated program took on the look of Betty Crocker's kitchen, circa 1950. Nothing had been done to update the program beyond Cooking and Baking. Furthermore, there were few if any boys. The department head was referred to a neighboring school where the Family and Consumer Science Department (new name) featured modern courses in Single Survival, International Foods, and Adolescent Psychology.

One more example: Another district in which students had five foreign languages from which to pick asked why one of them was dying. All they had to do was take a look at the program itself to see why it didn't appeal to students, at least as it compared to the other four competing programs. Sadly, the teacher had lost interest and was running the program into the ground; he could not compete with the enthusiasm his colleagues displayed toward their subject matter. Some object to my using the term *competing*. Like it or not, it's a fact of life. Put yourself in the shoes of a student reaching the senior year; with one (or at the most two) spaces in the schedule open for electives, how is she going to choose? It is survival of the fittest.

School Organization

We also have to define the way secondary schools are organized. Readers of this book run the gamut from teachers in charge of small alternative schools to principals of large high schools with several thousand students. Remember what I said at the top about the generic brand. Secondary schools are subdivided into departments. Here is a common model: English, Social Studies, Math, Science, Foreign Language, Fine Arts, Music, Technology, Home Economics (Family Consumer Science), Health and Physical Education, Special Education, Vocational Education. There is no one right way to organize a school; the examples used in the pages to follow are for illustrative purposes only; they don't profess what is correct. Mix and match 'em whichever way works best for your district. The good news is that the ten scheduling steps fit them all.

The point being made is that schools organize their departments in a variety of ways:

- There may be a separate Reading Department. Or, Reading and English may be combined in a single department called Language Arts.
- Computer Science may be a separate department—or part of the Math or Business Education Departments.
- As already noted, Foreign Language may be called Second Language, Languages Other Than English, or World Languages.
- English as a Second Language and/or Bilingual Education may be standalone departments or subsumed under the Foreign Language Department.
- Technology may be merged with Home Economics (or one of its aliases).
- Vocational, Occupational, and Career Education may be separate departments or combined with Technology.
- Even Fine Arts and Industrial Arts may be combined into a single department.
- Ditto for Fine Arts and Music.
- Health and Physical Education may be separate or combined departments and may also include Drivers Education.
- Business Education may be an umbrella for Accounting, Secretarial Studies, and Career Education. Or, each of these may be a separate department.

Time

The third and final set of definitions has to do with the variable *time*. The fact that schools may reorganize anywhere from one to five times a year has already been mentioned. Most schools employ annual or semiannual promotion; tri-, quad-, and quinmesters are far less common. This variable does not matter to us. The only thing we need to know is that the *same ten steps* will be followed one, two, three, four, or five times during the school year. Just keep in mind the effect these differences can have on course titles and the resulting confusion that can ensue if not thought out carefully. Spanish "2" in a school on annual promotion means second-year Spanish; but that same course title in a school on semiannual promotion means the second semester of first-year Spanish.

√ Helpful Hint 2

One more bit of advice before we get started: Invest in a spiral-bound or a "marble" composition notebook. Use it as a diary. Chronicle, on a daily basis, every scheduling function you perform. At the beginning of the year, there may be days at a time when there are no entries; however, when the scheduling process reaches its peak during the second semester, there will be several entries for some days. In addition, annotate the log. Indicate what went right . . . what went wrong . . . and what you could have done better. Learn from your mistakes so you don't make them again. Indicate what you would have done differently if you had a second chance—because you will have another chance—the following year.

The first time around, it may be a bit difficult to record every scheduling activity. Do it; don't skip a day. Maintaining this log is well worth the effort. If you keep this notebook up to date, after the first year and one complete scheduling cycle, it will make the second time around so much easier. By the third year, you will be a pro. Not only will this timeline remind you what comes next, but your comments will help you to do things more effectively and more efficiently.

So much for the preliminaries. *The ten steps about to be presented work in all settings.* We're done with the theory, we've covered all the definitions, we speak a common language. Fasten your seat belt! We're ready to embark on the twelve-month, tenstep scheduling odyssey.