Tackling Block Scheduling

How to make the most of longer classes

MOVING FROM A TRADITIONAL schedule to a block schedule is not simple. During the 1995–1996 school year, Maplewood Comprehensive High School in Nashville, Tennessee, moved from the traditional six-period school day to the four-by-four block schedule (Figure 1), which offers eight full-credit courses per academic year. Students complete four courses, arranged in 90-minute blocks, during each semester. We have found that the benefits greatly outweigh the effort required to make the change.

Before implementing the change, we devoted much research, discussion, and study to determining if a block schedule would be advantageous to Maplewood students. Several Maplewood teachers visited schools using block schedules to provide our staff with firsthand accounts of how these schools operated. In the 1994–1995 school year, our principal implemented a rotating 90-minute period to allow teachers and students to experience a block period one day per week in each class. After investigating each aspect of the block schedule, students, parents, teachers, and administrators reached the consensus that Maplewood would change to the four-by-four block schedule. We chose the four-by-four block schedule over other types of block schedules because it offers simplicity, additional opportunities for students to gain credits for graduation, longer blocks of time for in-depth discussion and project-oriented learning, and fewer classes to contend with (four instead of six) each semester.

MAKING IT WORK

Training and preparation are the keys to a successful transition. At the end of the 1995 school year, our administrators brought in a trainer for a two-day workshop on block scheduling. In addition, teachers in the same department were given release time to develop common syllabi to provide continuity in instruction.

Although the block schedule provides longer class periods for instruction, actual clock hours are lost by students completing courses in a single term. This facet of the four-by-four block schedule required us to reevaluate our curricula and prioritize our course objectives. Our guidance department prepared for the change by developing a new master schedule and tried to ensure that students were given schedules pairing two “high homework” courses with two “low homework” courses each term. Unique aspects of the four-by-four block schedule include the following:

- Students have only four classes per day rather than six.
- Students can earn eight credits per academic year rather than six.
- There is increased instructional time each day.
- Students take two core courses per term coupled with elective courses, thus allowing students more in-depth study time.
- The student-to-teacher ratio is reduced considerably.
- Teachers can implement more hands-on activities.
ARTISTIC ELEMENTS

Objective: Construct a creative visual aid such as a mobile or three-dimensional poster that describes an element.

Guidelines: Be prepared to give a five-minute presentation on your project. To construct the visual aid, you may use coat hangers, posterboard, construction paper, yarn, newspaper, magazines, cardboard, craft materials, or nontoxic materials in which the element is found. The visual aid should be colorful and interesting, and the information should be easy to understand. Include the following information about the element in your visual presentation:

1. Name and symbol.
2. Electron configuration notation.
3. Boiling point.
4. Melting point.
5. Specific gravity.
6. How it was discovered and who is given credit for its discovery.
7. Where it is produced or mined.
8. Cost.
10. Atomic mass.
11. Atomic number.
12. Isotopes.
13. Chemical behavior.
14. Compounds in which it is found.

On a separate sheet of paper, list at least three references in the following format: Author(s). (Year published). Name of book/periodical/computer program, volume/edition, inclusive pages.

Evaluation: 30% following guidelines, 30% creativity, 30% presentation, 10% properly reporting references.

ELEMENTS OF FICTION

Objective: Write a short story, talk show, or play that describes an element. The key to this assignment is creativity.

Guidelines: Explain your adventurous life as a chemical element by describing the following:

1. How you were discovered.
2. Your name and symbol.
3. Your physical properties.
4. How you are produced.
5. How much you are worth.
6. How you are used.
7. Other elements you like to hang out with (compounds/group behavior).
8. Where you are located on the periodic table.
9. Your history.
10. Unusual and interesting facts about yourself.

Be sure to use the following format:

Cover Page—Include your name, class period, and the title of your story.

Story—The story must be two to five pages in length. Typing, word processing, and illustrations are optional.

Reference Page—List at least three references.

Editing: After you have written a draft of your story, please check it for grammar and spelling errors. Revise your draft and then submit it to your lab partner for review. Ask your lab partner to point out any necessary revisions and make suggestions for improvement. Then, write your final draft.

Evaluation: 30% content, 30% creativity, 30% grammar/spelling, and 10% references.
We continually monitor and evaluate the four-by-four block schedule. So far we have observed many benefits. Daily attendance has increased because students have realized the importance of frequent attendance in semester-long courses. Our failure rate has decreased because students have more opportunities to engage in peer tutoring. Administrators report that discipline problems have diminished as a result of fewer class changes per school day. Textbook inventory procedures are greatly improved because students now are only responsible for handling four textbooks per semester and the texts are kept for only a semester as opposed to an entire school year. The quality and continuity of instruction have also improved through the longer period. Teachers are using more group learning, student presentation, and hands-on learning techniques. Students have more time available for acceleration and remediation because there are more opportunities to earn credit. Finally, teachers have more planning time each day (90 minutes as opposed to 55 minutes).

In the block schedule, science teachers at Maplewood have observed a need to shift from the traditional lecture-and-discussion format of instruction to a more hands-on, project-oriented curriculum. Asking students to sit and listen to the equivalent of two 55-minute lectures per day is unreasonable and negates the benefits that the block schedule is designed to accomplish. We have found that project-oriented instruction provides for a more meaningful interpretation of our course objectives.

In a survey conducted in the 1995–1996 school year, three-quarters of our students reported liking the four-by-four block schedule better than the traditional schedule and favored continuing the program in the 1996–1997 school year. One student responded, “I believe that the teachers are more motivated on this schedule.” In addition, students generally felt that the new schedule would better prepare them for post-secondary education and entering the work force. One student gave a particularly instructive response: “If you have to sit still for the whole 90 minutes, the schedule is no fun.”

The benefits of longer classes are obvious, especially when doing laboratory activities: We can brief students for a lab activity, perform the experiment, and debrief students all during one class. On the traditional schedule, we often found that students forgot the meaning of the experiment by the next class and were unable to analyze data and draw conclusions.

**INTERDISCIPLINARY ACTIVITIES FOR A BLOCK SCHEDULE**

The projects we have implemented in our curriculum serve to draw out students’ creative abilities and to enhance their writing and organizational skills. In the Artistic Elements activity (top of page 26), students choose an element, locate specific information about the element, and report it to the class in a visual presentation. This project enables students to use their artistic abilities in science class and develops students’ research and presentation skills. Students move to different work stations to locate information and materials. In addition, they are engaged in a hands-on activity in which they must find information rather than receive it from the teacher. The teacher must function as an encourager and motivator during this type of activity. Because many students are not accustomed to using initiative, it is important for teachers to keep students focused by setting small deadlines to be met at various points throughout the activity.

In Elements of Fiction (bottom of page 26), students write a short story, talk show, or play that describes an element’s properties. Students learn to work together by reviewing and editing each other’s work. When students have finished the project, they read their stories to the class, often using illustrations to enhance their presentations. This activity is a great tool for implementing writing across the curriculum. Furthermore, students must use organizational skills to develop a logical flow for the information they are required to report.

**BLOCK SOLID**

The four-by-four block schedule presents both positive and negative sides. Although we cannot cover as much material in the block schedule because actual clock hours are lost, we feel that the quality of instruction is better than is possible with a traditional schedule. Also, we realize that the success of the block schedule depends on continuous revision and improvement. One improvement that is planned for the 1996–1997 school year is the development of curriculum strategies that integrate vocational and academic curricula. With this, students will begin to value academic skills as a means for developing work skills.

While not a panacea for the problems encountered in education today, block schedules are certainly a step in the right direction. The vast majority of faculty, teachers, and students at Maplewood report that they would not go back to the traditional schedule. Our main goal is to continue to provide every means necessary to ensure the success of our students. We consider block scheduling to be an excellent option in striving to reach that goal.

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