



An Examination of the Impact of Block Scheduling

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Block scheduling is a strategy for rearranging the school day to establish longer periods of uninterrupted classroom time for student learning and instruction. Its proponents suggest that such an arrangement will intensify the students' learning experience and ultimately promote improvements in academic achievement. This *Spotlight* presents the experiences and preliminary outcomes of the 4 x 4 block scheduling model used in New Jersey's Upper Freehold Regional School District at Allentown High School.

The current interest in block scheduling arose in part out of two landmark publications, *Prisoners of Time*, produced by the National Education Commission on Time and Learning (1994), and *Breaking Ranks: Changing an American Institution*, a report from the National Association of Secondary School Principals (1996). These reports suggest that the quality and quantity of classroom time are of particular concern, given the fact that U.S. students spend significantly less time in core academic subjects than their counterparts in Germany and Japan, countries that outperform the U.S. in international assessments.

Some educators argue that altering the arrangement of instructional units and changing time parameters for teachers could increase the likelihood of reforming teaching practices and

programs. Larger blocks of time might lead to more project- and problem-based learning activities, and to increased opportunities for student collaboration and individualized learning. An increase in integrated and interdisciplinary instruction might be another indirect result.

A review of the literature presents opposing views. On the one hand, O'Neil (1995) suggests that block scheduling can improve a school's overall climate and can be a catalyst for innovation in the classroom. Likewise, Buckman, King, and Ryan (1995) indicate that schools can expect to observe significant changes in the instructional approaches employed by teachers with the adoption of block scheduling. Mathews (1997), on the other hand, suggests that not all schools will benefit from block scheduling arrangements, and calls for more rigorous studies to substantiate claims of effectiveness. These ideas were put to the test in the Upper Freehold Regional School District in Upper Freehold, NJ when a schedule of four 85-minute blocks of time was initiated at Allentown High School at the start of the 1997-98 academic year.

METHODOLOGY AND FINDINGS

In order to ensure a thorough assessment of the new model, district educators looked closely at outcomes

from other schools where block scheduling had been adopted, and formulated 37 expected outcomes into three general categories: (a) changes in instructional approaches used by teachers; (b) changes in the curriculum experienced by students; and (c) changes in the climate of the school.

These outcomes formed the basis of an evaluation of the program's progress after one year of implementation. The staff at Upper Freehold examined the impact of implementing block scheduling using two sets of assessment measures. The first involved surveys—one for students and one for teachers—focusing on the perceptions of each group in the context of the new scheduling arrangement. The faculty and student surveys were administered in May 1998, at the end of the academic year, after two full semesters under block scheduling. The second involved examination of school records to determine specific outcomes for both students and teachers under the new plan.

Teacher Survey

The Teacher Survey was comprised of 39 items that teachers were asked to rank on a 3-point scale, where 3 = "things are better" and 1 = "things are worse," following implementation of block scheduling at Upper Freehold. A total of 61 out of 68 faculty members responded. More than 75% of the

teachers reported that “things were better” than prior to block scheduling. Major findings from the Teacher Survey include changes in teacher perceptions related to the following:

- Classes involve more learning activities.
- Teachers are more willing to try new strategies.
- Students spend more time working with each other.
- Opportunities for independent projects are more plentiful.

Approximately 83% of the faculty recommended continuing block scheduling, and about 84% reported that the staff received adequate training and support to successfully implement the new plan.

Student Survey

The Student Survey followed the same format as the Teacher Survey and was comprised of 33 items. Five hundred forty-four out of 675 students in grades 10-12 responded.

Many positive findings were noted. More than 40% of the student respondents reported that “things were better than last year” in the following ways:

- Students spend more time working with each other.
- Classes involve more learning activities.
- Teachers use more and different methods of instruction.
- Teachers seem to know students better.

- Students are more involved in learning activities.
- Opportunities for independent projects are more plentiful.
- Students are given more time to understand concepts.

Approximately 75% of the students recommended that block scheduling be continued.

School Records

The second assessment strategy involved an analysis of data collected by the Upper Freehold Regional School District. These data provide achievement indicators and benchmarks against which progress can be gauged from year to year. The specific data analyzed included honor roll status and final course grades.

The percentage of students earning honor roll status during each marking period increased substantially from the 1996-97 to the 1997-98 academic year. The figure below shows the percentage of honor roll students for each of the four marking periods. Overall, the percentage of students on the honor roll increased from 25% to 40% during the period in which block scheduling was implemented.

An increase in final grades in all core academic subjects for all grade levels was also notable during the 1997-98 academic year. Overall, 4% more students attained a final grade of “C” or better in the five core curriculum areas. The greatest improvements occurred in mathematics and science,

with improvements of 9% and 6% respectively. In addition, a 3% decrease in the number of students experiencing multiple failures (5% vs. 8%) was noted during this period. Thus, out of approximately 950 students, 29 fewer students experienced multiple failures in spite of the fact that most students took eight courses as opposed to seven in the previous year.

CONCLUSION

From the perspective of the teachers and students at Allentown High School, the most significant changes that accompanied implementation of block scheduling in the 1997-98 school year were related to instructional practices, assessment practices, and student involvement in the instructional process. Evaluation results for this implementation period suggest that numerous and substantial positive changes have occurred in the high school as a result of implementing block scheduling.

School data related to specific outcomes suggest that the academic environment of the school has improved as evidenced by enhanced grades, particularly in the core academic subjects, and decreased failure rates. In conclusion, the results indicate that meaningful changes have occurred in the instructional approaches used by teachers and in the classroom experiences of students, indicating that block scheduling can be a catalyst for positive change.

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Percentage of Students on Honor Roll

