Academic Research Proposal

Old kids on the block: A qualitative study of the effects of block scheduling on schools with five or more years' experience

I. Statement of Problem

Despite the fact that research on the block schedule has existed for over a decade, there is much that researchers do not know about its effects on teachers and students. This is the case, in part, because most block study research has been conducted within two years from the time the schools transitioned from a traditional schedule to the block schedule. There is a significant need for studies that examine schools that have matured under the block schedule – those that have been using it for more than just a couple of years. Additionally, a great number of studies have examined the block schedule's effect on student outcomes such as standardized test scores. While some studies have mentioned possible side benefits such as reduced teacher workload, fewer classes to prepare for, etc., there are few, if any, studies that have attempted to examine these potential benefits.

II. Background

Block scheduling has become a popular mode of instructional reform in the United States, and has managed to generate a fair amount of controversy along the way. Under a traditional schedule, students attend six or seven 50- or 55-minute classes each day. Most classes meet all year, some meet for a semester. According to Rettig & Canady (2003), the term "block schedule" can represent a wide variety of non-traditional schedule types. The most common of these is the 4x4 schedule, in which students attend four 90-

minutes classes per day for one semester. A semester-long class, accordingly, would meet for a quarter. Another popular version of the block schedule is the A/B Schedule, in which students attend four 90-minute periods one day (A), and then four different 90-minute classes the next day (B). In addition, there exists a wide range of variations on the block-schedule concept.

The block has been around since the 1960s, when J. Loyd Trump developed a system of classes ranging in length from 20 to 100 minutes (Gruber & Onwuegbuzie, 2001). In 1983, Joseph Carroll suggested modifying the length of class times as a way of improving instruction (as cited in Benton-Kupper, 1999). Two strong proponents of the block schedule, Rettig & Canady, have been studying (and promoting) the block schedule for decades.

The Good, The Bad, and the Ambivalent

The block schedule addresses a number of issues commonly associated with the traditional schedule. A major benefit is that longer periods offer teachers more time to implement diverse teaching strategies (Jenkins, et. al., 2002). Critics, though, point out that whereas a 50-minute class under the traditional 180-day schedule meets for 150 hours, a 90-minute class under a 90-day block will only meet for 135 hours (Veal & Flinders, 2001).

Other potential benefits of the block include the following: Teacher/student ratios are reduced. A teacher with an average class size of 25 will only have 75 students per semester, as opposed to 150, and 25% more time to plan (Khazzaka, 1998). Likewise, students have fewer classes to study for each semester, but end up with an extra credit by the end of each year. Fewer classes mean less time lost to transitions and fewer

opportunities for student misbehavior between classes (Hackman, 1995; Khazzaka, 1998). Proponents argue that these improved conditions should result in improved grades and scores on standardized tests.

Perhaps it is because of these potential benefits that the block concept truly came into its own in the 1990s. For example, in North Carolina, 1.6% of high schools used some form of the block in 1992. By 2000, that number had jumped to 71.8% (Zhang, 2001). The block is more than just a reform; it is something of a phenomenon. According to Cobb (as cited in Kenney, 2003), such widespread reform is extremely rare without either a federal mandate or the support of solid scientific evidence.

It is this lack of solid evidence on the effectiveness of block scheduling that worries some. In many studies, especially those measuring academic achievement, the results have been decidedly mixed. For example, Zhang (1999) found that, in North Carolina, the block has had a positive effect on End of Course (EOC) scores in Algebra, but no significant change for EOC scores in English; Biology; Economic, Legal, and Political Systems (ELP); and History. Deuel (1999) found in one urban district that schools on the block schedule saw improvements in discipline and in students' letter grades. However, he found no evidence of improvement on standardized tests.

Worse than a neutral effect, Gruber and Onwuegbuzie (2001) observed a decline in test scores at one high school in Georgia in language arts, math, social studies, and science. Lawrence and McPherson (2000) found that students in two traditionally-scheduled high schools in North Carolina scored significantly higher on tests for Algebra I, Biology, English I, and U. S. History tests than their block-scheduled peers. While the

Knight & De Leon (1999) study was generally positive, they discovered that AP students on the block schedule did significantly worse than their traditional peers.

A few studies are ambivalent toward the block. Slate and Jones (2000) found that after a one-week trial, students perceived many advantages to block scheduling, but preferred the traditional schedule. Another study indicates that block scheduling makes little difference in academic achievement – primarily because teachers do not alter teaching strategies to better fit the block schedule (Jenkins, et al., 2002).

At the end of the day, the only thing researchers seem to be able to agree on is that there is no consensus on the block's effectiveness. There are likely a number of reasons for this lack of consistency in the data. First, the block is a new reform. It has only been actively implemented and studied for about ten years. In study after study, researchers make statements similar to Khazzaka's (1998, paragraph 42), "Many replications of this study are needed before its results can be generalized to a larger population."

In addition, most of the studies have been conducted within the first two years of implementation; see Benton-Kupper (1999), Deuel (1999), Khazzaka (1998), Wilson & Stokes (1999), Veal & Flinders (2001). One study was conducted during the transition from a traditional schedule to the block (Knight & De Leon, 1999), and one (Slate & Jones, 2000) studied only a one-week trial period. Yet Perreault & Isaacson (1996) indicate that it may take up to five years for people to settle into a new system and Hackman (1995) warns of an "implementation dip," wherein things tend to get worse before they improve. It is quite possible, therefore, that many of the benefits and problems in the literature may be a function of the immaturity of the transition rather than

characteristic of the block schedule itself. Researchers may not be adequately considering biases that may be an integral part of the implementation process.

Most studies have a narrowly defined population, such as a given district or school, and may not apply to other schools, districts, counties, states, or the nation as a whole. Only a few, such as the Zhang (2001) study, examine a population across an entire state. This tends to limit the extent to which the findings of any particular study may be generalized to other populations.

When Good Teaching is just Good Teaching

Many researchers have concluded that block scheduling, by itself, is insufficient to improve test scores or academics. Veal and Flinders (2001) believe that restructuring is significant only to the degree to which it influences daily life in the classroom. Zhang (2001) agrees that the interaction between students and teachers is of primary importance in learning. Similarly, Gruber & Onwuegbuzie (2001) found in their research that the presence of a professional development program is a critical factor in the successful implementation of a block schedule.

It appears, then, that the block is only beneficial insofar as teachers are able and willing to improve the way they teach. Perreault and Isaacson (1996) found a number of schools in which the block failed due to lack of teacher support, they found that the academic culture within a school or even a department can have a significant effect on how teachers will respond to the change

Jenkins et. al. (2002) examined how teachers' methods under the block differed from their traditionally scheduled peers in North Carolina. They found very little differences between teaching styles in both systems and concluded that educational

leaders should examine ways in which they can prepare teachers to more effectively teach, regardless of which scheduling model is used.

A Modest Proposal

There is a significant lack of research of any kind on schools that have used block scheduling for more than two years. Yet, even if the block schedule does nothing to improve scores on exams and standardized tests, or fails to raise GPAs or to increase the number of students on the honor roll, there may be some definite, real benefits for teachers and students. Hurley's research pointed to fewer preparations, more time for duties, and fewer students per semester as benefits for teachers (as cited in Gruber & Onwuegbuzie, 2001). Other studies found quieter learning climates, more relaxed students and teachers, improved relations between students and teachers, and higher morale (as cited in Wilson & Stokes, 1999). Deuel (1999) notes in her study that most guidance counselors felt that students who had to concentrate on fewer classes did better. It appears, therefore, that even with little or no improvement in test scores, the block may create more favorable conditions for teaching and for learning such as less stress, a reduced workload, or diminished anxiety under which students and teachers can perform at least as well as their traditional peers.

III. Purpose/Problem Statement

The purposes of this study are to 1) add to the body of literature examining more mature block schools - at least five years old - in North Carolina, and 2) to answer the question, "After five or more years of experience with the block schedule, what are teachers' and/or students' experiences and perceptions?"

IV. Methodology

Participants

The subjects in this study will consist of high-school teachers, students, and administrators chosen from two schools in North Carolina. Participants will be randomly selected from schools that have been under the block schedule for a minimum of five years. However, it is important that those teachers chosen have had experience teaching in a traditional setting, and have had at least three years experience in the current block system. Consequently, subjects will have a minimum of five years' total experience, a minimum of two years' experience with traditional schedules, and a minimum of three years' experience with a block schedule.

Setting

The two schools selected for this study will be as similar as possible in terms of length of time on the block, and in terms of demographic characteristics (socio-economic status, racial diversity, etc.). The researcher will seek to identify schools that differ greatly in terms of teacher job satisfaction and/or student achievement on EOC exams. The five-year block requirement may limit which schools may participate in the study. In addition, time constraints on the researcher will likely necessitate that these schools be in relatively close proximity to one another.

Instruments

Potential teachers will be mailed a very brief survey. The survey will explain the purpose of the study, and assess the teachers' suitability for the study in terms of years' experience, subjects taught, and willingness to participate.

Data will be collected primarily through observation and interview. A minimum of two interviews will be planned for each teacher: An initial and a follow-up interview. It is very likely that the study will require several additional interviews, formal and informal. In order to better understand the dynamics of a teacher's experience, each teacher will be observed regularly and often for an entire school year.

Other records may be studied, as well. Factors such as vacation or sick time used, absenteeism, etc., may provide further insight.

Procedures

Before the start of the school year, schools will be identified that have been on the block for five years or longer. Administrators will be contacted for permission to conduct a qualitative research project at their school. A short survey will be mailed to all teachers at qualifying schools, and a bank of potential subjects will be chosen. If necessary, a follow-up survey may be used to solicit more responses. Once school administrators have granted permission, teachers will be contacted for participation in the study. A schedule for interviews and observations will be established.

Once school starts, the researcher will proceed with observations, interviews, and data analysis. Teachers may be interviewed individually, as a group, or both. If students are chosen to be interviewed, parental permission will be obtained. Students may be interviewed individually, as a group, or both. This process will continue throughout the school year. From time to time, member checks will be conducted to solicit feedback from the teachers participating in the study, and from their administrators. Material gleaned from official records such as teacher and student files will be used for triangulation.

Data Collection and Analysis Methods

This study will employ some naturalistic observation (in classrooms), some document analysis, and focus interviews, to construct a comprehensive picture of teaching under the block schedule.

An audit trail will consist of audiotaped and/or videotaped interviews; detailed field notes; tapes of classroom observations, if possible.

Data analysis will consist of examining notes and recordings of interviews and observations, and searching for patterns and themes. Since the data is qualitative, the study will, of necessity, use an emergent design for data collection and analysis. Methods of data analysis will depend heavily on what data is collected.

V. Ethical Considerations

Permission must be obtained from administrators and possibly parents. Files and documents examined for triangulation may contain sensitive information, and individual confidentiality should be maintained. In addition, it is possible that teachers and students may desire confidentiality in the study. It may be necessary to change names of schools and individuals in order to maintain confidentiality.

VI. Potential Significance of the Study

Implications

This study seeks to examine effects of block scheduling on teachers and students aside from the final outcome of standardized test scores. It seeks to determine if the block schedule is beneficial in other ways, even if test scores remain unchanged. The study also seeks to discover if other factors, such as teacher in-service training, contribute to the success of block scheduling. In areas where data indicates problems with the block

schedule, this study may expose those problems and offer possible avenues for studying their causes and solutions.

Applications

Much research needs to be done on mature block scheduling programs, and findings from this study should serve as a jumping-off point for further studies. Additionally, this study may offer ideas, suggestions, or items for consideration to teachers and administrators who are struggling with the block schedule, or who are considering adopting a block schedule program.

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