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ABSTRACT

The changes that occurred when a high school in Chattanooga (Tennessee) implemented a seven-period day in place of the traditional six periods were studied. The total time for instruction remained the same, but less time was available for specific subjects because each class was shortened by 10 minutes (from 55 to 45 minutes). Study participants were 853 (83%) of the 1,026 students and 54 (85%) of the 62 teachers. Quantitative and qualitative techniques were used to assess the impact of the changed school day. Achievement test scores and grade point averages were determined before and after the change. Onsite visits were conducted by researchers at the beginning and near the end of the school years 1987-88 through 1989-90 to administer Concerns Based Adoption Model techniques for monitoring/analyzing teacher concerns. In addition, both students and teachers completed the School Attitude Survey (SAS). Achievement data yielded inconclusive results in that standardized test scores and grade point averages were not consistent across assessment measures. The SAS revealed that students' attitudes about the change were generally more favorable than were those of teachers. In the second year of the investigation, teacher attitudes improved slightly. One positive finding was a decrease in dropout rate after the change. Implications of the findings for educational change are discussed. (SLD)

Assessing the Impact of an Expanded Curriculum on Secondary Students and Teachers: Year Two

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Assessing the Impact of an Expanded Curriculum on Secondary Students and Teachers: Year Two

Time for learning has been studied under many guises including classroom efficiency, student attention, length of the school day/year, and time on task. Time devoted to school learning appears to be a modest predictor of achievement (Walberg, 1988). Unfortunately, when time in school is increased, the promise of higher achievement does not necessarily follow (Karweit, 1983; Karweit, 1984; Levin & Tsang, 1984). Other educational perspectives have focused on the opportunities for learning, quality of the instructional opportunity, as well as better time management to increase learning (Bloom, 1974; Fredrich & Walberg, 1980). Time, however, is only one of many complex factors which influence learning. Among these factors are the emotional and physical state of the learner and the social atmosphere of the classroom (Blai, 1988).

The purpose of this research was to document and analyze the changes that occurred when a high school (grades 9 through 12) implemented a seven period schedule. Instead of lengthening the school day, each 55 minute class was shortened to 45 minutes. The total time for instruction was not altered although less time was available for the specific subjects. The change in schedule was viewed as a means for mediating two curriculum challenges: (1) Providing enrichment electives and experiences and meeting state mandated increases in high school graduation credits for the college preparatory students and (2) providing more options for at-risk students in an attempt to reduce the dropout rate.

The six period format is historically well established, thus limited research is available to determine the effects of the seven period day on student achievement (Bishop, Warner, & Weber, 1988). Although Goldberg (1983) studied the 7 period day, the emphasis was on scheduling, course and transportation issues An extensive evaluation of a seven

period format in the Arlington, Virginia public schools provides more information on the impact of the format on both students and teachers. In this study, teachers were divided in their opinions as to whether the program had positive or negative impacts on students. Overall, students felt that the program had a positive effect, although a large number (38%) remained neutral. (Wills, 1989)

It is expected that as graduation requirements are increased, students are going to have limited opportunities to take electives and advanced courses without extending the school day or reconfiguring the periods. This study provides information about planning for implementation and contributes to the void in the literature and research base for school reform at the national level. Thus, the evaluation had several objectives, including assessing the impact of the program on student achievement, comparing student and teacher attitudes toward the program, and monitoring teacher concerns about the program during the school year.

Methods

Subjects

The target school is located in a suburban environment in Chattanooga, Tennessee and is one of four Hamilton County high Schools. It has an enrollment of approximately 93% white and 7% black students. Participating in this study were 853 of the 1026 (83%) students and 54 of the 62 (85%) teachers.

Design and Procedures

The evaluation design was adapted to the ongoing operations of the school. Both quantitative and qualitative techniques were used to assess the impact of the seven period day on students and teachers. A statistical description summarizes achievement in relation to standardized test scores and grade point averages during the 1987-'88, 1988-'89, and 1989-'90 school years. Onsite visitations by the

researchers at the beginning and near the end of the school years were used to administer CBAM (Concerns Based Adoption Model) techniques to monitor and analyze teachers' concerns (Hall, Loucks, Rutherford & Newlove, 1975). At the end of each of the school years, the School Attitude Survey (SAS) was administered to both students and teachers. This 25-item Likert scale was designed to assess attitudes toward school in general and the seven period day specifically.

Conclusions

The results of the achievement data must be viewed as inconclusive in that the Grade Point Averages and Stanford Test data were not consistent across the assessment measures. On the positive side, grade point averages were significantly higher after implementation of the seven period program for Seniors, Juniors, but not Sophomores. The PSAT for 1988-90 data for tenth and eleventh grades also indicated positive effects on achievement. However, the Stanford data do not support achievement gains for the twelfth grade since the results show a steady decline in the percentile scores over the three years. Given the conditions of the school program, the school environment, the early administration of the Stanford, and lack of comparative student achievement gains over previous years, it is unrealistic to develop any conclusions from the data at this time. In fact, caution is recommended in attributing any achievement effects to the Seven-Period Program, since there is no way to rule out all possible confounding factors.

One positive finding related to the reduced number of student dropouts. Far fewer students (34 compared to 70) dropped out of Central High in the 1988-89 school year than did in the 1987-88 school year. A slight increase to 38 student dropouts occurred during the 1989-90 school year.

The School Attitude Survey (SAS) revealed significantly contradictory perceptions of the program between teachers and

students. Chi-square analyses indicated that the students' attitudes toward the seven-period day were generally more positive than the teachers' attitudes. The seven-period day was believed by the teachers to have increased students' homework and class assignments without allowing as much depth with curriculum material as the six-period day. Teachers also seemed to have difficulties adjusting and organizing for the shorter classes (45 minutes) indicating that writing assignments, laboratory experiments, and the utilization of media were minimized. The seven period format was perceived as offering more learning opportunities for students, but increasing the teachers' workload from the standpoint of preparation and teaching. Teachers attitudes became slightly more positive during 1989-90 as compared to the 1988-89 school year indicating some closing of the gap between teachers and students attitudes. This difference in teachers and students attitudes however poses the question, given the absence of conclusive data related to achievement, of whether the innovation should be maintained and upon what basis the decision should be made.

The results of this two year study will be used for further planning in the implementation of the seven period program. Additional data and time to work through the initial problems associated with any innovation are necessary before wide scale implementation can be recommended. The evaluation is continuing through the 1990-91 school year.

This study acknowledges, as others have cautioned, that time adjustments in curriculum in and of itself will not necessarily be an effective strategy for increasing achievement (Karweit, 1988). The difference in drop-out rate and level of positive student attitudes may reflect a more satisfied client and motivational environment. However, this may be sufficient justification to recommend the continuance of the program, since the data for achievement indicate the students are not performing any worse than in a six period day. Other studies will need to evolve to extend the scope

of these findings for more deliberate analysis of the impact of time on learning with respect to not only the amount, but also quality.

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