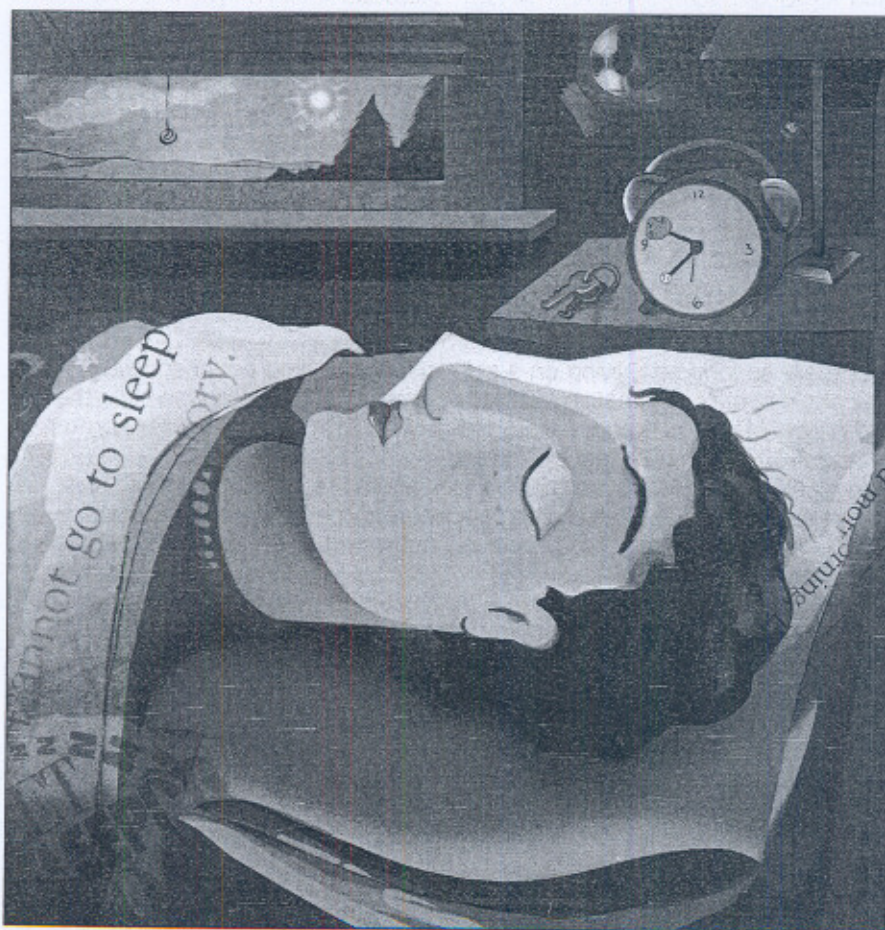


# The Impact of School Starting Time On Family Life

BY GORDON D. WROBEL

*Mr. Wrobel discusses the impact that changing a school's starting time has on families. He also provides guidelines to help policy makers implement such changes in ways that involve families and help them to make the needed alterations in their family routines.*



**W**HEN ASKED, most parents can provide vivid descriptions of what they believe to be a cause-and-effect relationship between their child's disrupted sleep and subsequent deficits in mood, behavior, and performance. Even young children can readily report a clear connection between their sleep and how they feel, relate to others, and meet the challenges of the day.

Despite a common awareness of the importance of sleep, little formal study has been done to document factors affecting the reciprocal relationship between sleep and the family milieu. The Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota has been engaged in two studies (referred to here collectively as "the CAREI study") that are attempting to examine the impact of changes in school starting times across the school, community, and family contexts. While not initially a primary focus of the CAREI study, the impact that changing school starting times has on families has emerged as an important factor deserving of more careful examination.

## Why Sleep Is Important To Education Policy

While there is a growing medical literature investigating the effects of sleep

*GORDON D. WROBEL is a nationally certified school psychologist and licensed psychologist whose professional focus has been children and youths with emotional and behavioral disorders. He is a doctoral candidate in educational psychology at the University of Minnesota, Minneapolis.*



on the health and performance of children and youths, there has been little crossover between the fields of sleep medicine and primary and secondary education.<sup>1</sup> Consequently, education policy makers have not typically considered sleep as an important factor affecting the educational process. This fact is remarkable, given the substantiated connection between sleep and educational performance.<sup>2</sup>

According to Ronald Dahl, "There are very few data on sleep deprivation in normal children."<sup>3</sup> Despite the lack of data, there is a growing concern that children, and especially adolescents, are not getting the sleep they require to be at their best in school, at work, or in the community.<sup>4</sup> Some school districts that have been alerted to this concern have responded by changing to a later school starting time for adolescents. Education policy makers have sometimes forged ahead with sweeping changes in school starting times without the benefit of well-thought-out plans for policy development and implementation.<sup>5</sup> The current CAREI study suggests that there are but a handful of formal studies that examine the actual impact of changes in school starting time on student learning and behavior.

In addition, CAREI has found no study of sleep that has focused on the family milieu and how it affects and is affected by changes in school starting time. Yet common experience tells us that the family context plays a critical role in how students present themselves at school. Preliminary results of the CAREI study suggest that changes in school starting time can and do have a profound effect on families. The impact has been reported in nearly all facets of family life: school, work, leisure time, and even family traditions. There appears to be a rather complex interaction between the family milieu and changes in school starting time. Clearly, not all families are affected by such schedule changes in the same way or to the same degree. For some families a change in school starting time results in dramatic positive changes, while the same change for another family may be devastating.

### The Impact on the Family

It should be remembered that the family context was not a primary focus of the CAREI study. Concerns relative to the family emerged from the research process and the data. Consequently, the impressions

developed here should be seen only as a guide for further formal study. Nevertheless, the dramatic reports that surfaced suggest that education policy makers and communities may benefit from considering the impact that schedule changes will have on families.

The study of sleep necessitates an examination of the family context, if for no other reason than that the home is where the event of interest — sleep — most frequently occurs. The family milieu presents a number of challenges for the researcher. Key variables such as the quantity and quality of sleep are difficult to control. Parents are typically reluctant to volunteer their children for research, regardless of the nature of the study. In addition, children are particularly resistant to sleeping outside of their homes, which often eliminates the opportunity for controlled observation of a subject's sleep. Children and youths often have privacy concerns relative to the self-reporting of the details of their sleep, such as what time they go to bed and the quality of their sleep. It has also been our experience that many children and youths have a difficult time accurately maintaining even simple records of sleep patterns. In addition, parents have been shown to be particularly poor reporters of their children's sleep habits. Taken as a whole, these complications can compromise even the best-planned research design, especially when attempting to relate sleep to measures of daytime performance.

Because of the complications of obtaining accurate data regarding sleep and wake patterns of children and youths, CAREI developed a research design that used multiple data sources in an effort to begin to examine the relationship between sleep and daytime student performance. The current study has four primary data sources: 1) focus group interviews with students, parents, and school staff members; 2) a School Sleep Habits Survey completed by students; 3) telephone interviews with parents and key stakeholders; and 4) written surveys of teachers.

Some 18 urban and suburban school districts have been involved in the CAREI study. Over 10,000 participants have included students, parents, school staff members, and key stakeholders in the community. In addition to the self-report data offered by students and parents, school staff members were asked to comment on what they had heard from parents. Staff members who were also parents offered their

own parental experiences as well.

Two overarching themes emerged from this data set. First, the impact of changing school starting time is profound for many families. Families experience a wide range of positive and negative effects when the school schedule changes. While some families reported little difficulty in adjusting to the new schedule, others were devastated by the stress of attempting to meet the new demands on their time. Even those families who reported having little difficulty adjusting to the schedule changes saw both advantages and disadvantages to the change in school starting time.

Second, how the policy process played out in each community had a substantial impact on how the changes were received by families. Some school districts and individual schools took great pains to involve the school community and keep members informed of the anticipated changes in school starting time. Other districts and schools had as little as one week to implement the change in schedule. Clearly, those districts and school communities that had ample warning reported less difficulty in making the necessary adjustments. As one elementary school principal recalled, "We did work up front involving the community. Talking about it. Talking to our staff and having the staff vote on when they wanted to start. Do they want their meetings on the front end or the back end of the school day? And it happened. There was a lot of preparation."

The CAREI study found that students and parents were keenly aware of the policy process. How these stakeholders perceived their involvement in the process affected how they responded to the changes. Those who described the policy process as open and sensitive to their needs reported being better able to make informed decisions about which school to attend, which schedule options to choose, and how best to meet their needs. Those families that reported feeling devalued in the process were often vocal in their distrust of the justifications offered for making the schedule change. One parent told us, "I was in agreement with the change because I had been able to read the literature. But I also know that staff and students were very cynical about how the decision was made. And there was a lot of feeling that people were not consulted or talked to and it was just decided."

Most of the schools in this study were engaged in a number of significant change



initiatives, which made it difficult to sort out the impact of the change in starting time from all the other influences. For example, some schools had implemented a school attendance program independent of the change in starting time. Despite this, participants in the CAREI study readily offered opinions about the impact of school schedule on school attendance. Another factor that made it more difficult to assess the effects of changes in school starting time was that most of the schools involved in the study did not begin collecting relevant data until after the changes had been made.

### **Economics as a Factor In Starting Time Policy**

The impact of changing school starting time was not the same for all communities in the CAREI study. The concerns expressed about the changes were clearly related to the relative affluence of school communities. For example, transportation to and from school and other activities was a substantial, if not primary, concern in the less affluent school districts, where viable alternatives to school transportation were typically reported to be limited or nonexistent. As one parent told us, "My children miss more school. I don't have a car. The bus is there so early, and if they're late, they miss it, and I can't get them to school."

The more affluent districts consistently reported that their primary concern in designing a school schedule was the best interests of students. Students, parents, and staff members from less affluent schools consistently reported that they thought that administrators considered the best interests of students to be secondary to the realities of the transportation budget. This attitude, when combined with a problematic policy process, fostered an atmosphere of mistrust of — and, in some cases, open anger with — the school administration. "It is unfortunate that the scheduling of buses dictates the schedule for school," one parent remarked. "The central office doesn't base any of its decisions on what parents or students want in this district. They are basing the decision solely on what's cheaper to run as far as transportation costs," complained another. In such situations it was difficult to segregate fundamental concerns about disrespect and disenfranchisement from concerns related to the change in school starting time.

A clear relationship emerged between economics and the ability to adjust to the time change. Families with ample resources tended to be actively involved in creating and taking advantage of alternative means of meeting new schedule demands. Families with limited resources saw themselves as having few options and often reported being overwhelmed by the same demands. Affluent parents talked of needing to adjust their work schedules in order to support their children's school and activity schedules. Parents with limited resources talked of the stress associated with having to change jobs because their current jobs did not offer the kind of flexibility they needed in order to meet their children's schedule. Day care and supervision of their children also presented major concerns and challenges.

The change in school schedule had an impact on the number of transitions young students experienced each day. Students might have to go from home to day care, come home after school to an empty house, or wait alone in the school building for long periods. These transitional periods of the day often had little organized activity, and it was difficult for children to use these times to do homework. Some parents were now burdened with the need to provide both morning and evening child care. For other parents and their children, however, the new schedule meant fewer transitions and an increase in quality family time. One parent reported, "I've been fortunate. My mother works in my son's school district. I take him to her house for breakfast, and they walk to school together. If that hadn't been the case, it would have been awful to have to put him in day care both before and after school."

In order to maintain their jobs, some parents whose work schedule did not match their children's school schedule had to leave their children unsupervised for parts of the day. These parents were clearly troubled by the situation and often reported seeing no other alternative. Many of these parents mentioned that affordable, reliable day-care options simply did not exist in their community. Others stated that older siblings who had previously provided interim supervision for younger siblings were now unavailable because of the later end to the older siblings' school day. In these communities, students, parents, and school staff members alike reported significant concern over the amount of time that young children were being left unsupervised. This

concern did not surface in the more affluent districts.

Some students' families expected them to work, either to supplement the basic family income or to cover unmet personal expenses and leisure activities. Because labor laws limit the time of day that youths can work, changes to a later ending time for school often meant that fewer hours were available for students to work. Students reported not only that there were fewer hours but also that late arrivers were often relegated to the least desirable job duties, such as cleanup and closing activities.

### **Family and Community Norms**

While the CAREI study did not focus on community, family, and cultural differences, it became clear that there were norms with regard to time that created expectations about what is appropriate behavior. These attitudes were often based on individuals' personal experiences and did not acknowledge that there is a spectrum of needs relative to the amount and scheduling of sleep. As an example, persons who were raised in an agricultural setting, where early waking schedules were the norm, saw early starting times for school as not only normal but preferred and valued. People who were late risers were seen as lazy and unmotivated. In focus group interviews, an "owl's" disclosure of a preference for a later schedule often brought deprecatory comments and laughter from the others in the group.

Consistent across all schools were the complaints by parents and students that there were simply too many demands on their time. Some communities expected their children to be involved in numerous extracurricular and volunteer activities. Many students mentioned having virtually no personal time to unwind or relax and reported experiencing deleterious effects from excessive commitments and time demands. It was not uncommon for students to refer to extreme fatigue and associated health problems. For the most part, students were making the choices to be committed to these activities, but in some instances, pressure came from the student's social milieu.

Students commonly reported the perception that success as an adult was directly related to overextending themselves with activities while in high school. One student told us, "There's a lot of times I'm



sitting in school and I'm saying, 'Geez, I just want to go home,' and then I realize I get to step off my bus, put on my work shirt, and run to my work because I've got to be down there." Another student complained, "Since I like to do a lot of stuff after school, the later starting time conflicts with that. I get home late, and I want to do stuff after school. The school district thinks that you have just as much time because you can stay up later. But after 9 or 10 p.m. for me, it doesn't feel right to do homework anymore. So that just really limits my time, and it limits what I can do because I get home so late."

It was apparent when looking at the data across communities that not all schools were equally supported in making the schedule changes. Some communities expended substantial effort to ensure that schedules for before- and after-school activities were accommodating. In other communities, respondents told us that the school schedule was the only one to change and that they felt out of synch with the rest of the world. The conflicting schedules affected opportunities for recreation and sports, medical appointments, and jobs for teens.

One teacher noted, "When these starting times were changed, many people, especially school administrators in our district, asked, 'What is going to happen with regard to the community and the theater and sports?' And the answer we were given was, 'The rest of the world will adjust to accommodate us.' But no one has adjusted to accommodate us. Our transportation department hasn't even accommodated us. We can only schedule field trips during

certain hours of the day." Said another, "Nothing meshes as well as it should. The learning doesn't mesh; the social skills that go on the rest of the day, they just don't mesh; my family life doesn't mesh; everything is off. So that affects my attitude and affects the kids' attitudes and their abilities in school."

One could easily be led to believe that the best possible school schedule would be the one that would most closely match the schedule of the family. Certainly the family routine is of great importance. Yet simply matching a family's schedule may not be in the best educational interests of the students. It is clear from our findings that families differ substantially in their ability to adjust to schedule demands and changes. Participants readily identified themselves and their children as "morning" or "evening" people. They were quick to point out preferred personal schedules and the problems associated with mismatches between time demands and natural rhythms.

### Impact on Students

The student participants in the CAREI study were generally very aware of policy discussions regarding school starting time. Some schools had gone to great lengths to inform and involve students in the decision process. Some students reported having discussed the impact of sleep on student performance as part of their school's curriculum. In those schools, it was not uncommon to hear students quote research they had read or to relate discussions they had had with their peers and teachers. Students were aware that sleep plays an important role in their school performance. These students had been empowered to make informed decisions about their sleep habits, and they often articulated concern about the difficult decisions they needed to make regarding time management.

In schools where student involvement in the policy process was limited, it was commonly reported that students simply stayed up later as a result of the later starting time. It was their perception that changing the starting time had little impact on the total sleep students were getting. Many reported that they and their peers were filling their available time with more late-night television viewing. School staff members also reported a concern that even young children were now staying up late to watch adult-oriented programs.

One might be inclined to generalize that

all young people would opt for the later starting time if given the opportunity. We did not find this to be the case. Many students who experienced a change to a later start reported a desire to have an earlier starting time. For these students the earlier time was seen to be a better match for their natural schedules or to provide more opportunity to participate in activities after school. Many students reported that they enjoyed getting up early in order to be done with their school day early. The early end to the school day left ample time for after-school activities, work, and socializing.

An unanticipated problem that school staff members reported was that many of the elementary students on the late schedule had viewed as much as two or three hours of television in the morning before coming to school. This programming, largely cartoons, often contained violent themes that were replayed in the classroom, much to the dismay of the teacher.

For some elementary students, a late school start necessitated an early morning day-care transition. Staff members felt that this was hard on many of the students and left them fatigued at the end of the day. In addition, elementary school staff members reported that the prime learning time for this age group is in the morning and that later schedules afford less of this optimum time.

Students with special needs, while not a focus of this study, were often mentioned as being affected differently from the general school population. Parents with children who had substantial needs for personal care reported significant advantages to later starts. Students with emotional and behavioral concerns were seen to be particularly affected by changes in school starting time. The behavior of this group of students tended to deteriorate in the afternoons, which suggested that earlier starting times were preferable to later starts. Further study with this group of students may provide important insights into the relationship between sleep and daytime behavioral functioning.

### Other Considerations

Ethnic and cultural variables were not specifically examined in this study. However, concerns were raised about how students from various cultural and ethnic backgrounds might have been differentially affected by the change in school starting time.



"That class ought to come with a warning: 'May cause drowsiness.'"



For example, it was reported that students who fasted as a religious custom often had difficulty maintaining their fasts because of either an early starting time or a late dismissal time.

While the intention of moving to a later starting time for adolescents was to increase the available time for sleep, some students actually found that they had less time to sleep because of time demands within the family. A host of reports suggested that some family schedules did not change to accommodate the changes in the school schedule. Some families have traditions requiring adolescents to assist with meal preparation, child care, and other household duties. Students in these families still needed to get up early to complete their family duties, even though they were required to remain in school until later in the day. For these students there was a net loss of time available for activities and sleep.

For other families, the change in school starting time meant that the family schedule was now more in synch. Parents and children in these families reported having more quality time together. They now had time to prepare for the day together, eat meals together, and enjoy a family activity after school because of the lack of conflicting commitments in their respective schedules. Yet other parents and students reported that the same changes in the school schedule resulted in lost opportunities to be together as a family.

Students, parents, and school staff members all mentioned concerns regarding certain school schedules and nutrition. Schedules that demanded that mealtimes be at odd hours were seen to put some students at a disadvantage. Students of all ages complained of hunger that kept them from concentrating on their work or doing their best. Teachers talked about needing to provide snacks to older elementary students to accommodate their hunger.

Several parents commented that they had noticed differences in their children's attitude toward school as a result of the change in starting time. Interactions between parents and children were strained when parents had to struggle to get their children to comply with a newly implemented early start. These struggles set in place a negative attitude for the student, which was often carried over into the school day. Seemingly insignificant concerns, such as access to the bathroom in the morning, took on greater significance

in homes where children and parents were feeling rushed. Several parents reported having observed a decline in their children's attitude toward school in general as a result of the need to be up early.

Parents whose children attended schools starting later reported fewer behavioral concerns and an improved attitude toward school. "The change to a later school starting time has made for a happier family," noted one. "The kids are more rested, and there is less fighting in the house."

Other parents suggested that the changes had little impact. They simply adjusted their schedules to provide ample time for sleep and morning preparation. In fact, several stated that the process of adapting to the change in school starting time provided a valuable learning experience for their children. One parent reported, "Our children were pretty disciplined. They went to bed earlier to get up earlier. It was a bit awkward with the extra time in the morning. It taught them how to use their time."

### Guidelines for Family-Friendly Policies

The following guidelines are meant to aid policy makers in developing and implementing changes in school starting time. These suggestions are based on the experience of schools participating in the CAREI study and pertain particularly to the aspects of the process that will involve families and help them make the needed changes in their family routines.

1. *Inform and involve all stakeholders.* This suggestion may seem all too obvious. However, policy makers need to understand that changes in school starting time affect virtually every aspect of family and community life. The sooner stakeholders are involved in the decision, the sooner problems can be anticipated, adaptations created, and solutions implemented.

2. *Allow ample time.* A significant change in a family's schedule will take time to arrange. A year of planning before the implementation of changes in school starting time would not be unreasonable. Adequate time will allow stakeholders to become informed and to make reasoned decisions about what is best for their situation.

3. *Provide justifications for decisions based on research data.* Families and students will use information if it is made available. Families want to know that changes

are being made in the best interests of their children. They want to be able to weigh the decisions and have alternatives defined.

4. *Support families in the decision process.* If your goal is to have students and families make good decisions about their schedules, understand that some may need to be supported in the process. This may require multiple methods of delivering information and will certainly demand culturally sensitive approaches to providing assistance. A change in school starting time may well intrude on the customs of the family and, as such, could serve to alienate families from the school.

5. *Involve the community.* Thought should be given to who in the community will be affected by a change in starting time. Community members and agencies that can assist with the change should be enlisted. Examples would be churches, park boards, police, field trip sites, and employers.

6. *Don't forget the school staff.* Changes in starting time will affect school staff members, many of whom are also parents. Staff members need to be given options and ample time to make decisions about their personal and professional lives.

7. *Commit to providing follow-up regarding the change.* As the process moves forward, difficulties will continue to surface. Ultimately, changes in school starting time will probably have an effect on educational outcomes. It would be wise to monitor the impact of the changes so that the best interests of students remain a priority.

1. Millicent Lawton, "Too Little, Too Late," *Education Week*, 11 October 1995, pp. 33-35; and William C. Dement, "History of Sleep Physiology and Medicine," in Meir H. Kryger, Thomas Roth, and William C. Dement, eds., *Principles and Practice of Sleep Medicine*, 2nd ed. (Philadelphia: W. B. Saunders, 1994), pp. 3-15.

2. Kyla L. Wahlstrom and Carol M. Freeman, *School Start Time Study: Preliminary Report of Findings* (Minneapolis: Center for Applied Research and Educational Improvement, University of Minnesota, 1997); and Joel Frederickson and Gordon D. Wrobel, *School Start Time Study: Technical Report, Vol. II* (Minneapolis: Center for Applied Research and Educational Improvement, University of Minnesota, 1997).

3. Ronald E. Dahl, "The Regulation of Sleep and Arousal: Development and Psychopathology," *Development and Psychopathology*, vol. 8, 1996, p. 9.

4. Mary A. Carskadon, "Patterns of Sleep and Sleepiness in Adolescents," *Pediatrician*, vol. 17, 1990, pp. 5-12.

5. Kyla Wahlstrom, Gordon Wrobel, and Patricia Kubow, "Executive Summary of Findings from Minneapolis School District School Start Time Study," 1998, available from <http://carei.coled.umn.edu>. 