

Just five more minutes

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Wouldn't it be wonderful if your pupils were awake for the first lesson of the day? Susan Greenfield suggests a later start to stop the yawns

Do your teenage pupils make you feel like the most boring person on earth? They flop around, dull-eyed and yawning, at 9.15am, while you do your best to make them sit up and pay attention.

But perhaps they shouldn't be in school at that hour? Perhaps they really should be in bed? There is a naturally greater requirement for sleep in teenagers, which begins at the onset of puberty and does not tail off until late adolescence.

Studies of adolescent sleep patterns show that teenagers benefit from at least nine hours' sleep a night, beginning later in the evening and finishing well into the morning. Although clearly not helped by the frantic and erratic social lives that modern adolescents lead, this shift in sleeping patterns is biological, the result of hormones produced in puberty that act directly on the brain.

With the average teenager getting around seven and a half hours' sleep, and a quarter getting less than six and a half hours, there are a lot of young people out there who are significantly deprived of sleep. Indeed, research shows that up to half of Year 10 and 11 pupils show symptoms of narcolepsy - a chronic sleep disorder - in the morning, despite not suffering from the condition.

Sleep deprivation in adolescents dramatically affects their behaviour at school and harms their mood, academic performance and health.

While teenagers' biological need for long periods of sleep has remained the same over the years, the social Zeitgeist for late-night socialising, telephone calls, television watching and computer use means adolescents'

sleep is being squeezed into an ever-shortening period of the day. Recent studies of sleep attitudes and practices in teenagers have shown that unstructured television watching or computer use is by far the most common reason why they don't get enough sleep. Creating a structure around these activities, through careful supervision of technology use and placing limits on socialising hours, may provide more regular patterns of sleep and a partial solution to the problem.

Perhaps a more effective approach would be to adopt a later school start time. Teachers and pupils consistently report improved performance in the afternoon. Starting school a couple of hours later would accommodate teenagers' natural sleep cycles and enable them to perform academically when they are optimally alert.

Careful education and planning is required so families and teachers can restructure their days to accommodate shifted schedules. But evidence from the United States suggests that, where teenagers are allowed to start just an hour and a half later, both attendance and alertness improve and pupils are less likely to feel depressed.

Teachers and parents need to be more aware of teenagers' natural sleep cycles and the potential health hazards of lack of sleep. This might stop you from plunging into gloom at your apparent lack of teaching skills and might make you, as parents, more tolerant of your own teenagers, still fast asleep at midday every weekend. Baroness Susan Greenfield is professor of pharmacology at Oxford University and director of the Royal Institution of Great Britain.

References

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The big sleep

In 1997, seven comprehensive high schools in Minneapolis, United States, shifted their school start time from 7.15am to 8.40am.

A four-year study of the effects of the change found it produced significantly higher enrolment and attendance rates, less sleeping in class and less pupil-reported depression. Pupils carried on going to bed at the same time so got more sleep and were calmer and better-tempered as a result.

In the UK, two comprehensive schools in Kent - Homewood in Tenterden and Hugh Christie in Tonbridge - are planning to introduce a more flexible approach to school hours from September.

Under the experiment, funded by the Government's Innovation Unit as a way of increasing the personalisation of education, the schools will provide the 380 teaching sessions a year required by law but not in the conventional 190 days.

At the 1,200-pupil Hugh Christie Technology College, some days will contain three sessions. Most older pupils will start school mid-morning and finish in the early evening.