Just a few days before my career as a fledgling science teacher began in a large public high school in New York City, a mentor suggested I might get some ideas about how to run a classroom from a book called The First Days Of School by Harry Wong. Although the book seemed to concentrate more on elementary students, I found that many of the principles in the book worked well for high school students. Even as I have begun to teach at the university level, many of Wong’s themes have persisted in my teaching style.

Wong’s central thesis is that for learning to occur, a teacher must create the proper environment. In education jargon, a good climate for learning is generated via classroom management, an array of methods used by elementary and secondary school teachers to provide structure and routine to a class period via a seamless flow of complementary activities. Many college professors would likely consider classroom management to be chiefly a set of rules to maintain discipline and order among an otherwise unruly herd of schoolchildren, and therefore not a useful concept for mature university students.

However, classroom management is much deeper than mere rules for behavior; it is an approach to instructional design that considers the classroom experience holistically. A typical professional management style is to lecture for an hour or so and ask students to demonstrate learning via examinations several times in a semester. In contrast, a good high school teacher will manage a class from bell-to-bell to create a natural order and flow to a given lesson.

In this presentation, I will argue for an approach to college lesson design similar to the classroom management style commonly employed by high school and elementary school teachers. I will suggest some simple, practical techniques learned during my high school experience that work just as well in college: warm-up and practice problems, time management, group activities, bulletin boards, learning environment, and standard procedures. Central to all of these suggestions is the basic concept of planning activities for students beyond passive absorption of lecture material and fitting them smoothly within the typical time constraints of a class period. Well-managed students learn better. I close with the observation that the most basic desires of students are independent of age; learners of all ages and levels prefer well-designed classroom experiences. In this context, books and resources intended for the professional development of secondary—and even elementary—teachers suddenly contain a wealth of techniques that, with some modification, might be useful at the university level.

High school teachers call this “Bell to Bell Teaching.” Everything is planned. There is a routine and the students know it. There is a natural flow to the timeline and no single activity takes more that 20 minutes. The class is naturally more interactive. There is a sacrifice of content, but the trade-off is a more engaged classroom and higher quality learning.

**SOME EXAMPLES OF TECHNIQUES USED BY HIGH SCHOOL TEACHERS TO CREATE WELL-STRUCTURED AND PRODUCTIVE CLASSROOMS**

1. **Establish routines.**
   - Good classrooms run themselves. This can only happen if the students have a routine. Routines promote efficiency.

2. **“Do Now” problem**
   - This is a highly useful tool that helps students focus immediately when class begins: post one good practice problem. If part of a routine, students know to look for it and will begin working as soon as the problem is revealed. The other key is that they are actively engaged in learning, as opposed to passively listening to introductory comments by the professor/teacher.

3. **Structured group work**
   - Many students find it difficult to sit and listen to a lecture for entire period. Establishing regular group sessions allows students to practice new concepts with each other actively, rather than passively absorbing concepts from a lecture.

4. **In class practice**
   - Many professors are loathe to sacrifice “critical” lecturing for student practice. However, many students appreciate the chance to practice new concepts in the presence of the professor. Quality, not quantity. Plus, practice sessions also add variety to a class period.

5. **Enforce reading assignments**
   - One technique high school teachers use to maximize active learning in the classroom is to delegate more passive learning to home-based reading assignments. Much of what is typically taught in lecture, particularly introductory geology and biology, is often just as easily learned by reading the textbook. Pop quizzes encourage students to actually read. Reserve class for activities and student interaction.

6. **Develop grading rubrics**
   - Rubrics are common in high school, but rare in science classes. Students appreciate the structure of a clearly written set of grading standards as a framework for approaching projects and papers.

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**TIMELINE OF A TYPICAL COLLEGE CLASS PERIOD:**

9 a.m. Class begins
9:01 a.m. Professor begins lecture
9:45 a.m. Some students are sleeping
10 a.m. Lecturing over, class over

**TIMELINE OF A WELL-MANAGED 10TH GRADE SCIENCE CLASS:**

9 a.m. Bell rings, students begin established routine
9:01 a.m. Students begin introductory problem on board while teacher returns and collects homework.
9:04 a.m. Teacher selects a student to lead the class in the solution to the problem.
9:08 a.m. Teacher introduces new concept and the day’s (short) lesson.
9:23 a.m. Students self-organize into groups for an activity that supports the lesson.
9:45 a.m. Activity ends, teacher assigns and/or distributes assignment for practice. Students practice in class.
10 a.m. Bell rings, class over.

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**MAKE STUDENTS THE CENTER OF YOUR CLASSROOM**

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**Suggested reading:**
- *The First Days Of School* by Harry and Rosemary Wong
- Universal classroom management concepts

Better yet, ask your neighborhood high school teacher for some tricks of the trade.