This article likens education to playing a game. Whereas students think of education as a finite game—as something to beat—educators see the educational process as an infinite game, and hope to instill in students a desire to pursue knowledge for its own sake, to value their time in the process, and to be prepared for life's surprises. In David Letterman's fashion, the article contains a top 10 list of surprises about teaching: (10) Students don't always know what they're supposed to do—what it is to "be a student"; (9) Students think current teachers will be like previous teachers; (8) Boredom is more contagious than enthusiasm; (7) Students think teachers work at school and students work at home; (6) Students are not expecting a Sage on the Stage; (5) Students think mastery of a subject is roughly equivalent to memorizing the textbook; (4) Learning is a social experience; (3) Students think classroom teachers are the most significant factor in student learning, and rank it ahead of their own student habits in importance; (2) Students think of education as an obstacle course rather than a way of living; and (1) What we do as teachers affects far more than our students. (VWC)
Some of you may not know that the purpose of the Professor of the Year award is really to help institutions in higher education initiate conversations about teaching. The Carnegie Foundation hopes to instill an institutional commitment to what they call the scholarship of teaching: to make public innovations in teaching strategies; to subject these innovations to critical review; and to share and build on these new developments as a resource for educators.

Too much of what we do is in isolation. We are always reinventing the classroom, or burying it in the past. We need to find ways to talk about teaching as a profession and as a scholarly discipline.

When I started teaching at CSM twelve years ago, I didn't know a thing about pedagogy, learning styles, or metacognition. I naively walked into the classroom more worried about myself and my performance in front of the class than with student learning. I just assumed learning would happen.

As I got to know my students, I found we had different ways of looking at things—we brought different expectations to the classroom. I found that many of my students didn't learn in the same ways I did, and I began questioning the way I taught.

Things didn't always work out as I had hoped. I've had my share of students sleeping in class, doing their nails, or sneaking in late on hands and knees through the back door as if invisible.

I'm still amazed at many of the things my students do—or don't do. When they're struggling with the class, why don't they talk to me about it? When I'm giving a lecture, how can they ask whether the material is going to be on the test? And when I assign homework or reading, don't they KNOW it's to be done before the next class so we can talk about it? Haven't they already been in school at least twelve years? Why don't they know how things are done?

I found an interesting description of education that I'd like to share with you. It comes from a book by James Carse, called Finite and Infinite Games.

"There are at least two kinds of games. One could be called finite, the other infinite.

A finite game is played for the purpose of winning, and the infinite game for the purpose of continuing the play."
Finite players play within boundaries; infinite players play with boundaries.

Surprise causes finite play to end; it is the reason for infinite play to continue.

To be prepared against surprise is to be trained. To be prepared for surprise is to be educated."


Far too many of our students think of education as a finite game--something to beat. As educators, we hope to instill in our students a desire to pursue knowledge for its own sake, to value their time here, and to be prepared for life's surprises.

As I think about the things that go on in my classroom, it is the things that surprise me that connect me most to my students. So, in the Letterman tradition, I share with you today my top ten surprises about teaching.

**Surprise No. 10: Students don't always know what they're supposed to do -- what it is to "be a student."**

My evidence of this is the number of students who just "show up" each day--without reading, without working, without thinking about what we're going to do next.

It's interesting to think about how teachers and students come to have different expectations about what students are supposed to do when they take a course. It seemed to me that my students thought they were supposed to come to class, most of the time, and do the minimum work required to earn whatever grade they were trying for. Some students knew they would be satisfied with a "C" in the course, and that translated to attending all the classes, turning in "something" for most of the assignments, and "doing their best" on the quizzes and tests. It seemed to have no relationship to learning.

Now, I talk about what a "C" means in each course. And, many students are shocked to learn that my idea of a "C" was their idea of an "A"!

Students also benefit from guidance about what to do when they're in class. When I'm lecturing, my students should be listening, formulating questions, and taking notes. Have you ever had a student constantly interrupt you because they couldn't write as fast as you were talking? They may not know how to take notes, or you may be talking too continuously. And, what do your students "do" with those notes? We could help a lot of students by simply telling them how to use their notes for studying.

I also specifically tell my students that they won't learn all they need to know just by coming to class and listening to me. But I've come to understand that many students don't know what to do on their own--they don't know how to study. Some students think listening to a lecture is studying. Others think reading is studying. Still others think memorizing is studying. What they don't seem to get is that studying has to do with intent as much as with activity.

**Surprise No. 9: Students think current teachers will be like previous teachers.**
This is closely tied to the topic I just mentioned, but with a twist where the student has some real evidence of how a "C," or an "A," was earned in previous courses. Or, when students say, "But I thought that was what you wanted!" without ever having asked what you wanted.

I think many students are in the habit of thinking of teachers collectively instead of individually, and make many assumptions based on their view of what "teachers" do and want.

Of course, this is a natural enough assumption. We all tend to base our expectations on past experience. But this is especially problematic for students who have had unpleasant school experiences. Their expectation is that all teachers, all school, is unpleasant.

This may explain why students are so responsive to teachers who make it a point to show that they care about the success of individual students--because it comes as such a surprise. At its best, recognition that teachers care about students as individuals changes the way students view education. It becomes more personal.

I do tell my students that my goal is to have each and every one in the class achieve to their optimum potential. How rare it is for students to hear these words. We think they know it, but they don’t.

In an analysis of several studies of student evaluations of college professors, students consistently ranked the following characteristics as the most important qualities of good teachers:

• 1) Shows respect for students
   2) Cares about student learning
   3) Listens to what students have to say about teaching

Teaching mechanics like "is well-organized" or "is a good presenter" consistently ranked lower than the interpersonal qualities that make students feel comfortable and welcome in the classroom and faculty office.

**Surprise No. 8: Boredom is more contagious than enthusiasm.**

I hate to feel like I’m wasting my students’ time or that we are just in class to meet an attendance requirement, but some days it does feel that way. There have been plenty of times when I’ve had to drag myself to class without really looking forward to it. But I had no idea how apparent that is to students until I saw it from the student perspective. We should all be students every once in awhile, to be reminded of what students see from their side of the lectern. Off days are one thing, but joyless teaching is a disservice to our students.

I have come to the point that I feel invigorated by being in the classroom, by focusing on what my students need, and by enjoying the subject I teach. Thinking about what my students need reminds me that I’m an advocate for their commitment to the course. If I don’t believe the subject is important, why should they? If I don’t believe their attendance at this particular class session is essential, why should they bother to come?

Some of my students have told me that they work hard in my class because they can see that I work hard in the class. I was actually surprised that they noticed, and alerted to the fact that they are paying attention to things that I thought were "behind the
scenes." My guess, then, is that they also notice when teachers don't work hard to prepare for class, don't show how much they love their subject, and don't seem to care about student learning. When teachers are bored, their students will be too.

**Surprise No. 7: Students think teachers work at school and students work at home.**

My students seem to be surprised when I tell them I do as much homework as they do! When I talk about our various responsibilities in making a class "work" I remind students that we both need to work in the classroom and at home, and that I saw no separation of responsibility for ensuring success of the class as a whole.

Many students think only the teacher needs to prepare for class time. What I try to explain to them is that my lectures won't mean anything if they have no context for filing away the information in their memory. And, if they can't file it away, it won't be available for recall when they need it. They'll just have to try to learn it again.

I'm sure many of us have told our students to "do the reading" before the lecture and to come to class with questions about the reading or about the homework. Then, when we ask for questions at the next class, silence reigns. We can either assume that the students understand the material and go on to something new (and risk their not learning it at all) or cover it again thoroughly just to make sure.

The latter option can seem to students like a good reason for not reading in the first place. Why read the book if the teacher is going to tell us all about it in class anyway?

Educators no longer hold the view that our students are empty vessels waiting to be filled. Now, we need to convince our students that it is their own effort in the classroom, as well as at home, that promotes learning.

**Surprise No. 6: Students are not expecting a Sage on the Stage.**

I'm pretty sure this was my first big mistake, and what actually kept me away from teaching for many years: My perception that teachers had all the answers, spoke eloquently, and were witty and inspiring. When I finally decided to try my hand at teaching, I had come around to the idea that caring a lot about interesting students in the field of programming would overcome my native fears about speaking in front of a group, but I still held on to very high expectations of teacher performance in the classroom.

That attitude actually prevented me from making meaningful connections to my students. I was so concerned about covering the material and not making any mistakes that I didn't relax very much when I was "on." My greatest fear at that time was that I wouldn't be able to answer a student question. My second greatest fear was that if I paused to answer a question I wouldn't remember where I had left off in my lecture. I've never been very good at thinking on my feet.

I'll never forget teaching my first C programming course in 1988. I was not a C programmer at the time, so to prepare for the course, I had learned enough C to work through the problems in the textbook and develop the first couple of lab assignments. The first night in class I discovered that about half of my 48 students had taught themselves C and had been using it to write programs for several months. They had run into problems, which inspired them to take a class where they would have access to an expert. Me!
I still remember the experience as grueling. There was no way I could bluff, I certainly
didn't have the kind of answers these students needed and expected, and I started to
dread coming to class. After all, how many times can you say, "Gee, that's a fascinating
question, but it takes us away from what we need to concentrate on today. Why don't we
discuss that after class?"

More than any other class, this one taught me how to connect with my students. I
couldn't be the teacher I thought I was supposed to be, and instead became the teacher
my students needed. I realized that students needed to know the things that weren't in
the book, the ambiguities of our discipline, and, perhaps most importantly, that working
in the computer industry means constantly learning. And I was able to demonstrate that
quite well. Standing before them every night was an expert who didn't have all the
answers. What made me an expert was that I knew how to find the answers and use
them. And I could demonstrate that process to help my students develop their own
strategies for studying and learning.

It turns out that I developed lasting friendships with students from this particular class,
got a little better at thinking on my feet, and came to truly enjoy teaching and the give
and take of the classroom. I have found that students appreciate teachers who are
human, who act as a role model in the discipline, and who can listen and respond to
student questions and concerns. I've learned that every word I say doesn't have to be a
pearl of wisdom, but it does have to be relevant and honest.

Surprise No. 5: Students think mastery of a subject is roughly equivalent to
memorizing the textbook.

Before we roll our eyes at how off-track students are, let's ask ourselves what we think
mastery is. We might have different opinions among ourselves, and we might even
answer this question differently for different classes. What is mastery in an introductory
course? Is it learning the vocabulary of the field? Is it applying the concepts to real-world
What changes?

A second thing we might ask, is how do our students get the impression that
memorization is key? How do we develop our tests? How are they graded? Is there only
one right answer? Can students defend a different interpretation of our questions,
different routes to a solution? Can they use their books and notes as a resource? Or,
must it all be memorized?

I'm afraid that many of my students just don't know how to use their textbooks for
learning except to memorize the italicized words. They're mystified about what is
important. They don't know about summarizing, or reflecting on a few pages at a time.
They don't think about isolating new concepts and trying them out gradually-and instead
feel overwhelmed by so much new information all at once.

I try to help my students focus their attention on learning while reading, to be able to
organize the way they use their study time, and to connect new material to their current
knowledge. And I have found that I can't just assume that they already know how to do
this, so I spend time in class talking about it and demonstrating how to do it. I think it's
vitally important for us to teach both subject matter and study skills whenever we can. If
students feel less frustrated when they study, they become more confident learners and
can establish a habit of learning that they can use forever.

Surprise No. 4: Learning is a social experience.
I have found that my students are more engaged when I encourage a social atmosphere in the classroom. My initial concept of a classroom was what I recalled from my own experience. Students sit at desks and keep quiet, while teachers stand at the front of the classroom and lecture. It wasn't until graduate school that I recall working in groups in the classroom. The only times I recall students speaking in class was when called on to present a solution on the board--always a chilling experience for me.

Eventually, I discovered that students learn from being the teacher for awhile and I tried group assignments. I called my small groups "teams" and made the assignments a little competitive to give the team members a reason to work cooperatively.

Despite my fears about unequally balanced teams, the inevitable slackers, and the nightmare of grading group work, I have had more positive feedback from my students about working in teams than on any other aspect of my classroom strategies.

I make the classroom a social environment because I want to foster a sense of a community of scholarship; I want students to believe themselves capable of surpassing me, of teaching me things, and I try to demystify what teachers do. I want to encourage my students to become teachers, not only in academic institutions, but in their roles as parents, and neighbors, and citizens as well.

Surprise No. 3: Students think classroom teachers are the most significant factor in student learning, and rank it ahead of their own study habits in importance.

Last Fall I conducted a study to compare student beliefs about participating in traditional and online courses. I polled students who had experience in online courses and those who did not. The results from those two groups were comparable in their perceptions about the factors that influence student success in on-campus and online courses.

I asked them "What do you think is the most important factor influencing your success in a course you might take on campus. How about for a course you might take online?"

For on-campus courses, 63% of the students ranked teacher quality as the most important factor for student success. Far behind it, in second place, 17% of the students ranked study habits as the most important factor. For online courses, study habits was the most important factor, selected by 26% of the students. It had the highest ranking. Fewer than 5% of students mentioned the teacher of an online course as the most important factor for student success.

We can draw all kinds of conclusions from these findings--and ask many more questions--but my point here is that many students don't realize how important their own study habits are for their success in school.

Surprise No. 2: Students think of education as an obstacle course rather than a way of living.

Did you ever get the impression that your students are taking your course in order to check something off a list? When you ask your students why they're taking your course, do they say "It's required." I hear it all the time, but I don't like it very much, even if it is a required course.

I want my students to take my course because it's going to be fun, or because they've always wanted to learn it. I suppose this goes against the natural order of things, and
that's really a shame. Because what a pleasure it is to get up in the morning to attend a class about something you like, something you want to do, something that adds to your life.

One thing teachers can do is encourage students to see how a particular class fits in to life experiences, various career choices, or building community and citizenship. Think about why you teach and what you hope to accomplish by your example.

Is it your goal to assist students in appreciating this country and becoming good citizens? To put the common good before individual good? Or, is it your goal to use education to promote social justice and economic mobility? To give students the skills they need to empower them politically and economically? Or, do you want to help students embrace the pursuit of knowledge and intellectual achievement as goals unto themselves?

By helping students understand the interrelationships among the disciplines and between liberal studies and professional training, we help them see "Education" as a lifetime pursuit instead of 16-year-long obstacle course.

**Surprise No. 1: What we do as teachers affects far more than our students.**

It's comfortable to think that I only need to worry about what I do in my classroom; that I can focus on my discipline and teaching strategies for my students.

But I have learned a lot from my colleagues. Had they worried only about their own classes and students, I never would have had the support and encouragement I needed to keep trying: the eye-opening conversations we had about student strengths and weaknesses; the sharing of strategies that worked or didn't work; or the intellectual engagement that comes from working with colleagues-faculty, staff and administrators-who care. Care about students, care about scholarship, and care about the institution and its value to the community.

We all need to be mentors. We need to be sounding boards. And, we need to be advocates for one another, for our students, and for education.

In an environment of limited budgets, we cannot do everything we would like; we compete with other institutions for employees as well as students; and we survive at the pleasure of the State.

What this creates is a disparate collection of employee groups focused on different goals. Some are focused on the best interests of faculty, others on the interests of classified staff, administrators, the district office, individual colleges, technology, departments. We have a loose collection of opposing interests in a time of significant under-funding.

What we need is a focal point, a unifying theme throughout our district, an overriding criteria that can be applied across issues and interests. Before any group advances a new proposal they should be able to answer the question **How will this benefit students?**

As a Trustee, when you represent the public, as a hiring committee, when you compare candidates, as a college administrator, when you apply policy, as a union leader, when you represent your membership, as a legislator, when you make funding decisions,
as a staff or faculty member, whatever our job, let's keep in mind, **How does it benefit students?**

Have a great year, everyone. I look forward to continuing the conversation!

Thank you.
U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)  

REPRODUCTION RELEASE  
Specific Document  

I. DOCUMENT IDENTIFICATION (Class or Documents):  

All Publications:    
My Top 10 Surprises about Teaching  
By Kathleen A. Kennedy  

Series (Identify Series):  
Publication Date:  

II. REPRODUCTION RELEASE:  

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents generated in the monthly abstract journal of the ERIC system, Resources in Education (RlE), are usually made available to users in microfiche, reproduction, paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to each document.  

If permission is granted to reproduce and disseminate the identified documents, please CHECK ONE of the following three options and sign at the bottom of this page.  

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY  

[Signature]  

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)  

Level 1  
[ ]  

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
in MICROFICHE AND IN ELECTRONIC MEDIA  
FOR ERIC COLLECTION SUBSCRIBERS ONLY,  
HAS BEEN GRANTED BY  

[Signature]  

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)  

Level 2A  
[ ]  

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
in MICROFICHE ONLY HAS BEEN GRANTED BY  

[Signature]  

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)  

Level 2B  
[ ]  

Documents will be processed as indicated provided reproduction quality permits.  
If permission to reproduce is granted, but no level is checked, documents will be processed at Level 1.  

I hereby grant to the Educational Resources Information Center (ERIC) reproducibility permission to reproduce and disseminate these documents as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC subscribers and its system contractors requires permission from the copyright holder. Exclusion is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.  

[Signature]  

Kathleen A. Kennedy  
Professor  
College of San Mateo  
1700 W. Hillsdale Blvd.  
San Mateo, CA 94402  

[Signature]  

Kathleen A. Kennedy  
Professor  
College of San Mateo  
1700 W. Hillsdale Blvd.  
San Mateo, CA 94402  

kennedy@smccd.edu