Weaving computational thinking into the curriculum

… these ideas as well at the meeting sponsored by the National Academies, where there was considerable resonance with a number of the other people in the room. So I wanted to just give an overview of that. Let me begin by just giving you some images that Jeanette Wing presents about it. You should absolutely, if you don’t know about this, go to Jeanette Wing’s web page, which you see up there at the bottom, highlighted in yellow. But these slides, which I’m just going to run through while I talk, came from a presentation that she gave just eight months ago, in November 2008, which is the first time an American has come to Paris in a long time and be treated positively. So, a good time for her to do it. But here are just some images of all the places that Jeanette proposes that we might be able to use computational thinking in a wide variety of disciplines. And again, this PowerPoint presentation is on her website. So that’s a little bit about … and how you can say it’s anything but wonderful? It is wonderful. We need absolutely to get computing to be a fore pillar in the educational system. We need to have everybody learn a little bit about computational thinking. But there are many strategies that we might take in order to implement that, some of which I think might be more effective than others. So what I’m going to do is I’m going to talk a little bit about some of the pitfalls; some of the myths that make those pitfalls more likely that exist in the general population. And then finally, talk a little bit about what we’ve been doing at Stanford for 25-30 years, which I have argued was a computational-thinking-everywhere program, done in … with the rather different approach of having the computer science department teach everyone — which is more or less what we’ve been doing. And I’ll show you that. So here are the pitfalls that I see. First of all, if we give students this exposure to all the magic …