It's my privilege to share some thoughts about Zig from the perspective of program development. That may seem like a straightforward assignment, but it hasn't come easy for me. I don't know how to capture in a few words the unique experience of watching Zig pound out beautiful formats on multiple programs from one-hour-to-the-next, day-after-day, year-after-year.

For one thing, the intensity of that work was often punctuated by unprompted detours to YouTube, which involved a lot of singing. Patsy Cline sort of grew on me but many of Zig's favorites did not. He had a special charm that way.

What I'm reading to you today is, I think, the sixth iteration of my remarks. Previous attempts were missing something that kept eluding me, but a few days ago, I finally did realize what I had been missing.

I was working with Owen in his office on a language track that I never felt Zig and I had gotten quite right. Affixes are little monsters from an instructional perspective. They change their meaning in subtle ways that frustrate generalization and can defeat the progression of a format if you're not careful. Most of the time Owen and I spent working on that track was devoted to the creation of example sets that would satisfy our teaching requirements and give the students a clean look at how affixes function to produce meaning. We could have cheated and saved ourselves a lot of time by stipulating difficult cases and calling it a day, but that's just not how we roll.

Like father, like son -- no instructional format, no matter how clever or well-conceived, is worth anything at all if leaves children with a chaotic and jumbled impression of a subject matter.

Here was my realization: Program development isn't about tinkering with formats for the sake of artificial precision. Fundamentally, it's about
ethics. We sweat and fuss and sometimes torture ourselves for hours to find just the right form of presentation that will disburden students in their pursuit of knowledge. We should carry that burden. Students should not.

In previous versions of these remarks, I kept trying to characterize program development with clever examples of Zig's technical brilliance. But I think it's misguided to divorce his intellectual abilities from his virtues of character and his ultimate concern, which was always the welfare of children.

That's what you need to remember about Zig Engelmann. Yes, he was genius. And yes, DI programs can be analyzed in strictly logical terms and their efficacy proven in accordance to scientific standards. But I don't think you get Zig if you don't see that everything he did, especially the painstaking work of program development, was driven by a passionate ethical concern for the welfare of children.

I was going to describe to you what Zig did around Lesson 20 in GK language. Zig was bothered by what he perceived to be insufficient modeling in the initial teaching of second-order declarative statements, so he spent a few days fixing up some exercises in the Identity Statements track. What he did was really clever, but why he did it is more relevant today: Once those little kinders learn how to say, "The car is red," "That girl is running," and "The apple is not on the table," they have learned a universal strategy for predicating any feature of any subject. The world lights up like a Christmas tree. Freedom of thought becomes second nature.

I was going to describe to you how deftly Zig teaches kinders to discriminate between samness and difference. The architecture of that discrimination really is a beautiful thing to comprehend. But when I look at those tracks now, what stands out to me is, once again, their ethical significance. Whatever else students are learning in a DI program, they're always building up an immunity to stereotypes, false rhetoric, salesmanship, gamesmanship, and all the perverse manipulations they will encounter on life's way, ready or not.
And the Absurdity tracks - possibly my favorite. Ask yourself the question, and really think about: Everybody, does a horse belong in a kitchen? Why not? I'll tell you why - because that's absurd. Well, get ready kids, because absurdity is a feature of everyday life. Laugh at it, when appropriate, but know it for what it is -- a sign that the world is out of joint, topsy turvy, upside down -- and it's up to you to set things right.

I hope you'll remember Zig not just or even primarily as a genius. He was a champion of the underdog and a great opponent of bullies, superstition, and nonsense. You can see the virtues of his character in every exercise of every program he ever wrote.

Thank you.