

ChemE Is No Cakewalk

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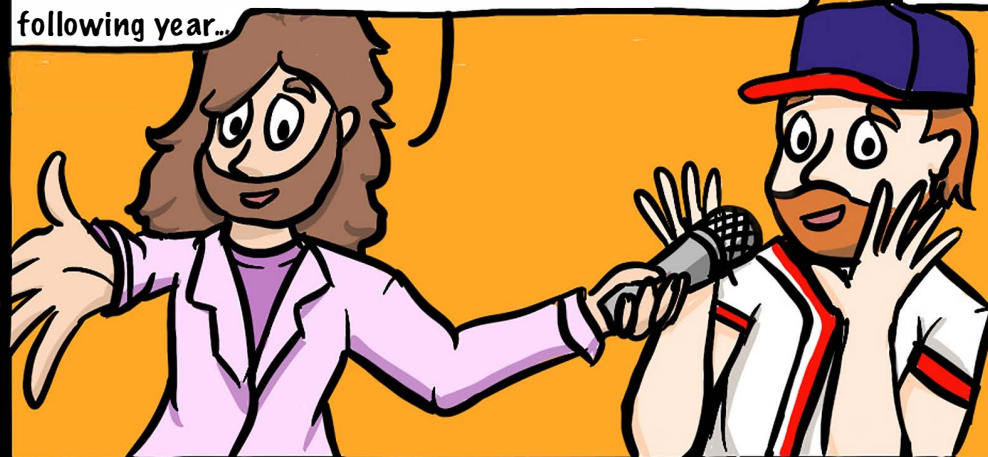
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There was a great quote from the interview of a baseball player a few years ago. When asked why his team that had such great chemistry the year before, and had won the championship, had done so poorly the following year...

Chemistry is icing on the cake. It's not the cake.



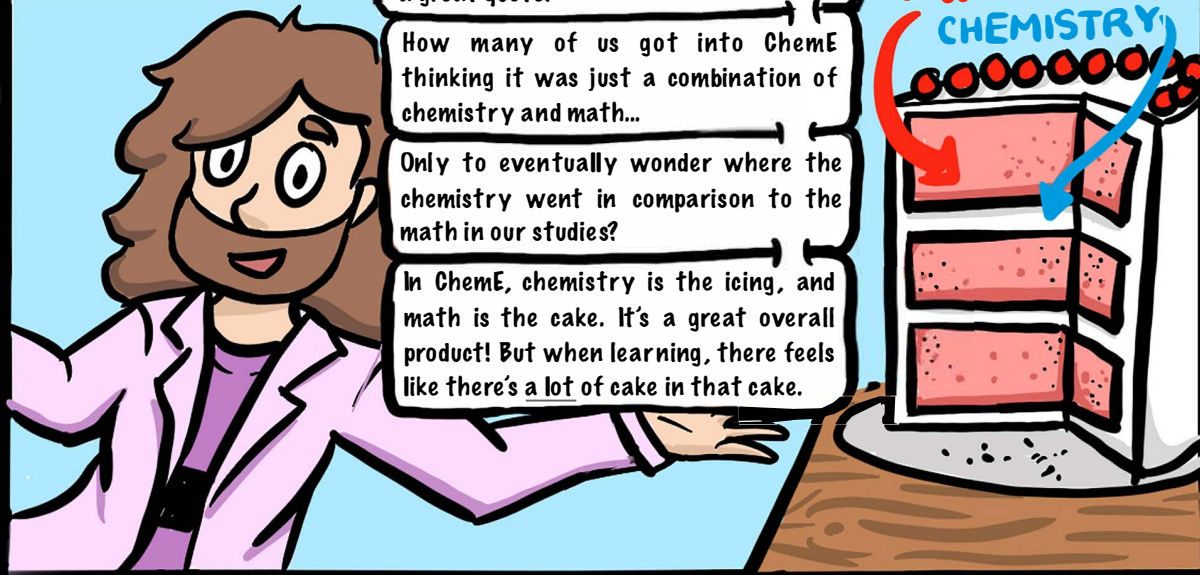
To anyone in chemical engineering, that's a great quote!

How many of us got into ChemE thinking it was just a combination of chemistry and math...

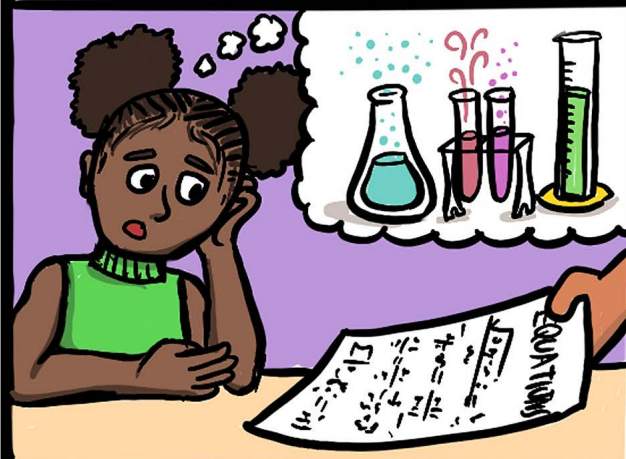
Only to eventually wonder where the chemistry went in comparison to the math in our studies?

In ChemE, chemistry is the icing, and math is the cake. It's a great overall product! But when learning, there feels like there's a lot of cake in that cake.

MATH
CHEMISTRY



Really, it's an issue of both message and delivery.

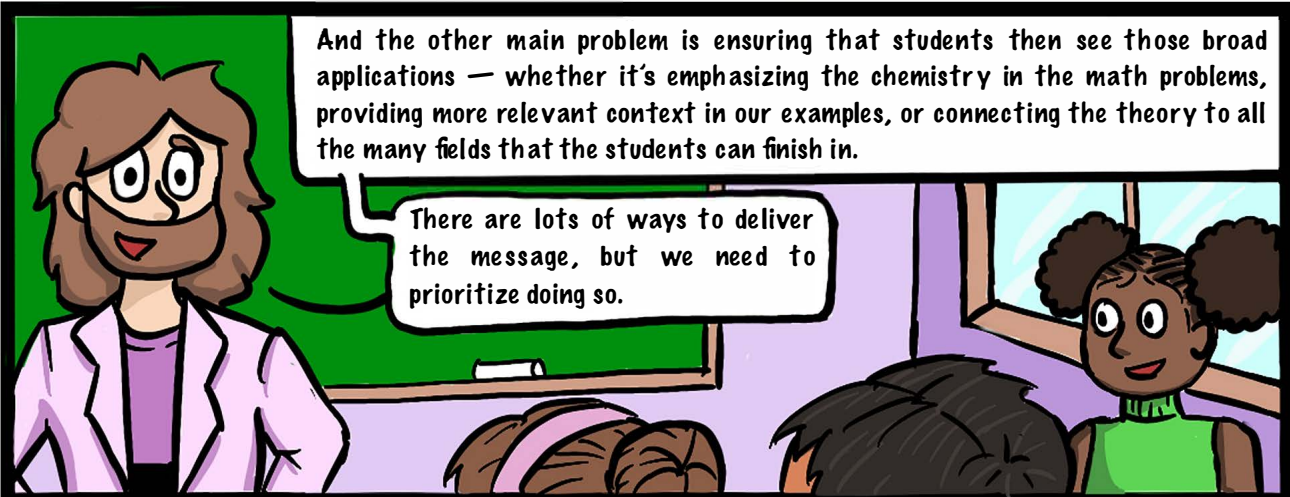


The first problem is that not enough high school students (and non-engineer adults, for that matter) know what chemical engineering actually is. So a math heavy focus feels kind of bait-and-switch.

So we need to do a better job both explaining and celebrating what chemical engineers do — how we can be involved in materials and medicine and the environment and food science and cosmetics and more — so students are ready for their instruction, which has a theoretical core and broad application.



And the other main problem is ensuring that students then see those broad applications — whether it's emphasizing the chemistry in the math problems, providing more relevant context in our examples, or connecting the theory to all the many fields that the students can finish in.



This is really a bridging and retention problem from K-12 to undergraduate, and there are a bunch of approaches we can take to address it. But it's something we should be mindful of!

Maybe then... we can all have our cake and eat it too.

