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Firstly, a fraction multiplied by another fraction looks inherently intimidating. Before a student even attempts to carry out the procedure they get nervous just looking at the numbers, which in turn makes it harder to learn because when a student starts out with the attitude that something will be hard, it normally is harder for them. Aside from that, most students yearn to get the correct answer with little thought when something seems difficult and the simple action of multiplying the numerators and then the denominators is easy to memorize quickly. It is hard for students to conceptualize what it is that they are doing and come to terms with the fact that by multiplying a fraction they are actually getting a smaller value. For instance, ½ times ½ is ¼ which is smaller than the original two factors. Essentially, you are cutting a half which used to be a whole in half for the second time which gives you ¼. But most students don’t see it that way, and I know that I did not. I followed the algorithms and hoped that I passed because I have always had a hard time in math due to my dyspraxia, and felt more comfortable mindlessly memorizing steps than admitting my confusion to the teacher. Up until this point in time, I am not sure I ever actually thought to myself that multiplying by ½ is the same thing as splitting something in half, or dividing by 2. As I got older I realized that it was what I was doing, but I never put the concept into words. When, and if, teachers begin to implement visual aids, it is too late and the damage is done as the students have started off with a poor approach to fraction multiplication like I did.

Both Fran and Kevin supported the students’ learning of mathematics by assisting the school in applying for a grant to get the resources they needed to further students’ conceptual knowledge of multiplying fractions. Fran and Kevin each chose students to come up and model the problems for the class which was a very good idea because often a student explains something in a different way than the teacher which might make more sense to certain students in the class. A new perspective is always beneficial when learning math. I also thought that Kevin pairing his students Charles and Jorge who both got the correct answer but in different ways because Charles did not understand why he was doing what he was doing was a wonderful idea. It allowed Kevin to dedicate more time to the whole class and allowed Jorge to further practice what he already knew by teaching it to Charles who needed the extra help. However, Jorge inhibited his students’ learning in a few ways as well. I found his vague remark “Is that what the problem is really asking? Think about it.” to Charles to be unhelpful because if Charles could understand what the problem was really asking on his own then he wouldn’t be struggling with it in the first place. He needed more guidance than that. Fran also supported her students learning in many similar ways to Kevin. Telling her students to work in pairs was very beneficial to their learning because they had someone to go to for help if they were confused and peers are less intimidating to admit confusion to than a teacher. But, when Fran was working with Antonio I feel that she became impatient with him and made a mistake in trying to “get him through” the problem rather than addressing the deeper confusion. She shouldn't have sighed in front of him, because although his many botched attempts must have been frustrating, she should not have let her impatience show. Just because it seemed easy to her did not mean it was easy for Antonio, and by showing her frustration with him she likely caused him to feel less intelligent and made him less likely to go to her for help in the future. Fran and Kevin needed to go over why there were two hexagons representing one unit whole rather than just one hexagon. They kept saying “remember that these two hexagons represent a whole unit” but that does not address the underlying confusion.