



Seeing Green

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Narrator: As a first-year science teacher, Ms. Maguire had entered Maple Rivers High School with excitement. Although she wasn't from the area, Maple Rivers bore strong similarities to her own high school, and she felt a sense of kinship with her students. Ms. Maguire also loved the Maple Rivers community itself. Among the families in the area who weren't in agriculture, many worked as engineers and senior managers in the oil and natural gas industry. They often moved to the area specifically to send their children to Maple Rivers Public Schools, which were renowned for a close-knit parental community and excellent academics.

Ms. Maguire had quickly built a strong rapport with students and administrators alike. Her students in particular appreciated her passion for science and her commitment to incorporating local issues into classroom discussions. Today, however, a sense of tension filled the room.

Ms. Maguire: So remember that last week we brainstormed what we know about the difference between weather and climate, how climate impacts the development of different weather systems, and the Earth's geologic history. And we just watched the video from National Geographic, "Causes and Effects of Climate Change," to see how climate change is connected to everyday human activity. Now let's—

Mason (*interrupting*): This is not real science! Climate change happens all the time, and the people who made this video are freaking out for no reason.

A chorus of "yeah" sounds in the classroom. Chandelle's hand shoots up, her eyes imploring Ms. Maguire to call on her.

Ms. Maguire: Chandelle?

Chandelle (passionate): You all are wrong! Can't you just accept the facts? The video showed all the evidence that humans are causing climate change!

Mason: All those numbers came from the EPA. In case you haven't heard, Chandelle, the EPA pushes a liberal agenda. We can't make our decisions based off of politics.

Chandelle: Mason, you can't call science political just because you don't like it.

Lindsey: Yeah, but you shouldn't be defending the video just because it *does* agree with your politics. Like, Ms. Maguire is always teaching us that scientists question things, look at the data, and challenge assumptions. The only reason you think this video is automatically true is because it backs up what you already believe. You don't know any better than Mason does if their interpretation of the stats is right, so why take it on faith?"

Ms. Maguire is unsure how to respond to this passionate debate about what is, in her mind, a settled scientific issue.

Ms. Maguire (*quickly improvising a plan*): It seems like we have a bunch of different viewpoints here. Since we only have a few minutes, why don't you each take out a sheet of paper and write down your position on humans' responsibilities for climate change, along with the evidence supporting your claim. Make sure you address information from our brainstorm and the video. You can finish your responses for homework, and we'll use them to continue our discussion tomorrow.

Narrator: The next day's class went much more smoothly, as students compared their opinion papers with the evidence presented in a UN climate-change report that Ms. Maguire helped them find. While there was still some grumbling about politically motivated science, Ms. Maguire felt better about launching the unit, and looked forward to introducing a group project on modifying human behavior to mitigate climate change. Humming to herself, she walked down to lunch duty, where she was surprised to be pulled aside by Mrs. Lee, the school principal.

Mrs. Lee: Can you come into my office after seventh period? I got a phone call this morning; a couple parents want to talk about what happened in class yesterday. Ms. Ruiz and Mr. Fawkes will be there, too; it shouldn't take too long.

Ms. Maguire (*surprised*): Uh, sure. Can I ask--?

Mrs. Lee (*distracted by a rowdy group of students*): What is that group doing over there? Gotta go!

Narrator: As soon as the school day ended, Ms. Maguire made her way to the conference room, her heart hammering double-time. Ms. Ruiz, Maple River's instructional support specialist, met her eyes with a smile, gesturing to the seat between her and Mr. Fawkes, Ms. Maguire's assigned teacher mentor. Ms. Maguire sank down, grateful for their presence. Looking around the table, she saw Mason's dad, Mr. Darrow, and Lindsey's mom, Mrs. Tekin, along with Mrs. Lee.

Mrs. Lee: Thank you all for taking the time out of your Wednesday to be here. As I'm sure you've all heard me say before, at Maple Rivers, we believe in fostering strong academic communities, and, as a community, I am sure we can resolve this.

Ms. Maguire (confused): Resolve what?

Mr. Darrow (friendly on the surface, with an edge underneath): Thank you, Principal Lee. Now, I want to be clear about why I'm here. It's important that the classroom be a politically neutral space, and, yesterday, it wasn't.

Ms. Maguire: I'm sorry to hear you say that. I agree the classroom should be neutral. But I actually didn't – and, well, I guess I still don't – consider global warming to be a political issue. It's just science.

Mr. Darrow (*leaning in*): Our children should have the right to use the facts to draw their own conclusions. After all, school is where they learn to think for themselves.

Mrs. Tekin (*smiling*): Now, Ms. Maguire, I know you're just trying to teach, and that's fine. In fact, I don't think you were trying to be political, either. I just think you don't have the entire story.

Ms. Maguire (confused): What story? Climate science is pretty well established by now.

Mrs. Tekin (*explaining*): But science is different from policy. Many academics demonize the petroleum industry, in spite of the fact that we all know how much our economy depends on oil. Especially right here in Maple Rivers, where energy jobs help to put food on our tables. I mean, I bet half our parents would lose their jobs if we enacted some of the more out-there liberal proposals I hear floating around!

Mr. Fawkes: True.

Mrs. Tekin: So when Lindsey comes home and tells me that she was made to watch a video criticizing petroleum engineering in class, we have two problems. One, I have Lindsey telling me that she doesn't want to be a petroleum engineer anymore because it's hurting the planet. And we need more girls like her in the field. Two, we've needlessly villainized the very industry we depend on. Look, I'm not saying, "don't talk about climate change." I just want to make sure that our kids don't come home ashamed of what it is that their parents do. Teach them about climate science, but then teach them about the importance of energy independence, about the benefits of natural gas – about all the other stuff the media likes to ignore!

Ms. Maguire (unsure how to respond): Um.....

Mr. Fawkes (coming to her rescue): First year teachers often have a difficult time balancing classroom and curriculum—I'm sure we can all trust Ms. Maguire was trying to do right by her students. The question I'm hearing from both of you is, "how can we balance academic and community values at the same time?" Mrs. Tekin, I think you offer a very fair middle ground. Let's teach the science – all of it. We can talk about CO₂, and we can talk about clean-burning natural gas, and we can learn about the importance of the work folks in the community do.

Ms. Maguire (*trying to disagree without being confrontational*): I'll be honest...This compromise worries me. Climate scientists agree that we all need to do our part to keep the worst possible outcomes of global warming at bay, which

includes reducing fossil fuel use. If the consensus of the scientific community is considered political, then how am I supposed to teach science?

Ms. Ruiz (*reassuring*): I get your worry. And you're teaching the curriculum, just as we expect you to. But there's a difference between science and activism. You could – in fact, you should! – spend some time teaching climate change, but you should also teach students about the community we live in. And, hey, I've seen you teach! I know you can do a really great job in connecting school and community!

Principal Lee (*relieved at this compromise*): Yes, I think that is a wonderful way to proceed. This way, the students can discuss current events and science without making anyone feel left out. Let's just incorporate the importance of the petroleum industry into the conversation!

Ms. Maguire (*unconvinced*): Of course, I think it's important for my students to hear a range of opinions and formulate their own conclusions. Still...teaching climate change like *this* feels political. The scientific consensus is that, well, global warming is a major threat to all of us. I just don't want that to get lost in the debate. I don't know that changing the curriculum in this way feels right.

Mr. Darrow (*visibly annoyed*): Regardless of how you may feel about the issue, your job is to work in tandem with the community and its values. I mean, you're a teacher, and it's your responsibility to let the students debate the issues, not dictate your version of the truth.

Mr. Fawkes (*conciliatory*): Ms. Maguire loves this community, and I have no doubt that she is going to use the ideas from this meeting to grow as a teacher.

Narrator: All of the participants in the meeting looked to Ms. Maguire, clearly expecting that she would concur with the "compromise" that the others had reached. But she could only focus on the questions running through her head.

Ms. Maguire (talking to herself): What should I do? Would including Maple Rivers' connection to the oil industry minimize legitimate scientific work coming out every day about the dangers of global warming? Or could I somehow teach both, and separate science from policy? The fact that so many of my students—and their parents!—doubt the basic veracity of climate science makes it seem

particularly important for me to represent the science accurately. But how can I continue teaching climate science the way I planned if I keep running into constant opposition? Do I have some obligation, as Mr. Darrow suggested, to teach in tandem with the community's values—or at least, not to undermine its very economic foundation? And if I do teach climate science this year without compromising, will I be able to stay at Maple Rivers in the future? I'm still two years away from getting tenure. Am I willing to lose my job over this? What should I say?