

Valedictory Address

Good morning everyone. To our principal, Mr. Garrick, our administrators, all of our teachers and staff, and the school board president, Mr. Doug Heil, I extend my warmest welcome. To the Class of 2022, and all of our parents, families, and friends, welcome to the critical point. I call it the critical point because this phase in our lives is a point; a moment of time that, in the context of our entire lifetimes, represents a rather negligible amount of time. Although this point in our lives has been going by and will continue to go by at a fast pace, it represents forced transition. We might not want to move into the future, but the pressure that we are put under puts us in a state where we are forced to come to terms with who we are. This is the transition phase; the transition between dependence and independence; between adolescence and adulthood. The choices we make at this point will have their effects amplified over the course of our lives. I think the gravity of this point in our lives causes us to feel strong, contrasting emotions. We feel joy and relief because high school is over, and soon we will move on to hopefully more exciting things that we enjoy because they are what we choose to do instead of what we are forced to do.

I'm going to make a comparison that seems far fetched at first, but I want you to bear with me and listen until the end because I think this is an accurate representation of high school. High schoolers are like particles. Molecules, atoms, and electrons move rapidly and unpredictably, and they are highly sensitive to their surroundings. The electron clouds of an atom are constantly shifting, like how our friend circles constantly shift. Trying to predict the behavior of these particles is what chemistry attempts to do. There are equations that attempt to explain what a particle will do when it's surroundings are changed, and there are models which attempt to model what the orbits of electrons surrounding an atom look like. However, these models and equations don't always work. For example, when a gas is subjected to low temperature and high pressure, the ideal gas law equation which relates different quantities of the gas breaks down and you have to inspect the gas more closely to determine the unknown quantities that you are solving for. Also, in terms of electron orbitals, it turns out that we can't be certain where an electron is at any given time. We can only know that there are orbitals surrounding atoms where we are likely to find electrons. I think these facts relate tonight schoolers because we are often subjected to the adults around us trying to figure out how we work. They try to predict what we are going to do and what we are truly like, but the reality is that this cannot be known for certain. A gas being put under pressure and becoming non idealistic, I think, is a perfect example of our experience under the COVID-19 pandemic. We were put under stressful conditions and our high schools lives became non ideal. The territory that we headed into with hybrid schedules and online learning was uncharted; it couldn't be known how we would react to these changes. To find out how wage pandemic truly impacted us, we had to devote more time to mental health issues; more time to talking about how we truly feel. In science, nothing is as simple as it first seems; there is always nuance, and in real life, there is also nuance that must be explored to truly explain what a person is like and what they feel.

I want to thank all of our teachers that we have had throughout the years, as well as our staff working behind the scenes to make everything possible. Our teachers and staff here

at DeSales are like the sea of delocalized electrons present in metallic solids. In metallic solids, electrons are spread out among all of the atoms instead of certain electrons belonging to certain atoms; the atoms all share their electrons. This sharing of electrons thus results in a strong solid that is shiny, extremely durable, and efficiently conducts heat and electricity. The staff at St. Francis Desales High School are like that sea of electrons; all of the students share them equally and this results in a school community that is stronger because of that relationship.

In closing, there is one final comparison that I would like to make that will hopefully give you all something to think about. There are attractive forces between everything. Mrs. Scott likes to point this fact out when she teaches universal gravitation. When I was learning about universal gravitation in AP physics, Mrs. Scott pointed out that we are gravitationally attracted to each other because we have mass and there is distance between us. This gravitational attraction might not be very strong, but it is still ever present. Particles also exhibit attraction to each other; when particles are oppositely charged, they are more attracted to each other. I think there is a beautiful lesson to be gathered from that concept; that opposites attract, and that when opposites come together, they can form a strong bond. Ionic bonds, the bonds that result from attractions between oppositely charged particles, are the strongest type of atomic bond that there is after all. So, my final message would be to love those who seem to be different from you. If you don't, you will never experience that bond that could have been, and there is nothing worse than having regrets. I think we can all agree on that in some way. So, thank you all for listening today. Class of 2022, enjoy this moment, because it is a temporary moment that we must cherish. The attractive forces among us are acting strong today; I know you all can feel it. Peace out class of 2022, it's been real.