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Earth Science: Topic 11
Compare/Contrast Debate

Background: Earth is unique from other planets. It is possible to study the earth as simply another planet – or as unique from other planets.

- *Position A:* Earth is a unique planet and must be studied separately from all other planets for the best understanding.
- *Position B:* While yes, Earth is unique, it should be studied as one of many planets for a full understanding.

I select position A.

Background/Overview

Earth is undeniably unique planet. Earth's uniqueness is self-evident in its support of life, the diversity of life, its size, mass, formations, atmosphere, presence of water and a myriad of other attributes. In high school, Earth is best studied as the unique entity that it is. Post-graduation in university studies, comparative studies of Earth and other celestial bodies would make sense. For emerging adults, however, Earth science is best taught and learned as a stand-alone subject area. Drawing attention and focus away from Earth through introduction of space science introduces distraction and (in high school) less-relevant concepts.

Point 1. Comparisons of Earth to other life-bearing planets is unlikely to happen. At present, scientists are unaware of any other planets which are currently supporting life. While there may be such planets elsewhere, they are unlikely to be found in the foreseeable future. Even if they are discovered, the distance between Earth and that hypothetical planet would be vast - making direct comparisons difficult, at best.

Point 2. Human impacts toward our planet should be understood well. Earth is our home - it is where our species and other species will survive and thrive - or, not. The importance to more deeply understanding our planet, singularly, may very well become a life-death situation for ourselves and future generations.

Point 3. Earth science has a wide array of topics without introducing other complexities. In high school, the study of Earth - *by itself, and without distractions from the study of other planets, even in our solar system* - is a broad topic. Evidence of this can be found in the index of most any high school Earth science textbook. Topics (chapters) are numerous, each with a significant set of facts, concepts, and strategic-thinking ideas. Grasping the concepts in an advanced way - when compared to earlier school years - is important enough to warrant a typical student's full attention.

Conclusion

In high school, Earth science is best taught and learned as a stand-alone subject area. Reasons for doing so can be summarized in three ways. Other life-supporting planets are currently unknown and unlikely to be discovered any time soon. This makes direct comparisons of Earth to other similar planets highly unlikely. High school students are poised to become adults where understanding and supported opinions regarding the health of our planet will become increasingly important. Finally, Earth science is a vast topic in-and-of-itself. Introducing additional concepts into the focused attention toward Earth science may be beyond the capacity of many high school students.