# Aff Framework Cards

**Simply learning about space policy has real world impacts- economic development and activism**

**Karl and Lukaszczyk 10** [Alex, space engineer and the Chairman of the Space Generation Advisory Council; Agnieszka, Co-Chair of the Space Generation Advisory Council, ; “Youth contributions to the debate on space security”, THE FAIR AND RESPONSIBLE USE OF SPACE, Studies in Space Policy, Volume 4, 6, 165-174, Springer Link, <http://www.springerlink.com/content/u5u7083311164j2h/fulltext.pdf>]

Space education and outreach: There is a lack of space education in schools, especially in developing countries. Students are not aware of the opportunities that exist in fields such as remote sensing applications and satellite communication and are not aware of future space programmes in their country. Through more comprehensive space education, they will be able to apply this knowledge to solve specific problems within their community, thus contributing to the economic development of their nation. Creation of a Global Space Education Curriculum – expanding space education in schools on an international level by convincing governments and schools to include space curriculum in classrooms – has been recommended. These programmes will raise space awareness as well as stimulate student interest in studying science and engineering. Organisations such as UNESCO, among others, should play an active role in encouraging educational programmes in space research. Space agencies should regularly inform the public, especially people from developing countries, of the benefits of space technologies by setting up specific workshops and educational events. Young people pointed out that it appears as if many agencies, organisations and governments are aware of the poor information distribution when it comes to space topics; however, very little progress has been achieved in this area.

**The plan results in better policymaking and real world impacts**

**Snider 4** [Alfred C., Assistant Professor of Forensics at the University of Vermont, “Space Utilization as a Subject of Academic Debates”, <http://er.jsc.nasa.gov/seh/debate.html>]

Competitive and in-class debates serve several important objectives. First, debates usually focus on policy issues with important societal implications. Debates thus offer instructors a unique opportunity to relate often abstract classroom theories to "real world" issues in an area interesting to most students. For example, policy debates centering on space-related topics can be employed in economics, foreign affairs, political science, history, and almost any other social science discipline (although in some fields debates on value topics rather than policy topics are more appropriate). Second, debates provide a significant educational experience. Obviously, students learn about the processes of "debate" and "decisionmaking" during the activity, but, additionally, debaters consistently utilize skills such as: public speaking, logic, persuasion, organization, research, composition, and other subtle tools relevant to such a complex act. Third, debate encompasses an element of play and competition that attracts and stimulates students, promoting the educational process. Debates that focus on space policy issues frequently appeal to students because of factors such as: student interest and stakes in the future, both as individuals and members of a society with long-term concerns; student fascination with new adventures and challenges; student concern over potential limits to growth and the need for new frontiers and additional resources; and student involvement with technology (e.g., electronic video games, computers, videotape decks), which often leads students to consider both the potential and the disadvantages of high-technology solutions to social problems, which often constitute the partial or virtually total product of technological progress. II. Points of Stasis in Space Utilization Debates In debates focusing on space utilization, certain issues seem to come up over and over again. Such issues may be thought of as points of "stasis." From the perspective of Gass, there exist certain points of stasis, or "centers of controversy, which inhere in all policy disputes" (1). Thus, policy questions in and of themselves lead to certain points of stasis. Some of the points of stasis in debates encompassing space utilization are reviewed below. When relevant, such points of stasis can be applied during in-class debates. A. Resource Limitations Several issues seem relevant here. First, affirmative teams are prone to argue that space utilization represents a viable answer to growing resource shortages. Second, negative teams often respond that the initial cost of such endeavors is too high. Third, negative teams argue in some situations that any expensive affirmative proposal for non-space-related programs will be funded at the expense of continued space utilization programs. Each topic is discussed briefly below. First, debaters see space utilization as an answer to resource limitations. Human history has been a story of expansion: populations, wealth, occupied land, and the ability to control nature have all increased. However, many concerned scholars contend that unlimited growth on Earth cannot proceed much longer without a world collapse, i.e., accelerating resource depletion in the face of vastly larger populations. Perhaps the seminal document in this field is the Club of Rome 1972 publication, "The Limits to Growth," prepared by a study group of scientists and industrialists concerned with the future. The authors sought to assemble, in mathematical form, all known data about population, pollution, food supplies, industrial needs, and the synergistic interactions among such elements. They then constructed an elaborate computer model and concluded that, if current trends continued, world civilization would collapse before the year 2100. The authors noted that the only way to avoid such a disaster would be adopting a policy of limited growth (2). Although the study has been attacked for methodological shortcomings, this research nevertheless provided a powerful impetus for debaters, encouraging many debate teams to look toward the future‹emphasizing the ecological impacts of growth, the uses of greater wealth, and the distribution of existing wealth into a limits-to-growth model. Affirmative teams advocate space utilization as a way out of this trap, arguing that we are at an important turning point and must take action to escape a closed-system Earth. R. Buckminster Fuller, a common source among debaters, has noted that "we are in an historically critical state of humans aboard spaceship Earth. I think we have been given adequate resources to absorb our many trial and error explanations for knowledge. We have been allowed to make a great mess of things‹until now" (3). Specifically, a number of affirmative teams propose space development along the lines suggested by Gerard K. O'Neill (4). Such development would use current space technology to build space habitations. For example, some teams have proposed that space developers might build a small station on the Moon, where a mass driver (a device to use solar energy to electromagnetically propel pieces of lunar material to a spot in space between the Earth and the Moon) would deliver resources to a small space manufacturing center. Utilizing solar energy, the manufacturing center would process the raw materials into usable form and create larger habitation exploiting the weightlessness of space. Workers also could begin building solar power stations to supply energy to work units in space and to the Earth. Eventually, lunar or asteroidal material might be processed in space for use on Earth. Thus, space development could provide unlimited energy at a low cost, as well as unlimited raw materials. In the long run, habitations might evolve into large, self-enclosed worlds housing hundreds of thousands, or even millions, of persons. Thus, affirmative teams have been directly addressing this point of stasis‹ limited potential for terrestrial growth‹by proposing long-term space utilization.

**There are intrinsic benefits with learning about the Aff- key to activism.**

**AIAA, 11** [American Institute of Aeronautics and Astronautics, Duane Hyland, “AIAA Partners with National Forensics League to Sponsor Space Policy Debates”, http://www.aiaa.org/content.cfm?pageid=912]

AIAA Deputy Director Klaus Dannenberg stated: “The AIAA is pleased that the NFL has decided that America’s future role in space exploration and development is a topic worthy of debate for the Nation’s high school students. AIAA is excited to work with the NFL in educating our future leaders on the interaction of political, scientific, technological, and environmental issues and the associated societal benefits encompassed by a sustainable space policy. This interaction provides a chance to reach out to the next generation and to inspire them to make this school year’s debate topics their own life’s work.”