

BioTalk – An Online Argumentation Process for Hamburg’s Adolescents about Chances and Risks of Genetically Modified Food.

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How to motivate hundreds of pupils to discuss the topic genetically modified food and to work out hundreds of argumentation cards voluntary three weeks on the Internet while having fun?

The project BioTalk has ventured on this difficult task which sounds slightly unrealistic. In the course of the project the project group developed a specific online argumentation proceeding for adolescents in Hamburg that was applied successfully.

BioTalk was funded in the context of the programme „Support of discourse projects dealing with ethical, judicial and social questions regarding the modern medicine and biotechnology“ by the German Federal Ministry of Education and Research. It was conducted between April 2005 and March 2006.

In the consortium the TuTech Innovation GmbH worked together with the research institute BIOGUM (Biotechnology, Society and Environment) and the Institute of Didactics in Natural Sciences of the University of Hamburg and the Fraunhofer Institute for Autonomous Intelligent Systems (AIS).

The project was based on a two-step procedure: in the preparation phase organised in cooperation with teachers, educational institutes and the department of education and sport the project group developed the framework and features of the following online argumentation process and tried to attract the pupils’ attention by several promotion activities. In the second phase the online discourse and integrated role playing game was set up and carried out on the TuTech’s online discussion platform DEMOS – a participation and argumentation support system which has been applied successfully in different national and international public discourses. In this case, DEMOS was adapted to the specific needs of the target group.

The discourse project run through the three subsequent phases of broadening, deepening and consolidating the argumentation process in different kinds of forums and joint work arrangements. During the process the participants were called on to take over up to seven different roles and to explore the different role specific perspectives and arguments. They were also asked to fix and work out collaboratively those arguments within so called “argumentation cards” which offered a pro and contra field for all of the seven roles. These argumentation cards – as well as the stories – were based on a wiki-format to enable the team work of the different participants on the Internet.

In the end more than 300 pupils were attracted to join the online argumentation process about chances and risks of genetically modifies food. The discussion was going on for three weeks carried by an enormous engagement of the young participants. Altogether, the pupils wrote more than 4000 single contributions. Furthermore, they collaboratively developed 170 argumentation cards covering the pro and contra arguments of seven different role perspectives each and 70 individual stories dealing with specific aspects of the underlying topic.

The analysis of the project discovered that in particular the game like and competitive character of the online discourse as well as the community built up at the same time motivated the pupils to take part and to work out their arguments frequently. The game like surrounding and the underlying features

supported effectively their willingness to formulate their own positions and to reflect arguments from different point of views.

It showed up that the usage of new media to exploit and discuss difficult and complex topics allows new types of interaction and enhances the motivation of the pupils. Game like elements and competitions, active group work and the establishment of a constant community resulting from the collaborative argumentation process seem to be suitable to increase both, the interest in complex topics as well as the ability to argue. This presumption is also backed by the stability of the participants' number which were forced to spend considerable extra time and work to keep track of the ongoing discussion.

The successfully tested approach demonstrates new internet based proceedings to exploit and work on societal relevant and diverse topics within a game and discourse oriented framework while at the same time enlarge the different perspectives and, furthermore, new types of participation.