

SP - (16551) - 'LET'S TALK ABOUT SCIENCE' – INDUSTRY-STUDENT MEETINGS IN STEM-EDUCATION-WEBINARS

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Short Abstract

In Europe initiatives have been launched over the years in support of strategic partnership between major industries, ministries of education and teachers in Science, Technology, Engineering and Mathematics education (STEM). The aim of this study is to scrutinize the involvement of industrial actors in STEM-education. We focus on what messages are communicated to students in encounters between industrial representatives and students regarding relations between science-industry-society. The research employs a case-study methodology. A webinar series with chats in which secondary students meet with industrial representatives is analysed. The webinars focus on STEM careers and skills. A qualitative content analysis was performed. Six themes were discerned in the industry-student conversations: (1) Diversifying the chemical industry, (2) Emphasizing "soft skills" in the chemical industry, (3) Negotiating risks associated with chemical industry as a workplace, (4) Negotiating environmental issues and responsibilities, (5) Convincing students to choose a petrochemical career, and (6) Emphasizing the role of chemistry in society. In conclusion, the webinar sessions provided opportunities to challenge some recurring stereotypical images of STEM and the petrochemical industry. The roles of the students and the industrial representatives varied between themes. For example, environmental issues were mostly raised by the students, whereas the industrial representatives emphasized career possibilities and 'soft skills'. The industry representatives focused on communicating the role and contributions of the petrochemical industry in relation to environment, society and risks in a positive way, while leaving out broader, and more critically oriented perspectives. This underscores the importance of taking cautions raised in the educational policy literature on a decrease of citizen perspectives into account when opening up STEM-education for increased participation of external actors, e.g. industry.