

SP - (16629) - IS SCIENTIFIC CONTENT IN SOCIAL MEDIA COMMENTS REWARDED? ANALYZING YOUTUBE COMMENTS ABOUT CLIMATE CHANGE

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Short Abstract

Social media sites such as YouTube have become places for discussions about socio-scientific issues due to their possibility of direct interaction, for example by writing comments. But despite this, it is unknown if and how social media and comments in particular may contribute to informal learning. Therefore, we selected the most commented video in German language about climate change and qualitatively coded 1021 of its comments using qualitative content analysis. We investigated (RQ1) the amount of comments referring to scientific content, (RQ2) possible co-occurrences between resulting categories, and (RQ3) connections between categories and users' likes for comments from these categories. Overall, only 206 comments included scientific content (20.2%), which was a significantly smaller amount than comments without scientific content ($n = 815$, 79.8%). The most frequently coded categories for comments without scientific content were discredit ($n = 222$, 21.7%) and wishes for further debates about climate change ($n = 97$, 9.5%). These wishes for a further debate were not grounded on scientific argumentation, as we found a negative correlation between the occurrence of the category wish for debate and the occurrence of the category scientific content ($r = -0.13$, $p < 0.01$). Besides this, none of the categories referring to scientific content was a predictor for users' likes. Only the categories of wish for debate ($\beta = 3.13$, $p < 0.001$) and discredit ($\beta = 2.61$, $p < 0.001$) were significant positive predictors of the given likes. Based on these results, users obviously attribute only a minor role to scientific contents in social media comments, even if further studies are needed for generalization. Overall, social media comments may be problematic for informal learning due to the possibility of reinforcing scientific misconceptions about debated topics such as climate change. The consequences these results could have for formal education will be discussed.