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An Evaluation of Argumentation-Based Studies on Physics Subjects Using the Toulmin Model

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Abstract

This study is unique in examining how researchers encode components in Toulmin Argument Pattern (TAP)-based applications and their alignment with the TAP framework. Accurate coding practices are important given the increased emphasis on argumentation in PISA, the US National Research Council, and national curricula. As a result of the content analysis, it was seen that the researchers coded misaligned with the TAP. These different coding practices lead to the dissemination of misinformation about argumentation. This research will provide valuable guidance to educators and policymakers in developing curricula and conducting argumentation activities by analyzing these practices.