TITLE: NON-ROUTINE QUESTIONS: the written production of math undergraduate students.

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ABSTRACT:

Considering evaluation an investigation practice, this study analyzes the written production of Math undergraduate students (Bachelor and Teaching Degrees) from a public university in non-routine discursive questions. The approach is predominantly qualitative and interpretative, based on the guidelines put forward by the Content Analysis to verify how these students deal with these types of questions in regards to their interpretation and use of the information in the statements, their most used strategies and to the math content knowledge they trigger in solving these questions. Thus a mathematization process involving four phases was considered: comprehension, strategy, procedure and question resolution. The investigation highlights the following relevant points: most students use school-type strategies to answer the questions; they deal quite well with the algorithms involved in the chosen strategies; and students working towards their Bachelor Degree or Teaching Degree showed written records that indicate a similar mathematization process.

Key words: Mathematics Education. Evaluation as an Investigation Practice. Mathematics Written Production Analysis. Mathematization.