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## Chronological and Pedagogical Analysis of Global Real-Time Assessment Tool for Teaching Enhancement (G-RATE)

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### ABSTRACT

The Global Real-time Assessment Tool for Teaching Enhancement (G-RATE) serves as a pedagogical feedback tool to assess teaching performance in learning environments. This tool is developed based on How People Learn (HPL) framework, which specifically identifies four dimensions which are essential elements of an effective learning environment which are community-centeredness, learner-centeredness, assessment-centeredness and knowledge-centeredness. However, there are no succinct and meaningful representations for frequency and chronological observational data and no interpretation from the collected observation data has been made so far. This study addresses two different methods to observe the patterns from the observation data. First, observation data is compared in two rounds within the groups based on the timestamp, with each time slot differs by 10 seconds. Second, the observation data is compared by percentage of occurrence within the groups throughout the observation period. From the analysis, it could be observed that the teaching performance improved both in organization and community-centeredness as there are more activities carried out in the second round of observation, but varies in other dimensions. This analysis ensures that this tool is effective to be used for improvement in instructors' teaching performance due to the meaningful data representations.

### KEYWORDS

Data Analysis, G-RATE

### REFERENCES

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