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Topic of Research: Development of e-content on Difficult Areas in Mathematics at Elementary Level

Keywords: E-content, Difficult Areas, Mathematics, Elementary Level

FINDINGS

The thesis examines the difficult areas in Mathematics at Elementary Level and develop the e-content to address these difficult areas. By utilizing a variety of data collection methods, the researcher gained profound insights into the challenges faced by students and teachers in Elementary Mathematics. The initial questionnaire administered to both students and teachers provided a broad overview of difficult areas. To delve deeper, focused group discussions and interviews were conducted with students and teachers respectively, revealing specific complexities. The students and teachers explained the challenging topics in detail. The findings included challenging topics such as Geometry, Congruency, Comparing Quantities.

These findings served as a foundation for subsequent actions. It became evident that while certain topics found favour among students, numerous areas posed significant challenges. To gauge students' understanding accurately, an achievement test was meticulously crafted based on the findings from different tools. The test papers gave a clear idea about the alternate conceptions of the students about the topics and the kind of errors students commit while dealing with such challenging topics.

Armed with this detailed understanding of the challenging areas in Elementary Mathematics, the researcher embarked on the development of targeted e-content. Following the structured ADDIE Model, each step was meticulously executed, ensuring a comprehensive approach. To validate the authenticity of the e-content, a tool for e-content evaluation was adopted from CIET, NCERT, wherein the experts of Mathematics and Educational Technology evaluated the e-content and gave their comments. These methodical steps formed the cornerstone of this research, driving meaningful interventions and paving the way for an enhanced learning experience.