Digital Books, Students' Motivation and Teachers' Work Effectiveness in Teaching Mathematics

Research Goal:

To examine the impact of using digital books on:

- students' motivation and involvement in learning
 mathematics
- effectiveness and efficiency
 of the teachers' work

Literature Review:

- ✓ Digital books
- ✓ Students' motivation to learn mathematics
- ✓ Effectiveness and
 efficiency of the teachers'
 work

Research Questions:

RQ1: What is the relationship between using digital books in class and students' level of motivation and engagement in learning processes?

RQ2: What impact does the use of digital books have on the effectiveness and efficiency of the teachers' work?

Population:

100 mathematics teachers and
270 fifth- and sixth-grade
students from an Arab
elementary school

Research Tools:

Two updated questionnaires based on Brislin (1970): teachers' questionnaire, students' questionnaire

Findings:

- Pearson's correlation
 showed a positive
 relationship between
 digital books and
 students'
 motivation/engagement
- Pearson's correlation showed a positive relationship between digital books and teachers' efficiency

Regression
 calculations showed
 significant results
 regarding students
 and teachers

Conclusions:

Using digital books in mathematics increases students' motivation and teachers' efficiency and effectiveness in instruction.

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