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MATHMARVEL 2.0

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EXECUTIVE SUMMARY

The "MathMarvel 2.0" program, was held at UiTM Negeri Sembilan's Kuala Pilah Campus from June 14 to June 21, 2024, involved 156 students and 25 facilitators from various academic backgrounds. The purpose of the event was to enhance peer tutoring and examination skills through the use of diverse question-solving methodologies. The program's beneficial impact on their learning and the facilitators' skills were highlighted by the participants, who also indicated improved pleasure and confidence. Despite these achievements, the program faced challenges such as identifying subject-specific facilitators and keeping track of students' attendance. In order to keep up educational momentum and address these problems through enhanced recruitment and attendance tracking systems, it is recommended that the program be offered regularly each semester. This will help the department of Mathematical Sciences Studies improve student performance and reduce failure rates.

INTRODUCTION

Initiated at UiTM Negeri Sembilan, the "MathMarvel 2.0" program was designed to address the need for better test preparation and peer learning among students in the Department of Mathematical Sciences. The program aim to provide advanced problem-solving skills and promote a supportive learning environment for a broad group of students from academic programs IC120, AS116, AS114, AS122, AS007, and AS002. It was scheduled to take place from June 14 to June 21, 2024. Students, department heads, and faculty facilitators were among the important stakeholders in this effort, which focused on collaborative education strategies to enhance both individual and group academic achievement. It's main objective to increased exam confidence, increased comprehension of challenging mathematical ideas, and the development of peer support systems. Student comments and improved exam scores would be utilised to evaluate the program's effectiveness.

RESULTS /ACHIEVEMENTS

Academic performance significantly improved as a result of the MathMarvel 2.0 program, which was conducted at UiTM Negeri Sembilan. The program successfully reduced the final exam failure rates for all participating courses to below 25%. Additionally, the peer-to-peer facilitation approach increased classroom attendance and created a positive learning atmosphere. A considerable increase in motivation and self-assurance was reported by students in the overwhelmingly favourable feedback from participants and stakeholders. They valued the program's interactive approach to education, which simplified and made entertaining even the most difficult mathematical issues. Program participation helped students graduate on time and saved minimise the possibility of paying for later tuition, which also provide financial benefits. Students interacted more freely and discussed more openly in the comfortable environment, which was important for developing a collaborative learning culture. A more specific and successful learning experience was produced by this entirety strategy, which improved the identification of individual problems and enabled suited preparation for semester-end exams. Figure 1 shows the activities throughout the program.

Figure 1 : The activities throughout the program

CONCLUSION

Student performance, engagement, and confidence in solving mathematical issues all significantly improved under the MathMarvel 2.0 program. Peer-to-peer tutoring successfully reduced the failure rate to less than 25% while providing a helpful and cooperative learning atmosphere. Participant feedback indicated that the program helped to make mathematical ideas more approachable and entertaining, which increased motivation and enhanced engagement in class.