

Link:

<https://pubs.aip.org/aip/acp/article-abstract/2540/1/090002/2873809/Preliminary-research-on-the-development-of-digital?redirectedFrom=fulltext>

Preliminary research on the development of digital hypercontent modules in mathematical physics subjects

[Dewi Hikmah Marisda](#);

[Rahmawati](#);

[Ma'ruf](#);

[Hartono Bancong](#)

[Author & Article Information](#)

AIP Conf. Proc. 2540, 090002 (2023)

<https://doi.org/10.1063/5.0105890>

•

- Share Icon **Share**
- Tools Icon **Tools**
- **Search Site**

This research is an initial study on student learning outcomes in the Mathematics Physics course. Mathematics Physics is a compulsory subject for the Physics Education Study Program, University of Muhammadiyah Makassar. Mathematical Physics examines the application of mathematics in solving physical phenomena. However, mathematical Physics is often considered difficult by students. Still, Mathematical Physics is essential because of its role as a provision for students to study advanced Physics courses, such as Mechanics, Optics, Waves, Electricity, and so on. Therefore, the search on the perception and acquisition of student learning outcomes in Mathematics Physics lectures is the basis for providing intervention for researchers through research and lessons in the selection of strategies, learning methods, and even the development of learning tools. This research is survey research. The way of data collection is through interviews with 14 fourth semester students of the Physics Education Study Program at the University of Muhammadiyah Makassar. The results of the study found that as many as 57,14% of

students scored less than 70 (categories C, D, and E). this percentage gain is still far from the expected results in Mathematics Physics learning. In addition, the absence of learning tools that are following the characteristics of the Mathematics Physics course for Physics Education students also has an impact on the common understanding of students' Physics concepts.