



## Development of Sound Energy Teaching Module Based on Integrated PjBL Learning Model with Local Wisdom to Improve Scientific Reasoning Ability

Novi Sari Liani <sup>1\*</sup>, Desy Sary Ayunda <sup>2</sup>, Lissa Zikriana <sup>1</sup>, Wulanda <sup>2</sup>

<sup>1</sup> Universitas Almuslim

<sup>2</sup> Universitas Malikussaleh

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### ABSTRACT

This study aims to develop a sound energy teaching module based on the PjBL learning model integrated with local wisdom to improve scientific reasoning skills and test feasibility. The type of research used in this study is a quantitative research type with the Research and Development (R&D) research method. With the ADDIE development model used analysis, design, development, implementation and evaluation. The results of the validation research by media experts show that in the media aspect, technical quality and media size with a presentation value of 84.90%, 89.02%, 91.55% so it is concluded that it is very good. The results of the material expert analysis clearly show that in terms of material coverage, material accuracy, up-to-dateness and stimulating desire, media presentation with a presentation value of 85.73%, 88.58%, 97.30%, 90.72%, 95.81% so it is concluded that it is very good. The results of the analysis of linguists clearly show that in terms of clarity, suitability with student development and suitability with language rules with a presentation value of 88.16%, 90.07%, 95.35%. The results of the overall feasibility test for individual, group and field validation with a percentage of 89%, 87% and 95% qualifications are very suitable. The results of the gain normality test analysis obtained a result of 0.89 so that it can be concluded that there is an increase in the scientific reasoning ability of students who are taught with the sound energy teaching module based on the PjBL learning model integrated with local wisdom.

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### Corresponding Author:

Novi Sari Liani | Universitas Almuslim

Email: novisariianiibnuhajar@gmail.com