



**PHILIPPINE NORMAL UNIVERSITY**  
The National Center for Teacher Education

**STRATEGIC INTERVENTION MATERIALS (SIMs) IN PHYSICS  
FOR GRADE 8 SCIENCE**

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### **ABSTRACT**

*Keywords:* STRATEGIC INTERVENTION MATERIAL, LEAST LEARNED  
COMPETENCY

The problems experienced by teachers in teaching science and the low performance of students in some science competency-based skills prompted this study to develop and validate Strategic Intervention Materials (SIMs), particularly in Physics for Grade 8 Science. These will serve as supplementary tools in assisting teachers in teaching particular science competencies and more on minimizing failure among the students. The diagnostic test in the strand Force, Motion, and Energy (Physics) conducted among the 245 Grade 8 students of Butuan City School of Arts and Trades for the S. Y. 2015-2016, revealed that there were two topics which students were found to be weak at, namely: Light and Electricity. The development of the SIMs was based on the least learned competency of each least learned topic. Six experts evaluated and validated the developed materials: three for the content and three for the pedagogy and utility using the criteria on SIM making contests with an evaluation scale in numerical rating and descriptive rating in five-point range. The results of the evaluation through the derivation of the mean rating of each item with its corresponding mean interpretation showed that the developed SIMs in *Light and Electricity* gained an overall descriptive rating of “outstanding” and these materials are recommended to be used in remediating students who performed low in the said topics.



## **ABSTRAK**

### *Mga Susing Salita:* STRATEGIC INTERVENTION MATERIAL, DI-GAANONG NALINANG NA KOMPETENSI

Ang mga problemang kinakaharap ng mga guro sa pagtuturo ng asignaturang agham at ang mababang performans ng mga mag-aaral sa iilang kasanayan sa agham ang nag-udyok upang isagawa ang pag-aaral na ito na may layuning maglinang at magpatibay ng mga Strategic Intervention Materials (SIMs), partikular na sa asignaturang Pisika ng ikawalong baitang. Ito ay magsisilbing kagamitang suplimentaryo na tutulong sa mga guro sa pagtuturo ng mga partikular na kompetensi sa agham at gayundin sa pagpapaliit ng bilang ng mga bumabagsak na mag-aaral. Ang dayagnostik na pagsubok sa *Force, Motion, at Energy* (Pisika) na isinagawa sa 245 mag-aaral mula sa Baitang 8 ng Butuan City School of Arts and Trades sa taong-panuruan 2015-2016 ay nagpakita na may dalawang paksa na mahirap para sa mga mag-aaral: ang *Light at Electricity*. Ang pagbuo ng SIMs ay nakabatay sa mga kompetensi na hindi gaanong nalinang sa bawat paksa. Anim na mga eksperto ang nagtasa at nagpatibay sa nabuong mga kagamitan: tatlo sa nilalaman at tatlo sa sining ng pagtuturo at kahalagahan, gamit ang mga krayterya sa patimpalak sa paglikha ng SIM na may numerikal na panukatan ng paghuhusga. Ang resulta ng ebalwasyon sa pamamagitan ng pagkuha sa antas ng *mean* sa bawat aytem ay nagpapakita na ang binuong SIMs sa *Light at Electricity* ay nakakuha ng kabuuang deskriptibong marka na “pinakamahusay” at inirekomendang gamitin sa pagsasagawa ng remedyal sa mga mag-aaral na may mababang performans sa mga natukoy na paksa.