



## DEVELOPING 21ST CENTURY SKILLS OF STEM STUDENTS IN THE CONTEXT OF THE NEW NORMAL

**ROLAN I. ARCILLA<sup>1</sup>, KARLA MICHAELLA G. BISCOCHO<sup>2</sup>,  
CHERRY ANN A. BARCIMO<sup>3</sup>, ABEGAIL L. GONZALES, Ph.D<sup>4</sup>**

<https://orcid.org/0000-0002-3885-5675><sup>1</sup>, <https://orcid.org/0000-0002-9984-3977><sup>2</sup>,  
<https://orcid.org/0000-0001-5095-9496><sup>3</sup> <https://orcid.org/0000-0003-1948-3076><sup>4</sup>  
rolan.arcilla@g.batstate-u.edu.ph<sup>1</sup>, karlamichaella.biscocho@g.batstate-u.edu.ph<sup>2</sup>,  
cherryann.barcimo@g.batstate-u.edu.ph<sup>3</sup>, abegail.gonzales@g.batstateu.edu.ph<sup>4</sup>  
Batangas State University, Batangas City, Philippines

### ABSTRACT

This study aimed to develop the 21st-century skills of STEM students in the context of the new normal. It explored the different learning tasks in biology appropriate in the new normal setup and the extent of utilization of various learning tasks to develop 21st-century skills of the STEM students in biology. It also examined the differences in the extent of utilization of various learning tasks to develop the 21st-century skills of STEM students. The descriptive type of research was used with the questionnaire as the instrument for gathering data from 181 Grade 12 STEM students of Batangas State University Integrated School Pablo Borbon Campus and Batangas State University Laboratory School ARASOF Nasugbu. The data were analyzed using weighted and composite means, standard deviation, and t-test. Findings revealed that students identified all learning tasks specified by the researchers appropriate to be utilized in the new normal setup. Further, findings revealed that it contributes to the development of 21st-century skills of the respondents to a moderate extent. However, there are no significant differences in the extent of utilization of various learning tasks in developing the 21st-century skills of STEM students. These were the bases of the researchers in preparing skill-based learning activities in Biology aligned to the STEM competencies and content standards set by the Department of Education in General Biology 1 and 2.

*Keywords: new normal, 21<sup>st</sup> century skills, learning tasks, descriptive research, Philippines*