

Journal of STEM Education: Innovations and Research

Volume 25, Issue 2, April-June 2024

Editorial Review Board	2
International Editorial Advisory Board	3
Editorial	4
Author Journal Reviews	5
Features	
Enhancing Students' Conceptual Understanding with Engineered Course Material Delivery	6
Dr. Vimal K. Viswanathan, Nikhitha Reddy Nukala, John Solomon	
STEM Persistence Among Women, Non-Binary, and Students of Color: A Longitudinal Study of the Impact of a Residential Science-Oriented Summer Bridge Program	15
Helen Walter Elisabeth Wade	
How the Introduction of Content Relates to Performance in a Middle School Modeling and Simulation Environment	21
Bradley Bowen Bryanne Peterson	
Virtual Engagement in a Hybrid Community of Practice: A Descriptive Study on the Training and Integration of New Members into the Genomics Education Partnership during COVID-19	30
Sean Gehrke Anya L. Goodman LizAnne Ngo	
The Impact of Participation in STEM Outreach on Persistence of Diverse Students in Physics, Math, and Engineering	42
Joey Shapiro Key, Cara Margherio, Linda Simonsen	
Bridging The Gap – Increasing Access And Preparedness For Post-Graduate Opportunities In The Biological Sciences For Student Transferring From A Rural Community College	47
Kara Tucker-Morgan and Francisco Villa	
Enhancing Scientific Practices In Primary Education Through A Meteorology-Oriented STEM Education Program: A Case Study	53
Achilleas Mandrikas, Constantina Stefanidou, Constantine Skordoulis	
Factors Shaping Students' Attitude and Persistence After Participating in a Summer Physics Course – A Mixed Methods Study	61
Dr. Gibin Raju Paul Feldkamp Dr. Whitney Gaskins	
Instructions for Authors	69
Contribution Form	70



@JournalofSTEMEd



Journal of STEM Education

The Journal of STEM Education: Innovations and Research (ISSN 1557-5284) is published by The Institute for STEM Education and Research, 2240 Mt. Vernon Ln, Auburn, AL 36830. www.jstem.org
The Institute for STEM Education and Research is a non-profit entity. Periodicals postage rate paid at Auburn, AL and additional mailing offices.

CONTRIBUTIONS are greatly appreciated and are tax-exempt.

PERMISSION FOR USE: The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works or for resale. Specific written permission must be obtained from the publisher for such copying.

Copyright © 2012 by The Institute for STEM Education and Research. It is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reports, photographic reproductions, microfilm or any other reproduction of similar nature and translations. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, photocopying, recording or otherwise, without permission in writing from the copyright holder.