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# Erratum: Developing and assessing pre- and in-service science and engineering teachers' systems thinking and modeling skills through an asynchronous online course

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## KEYWORDS

STEM teachers, systems thinking, modeling, online assignments, rubric, Object-Process Methodology—OPM

An Erratum on  
[Developing and assessing pre- and in-service science and engineering teachers' systems thinking and modeling skills through an asynchronous online course](#)

By Peretz, R., Dori, D., and Dori, Y. J. (2023). *Front. Educ.* 8:1154893.  
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Due to a production error in [Table 3](#), the “Content description” column heading was placed above the “Module” column, and vice versa. This has been rectified.

In the published article, there was an error in the **Abstract**. The original sentence was: “Research tools included the online assignment that the participants developed, dedicated rubrics for analyzing their assignments, accounting for use of modeling, media, visualization, micro–macro-process scientific understanding levels, and a mix of closed- and open-ended questions.”

This should have been written as: “Research tools included the online assignment that the participants developed, a dedicated rubric for analyzing their assignments, accounting for use of modeling and systems concepts and the integration of sustainability and COVID-19 issues, a variety of thinking skills, visualizations and disciplines, and a mix of closed- and open-ended questions.”

The publisher apologizes for these errors. The original article has been updated.

TABLE 3 The content of the four modules that formed the learning process.

Module	Content description
1	<ul style="list-style-type: none"><li>- Introduction to OPM.</li><li>- Identifying objects, processes, and states in a system.</li></ul>
2	<ul style="list-style-type: none"><li>- System aspects: function, structure, and behavior.</li><li>- Structural relations, state transitions, system aspects, and OPM modalities.</li></ul>
3	Understanding the System Diagram (SD): System Purpose—beneficiary and benefit, system function; and process enablers—agents and instruments.
4	<ul style="list-style-type: none"><li>- Diving into the details: the first detail level (SD1) of the OPM system diagram, divided into major subprocesses.</li><li>- Synchronous vs. asynchronous processes.</li></ul>