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\*CORRESPONDENCE
Ilonca Hardy

☑ hardy@em.uni-frankfurt.de

<sup>†</sup>These authors have contributed equally to this work

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# Corrigendum: Measuring adaptive teaching in classroom discourse: Effects on student learning in elementary science education

Ilonca Hardy<sup>1\*†</sup>, Nicola Meschede<sup>2†</sup> and Susanne Mannel<sup>3</sup>

<sup>1</sup>Institute of Early and Primary Education, Educational Sciences, Goethe-University Frankfurt, Frankfurt, Germany, <sup>2</sup>Institute of Elementary Science Education, University of Münster, Münster, Germany, <sup>3</sup>Institute of Early and Primary Education, Educational Sciences, Goethe-University Frankfurt, Frankfurt, Germany

KEYWORDS

adaptive teaching, contingent support, science education, classroom discourse, coding scheme

## A corrigendum on

Measuring adaptive teaching in classroom discourse: Effects on student learning in elementary science education

by Hardy, I., Meschede, N., and Mannel, S. (2022). *Front. Educ.* 7:1041316. doi: 10.3389/feduc.2022.1041316

In the published article Hardy, I., Mannel, S., and Meschede, N. (2020). "Adaptive Lernumgebungen [Adaptive learning environments]," in *Heterogenität in Schule und Unterricht [Heterogeneity in Schools and Instruction]*, eds M. Kampshoff and C. Wiepcke (Stuttgart: Kohlhammer), 17–26 was not cited. The citation has now been inserted in **Materials and Methods**, *Measures*, *Coding Scheme of Adaptive Classroom Discourse*, third paragraph and should read:

"In step 2 of the coding procedure, we applied a coding scheme on adaptive classroom discourse to the identified units of analysis. The coding scheme is based on existing measurement approaches, extending them to classroom discourse in an extensive cycle of theory-based deduction of categories and their empirical validation The coding scheme includes three indices which describe central facets of adaptive classroom discourse based on the ESRU-model (Ruiz-Primo and Furtak, 2007) and the model of contingent teaching (van de Pol et al., 2011): (a) diagnostic strategies, (b) instructional support, and (c) student understanding. The indices draw on observable verbalizations of teachers and students and were double-coded for each unit of analysis by independent raters with a high interrater agreement (diagnostic strategies:  $\kappa=0.81$ , instructional support:  $\kappa=0.74$ ; student understanding:  $\kappa=0.86$ ). In addition, in line with van de Pol et al. (2012) and Hermkes et al. (2018), we defined coding rules for the combination of these three indices in order to determine a global index of adaptive classroom discourse (see also Hardy et al., 2020). Table 1 gives an overview of the coding scheme."

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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Hardy et al. 10.3389/feduc.2022.1128585

# References

Hardy, I., Mannel, S., and Meschede, N. (2020). "Adaptive Lernumgebungen [Adaptive learning environments]," in *Heterogenität in Schule und Unterricht [Heterogeneity in Schools and Instruction]*, eds M. Kampshoff and C. Wiepcke (Stuttgart: Kohlhammer), 17–26.