



## The Scoring Rubric EVAR

Subscale	Item	Item text	strongly agree 1	2	3	strongly disagree 4	no answer	Notes
Technical Implementation	1	The AR in the learning scenario operates smoothly and reliably.						
	2	The teachers are confident in controlling the AR.						
	3	The handling of the AR is intuitive and simple for the learners.						
	4	The functionality of the AR is sufficiently described and explained.						
	5	The tracking method chosen is appropriate for the teaching scenario.						
Fit of the AR	6	The AR supports at least one specific learning goal.						
	7	There is a connection to previous and subsequent teaching sequences.						
	8	Relevant references to real situations or applications are made.						
	9	The AR offers clear benefits compared to conventional visualizations.						
	10	Potential benefits and challenges of AR use for teaching are discussed.						
	11	The AR helps learners to develop a better understanding of the content.						
Interactivity and Engagement	12	The AR encourages learners to actively engage with the subject matter.						
	13	There are additional possibilities besides viewing the object, e.g., interactivity or individualization.						
Visualization	14	There are feedback mechanisms (analogous or digital) to provide learners with feedback on their use of AR.						
	15	The complexity of the AR (cf. [1]) fits the learning goal addressed (in terms of cognitive load [2]).						
	16	The design laws [3] are taken into account.						
Creativity and Originality	17	The lesson design demonstrates an original and creative use of AR to support the learning process.						
	18	The AR was created by the teachers themselves.						

1. Czok, V.; Krug, M.; Müller, S.; Huwer, J.; Kruse, S.; Müller, W.; Weitzel, H. A Framework for Analysis and Development of Augmented Reality Applications in Science and Engineering Teaching. *Education Sciences* **2023**, *13*, 926.
2. Sweller, J. Implications of Cognitive Load Theory for Multimedia Learning. *The Cambridge Handbook of Multimedia Learning* **2005**.
3. Mayer, R.E. *The Cambridge Handbook of Multimedia Learning*, Second ed.; Cambridge University Press: Cambridge, 2014.