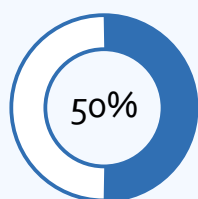# Meta-Analysis Rating Sheet:

Bisra et al. (2018). Inducing self-explanation: A meta-analysis.

Each meta-analysis selected for *Clearing House Unterricht* was critically reviewed by the *Clearing House Unterricht Research Group* for methodological reliability of its findings, adherence to current standards, and transparency and rationale of decisions.
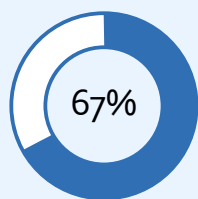
The rating system developed for this purpose summarizes the current state of meta-analytic research and includes criteria from APA (American Psychological Association) / Meta-Analysis Reporting Standards (MARS), PRISMA, AMSTAR, and Ahn et al. (2012). This rating including a total of 25 individual codes, summarized into four dimensions:
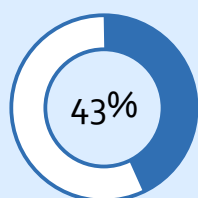
Search

50%

The findings of a meta-analysis result from the primary studies considered. It is therefore essential that the search strategy undertaken for a meta-analysis is comprehensible. The CHU rating system records, among other things, the completeness of reported search terms within the database search and the description of further measures taken to find relevant primary studies.
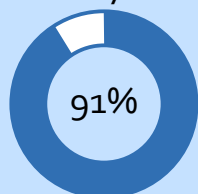
Selection

67%

As a rule, only a small selection of the searched studies are relevant for answering the respective research question. Therefore, an important quality criterion is the transparent and comprehensible presentation of the selection criteria for the primary studies included in the meta-analysis. Here, among other things, the CHU rating system records whether and how clear inclusion and exclusion criteria are described and whether publications that have not undergone a review process are taken into account.

Reporting

43%

In this context, reporting means whether and how information about the included primary studies is made available to enable the statistical analyses to be reviewed. This includes certain characteristics of the studies' participants and control conditions, and whether measures were taken in the data extraction process from the primary studies to ensure that reliability of the approach was maintained.

Statistical Analysis

91%

There is a wide range of established statistical methods for integrating effects from primary studies into meta-analyses. The CHU rating system therefore refers to the comprehensibility of the decisions made - not to their accuracy or quality. Among other things, the statistical evaluation checks whether the statistical model used to integrate the effect sizes is disclosed and justified, and whether confidence intervals for the reported average effect sizes are given.

Overall rating   67%