

Table 1: Interactive-Constructive-Active-Passive (ICAP) taxonomy for various overt learning activities

ICAP classification	Description	Examples
Interactive	Dialogue in which learners produce a joint output containing unique contributions from each participant	<ul style="list-style-type: none"> • Have two-way discussions with others • Build on contributions of others • Critique alternative views when constructing own view
Constructive	Learner produces an output that contains information beyond what was already provided to them	<ul style="list-style-type: none"> • Taking lecture notes in own words • Self-explanation • Written explanation • One-sided verbal explanation
Active	Learner is doing something physically	<ul style="list-style-type: none"> • Asking a clarification question • Taking lecture notes verbatim • Highlighting or underlining text gesturing or pointing • Manipulating an object
Passive	No explicit physical activity on the part of the learner	<ul style="list-style-type: none"> • Observing lecture • Reading text

Table adapted from: Henderson, J. B. (2019). Beyond “Active Learning”: How the ICAP Framework Permits More Acute Examination of the Popular Peer Instruction Pedagogy. Harvard Educational Review, 89(4), 611–634. <https://doi.org/10.17763/1943-5045-89.4.611>

Original source: Chi (2009); Chi and Wylie (2014)

Note: Classifications based exclusively on what a learner appears to be doing. Overt action does not perfectly map with underlying cognition but can be a practical approximation for teachers