Attribute	Definition	Argument Component
Summary	Average time taken by students to answer questions on the `LearnAnonymous` platform.	Data
Focal Knowledge, skills, and abilities	The ability of students to deliberate, introspect, and understand questions before answering.	Claim
Rationale	Students with higher metacognitive skills might allocate additional time for deliberation and introspection, resulting in a longer average response time.	Warrant
Additional Knowledge, skills, and abilities	Students might take longer for reasons unrelated to metacognition, such as being distracted, facing technical issues, or unfamiliarity with the topic.	Alternative Explanation
Potential observation	Time recorded for each answer given by a student on the platform.	Data
Potential work product	Log data from the `LearnAnonymous` platform detailing how long each student took to answer each question.	Data

Table 1: Evidence-Centered Design Analysis for the Feature: Average Response Time

Attribute	Definition	Argument Component
Summary	Proportion of reviewed answers to viewed questions on the `LearnAnonymous` platform.	Definition
Focal Knowledge, skills, and abilities	Understanding and reflection upon the correctness of their answers in relation to the solutions provided.	Claim
Rationale	Students who engage in reviewing their answers, by comparing them with the correct solution, demonstrate a higher level of metacognitive awareness. The act of review indicates a desire to understand and improve one's performance.	Warrant
Additional Knowledge, skills, and abilities	The act of revisiting answers doesn't solely measure metacognition; other factors like curiosity, seeking validation, or ensuring completion can influence this behavior.	Alternative Explanation
Potential observation	A student's choice to review their answers post-session before proceeding to the homepage.	Data
Potential work product	Log data indicating whether a student reviewed their answers after completing a session, and the frequency of such reviews in relation to the number of questions viewed.	Data

Table 2: Evidence-Centered Design Analysis for the Feature: Answer Review Ratio

Attribute	Definition	Argument Component
Summary	Ratio of test sessions to total sessions in `LearnAnonymous`.	Definition
Focal Knowledge, Skills, and Abilities	Engaging in test sessions can be seen as an effort to elaborate on knowledge, given the more challenging nature of these sessions compared to regular learning sessions.	Claim
Rationale	Students exhibiting high elaboration skills might be more inclined to undertake additional tasks. The test session ratio, which quantifies engagement in test sessions relative to all sessions, can be used as an indicator of such behavior.	Warrant
Additional Knowledge, Skills, and Abilities	Some students might engage in test sessions for reasons other than elaboration, e.g., out of curiosity or due to a misunderstanding of session types.	Alternative Explanation
Potential Observation	Number of times a student engages in test sessions compared to the total number of sessions they partake in.	Data
Potential Work Product	Log data capturing each student's test and learning session engagements, from which the test session ratio is derived.	Data

Table 3: Evidence-Centered Design Analysis for the Feature: Test Session Ratio

Attribute	Definition	Argument Component
Summary	Ratio of navigation events to total events on `LearnAnonymous`.	Definition
Focal Knowledge, skills, and abilities	Demonstrates an active effort by the student to elaborate on their knowledge by navigating through different subtopics beyond the most frequent ones.	Claim
Rationale	In the `LearnAnonymous` platform, students have the option to engage sequentially or to actively navigate for additional tasks. A high navigation ratio might indicate a proactive effort by students to seek tasks that supplement their core learning, correlating with the elaboration dimension of SRL-O.	Warrant
Additional Knowledge, skills, and abilities	While a high navigation ratio may indicate elaboration, it may also capture behaviors not related to this construct, such as random browsing or confusion about the platform's interface.	Alternative Explanation
Potential observation	Log data generated each time a student navigates between topics or subtopics. The navigation ratio is then calculated as the number of these navigation events over the total number of events.	Data
Potential work product	Ratio calculated for each student based on their navigation and other event activities on the platform. This ratio, in context with the test session ratio, can offer insights into a student's inclination for elaboration.	Data

Table 4: Evidence-Centered Design Analysis for the Feature: Navigation Ratio