Indiana's Alternate Measure (I AM) Blueprints
Biology
Updated 12/21/18

Blueprints are a foundational resource in the assessment development process. Blueprints specify the proportionality of how I AM assesses the Indiana Alternate Academic Standards (Content Connectors), including the relative range of each Content Connector on the assessment as represented in the minimum and maximum number of items to be administered to each student.

The Department recruited Indiana educators to inform the blueprint development in June 2018. These educators represented different regions of the state, diverse student populations, and content and accessibility expertise. Panels of content and special education educators serving students with significant cognitive disabilities were convened at each grade level, recommended priorities, and associated item ranges noted within the blueprints. Educators also considered the vertical articulation of the content across the tested grades in science: 4, 6, and high school. For grade 4 science, educators determined that Questioning and Modeling was of greatest priority. For grade 6, educators placed an emphasis on Investigating. For Biology, the educators determined that Analyzing Data and Mathematical Thinking should receive the greatest emphasis.

I AM science will be a stage adaptive assessment delivered in two segments via computer. In segment one, all students receive a set of operational items that will determine which test they will take in the second segment of the test. Based on their performance in segment one, students will be administered a second segment that is targeted at their specific ability level.

The blueprints for I AM specify the number of operational items students will be administered overall, as well as by reporting category and Content Connector. Students may also receive field test items each year to build out more flexibility in the item pool for subsequent administrations.

Overview

The columns of the draft blueprints highlight key features of test design, including reporting categories, Content Connectors, Content Connector allocations (number of minimum and maximum items per Content Connector), reporting category allocations, and total operational items possible.

Reporting Category: This is a broad domain or segment of the subject area identified by educators as meaningful sets of interrelated Content Connectors. Reporting categories are broad to allow for individual-level reporting of student performance. In many cases, the reporting category combines two or more related domains, as indicated by educators. The reporting category column also includes the overall percentage of the assessment characterized by the specific category.

Content Connector: The Content Connector category code is noted. The full language of the Content Connector is available at: https://www.doe.in.gov/standards/content-connectors.

Content Connector Item Range: The allocation defines the item range possible for each Content Connector. A Content Connector with a range that starts at zero indicates that the Content Connector may not be assessed each year.

Content Connector % of Test: The allocation defines the percentage of the test for each Content Connector and corresponding reporting category.

Total Number of Items Possible: This is the range for the total number of operational items possible on the assessment each year. Note: Field test items do not contribute to the operational points possible.

I AM Blueprints
Biology
(Beginning 2018–19 School Year)

Reporting Category	Content Connector (CC)	CC Item Range		CC % of Test		Reporting Category Item Range
		Min	Max	Min	Max	
Analyzing Data and Mathematical Thinking (40–50%)	B.3.1.a.1	1	2	3	6	**13–16**
	B.3.2.a.1	0	2	0	3	
	B.3.2.a.2	1	2	3	6	
	B.3.2.a.3	1	2	3	6	
	B.4.1.a.1	1	2	3	6	
	SEPS.3	0	2	0	6	
	SEPS.4	1	2	3	6	
	SEPS.5	0	3	0	9	
Communicating Explanations and Evaluating Claims Using Evidence (22–25%)	B.5.1.a.1	0	2	0	6	**7–8**
	B.5.4.a.1	1	2	3	6	
	B.5.4.a.2	0	2	0	6	
	B.5.5.a.1	0	3	0	9	
	SEPS.1	1	2	3	6	
	SEPS.6	0	2	0	6	
	SEPS.7	0	3	0	9	
	SEPS.8	0	2	0	6	
Developing and Using Modeling to Describe Structure and Function (28–37%)	B.1.1.a.1	0	1	0	3	**9–11**
	B.1.1.a.2	0	1	0	3	
	B.1.3.a.1	0	2	0	6	
	B.1.4.a.1	1	2	3	6	
	B.1.5.a.1	1	2	3	6	
	B.2.2.a.1	0	2	0	6	
	B.2.3.a.1	1	2	3	6	
	B.2.4.a.1	0	2	0	6	
	B.4.2.a.1	0	1	0	3	
	B.4.3.a.1	0	1	0	3	
	B.4.4.a.1	0	2	0	6	
	SEPS.2	1	2	3	6	
Total Operational Items: 32						