Course Delivery Tools Decision Matrix

A decision matrix is a tool for assessing the best option from among a variety of alternatives. The grid format, criteria, and scoring support objectivity and logical thinking. A decision matrix may be weighted or unweighted.

Figure 1

Criteria and Rationale

Criteria	Significance Rating 1–5 scale	Rationale
Free vs. paid features	5	Ensuring the platform remains free without a trial period is critical for sustained student access and equitable delivery (Batiquin, 2025). This aligns with the requirement to select tools with unrestricted free versions for course evaluation.
Accessibility features	5	True accessibility ensures that all learners can engage with materials effectively, a fundamental requirement for inclusive instructional design (Development Gateway, 2025).
Bonus features for learners	3	While gamification or extra tools are helpful, they are secondary to core instructional alignment and content delivery (Pratika, 2025).
Layout and visual appeal	4	A clean, intuitive layout reduces cognitive load and helps students navigate the course organization without frustration (Batiquin, 2025).
Add-ons and integrations	4	The ability to integrate external Web 2.0 tools and Learning Tools Interoperability (LTI) apps directly into the LMS prevents fragmented learning experiences (Pratika, 2025).

Criteria	Significance Rating 1–5 scale	Rationale
Synchronous/asynchronous interaction support	4	Supporting both live recordings and asynchronous animated videos is necessary to meet the diverse media requirements of a blended learning environment (Development Gateway, 2025).
Discussion board capabilities	5	Robust discussion boards are vital for formative assessment, peer collaboration, and the development of a community of inquiry in distance education (Pratika, 2025).
Navigation (ease of use and course/module organization)	5	Logical, consistent module organization is critical to prevent learners from getting lost and to support consistent delivery across all modules (Batiquin, 2025).
File size or storage limitations	3	Since large video files can be hosted externally and embedded, native storage limits are less critical but still relevant to the overall user experience (Pratika, 2025).
Interactive Media & SCORM Integration	5	As an instructional designer using Articulate Storyline, the LMS must support SCORM packages to host and accurately track interactive media engagements (Ibnas et al., 2022).
Data Analytics for Formative Assessment	5	The platform must provide actionable learning analytics to track student progress and inform adaptive, data-driven formative assessment decisions (Molinillo et al., 2018).
Adaptive Learning and Conditional Release	5	To support personalized learning paths in mathematics, the delivery tool must allow modules or assignments to be locked or released dynamically based on a student's previous formative assessment scores (Clark & Mayer, 2023).
Rubric and Advanced Grading Workflows	5	Efficient grading of authentic assessments requires robust, interactive rubrics that attach directly to the assignment interface and provide immediate, specific feedback to the learner without disrupting the instructor's workflow (Molinillo et al., 2018).

Criteria	Significance Rating 1–5 scale	Rationale
Parent/Observer Account Access	4	In middle school education, facilitating parental involvement through dedicated observer accounts is vital for maintaining transparency and supporting student accountability at home (Development Gateway, 2025).
Mobile Device Responsiveness and App Usability	4	Learners frequently access content on smartphones and tablets; thus, the delivery tool must provide a fully functional, responsive mobile application to ensure equitable access to all course materials and interactive elements (Batiquin, 2025).
Competency/Standards Alignment and Tracking	4	To ensure alignment with specific learning objectives, the LMS must allow instructors to tag assignments with state or professional standards and track, over time, the class's mastery of those outcomes (Ji et al., 2022).

Figure 2

Decision Matrix

Criteria	Significance Rating 1–5 scale	Quality Score for Tool 1 1–5 scale	Tool 1 Weighted/Final Score	Significance Rating 1–5 scale	Quality Score for Tool 2 1–5 scale	Tool 2 Weighted/Final Score
Free vs. paid features	5	5	25	5	5	25
Accessibility features	5	5	25	5	4	20
Bonus features for learners	3	4	12	3	3	9
Layout and visual appeal	4	4	16	4	5	20
Add-ons and integrations	4	5	20	4	3	12

Criteria	Significance Rating 1–5 scale	Quality Score for Tool 1 1–5 scale	Tool 1 Weighted/Final Score	Significance Rating 1–5 scale	Quality Score for Tool 2 1–5 scale	Tool 2 Weighted/Final Score
Synchronous/asynchronous interaction support	4	5	20	4	4	16
Discuss board capabilities	5	5	25	5	2	10
Navigation (ease of use and course organization)	5	5	25	5	3	15
File size or storage limitations	3	3	9	3	5	15
Interactive Media & SCORM Integration	5	5	25	5	1	5
Data Analytics for Formative Assessment	5	5	25	5	2	10
Adaptive Learning and Conditional Release	5	5	25	5	2	10
Rubric and Advanced Grading Workflows	5	5	25	5	4	20
Parent/Observer Account Access	4	5	20	4	3	12
Mobile Device Responsiveness and App Usability	4	4	16	4	5	20
Competency/Standards Alignment and Tracking	4	5	20	4	1	4
TOTAL SCORE:			**333**			**223**

Summary

After tallying the scores for all criteria to determine the total score for each tool, Canvas Free for Teacher emerged as the best tool for my purpose and context. When designing middle school science modules, maintaining structural consistency while supporting rigorous interactive elements is critical. Canvas allows for a highly structured module layout that forces sequential navigation, ensuring consistent delivery across all learning units. Furthermore, my reliance on tools like Articulate 360 and Camtasia requires a platform capable of handling complex integrations. Unlike Google Classroom, which functions primarily as an assignment distribution hub, Canvas natively supports SCORM packages (Ibnas et al., 2022). This allows me to embed branching scenarios and software simulations directly into the learning path without breaking the learner's focus.

My decision-making process was heavily weighted toward backend capabilities, specifically regarding data analytics and formative assessment. Tracking granular interaction data is essential for identifying precise learning gaps in science. Canvas provides comprehensive learning mastery gradebooks and actionable analytics that enable data-driven instructional pivots (Molinillo et al., 2018). While Google Classroom scored higher in pure visual simplicity and storage capacity, its lack of threaded discussion boards (Pratika, 2025) and inability to track deep learning analytics make it insufficient for a fully realized instructional design ecosystem. Canvas balances robust accessibility (Development Gateway, 2025) with the technical framework required to host advanced multimedia e-learning content.

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