

Need a Learning Solution? Consider Content Complexity and Pace of Change

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Complexity versus Change

When selecting a solution for a specific learning goal, consider two aspects:

- How complex is the learning goal? Is it a matter of following a rule? It's likely a low-complexity goal. This is not to say that a low-complexity goal is not important. Here is a suggested test: If you can write the rules for a targeted task, and people can do it – it is low complexity. Conversely, if the task has many variables to consider, then it is likely a higher complexity learning goal.
- How rapidly does the content change? If the subject matter can be written on paper, and remains relevant for 2+ years, it is reasonable to expect that the pace of change is low. If the topic is emergent, with new insights developing in months or faster, then it merits a modality that can be modified quickly.

The illustration below shows the tradeoffs between complexity and content change.

Complexity vs Content Change



Next Step: Apply the model to select a learning solution

Application of the model: Three Steps

Step 1: Define the variables.

Understand what constitutes high and low complexity; additionally, define the threshold separating slow and fast content change. This boundary should match your particular situation. The following diagram describes the scope of each quadrant of the model.

Content vs Complexity Definitions



Next Step: Classify your learning goals to the appropriate quadrant.

Step 2: Classify your specific learning goal(s) into the most appropriate quadrant(s).

This is an instructional design activity that will provide justification of your recommended solution to your approving administrator. This applies to training sponsors and education administrators that approve your curriculum strategy. This example provides example learning goals for each quadrant.

Content versus Complexity - Example Learning Goals



Step 3: Select an appropriate solution.

Examine learning solutions that support the levels of complexity and provide relevant content, based on how quickly new insights emerge in the targeted subject matter area.



Conclusions

This model has been applied in corporate training environments to justify the instructional solution approaches selected for specific projects. Why? Because the corporate sponsors will insist on proof that the project expenditure will return value that exceeds the cost of the instructional project. This applies to education field as well. If you are an educator with an innovative idea for teaching and learning, leverage this model to make the case for the best-fit learning approach.

The author suggest the following thresholds to classify low to high complexity and slow to fast content change. These are starting points. You should establish criteria that fit the specific content area and learning goals (e.g. If you teach emerging technologies, then the threshold between slow/fast content change may be, if appropriate, less than monthly).

Dimension	Low/Slow	High/Fast
Complexity	Low	High
	Established Set of Rules and Facts	Multiple rules, multiple variables that interact that can change the outcome, low
		likelihood of recovery from failure
Pace of Content Change	Slow	Fast
	Information/rules are consistent for more	Information/rules that impact outcomes
	than 2 years	change monthly.

The Author, Richard Busby, M.S., has over 20 years of experience in both learning strategy, learning architecture roles, and learning operations management roles. His intention is to share experience to enable other education and learning professionals. His passion? To enable youth to prepare for the future of work. Want to join forces? Contact the Broadskilling Project at <u>www.broadskilling.com</u>.