perplexity

Mapping SM-2 Algorithm Parameters to Creation and Task Execution

The SM-2 algorithm, widely used for learning (memorization), can be adapted for creative work and task management by reinterpreting its core parameters: **easiness** (ease factor), **quality response**, **repetition counts**, and **failure**. Below are specific ways to map these parameters to suit incremental writing or task workflows:

SM-2 Parameters and Their Learning Roles

- **Easiness Factor**: Reflects how easy it is to recall an item; affects scheduling interval length.
- **Quality Response**: User grades each review attempt (0–5), influencing adjustments to intervals and ease factor.
- **Repetitions**: The count of successful reviews.
- **Failure**: Occurs when quality ≤2; resets repetition count and intervals[1] [2].

Mapping to Creation (Writing/Ideation)

SM-2 Parameter	Creation/Ideation Mapping	Practical Example
Easiness Factor	*Maturity or clarity of an idea/draft*. High easiness = idea is nearly complete/clear; low easiness = needs more work.	A paragraph that is nearly publish-ready gets a higher easiness, scheduled for less frequent revisits.
Quality Response	*Progress rating for an item/idea*. Score from 0 ("stuck"/needs overhaul) to 5 ("flowing"/nearly done).	Each review, give a 0–5 rating on how happy you are with a draft fragment.
Repetitions	*Number of development iterations*. Increments only when progress is made or the idea is advanced.	“Third round of revisions” on a section means 3 repetitions.
Failure	*Stalling, confusion, or creative block*. Restarts cycle; triggers more frequent attention.	If an idea is deemed fundamentally flawed or confusing (rated ≤2), it is resurfaced sooner.

Mapping to Task Execution

SM-2 Parameter	Task Management Mapping	Practical Example
Easiness Factor	*Task familiarity or straightforwardness*. High value = routine/minor edits; low value = complex/uncertain.	A recurring, easy task (filing a report) will be scheduled less often than a novel, complex one.

SM-2 Parameter	Task Management Mapping	Practical Example
Quality Response	*Progress or blockage rating.* From 0 ("completely blocked") to 5 ("smooth/finished").	After attempted work session, rate progress; blocked tasks stay "in the queue."
Repetitions	*Number of returns or review cycles for the task.*	“Fourth attempt” at a stalled task = 4 repetitions.
Failure	*Failure to complete or make headway.* Triggers more frequent priority/focus, can mean need to break into subtasks or seek support.	If a task is not progressing after several tries (rated ≤2), raise urgency or change approach.

Tradeoffs and Implementation Notes

- **Subjectivity**: Rating “easiness” and progress is more subjective in creative work than in memory recall, introducing potential bias[2].
- **Granularity**: Tasks or creative fragments must be clearly defined to avoid overwhelming cognitive load or excessive fragmentation.
- **Failure as Guidance**: Frequent rating of “failure” should be leveraged as a signal to restructure, seek help, or reprioritize the item[1].

Recap Table: Learning vs. Creation/Task Mapping

Learning	Creation	Task Management
"Easiness" = recall ease	"Easiness" = item clarity/maturity	"Easiness" = task familiarity
"Quality" = recall grade	"Quality" = subjective progress score	"Quality" = progress/blockage
"Failure" = forgot	"Failure" = blocked/stuck	"Failure" = blocked/no progress

When adapting SM-2, map each review to a targeted check-in: Is this idea/task clear and progressing, or stalled and needing help? Use the ratings and calculated intervals to regulate when to revisit and rework items, ensuring neither ideas nor tasks languish for too long without progress[1] [2].

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1. https://github.com/thyagoluciano/sm2
2. https://www.blueraja.com/blog/477/a-better-spaced-repetition-learning-algorithm-sm2