

# LEARNER ENGAGEMENT

## *e-Learning Tips*



### GENERATIVE COGNITIVE PROCESSING

*involves psychological engagement that promotes the achievement of learning objectives by fostering appropriate cognitive processing during learning*

Recommended methods to produce engagement that leads to Generative Cognitive Processing

#### 1 Use of Relevant Graphics



Learners make more inferences during learning - indicating generative processing - when the text is accompanied by graphics, especially simpler graphics

##### EDUCATORS:

For e-Learning, choose graphics that are simple to comprehend with language / explanations appropriate for your level of learner.

#### 2 Supported Drawings



Asking learners to draw relevant visuals from scratch based on their interpretation of text is **not effective** for learning and results in extraneous mental load.

##### EDUCATORS:

Promote engagement with drawings by asking learners to generate drawings from provided elements. This could be implemented with a drag and drop technique in e-learning

#### 3 Collaborative Observation of Skill Tutoring



Collaborative observation of a tutoring session offers higher overall utility than does one-on-one tutoring.

##### EDUCATORS:

Could be adapted to e-learning by using a recorded video or animation of tutoring and asking learners to solve problems collaboratively or including tutor/student dialogs using avatars in place of actual tutors and students.

#### 4 Peer Teaching



Preparing to teach and actually teaching the material in lessons results in better learning than simply reading the lesson in preparation for a test.

##### EDUCATORS:

In e-learning sessions, you can ask learners to prepare a lesson and then 'teach' it to an on-screen avatar or posting explanations in an asynchronous format

#### 5 Asking Relevant Questions



Research has found that adding effective questions stimulates inferences and leads to better learning outcomes

##### EDUCATORS:

In e-learning, inserting multiple choice questions or a notes box for explanations during a lecture or reading are common methods to add to engagement

#### 6 Prompted Self Explanations



A self-explanation question asks the learners to explain the concepts or principles to themselves as they read or view a lesson

##### EDUCATORS:

Use self-explanations of instructional elements such as examples, diagrams, simulations and games

Graph adapted from [venngage.com](http://venngage.com).

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