

WHY DO GRANULAR LEARNING OBJECTIVES MATTER?

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Most content developers are used to creating 3-5 high-level enabling objectives. Why is it so important to create such granularity of learning objectives when developing an adaptive course?

The rationale: the more granular an LO is, the more focused it is on a specific aspect or element of the larger topic. The more specific the LO is, the easier it is to target what exactly the learner is struggling with, and then to identify and suggest resources to support them with that particular element.

For example, a very large LO might be “Demonstrate how to drive a car safely.” However, this is made up of many smaller pieces, such as understanding the laws involved when driving a car, understanding how to start a car, knowing what to look for in the environment, etc.

A student driver who is failing to demonstrate how to drive a car safely might be failing for a variety of reasons, and having more granular LO’s allows the instructor to quickly identify which element is causing the learner to fail in the larger task.

For example, if the student driver does not know the laws governing safe driving, he will not be able to demonstrate safe driving practices related to those laws because he does not know them. Alternatively, if he doesn’t know how to actually operate the car, he can know the laws backwards and forwards and still not be able to drive safely since he doesn’t know the practical aspect of actually operating the car.

Therefore, it is helpful to write many LO’s, targeting very specific elements of understanding of the bigger topic. This allows the software to identify exactly the elements that the learner needs support/remediation in to allow them to master the topic as a whole. The system can then provide support exactly where the learner needs it, which improves engagement and understanding since the learner receives the resources right when they need it, rather than before they are ready or after they have already mastered that particular element.

An adaptive system might ask the learner “What is the maximum safe speed to drive on an arterial road in Boston?” If the learner knows the answer, he will not gain anything from viewing resources aimed at teaching this fact, and indeed may become bored and/or disengaged if required to slog through material that repeats information he has already mastered.

On the other hand, if he does not know this fact, the system can immediately provide resources for the learner to explore that are designed to teach this information. The student receives this exactly at the point where they are most interested in knowing the fact, so they are primed to learn the information.

Please see the included diagram that illustrates this idea by breaking down components of 'Demonstrate how to drive a car safely'. At the top is the large learning objective. Laws and Mechanics are components of this, and each of these can be broken down further. For illustration purposes, only the element, and not an LO is listed for each sub-component. You can write an LO (or several) for each element at each level, but the smallest ones are the most useful for pinpointing exactly what the learner needs next.