PERFORMANCE EVALUATION

by Mads Heising

To determine whether or not the learning objective has been redeemed, you must determine the criterion for success. How quickly must a piece of information be recalled? to how great detail? When will learners have the required level of the action level knowledge?

If you wish to optimize your course design, you should test each of the course processes for effectiveness and efficiency. If you don't, the course is not controlled.

Effectiveness is a measure of how well the learner has acquired the desired competence. Your course may provide each learner with an excellent level of proficiency but that may very well not be necessary to achieve end-user satisfaction and you may, therefore, desire to have controls that enable you to adjust the effectiveness of your course; The first fo which is the ability to determine the actual performance the learners have after completion of the course, compared to the required level of performance.

Efficiency is a measure of how much resources each learning activity requires. You may find that your course is providing the desired level of effectiveness, but that learning activities can be refined to achieve the same result for less effort or that your course is not supplying the desired level of performance unless you provide additional resources.

It is important that you distinguish between the two terms, to keep control over both elements. Managers tend to only have an eye for efficiency, but to remain in the marketplace, effectiveness is just as important a parameter. Don't make a cheap course, a crap course.

To obtain the information required to determine E/E, you should make a map of all processes in your course and how they relate. You should then monitor the resources spent on each process and monitor their learning outcome.

Representative sampling or full coverage?

Often sampling of performance is preferred, rather than testing each and every learning objective for each and every learner.

Typical methods to monitor performance are either witnessing the performance of the learner or some kind of documentation, typically by some form of test.

Each method has advantages and disadvantages basically in that they either require a lot of orchestration, are hard to control.

Evidently witnessing a performance, requires that someone appears and monitors each learner's performance.

The advantage of using a witness is that it may require little orchestration if the witness is a subject matter expert. Disadvantages may be that it can be difficult to standardize measured performance and that it requires resources in each learner instance.

Advantages of using written tests are that they are easy to standardize and that you can measure the performance of many learners with little effort. Disadvantages to written tests are that, the more detail you wish the test to reveal, the more orchestration the test requires.

Leading or Lagging Performance measurement.

Traditionally performance measurement of education is almost always done by requiring that the learner pass an exam at the end of the course, as proof that the learner has acquired the competencies the course is designed to provide. This method only provides value to external parties, since it tells you almost nothing about how your course design performed - in effect the learner may actually have acquired the competencies despite your course - you don’t know.

Measuring the outcome after a process or a collection of processes are completed, is referred to as lagging performance measurement. You may say that the result is measured downstream.

Some courses, people may only partake in, if they already have a given set of competencies. Eg. you may only enter university courses if you possess a sufficient level of knowledge from high school. This is done in recognition that the learning process will not be successful if the process input is insufficient.

Determining a process outcome by the quality of its input is referred to as leading performance measurement. You may say that the end result is determined by a measurement taken upstream.

You can use leading performance measurement in your course design - mainly to measure and control your course efficiency since you can make adjust-ments while verifying the quality of the end result.

You can use lagging performance measurement in your course design mainly to measure and control your course effectiveness, mainly as quality assurance for your processes.

Despite the simple division of leading and lagging performance measurements, once you have a lot of data to support your learning processes, you may find that course outcome can be determined solely by leading measurements, such as is seen in eg. some competency- and evidence-based training schemes for pilot training.

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