



The PBET Characteristics

A training program or course is performance-based when the following PBET characteristics are present:

LISTED:

- 1) **Course prerequisites have been identified (and are enforced).**
- 2) **Performance objectives are derived from analysis.**
- 3) **Objectives are clearly worded and measurable.**
- 4) **Course Design is derived from the objectives.**
- 5) **Hands-on practice is maximized.**
- 6) **Performance tests are used to measure competency.**
- 7) **Practice and tests are repeated until "mastery" of the objective is achieved.**

BRIEF DESCRIPTION:

1. **Course prerequisites have been identified (and are enforced).** Prerequisites are those tasks that are necessary to perform if one is to learn to perform the entry-level tasks taught in the course itself. They are always expressed as performances, not as topics, courses, subjects, or age-levels.

There are a variety of things that training organizations can do to increase the likelihood that prerequisites are actually observed. These include improved communication, pre-testing, and pre-interviewing.

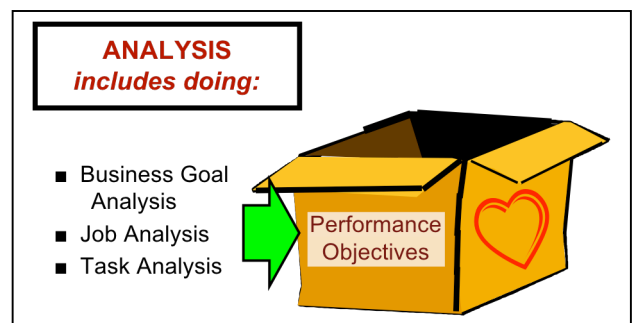
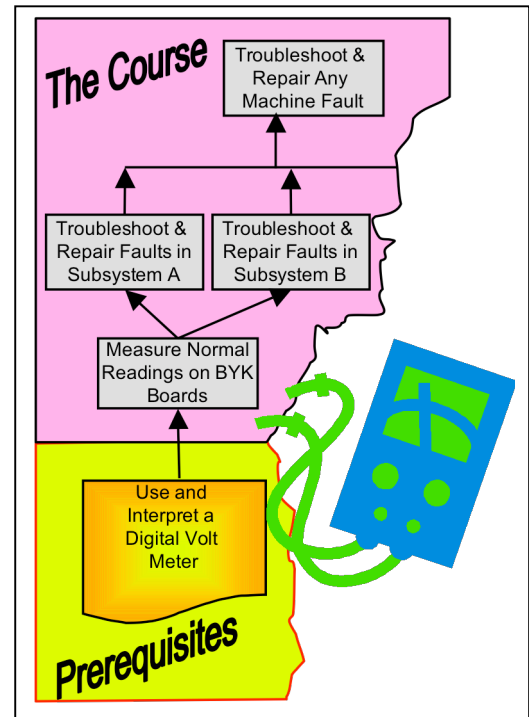
2. **Performance objectives are derived from analysis.**

First, is training the right solution for the performance problem? (This is a question resolved through PBET Step 1, Identify - also called performance analysis.)

Once training is determined to be the right course of action, all of the actual tasks that the performer will face are gathered. (This is the beginning of PBET Step 2, Analyze.) In the diagram, we visualize each task to be written on a card and gathered into the box.

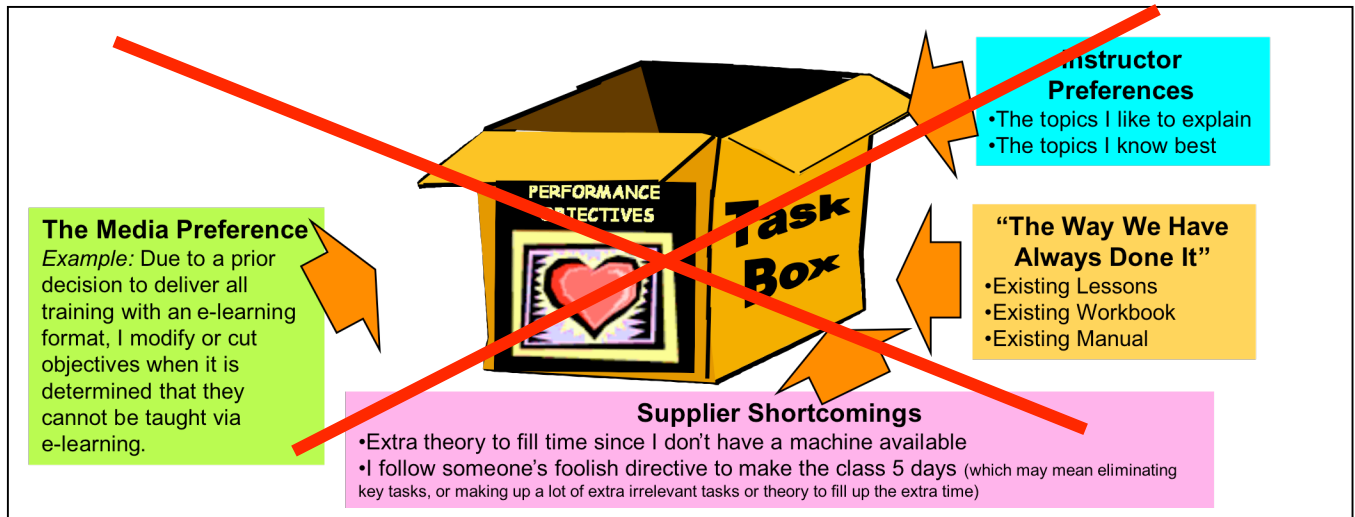
Tasks are identified through several processes; the one which produces the largest number of tasks is called job analysis, but other processes are important for the complete picture.

An example of a task might be, "clean the lens." That is the basis for the writing of the performance objective for that task. Since objectives are considered "the heart of PBET," there is a heart on the box.



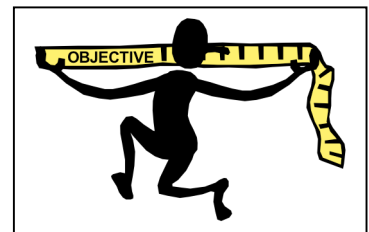
The main point is that the objectives are derived *from analysis*.

Thus, the diagram below illustrates actions that are the opposite of PBET. They illustrate the incorrect tendency to derive objectives from pre-conceived courses, ideas, preferences, etc.



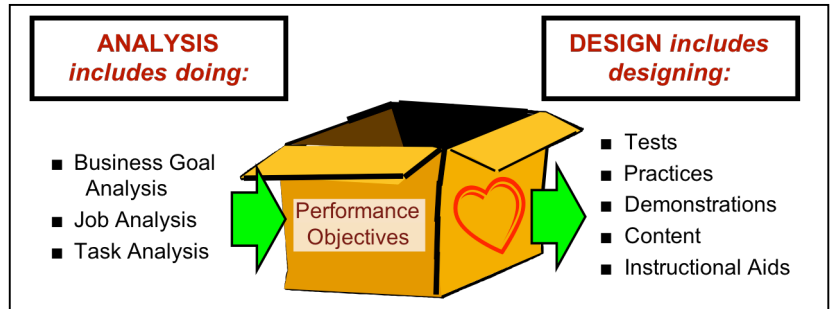
3. **Objectives are clearly worded and measurable.** Objectives are written so that an individual's success at performing a task is very clear to all involved: the training developer, the instructor, the student, and the student's supervisors.

Objectives have three parts, each of which contribute to the clarity of the objective: The conditions, the performance itself (or the task), and the standards. The standards provide the measurable. For example:



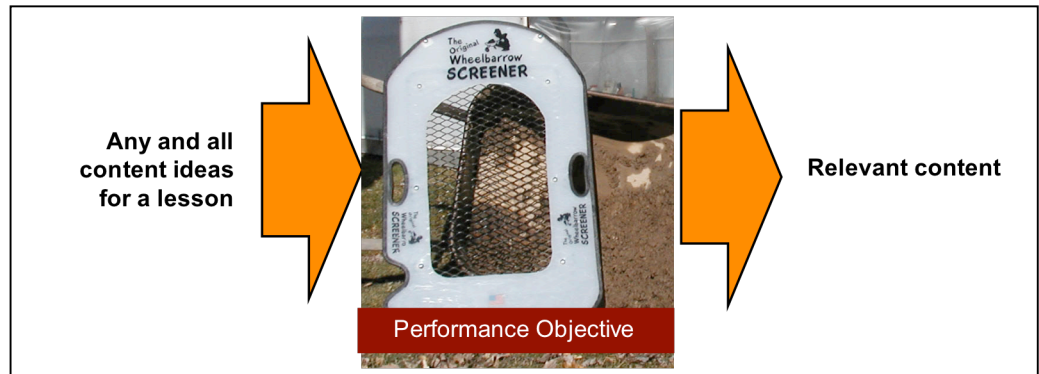
<i>CONDITIONS</i>	<p><u>OBJECTIVE</u> Given:</p> <ul style="list-style-type: none"> • Model 5000 Tape Backer Machine in functional order, but with no tape loaded • Roll of tape • Maintenance Manual
<i>PERFORMANCE STANDARDS</i>	<p><i>Load the tape for processing.</i> Standards:</p> <ul style="list-style-type: none"> • each step of the load procedure must be followed exactly and in sequence, • when done correctly, the backing tape must be able to roll through the machine without jamming, without folding, and without causing any error messages.

4. **Course design is derived from objectives.** Designing the each lesson of a course includes planning the test, the trainee’s practice activity, the demonstration of the task to the trainee, the content or information that the student needs to know in order to perform the task, and the means by which the student will learn the content.



“Content” includes the theory, rules, background information, functional explanations, or other information that is communicated to a learner as part of a lesson. In PBET, only relevant content is selected for inclusion in a lesson, as determined by the lesson objective. Not all lessons have content!

The main point is that every aspect of course design is guided by the objective (because the objective describes the actual task required by the performer in his/her actual environment. The objective serves as a garden screen, by which the good dirt (relevant content, for example) is retained and the rocks and weeds (irrelevant content, for example) are removed.



5. **Hands-on practice is maximized.** In other words, all students are given the opportunity to practice each and every task. Practice is essential. Not only does it build competency, it builds trainee confidence; both are required for a worker to perform a task. In addition, effective practice requires appropriate feedback.

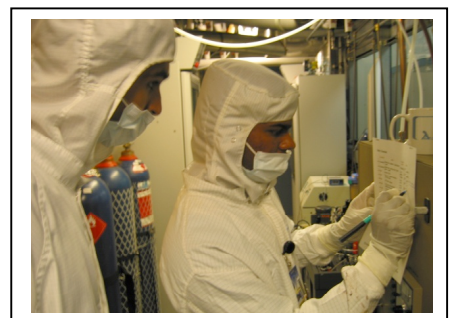


Hands-on practice cannot be maximized if equipment access is limited! Consequently, a machine dedicated for training is necessary for many aspects of maintenance training.

Equipment substitutes or simulations are encouraged only when the simulation closely resembles the real world of the worker; ie., the conditions and performance of the objective.

So there are implications on equipment availability, class size, length of course, and structure of the lessons.

6. **Performance tests are used to measure competency.** An appropriate test requires that a trainee perform a task, generally using the same equipment and under the same conditions which the trainee will face on the job. Such tests are used to determine if the trainee has attained competence; they are not used for ranking students.



7. Practice and tests are repeated until "mastery" of the objective is achieved.

The goal of developing competent and confident performers requires that training accommodate the needs of less experienced or slower learning trainees who nevertheless meet the course prerequisites.

At the same time, provision needs to be made for accommodating the more experienced and faster learning trainees.

Therefore, an authentic PBET course is governed by individual needs. For this reason, the course must be flexibly structured to allow for a reasonable minimum of self-paced instruction.

