Syllabi, Instructional Objectives and Learning Outcomes

*Standards 4th edition*

A Guide for PA Program Faculty®

September, 2010
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This document is provided strictly as a resource for physician assistant program faculty. Adherence to any suggestions is completely voluntary and does not assure compliance with any accreditation standard(s) or a successful accreditation outcome.
Introduction

ARC-PA Standards, 4th edition, effective September 2010, state “For each didactic and clinical course, the program must define and publish instructional objectives that guide student acquisition of required competencies.” (B1.09)

Standard B1.09 includes the annotation “Instructional objectives stated in measurable terms allow assessment of student progress in developing the competencies required for entry into practice. They address learning expectations of students and the level of student performance required for success.

The Standards also require that “The program must conduct frequent, objective and documented evaluations of students related to learning outcomes for both didactic and supervised clinical education components.” (C3.01)

The purpose of this document is to provide a brief description of the role of the syllabus, and the similarities and differences between instructional objectives and learning outcomes.

Definitions

A course syllabus is a document that provides a general conceptual framework for the course and conveys the expectations of a course.

Competencies are the knowledge, interpersonal, clinical and technical skills, professional behaviors, and clinical reasoning and problem solving abilities required for PA practice.

Instructional objectives are statements that describe observable actions or behaviors the student will be able to demonstrate after completing a unit of instruction.

Learning outcomes are the knowledge, interpersonal, clinical and technical skills, professional behaviors, and clinical reasoning and problem solving abilities that have been attained at the completion of a curricular component, course or program.

Course Syllabus

The course syllabus is an early point of contact and connection between students and faculty. It places the course in a broader context within the curriculum and provides a general conceptual framework for the course. Additionally it serves several very important functions.

• Sets tone for course
• Describes faculty's beliefs about educational purposes
• Provides information about course logistics
• Defines student responsibilities for success
• Describes expected student outcomes
• Lists instructional objectives
• Helps student assess their readiness for the course
• Lists available learning resources
• Communicates use of technology in the course

In addition to those functions listed above, the syllabus may also improve the effectiveness of student note taking, can include material that supports learning outside the classroom, and can serve as a learning contract.
The syllabus should be written in a manner that assists students in becoming effective learners. It should be to guide student learning and not simply a document designed to meet an institutional or accreditation requirement.

Each course or rotation director should be given the flexibility he or she needs in developing the content and scope of courses and syllabi; yet, since each syllabus should be developed to include essential content to assist students in their learning, there should be some consistency across syllabi. In other words, there needs to be a balance between consistency and academic freedom.

The syllabi used in the typical PA program can be quite extensive and may include a variety of learning tools for students such as course and lecture objectives, lecture notes, presentation outlines, laboratory handouts, etc.

*The ARC-PA expects that each syllabus, at a minimum will include the course name, course description, course goals, outline of topics to be covered, instructional objectives, specific expected learning outcomes, faculty instructor of record, methods of student assessment/evaluation and plan for grading.*

**Conveying Expectations**

Expectations are conveyed to students in several ways. PA programs develop their syllabi with instructional objectives and learning outcomes as merely one component of the overall documentation for the program. Some programs will develop separate policy manuals to include policies and expectations for all courses; this manual will be distinct from the course syllabi. Sometimes these manuals also address forms of evaluation and student assessment of mastery of objectives and learning outcomes. Often faculty feel so “tied” to using the traditional format of well written instructional objectives that they neglect to define and clarify all expected learning outcomes for students and how these will be assessed. It takes more than the mere attainment of multiple instructional objectives to prepare a student for entry into PA practice.

Due to the variety of approaches taken by programs, it is the responsibility of the program to inform the ARC-PA and site visitors if they chose to list student expectations in documents other than formal course syllabi. To facilitate thorough program evaluation ARC-PA representatives will necessarily need to review any supplemental documentation provided students about policies, expectations, and evaluation of courses.

**Competencies and Learning Outcomes**

Competencies refer to abilities required for PA practice. They set the tone for what is required for program graduates to practice clinically. They are often expressed in terms of multiple instructional objectives related to specific areas.

Learning outcomes are integrally related to competencies but reflect the abilities that have been attained by the student during the program.

**Instructional Objectives**

Instructional objectives are used to inform students and others what the student is to achieve. They provide one method of expressing expected student competencies.

Instructional objectives are concerned with students, not faculty, and will guide them in their studies. Clearly defined instructional objectives also aid faculty in designing appropriate educational experiences.
Instructional objectives stem from the defining of preset performance standards that represent a minimal level of expected performance, learning outcomes, to be achieved by all students and hence are key to competency based learning and evaluation.

Instructional objectives are specific and observable or measurable, rather than broad and intangible. They are tied to student evaluation and serve as a foundation for assessing the student's knowledge, skills, and performance.

**Instructional Goals vs. Instructional Objectives**

Instructional goals are often defined as general statements that define the major purposes of a course, rotation or unit of instruction. They are not readily measurable and may have several interpretations. They are broad references to a general direction of the course rather than any specific description of process or outcomes. A goal may describe the intent of a course. It is that end which is hoped for at the conclusion of the unit of instruction. From a faculty perspective, goals give a general direction for selecting content but offer no specifics related to the instructional process or the expected student outcome.

Instructional objectives are defined as statements that describe what the learner will be able to do after completing a unit of instruction. In other words, an instructional objective is a statement of certain behaviors or observable actions that, when they are exhibited by a learner, demonstrate that the learner has some skill, attitude, or knowledge. Since behaviors are the indicator of the desired outcome, these are often called behavioral objectives.

Another even more descriptive definition is: An instructional objective is a statement of an observable proficiency in which the criteria for acceptable performance is specified and measurable. The resources important in the performance of the task are also stated.

Instructional objectives can be grouped into two general categories: enabling objectives and terminal objectives.

Enabling objectives are ones written to assist the student in achieving the intended behaviors during the course of a unit of study. Terminal objectives are ones written to indicate the behaviors expected of the student at the completion of the unit of study.

**Relating Instructional Objectives to Learning Outcomes and Expected Competencies**

It is important to note that instructional objectives are related to intended outcomes, and not the process for achieving those outcomes. Therefore, the use of instructional objectives as the sole means of defining the educational experience may result in the richness of the instructional process and clinical experience being overlooked. Properly written instructional objectives are of critical importance in guiding student learning, but are only one component needed for designing the student educational experience.

**Writing Instructional Objectives and Outcomes**

Objectives and outcomes should be specific, measurable, requiring an observable learning outcome. Many PA programs have some instructional objectives that include a long list of problems or disease entities about which the student is expected to demonstrate some behavior, i.e. Discuss in detail, answer multiple choice, true/false and completion questions about the clinical manifestations, diagnosis, initial management and follow-up of the following problems/disease entities seen in an ambulatory care setting: (listed below as appropriate to the discipline/clerkship).

When using such instructional objectives, programs should remember that the list of problems/disease entities which follows the core objective must be:

- Appropriate to the discipline. Pediatrics instructional objectives should focus on pediatrics.
Appropriate to the length of time of the course. Can the students accomplish what the program hopes they can in the time allowed or is the list merely taken from a table of contents of a textbook?

Of the appropriate level for PA professional practice. Does the list of topics include those that should be included to prepare a PA for practice? For example, does a course on documenting the patient database include all the components of the history and physical, diagnostic studies, SOAP notes, etc?

A Word of Caution

It is easy to become overzealous in developing instructional objectives. Developing objectives that are too specific may result in an abundance of small-scope behavioral objectives. The resulting myriad of overly specific instructional objectives will so overwhelm students, that they will pay no attention to any of the objectives.

The trick in conceptualizing instructional objectives that help rather than hinder is to frame those objectives broadly enough so that the faculty can sensibly organize instruction around them while making sure that they are still measurable.

Sometimes one broad, measurable objective subsumes many lesser or smaller-scope instructional objectives. Since taxonomies of learning build from the simpler to the more complex, it is reasonable to develop evaluation items that fit into a taxonomy level equal to or less than that of the objective. For example, being able to discuss typically requires a certain knowledge base before the discussion can occur. In this case, it might be reasonable to ask an evaluation item about knowledge level content that could be presumed under the verb "discuss."

A caution here: faculty must be very careful not to justify to themselves that the broad objective subsumes objectives that it actually does not. For example, the instructional objective that requires the student to "perform a physical exam" should not be assessed by an examination that requires the student to "name the physical exam test used to assess a low calcium level;" nor can it be assessed by asking the student to "describe the consequences of performing a portion of the exam incorrectly." The latter two activities are not subsumed under "perform a physical exam," but are separate unto themselves.

Checklist for Evaluating Instructional Objectives

In reviewing instructional objectives, programs should ask the following questions:

- Have the instructional objectives been stated in terms of learner behaviors as opposed to faculty performance?
- Is the terminal behavior specified?
- Are the conditions under which the behavior should occur specified?
- Are the instructional objectives measurable?
- Are the criteria of acceptable performance specified?
- Is the full intent of the instructional objectives understandable to the learners?
- Are the instructional objectives accurate expressions of the elements of instruction?
- Do the instructional objectives, as a group, form an accurate picture of what is to be learned?
- Are all of the instructional objectives complete within themselves?
- Does the style of the instructional objectives follow the standards for writing good objectives?
- Are the verbs used action verbs that can measure behavior?
- Do the action verbs indicate the depth of "understanding" or performance expected?
- Are the instructional objectives realistically achievable for the length of the learning experience?