The Technical Instructor Course at Lackland Air Force Base is (according to the author) effectively preparing Air Force men and women as competent instructors in a wide variety of highly skilled technical specialties for the over 3500 courses conducted with Air Training Command. The course was developed to meet the need for qualified experienced technicians as competent technical instructors. Of approximately six weeks duration, the course is divided into two blocks of instruction. Block I is four weeks and three days in the classroom, and Block II is two weeks of practice teaching. Some of the broad topics that are covered in the course are learning processes, communicative skills, instructional objectives, methods and techniques, media, tests and measurement, counseling, and practice teaching. The program (which is fully described in this paper) is helping to meet the Air Force's need and has possible application for other institutions in upgrading the instructional methodology and technique requirements of qualified technicians selected to become instructors. (HD)
PERFORMANCE ORIENTED PROGRAMS
OF FACULTY DEVELOPMENT

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Hundreds of articles have been written on how to improve teaching and teachers.

In fact, the March 1976 issue of Educational Leadership was primarily devoted to continuing education for teachers. A quote from Theodore Roosevelt "Every man owes some of his time to the advancement of his profession" probably has as much or more meaning today than ever before. With a continuing push towards accountability in the teaching profession, it makes it all the more important to have a well-defined faculty development program.

But how do you define competency of your faculty? Charles Monroe, in his book on Profile of the Community College, states that "The ultimate test of the worth of any teacher is the quality of the product, the student."

For purposes of this presentation, let me simply define a competent instructor as one whose graduates are competent at least on 80% of their total job. That is the standard that we use to prepare the technical instructors of the Community College of the Air Force. We realize this might not work for you, but increasingly through the Freedom of Information Act, public institutions are using the material developed by the
services to assist them in their curriculum development. The program that I will briefly overview has worked well for us.

The Air Training Command conducts more than 3500 courses to prepare Air Force men and women for employment in a wide variety of highly skilled technical specialties.

We, of course, need competent and dedicated people as instructors to effectively conduct this large volume of instruction.

Most personnel that apply, or are selected for, instructor duty range from three to ten years of job experience and are highly proficient in their field. But how will they perform as an instructor in the classroom?

In order to answer that question and meet the need for qualified experienced technicians as competent technical instructors, the Air Force designed a concentrated course of a little over six weeks duration. The course is divided into two (2) blocks of instruction. Block I is four weeks, three days in the classroom, and Block II is two weeks of practice teaching. Simply called, The Technical Instructor Course, or "TIC" graduates are awarded a distinctive badge signifying that they possess the competencies required of their new profession.

Some of the broad topics that are covered in the course are the:
- Learning Process
- Communicative Skills
- Instructional Objectives
- Methods & Techniques
- Media
- Tests & Measurement
- Counseling
- Practice Teaching

Some of you probably remember these general areas from your own teacher preparation program.

Of prime importance, though, is the question, "How is the material to be taught?" Naturally, we want our people qualified and on the job as soon as possible. An important aspect of this is that "teachers tend to teach as they have been taught." It is, of course, imperative that the learning experiences in the course reinforce the various methods and techniques of instruction available.

One significant element of this course is the Air Force model for Instructional System Development (ISD) which consists of the following steps:

1. Analyze System
2. Define Education or Training Requirements
3. Develop Objectives & Tests
4. Plan, Develop, Validate Instruction

5. Conduct & Evaluate Instruction

Throughout the entire course, we stress the instructor's role in this approach in developing and conducting instruction.

In other words, the course teaches how new system requirements or changes to a present system are identified through the use of job inventories and task analyses. The instructor would then use this empirical data to design necessary changes. This might include revising his performance-based objectives and criterion tests. The instructor would then validate any changes through individual, small and then large group tryouts before actually implementing the changes in his classroom. Finally, the employers of his graduates would let the school know if his graduates were performing satisfactorily on the job through the use of job incumbent and supervisor questionnaires and actual field evaluation visits.

Another important aspect of the course is the learning module on Step 3 of the ISD process - "Developing Objectives and Tests." Here the student teacher learns to write specific objectives the student must attain as a result of the instruction. These are called criterion objectives because they state the criterion or standard of acceptable student performance. They are designed to clearly spell out what the student is expected to do, the conditions under which he is expected to do
it, and the level of performance or standard of proficiency expected. A student teacher in the automotive mechanics field prepared the following objective that meets all of these requirements. Given a repair kit and tools (condition), properly replace (behavior) all gaskets in a Ford 1560 carburetor within one hour (standard).

Success or failure on attaining this objective would be based upon whether the carburetor worked properly after all of the gaskets were replaced within the allowed time.

A number of controlled practice teaching exercises utilizing the lecture, discussion, and demonstration/performance methods are distributed throughout the first block of instruction in order to give the student teachers confidence and practice in planning for and using the skills they are acquiring. Completion of these exercises may be by stand-up instruction or if appropriate, the designing of self-paced lessons.

Of course, the subject of the student teacher's presentation can be related to his actual job and becomes a learning experience for the entire class.

For example, the student teacher of automotive mechanics might use the objective he had previously constructed in his module on writing behavioral objectives. (Replacing all the gaskets in the Ford 1560 carburetor). In actual teaching
situations, 80% of the students must perform the task correctly for the teacher to have successfully completed a demonstration/performance lesson. However, in a practice teaching demonstration, we are concerned more about demonstration of the teaching skills than we are with student performance.

We tailor the course to fit the needs of the students and to use the audiovisual equipment we have available. In our classrooms, various student presentations are video-taped by the instructor to help the student become aware of and correct any distracting mannerisms he might have and is perhaps unaware of (example: rattling change in pockets, poor eye contact, etc.). All designed to give the student the required competencies to comfortably lead a discussion or use proper questioning techniques in his class.

Practice teaching exercises are critqued by the instructor and the other students. The critiques comment on the planning of the presentation (i.e., clarity, organization, content) vs the effectiveness of the actual delivery of instruction (i.e., delivery, interaction, evaluation). Replay of the video can also help pinpoint areas of weakness and show subsequent improvement. Or, the video could even be part of a demonstration lesson within a self-paced presentation module for the instructor to evaluate.

Upon completion of the first block of instruction, the student teacher is placed on the job in the department where
he will be an instructor for two (2) weeks of supervised practice teaching.

We are presently validating a self-paced version of the course at one of our technical training centers. This method reinforces the idea that there are desirable alternative ways to present material other than the straight lecture method.

Learning modules have been prepared for the content areas previously covered. The student has up to four weeks, three days to complete the first block of instruction. A number of people with some previous experience or training in education have completed Block I in as little as five days.

Upon completion of this course, the student teacher is certified as a technical instructor and is awarded his instructor's badge. To insure that his proficiency remains high, he attends at least one in-service training course a year in either

- Academic Counseling
- Audiovisual Methods
- Instructional System Development
- Tests & Measurement
- The Instructor's Role in Self-Pacing

This entire educational program is directed toward the improvement of our courses, and assures that our graduates are qualified to perform on the job.
The Technical Instructor Course is effectively preparing Air Force men and women as competent instructors in a wide variety of highly skilled technical specialties for the over 3500 courses conducted within Air Training Command. The program is meeting the Air Force's need, and has possible application in your institution, in upgrading the instructional methodology and technique requirements of qualified technicians selected to become instructors.