This paper on the training of industrial and organizational (I/O) trainers, is written for undergraduate psychology curriculum developers, to provide information relevant to the preparation of psychology students for entry level positions in training and development. The eight phases in the development and implementation of a training program are delineated in table one. Tables two through four focus on the essential and interrelated skills, activities, and knowledge of an I/O trainer. A sample curriculum for an "Organizational Training Specialist" within the psychology major, as well as a course outline for Organizational Training I and II are included in tables five and six. Job descriptions of three entry level I/O training positions are offered. A resource bibliography for training trainers is also included.
Training for Training: Preparing Students for Work in Organizational Training

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The Teaching and Training of Psychology Students for Careers in Business
at a meeting of the
Midwestern Psychological Association, Chicago
May, 1983

ABSTRACT

The purpose of the paper is to provide information relevant to the preparation of psychology students for entry level positions in Industrial & Organizational Training.

The paper discusses:
(1) Program and planning components in the I/O training process;
(2) Skills and information essential for effective training;
(3) A sample curriculum for an "Organizational Training Specialist" within the Psychology Major.
(4) Examples of entry level jobs in Organizational Training;
(5) A bibliography of resources for training trainers.
Training and Development (T & D) is one major component in the contemporary Human Resource Management process. The purposes of training programs are numerous—productivity improvement, waste reduction, updating job skills, improving worker efficiency, increasing worker flexibility and versatility, improving communications, decreasing accident rates, introducing the worker to a new position, and so forth (Rambo, 1982). Stockard (1977) identifies a number of "basic categories of employees or target audiences" toward which training and development programs are directed. These include orientation for new employees, apprenticeship and craft skills training, supervisory training, office skills training, technical training, middle-management training, training for career development programs; and so forth (Stockard, 1977, 35-38). Because of changes in work which occur as a result of technological improvements, because workers change, and because many workers move into positions for which they may be untrained or only minimally trained, T & D is increasingly seen as an essential organizational function. Industrial and Organizational (I/O) Training occurs in corporations large and small, in the private as well as the public sector. Goldstein (1980 a) reports that over 90% of private corporations use training programs. Estimates of the amount of money spent each year in the United States on I/O Training range in the billions of dollars.

The purpose of this paper is to present information relevant to the preparation of undergraduate psychology students for entry level positions in I/O Training. Only a few colleges and universities offer formal preparation
for students to assume positions in organizational training. The few pro-
grams which do exist tend to be located administratively in university de-
partments of adult education, communications, or management. In a recent
survey, Zemke (1979) reported that of trainers in Fortune 500 companies,
30.8% held a master's degree, 23.1% held a bachelor's degree. He also
reported that the most common academic major was psychology (28.2% of
respondents). It is my contention that much of practice in I/O Training
involves applications of psychology to the workplace. I shall, therefore,
proceed by presenting information relevant to psychology curriculum programming
for I/O Training.

The T & D Department of a large organization may involve hundreds or
thousands of people, performing a wide variety of tasks. The common element,
however, is that at some point all are involved in human development training
programs. Any program, regardless of its purpose or functioning in the or-
ganization was introduced in response to some type of organizational demand.
It was requested, developed, implemented, and used. Some programs have been
in existence for years, others have died quickly. Since this is the common
element and rationale for T & D, we begin with an overview of the primary
components in the development and implementation of a training program. Table 1 outlines eight program phases, from the initial identification of a problem
which may require a T & D effort, through the implementation and evaluation
of the program.

A wide variety of skills are demanded in training. Generally, because
the role of the beginning professional is somewhat limited, the range of skills
expected is also less than the expectation for a training professional with
years of experience. A number of efforts have been made to identify and
categorize types of skills required in T & D. Table 2 presents a list of
12 clusters of skills which various authors have reported as involved in the
training function. Accompanying the skill name is an indication of whether
it is expected that the skills be possessed by entry level trainers or more
experienced professionals. Additionally, the table provides references to
sources which describe the skills in greater detail. Of particular importance
for the entry level professional, are the first five areas of skill listed.

Table 3 identifies the types of activities in T & D in which a new
professional might be involved, and then notes the skills clusters relevant
to the activity. I believe that it is particularly important to understand
that the five essential skills clusters identified here are used in a wide
variety of training activities. I also believe that it is important to
communicate to students the ways in which the skills which they are develop-
ing will later be employed.

Equally important to skills is knowledge and information. There are a
variety of bodies of information which impinge on the T & D process. A
number of areas of knowledge drawn from the broad field of psychology are
listed in Table 4. Accompanying this listing is an indication of the phase in
training program development in which such knowledge or information might be
essential—either in the program content itself, or in the process of develop-
ment and implementation of the program.

Having outlined essential skills and knowledge it is next important to
consider the training of these matters to students. An important early step
in the development of a program to train trainers is to contact your local
Training chapter of the American Society for Training and Development (ASTD). This is the primary national organization. Contacts with people in the local organization may help program development, as well as leading to internship/practicum placements and job placements for program participants.

Table 5 presents an overview of the types of courses which should probably be included in a well rounded program. As always a balance must be struck between the essential focus of an undergraduate education as training in the liberal arts, and the increasing demand for "job related skills". My own belief is that we do students a disservice when we allow them to become too specialized. Note that much of that which is required involves basic functional skills, such as writing, public speaking, computer use, statistics, research methods, artistic skills, and so forth. These are all skills which have a wide range of applications, and can be readily transferred to another type of career, if the student discovers after five years that he or she is not satisfied with a career in T & D. I have assumed a well rounded major in psychology, including such courses as social psychology, personality, and so forth. I have specified methodology courses (research design, statistics, testing) because, the training professional will be called upon to use these skills in activities, such as those outlined in Table 3. The primary focus of this curriculum, T & D, is limited to only a few specialized courses. A survey course in Business/Management is essential for the student to understand the organizational context of T & D from a business perspective. A survey course in I/O Psychology is also essential for an understanding of the role of T & D in the larger Human Resource Management process. The specialization which is provided comes in the Organizational Training course itself.
and the internship which should follow.

Table 6 presents a sample course outline for "Organizational Training I & II." This is planned as a two semester (full year) course. It must be structured to involve a laboratory component. I view this as an 8 semester hour course—4 credits lecture, 4 credits laboratory/seminar. The program begins with an introduction and overview. It moves to information essential for training. Then very quickly skills are tackled—presentation skills, curriculum and program design skills, and research skills. This curriculum incorporates the five skills clusters identified in Tables 2 and 3, and incorporates active training methods. Finally, the course concludes with consideration of administrative matters in training and an overview/summary which may include a final project. The program, however constructed, must provide the student with the skills and information needed to perform competently in an internship placement in a training organization.

The final note is always—where are the jobs. Admittedly, there are many positions for which a bachelor's level psychology major is not well trained. Most will begin in an entry level position. The exact nature of the position available will depend on the types of requirements and structures of each organization. Some T & D positions are administratively housed in T & D Departments. Others are attached to functional organizational units. The types of jobs for which your students are eligible will depend upon their mix of knowledge, skills and interests. Table 7 presents sample job descriptions for three different types of entry level positions in I/O Training. These are only examples. Small organizations may combine some of these functions. Large organizations may split each of these into more specialized roles. As you become more familiar with T & D in your community, the range of opportunities will become defined more clearly.
References and Bibliography


Table 1
Summary of Major Steps in Training Program Development

<table>
<thead>
<tr>
<th>Program Phase</th>
<th>Program Activities</th>
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</thead>
<tbody>
<tr>
<td>1. Problem Definition</td>
<td>Determine scope and nature of problem. Identify people involved. Ascertain whether a training problem (vs. selection, motivation, job design, etc.).</td>
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<tr>
<td>2. Establish Training</td>
<td>Determine program objectives. Define acceptable levels of performance. Explore existing alternatives and evaluate their feasibility for adoption/purchase/use.</td>
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<tr>
<td>4. Development</td>
<td>Construct training materials, including exercises, media (films, VTR, tapes, etc.), scripts of lectures, reading materials for trainees, and so forth.</td>
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<td>5. Pre-testing</td>
<td>Pilot test complete program with small sample. Evaluate effectiveness of training. Gather &quot;reactions&quot; feedback from participants. Revise training materials.</td>
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<tr>
<td>7. Presentation</td>
<td>Train program participants.</td>
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<tr>
<td>8. Evaluate</td>
<td>Assess effectiveness of training program.</td>
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Table 2
Clusters of Skills Essential for the Success of New and Experienced Training Professionals

<table>
<thead>
<tr>
<th>Skills Cluster</th>
<th>Essential for Trainers who are New</th>
<th>Essential for Trainers who are Exper.</th>
<th>Relevant Sources of Information on the Skills Cluster</th>
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<td>Budgeting/Financial management</td>
<td>No, Yes</td>
<td></td>
<td>Johnson (1976), Pinto &amp; Walker (1978).</td>
</tr>
<tr>
<td>Manpower Planning</td>
<td>No, Yes</td>
<td></td>
<td>Johnson (1976), Kenny (1982).</td>
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<tr>
<td>Research to improve training field</td>
<td>No, Yes</td>
<td></td>
<td>Pinto &amp; Walker (1978), White (1979).</td>
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</table>
Table 3
Identification of Specific Training Tasks which Involve Skill Clusters Considered Essential for Success of New Professionals

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<td>A/V (film, VTR, etc.) material production</td>
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<td>behavior modeling training</td>
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<td>behavioral observation</td>
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<tr>
<td>case &amp; discussion training</td>
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<td>communication training</td>
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<td>exercise/case writing</td>
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<td>public speaking (lecturing)</td>
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<td>programmed learning material writing</td>
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<td>Activity</td>
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<td>interviewing</td>
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<td>public speaking (lecturing)</td>
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<td>project reporting</td>
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<td>communicating feedback on progress</td>
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<td>P.R. material writing</td>
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<td>research design</td>
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<td>role playing training</td>
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<td>script writing (film, lecture, tape, etc)</td>
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Table 4

Selected areas of Knowledge and Information from Psychology Relevant to Effective Practice in Eight Training Program Phases

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Table 5

Sample Curriculum for an Organizational Training Specialist in the Psychology Major

Completion of the Psychology Major.

Course Prerequisites to "Organizational Training":

- Research Design & Methods (including: experimental, survey, and field research methods).
- Statistics (data analysis) (min. 1 semester).
- Introduction to Computers (especially BASIC, though familiarity with SPSS, SAS helpful).
- Psychological Tests and Measurements.
- Industrial/Organizational Psychology (survey).
- Introduction to Business/Management (including coverage of functional areas: accounting, finance, marketing, production, etc.).
- Organizational Behavior (optional).
- Public Speaking.
- Technical Writing.
- Expository (Instructional) Writing.
- Art (Graphics, design, photography, etc.)
- Organizational Training I & II (with required Laboratory).
- Internship/Practicum in I/O Training.
Table 6
Sample Course Outline for "Organizational Training I & II"

I. Training Overview.
The role and function of training in organizations.
Organizational realities facing the training department.

II. Organization of Training Programs Introduction.
Steps in Training Program Development.
Training Resource Requirements.
Relationships with the Organization external to Training Department.

III. Theoretical Background Information.
Learning & Training Principles.
Aspects of Motivation relevant to Training.
Performance Assessment.
Feedback & Reinforcement (related issues in behavior management).
Attitudes and attitude change.

IV. Overview and Introduction to Training Methods (include Laboratory).
include: lecture, case study, group discussion, role play, simulation,
behavioral modeling, programmed instruction (& C.A.I.), etc.

V. Use of Training Materials (include Laboratory).
Principles of use and experience using media and equipment for:
film, videotape, audio tape, film strips, slides, overhead
transparencies, charts, chalkboard, handouts, etc.

VI. Platform Skills Development (include Laboratory).
Provides experience presenting training in the following formats:
lecture, case discussion, demonstration, role playing,
simulation, behavioral observation and feedback,
communication skills training, etc.

VII. Design of Training Materials (include Laboratory).
Developing objectives.
Selecting the appropriate medium (guidelines).
Organization of information.
Design of materials.
Writing copy.
Construction of materials.

VIII. Research Processes (include Laboratory).
A. Needs Assessment.
Goals of needs assessment.
Methods of needs assessment.
Outcomes of needs assessment.
Use of assessment information.
B. Evaluation of Training.
Models for evaluation.
Evaluation research design.
Design of evaluation materials (surveys, tests, etc.).
Reporting evaluation results.
IX. Program Planning.
   Setting Objectives.
   Describing Program Limits.
   Defining Acceptable Performance.
   Selecting Training Methods.
   Organizing the Program.
   Follow-up.

X. Program Management.
   Staffing.
   Budgeting.
   Policy Development and Implementation.
   Setting Priorities and Scheduling.

XI. Conduct of Training.

XII. Continuing Development: The Future.
Table 7
Examples of Job Descriptions for Entry Level Positions in Industrial/Organizational Training

TRAINING INSTRUCTOR.
Conducts specific courses, programs, and workshops, or portions thereof, designed and intended to develop skills, abilities, and/or attitudes of organization member participants. Attempts to stimulate learner interest and interaction within the training process. Uses materials, media, and other resources as required to facilitate the learning/training process in order to achieve specified training goals. May be involved in management training, clerical training, safety training, general orientation, technical training, on-the-job training, and so forth.

CURRICULUM DEVELOPMENT WRITER.
Writes text for oral presentation of information in films, videotapes, audio tapes, lectures, and so forth. Write copy for training manuals, training workbooks, training exercises, case studies, and so forth. Applies principles of learning and training in development of materials. Must be able to quickly learn processes, procedures, and requirements of numerous and varied positions, roles and tasks. Must be able to work closely with content area specialists in development of curriculum materials. Develops written materials consistent with the goals and objectives of the training program, and the limits of the medium used.

AUDIOVISUAL/MEDIA DEVELOPMENT SPECIALIST.
Develops media including films, videotapes, audio tapes, charts, graphs, pictures, and so forth, as specified by curriculum writers and program designers. Involved in drawing, preparation, editing, rendering, photography, and related activities. Responsible for appearance, effectiveness, and relevance of media to goals and requirements of training program. Works with curriculum writers, program designers, and others, to insure maximum effectiveness and proper selection of training media.