

Evaluating Four Years of ID Experience

Gearold D. Miles
*Managing Director—
Educational Programs
Arthur Andersen & Co.
Center for Professional Education
1405 North Fifth Avenue
St. Charles, Illinois 60174*

Between June and December 1978, 15 instructional designers began working at the Professional Education Division (PED) of Arthur Andersen & Co., a major international public accounting and professional services firm. The Professional Education Division develops and conducts training in Arthur Andersen & Co. offices around the world, but the division is based at the firm's Center for Professional Education in St. Charles, Illinois.

Not only were these employees apprehensive about their new positions, firm and PED personnel were apprehensive about this new species—instructional designer.

What was instructional design going to contribute to a training program in existence for nearly 40 years at a major international public accounting firm?

Where were these instructional designers going to fit in the diversified but workable course development methodology? What were the responsibilities of these highly rated people going to be?

Four years later, each of these questions has been answered, and the answers are not based on supposition or false hope. Instructional designers have made tangible contributions to training development at Arthur Andersen & Co. More important is the melding of the instructional design group and process with other groups in PED to form one of the most sophisticated and effective course development teams in the field of professional training. This alone has provided a satisfactory answer to the above questions.

The Professional Education Division

has come a long way since the first instructional designers joined the division in 1978. Yet, these four years represent only one-tenth of the progress of Arthur Andersen & Co. in its professional education program—a program that began in 1940.

From this perspective, two things are apparent. First, Arthur Andersen & Co. always has placed the professional career development of each individual high on its list of priorities. Second, the firm's progress in the first 38 years compared to the amount in the past four years in PED promises an unbelievably fast-paced, exciting future for professional education at Arthur Andersen & Co.

Training as Old as the Firm Itself

Training has been an integral part of Arthur Andersen & Co. since the earliest years of the firm. When he founded the firm in Chicago in 1913, Arthur Andersen was on the faculty at Northwestern University, a role he continued until 1922. Arthur Andersen & Co. preceded other accounting firms in professional education by many years and today retains the number one position in training among accounting firms.

The firm's commitment to training encompasses not only its own people. Arthur Andersen & Co. offers educational services to many others outside the firm. Certain characteristics of the firm's professional education program have contributed to its success. Line personnel from the field traditionally have served as instructors. The program relates specifically to an individual's choice of career specialization. Centralized training schools in Chicago have maintained training uniformity over the years, although training also is conducted in practice offices and sessions arranged in central locations worldwide.

Firm Growth Accelerates Training Problems

As the Arthur Andersen & Co. organization grew, adequate training accommodations became a critical problem. Sessions were held in dimly lit office buildings, hotels, the attic of the Chicago office building and, for years, at the Chicago campus of Northwestern University. The growing number of trainees, limited and inappropriate space, the need for translating courses for international use, and demands for additional courses to meet professional needs made the advantages of acquiring a centralized training facility apparent.

Saint Dominic's College in suburban St. Charles, Illinois, became available, and in October 1970, the college became the Arthur Andersen & Co. Center for Professional Education. The move into our own facilities overcame one of the biggest shortcomings in our training program. We could remodel the facilities to fit our training requirements.

The acquisition of the college marked the firm's largest single investment for developing and conducting training to date. However, it was just another step in Arthur Andersen & Co.'s plan to maintain its leadership in professional education for business and industry. The challenge began as the firm made this facility come to terms with its purpose, its organization and its potential.

Dynamics Behind Increased Training at Arthur Andersen

Certain dynamics of the 1960s and 1970s—in our profession, in the economy and government, in technology—influenced the firm toward greater commitment to its professional education program. Specifically, these dynamics pressured Arthur Andersen & Co. to speed up training development and make it more efficient and effective. In retrospect, these dynamics became catalysts for the introduction of instructional design in PED.

For years there had been no radical change in the methodology used by the firm to perform its professional services. Then almost simultaneously during the late-1970s, the audit and consulting divisions revised their methodology. The new firm methodologies changed how work was done in the field and, ultimately, affected every Arthur Andersen & Co. professional in these practice areas.

This meant that every audit and consulting training course had to be revised.

Furthermore, changes in the firm's basic precepts meant an outstanding training backlog. Older members of the firm, who were familiar with the previous methodology, and every new hire needed training. To maintain the best client service, pressures existed in the firm to discard the present curricula, redo all courses in the audit and consulting curricula, and do it immediately.

At the same time, Arthur Andersen & Co., like other business and industry of the 1960s and 1970s, was experiencing the significant information, regulation and technological explosions of this period. Tax laws, auditing procedures, financial reporting and presentation standards changed continually. Computer technology and applications advanced dramatically. The consensus was that training was the way to meet these significant changes affecting the firm's professional practices.

Speedy results were now crucial to the firm. No longer was a leisurely "Socratic" transmission of new informa-

should be brought in as specialists in course design, development and production began to make sense to PED and the firm.

Reviewing Our Program to Meet New Demands

Partners and managers in PED had varying educational and firm backgrounds. They were well-versed in the content that was to be taught, although they sometimes depended on subject matter experts from the field to write a particular content. Common denominators among this PED group were Arthur Andersen & Co. background, knowledge of the content, and experience in the classroom. In actuality, this group was carrying on an earlier firm concept of "tutoring by the expert."

We knew what worked and what did not work for the unique population of Arthur Andersen & Co. trainees, and we built course after course based on this prior experience. Our system was

Though our methods of presentation were more limited than those methods instructional designers later introduced, they worked.

tion feasible or economical. As soon as we identified training as the instrument of change, an exceptional burden was placed upon our training personnel. The necessity of speed was, and still is, one of the biggest frustrations of our Professional Education Division. But speed without results is wasted effort, so we learned to concentrate on effectiveness as our main objective.

Efficiency became another factor impacting training development within the firm. Like everyone else, we had to get more for our money. During the first twenty-five years of our training program, it was relatively inexpensive to hold a three-week school at Northwestern University. By 1970, the changing economy encouraged us to reduce training time that took professionals away from client service.

As a result of this pressure for maximum effectiveness and efficiency, the roots of PED's synergistic course development process took hold. The idea that professionals outside the firm

predicated on a "trial-and-error" approach. PED training developers experimented with various training techniques and selected those that best fit our audience and our content. This approach may not have incorporated the most up-to-date educational techniques, but it satisfied most of the training demands of the firm. We were proud of our training achievements, but we also were dedicated to quality training and interested in improvement. We knew time and money were wasted if the student did not get the message.

PED course developers often were virtually "one-man shows." We analyzed the audience and its need for appropriate training; we developed the content and designed the methods of presentation; and we managed all details of course production, course conduct and, if necessary, materials distribution to local offices. Over the years we developed workable although diverse systems for producing courses.

Though our methods of presentation

were more limited than those methods instructional designers later introduced, they worked. But we did not know why our design methods worked. What we lacked were the fundamentals of instructional design or the psychological tenets on which adult professional education rests.

Occasionally, there were complaints from our practice offices. One complaint criticized the inclusion of unnecessary material in some courses. Today, the Evaluation Services Unit, an offshoot of instructional design that has existed at PED since 1979, diagnoses training needs of any audience and guarantees content that hits the mark for the targeted audience.

Students complained that certain courses, especially those heavily dependent on lectures, were dull. This was due partly to an admitted deficiency in design and media techniques, time constraints that forced our using what we knew worked, and previously unsuccessful experience in trying to introduce new instructional methods. Arthur

pull professionals from the field. Although instructional designers are quick to assimilate a particular subject matter, they cannot read a book about accounting principles and then write a course on basic accounting. This aspect of our synergistic process and the designer role was not yet recognized by PED and the firm. Though instructional design in PED eventually increased training quality and enhanced our course development process, it did not save time.

Introducing Instructional Design to PED

The people who first interviewed for instructional design positions at PED were in an unusual position. They had to sell their expertise to a group that essentially believed its products already were perfected. In addition, the expertise they were selling was a mystery to the buyers. Designers had to prove they could contribute to a well-established training program and enhance highly technical and professional content for

better course development but failed to acknowledge the usual constraints of a large enterprise that is introducing new ideas, methods or technological approaches. With one hand, we supporters pointed out specific improvements for new designers to make; with the other hand, we emphasized restrictions, rules and regulations and wagged our finger at their proposals.

Potential instructional designers had a glorious, ideal environment presented to them. Some of the oversell elaborated upon the great potential in PED—development of training for firm personnel and clients around the world, the most progressive media support and training facilities available and, finally, utmost respect from PED as specialists in the field of training.

Miscommunication and People Problems

During 1979 and 1980, we added another twelve instructional designers in PED, bringing the total to 27 in late 1980. There was a large influx of other people during this time, including managers and staff from the field as well as administrative and support personnel. Few had any experience with instructional design.

The things I remember most during this rapid expansion in PED involved poor communication and interpersonal problems. The "old guard" in PED was not always receptive to change; several members were downright antagonistic toward the "savior syndrome" of instructional designers. New training personnel, who transferred into PED, had to learn about training development in general—basically how to get their information and experience into a practical training form. They had little patience with the instructional design group since they were concerned about pinning down "the right way" to develop training. These were Arthur Andersen & Co. people who had grown up in a firm that extolled "the right way" to perform an audit or do a systems installation. Unfortunately, the new designers were not immediately successful in convincing them that instructional design is not like an audit or a systems installation. In instructional design, there are often different avenues for reaching a destination; there is no "right way."

Many users were "turned off" by academic, pedantic attitudes of some instructional designers. Users could not

Though instructional design in PED eventually increased training quality and enhanced our course development process, it did not save time.

Andersen & Co. students and instructors were not familiar and therefore not comfortable with many of these techniques. It was difficult to change established patterns of training. At least, many of us in PED were aware of stagnant techniques and the need for fresh input by specialists.

PED had to convince itself and firm leadership that there was a need for instructional design in the course development process to assure the highest quality training and thereby justify hiring many new specialists.

One of the ways instructional design initially was presented to the firm was unfortunate since it later caused many problems for instructional designers. Instructional design was promoted as a means of efficiency. Designers would save time by serving as content people, thereby reducing costs of course development. It would be less expensive to hire instructional designers to write and oversee the training content than to

which they had no educational background or experience.

The group supporting the introduction of instructional design inadvertently may have added to the difficulties placed on the new designers. We promoted instructional design to such a degree that, perhaps, our overselling did more harm than good. User anticipation was so high that instructional designers often were expected to perform miracles. We had a great amount of training to produce. Many of us hoped instructional designers would relieve project members and content people of certain responsibilities, such as writing case studies, or developing and modifying scripts. We needed capable people to undertake tasks like these, and this need clouded our good intentions of using instructional designers as they expected us to use them.

Even the PED group supporting design expected immediate results in

understand the instructional design jargon. Most designers were recent graduates (within 0-5 years) of well-known universities. The remainder had advanced degrees in the instructional design field. Few had worked in a business environment, let alone the highly structured world of accounting.

We had many conflicts stemming from the "theoretical versus the pragmatic." There was the confident "It's good design because I say it's good design" of the instructional designer offset by an obvious deficiency in business acumen.

Another conflict centered on the primary reason for introducing instructional designers to PED. The division depended on firm professionals to formulate the content of any course by serving as subject matter experts. Unfortunately, these subject matter experts created a major obstacle for designers who were hired to expand and revamp our methods of instruction.

Subject matter experts from the field did not understand the instructional design theory and language and did not immediately see the importance of dealing with the intricacies of instructional design. Most subject matter experts were on short-term "loan" to PED and anxious to return to their offices rather than

student evaluations began to prove the validity of new instructional approaches.

Defining the Designer's Role

Confusion and confrontations over responsibilities, authority and territory were numerous. One division of the firm began a five-year development program of its basic curriculum for its firmwide professionals in 1978. The long-range plan projected approximately 800 hours of training to be produced on a strict timetable based on the prerequisite, interlocking nature of its curriculum. However, developers at PED barely could obtain enough content people from the field. Developers were desperate for knowledgeable firm experts for the development stage of the program. Since instructional designers often performed their own "quick-studies" of the content, PED developers felt instructional designers might substitute for content people and eliminate the need to pull important experts from field assignments. As mentioned previously, this misconception about the role of the designer originated early in the introduction of instructional design and was difficult to reverse.

Other users saw designers as editors,

They often had peripheral information about printing, slides, or graphic design, but they lacked practical production experience for using color properly and economically, knowing how much text is appropriate for good readability on a slide, or what level of detail makes a graphic too busy and ineffective.

Suddenly, these designers were working for an organization that had modern audio-visual equipment, a television studio, graphic designers, print specialists, audio-video hookups in classrooms, a warehouse, and personnel to inventory and maintain training materials. The designers wanted to go all out because they had minimal experience in project control or budgeting. Review checkpoints were necessary for their good but idealistic media choices.

Too Much Too Soon

The general scenario in PED following its sudden expansion between 1978 and 1980 was typical of any enterprise experiencing rapid growth. There were too many challenges and not enough experienced people (in terms of organizational experience) to handle them.

PED initiated several special programs that also distracted the division and inhibited its getting organized more quickly. These included instructor training courses, executive development programs for managers temporarily transferred to PED, expanded client training and even orientation programs for new designers and subject matter experts.

It was a period of poor upfront planning and scheduling, largely a result of: (1) increased demands for course production to train professionals in the new firm methodologies, (2) a surge in new personnel who had no benefit of a "learning curve," and (3) ineffective and insufficient resources and support despite PED's tremendous expansion.

Basically, these were growing pains of a newly expanded, potentially sophisticated operation that needed time to pin down methodology, terminology, role definitions, scheduling, cost guidelines and consistent procedures.

Instructional Design Progress and Acceptance

Indications that PED and the firm were accepting instructional design slowly began to appear. Progress was gradual but increasingly evident; certain factors contributed to the progress.

First, a major reorganization in PED fostered a new sense of belonging for the designers. Until August 1980 when the

Many users were "turned off" by the academic, pedantic attitudes of some instructional designers... Many designers lacked print, video, and other media experience.

learn about instructional design. Instructional designers often interpreted this miscommunication as a put-down and seldom as a basic misunderstanding between two alien parties.

Although everyone, including instructional designers, brought his/her "educational baggage" to PED, subject matter experts were particularly biased. Not only were these professionals conditioned to the instructional methods of their school days (i.e., the lecture, chalkboard, textbook approach), they also believed that they should build courses similar to ones they had experienced during their careers at Arthur Andersen & Co. They were reluctant to add variety to content or presentation modes. Instructional designers fought many battles until testing results and

production supervisors, even instructors; however, most failed to see designers in the first two phases of course development, feasibility and design, and the last phase, evaluation. To say the least, this created an identity crisis for the designers. They realized that recognition as training specialists was not "a given;" they would have to earn this recognition and work hard to define their roles.

As a group, instructional designers did lack certain information and, more important, certain viable experience, such as working in a team environment instead of the individualized environment of academe. Out of 27 designers, there was a variety of degrees and areas of specialization. Many designers lacked print, video and other media experience.

reorganization occurred, a "pool" of instructional designers existed. Designers were assigned as required to different course development projects in different PED training groups. A designer might work three months on designing an audit training course, move to the development phase of a consulting course for four months and, at the same time, be finalizing another course for a different division.

The PED reorganization officially terminated this rotation system and created permanent assignments for all PED personnel within units responsible for firm educational programs (i.e., accounting and audit, tax, consulting).

Permanent assignments to a specific division or group created continuity for the designer, especially regarding course development procedures and methodology, content, terminology and coworkers.

Permanent assignments helped to diminish the disturbing feeling of "being in limbo" which many designers felt. In a survey authorized by PED management in early 1981, all instructional designers agreed that their effective use increased following the reorganization in August 1980.

Second, PED users began accumulating proof that designer recommendations were valid. Student responses in development and pilot tests verified previous designer suggestions. Users gradually realized that designers were the students' advocates in the presentation of training and made important contributions during feasibility, design and development phases. Members of the course development teams, the "old guard" as well as new personnel, were acknowledging and appreciating designer input.

Third, a subtle but important change in designer attitudes aided instructional designer acceptance. Instructional designers realized that winning the war "skirmish by skirmish" was the only strategy possible. A "D-Day" was not going to happen. They accepted the fact that proving their credibility was going to take time and required patience. Designers learned that winning their war would be accomplished course by course, manager by manager and by demonstration, not talk.

A fourth factor influencing instructional designer acceptance was the establishment of a synergistic course development process in PED. The cooperative and practicable process is the key to Arthur Andersen & Co.'s improved training programs. Important

aspects of this synergistic process include the necessary team approach to course development, where each team member contributes his/her special skills to the final product; the ability of team members to compromise for the good of the final product; and a clear and logical definition of the roles and responsibilities of team members.

Establishing this synergistic course development process ironically dispelled the notion of "the one true design model" and "the one true role of the instructional designer." Evolution of this process did not interfere with the different requirements of firm divisions. Instead, the process demonstrated that, since different divisions stress different things, design models and designer roles will vary among divisions. Minimum design standards must continually be maintained and redefined to provide overall uniformity; however, design checkpoints and standards can be flexible enough to accommodate variations in divisions and still create consistent instructional design at PED.

The end result is a professional development catalog that is available to firm professionals and presently lists 275 different courses in accounting and auditing, tax planning and compliance, management information consulting, and specialized areas of industry, manufacturing and management development.

analyze data to determine training quality, assess needs and evaluate impact.

Evidence of the firm's respect for instructional design is becoming increasingly apparent. There are more and more requests from offices of the firm for designer assistance on client training engagements. Additional evidence is included in the April 1981 report submitted to PED leadership on "The Use of Instructional Designers at Arthur Andersen & Co." Specific duties of PED designers essentially required the same competencies established by the Association for Educational Communications & Technology (AECT). Also, this report cited the most frequently listed contributions of instructional designers as objectivity, orderliness in the development process and quality.

The PED course development process and all team members, including designers, gained special recognition outside the firm in April 1982. Arthur Andersen & Co. received the 1982 Outstanding Instructional Product Award from the National Society for Performance and Instruction for a self-study training unit, "System Controls."

The unit is part of the Business Systems Skills Course in the mainline curriculum of the management information consulting practice. The training unit includes printed manuals, audiotapes and videotapes. The management information consulting practice, the

Users gradually realized that designers were the students' advocates in the presentation of training and made important contributions during feasibility, design, and development phases.

Instructional Design at PED Today

Although instructional design at the Professional Education Division is continually evolving, there is no doubt that today instructional designers are an integral part of course design teams. Few training organizations in the world have 50 instructional design professionals and can claim a systematic design methodology as sophisticated as ours. Few organizations have quality assurance and evaluation groups that gather and

PED consulting development team and the various PED support groups shared in the recognition of this prestigious award.

More important, the entire division experienced a sense of pride and accomplishment. The award was tangible proof that PED has made tremendous strides in achieving a systematic course development process, top-quality training products and in gaining the respect of leading training organizations and professionals.

If I must point out one shortcoming in our design group, it is a general deficiency in business administration skills and overall business/industry background.

Areas Needing Constant Attention

We do not expect instructional design at PED to become static or immutable. There are instructional design concerns that require constant attention. One concern involves educating subject matter experts about instructional design. Since content people from the field are assigned temporarily to PED for course development, continual education of new users is a necessity. Instructional designers have an advantage in their permanent assignments; they have the opportunity to build an understanding of their respective subject matter. Content people go back to local offices about the time they begin to understand and appreciate instructional design terminology, strategies, and so forth.

We have experimented with providing some basic training in the design process to subject matter experts at the beginning of a PED assignment. Results are impressive. A course in instructional design for users is presently proposed in a self-instructional format for use by content people in the field.

We are educating new instructional designers about the division to which they are assigned, so they can contribute to course development efforts more quickly. We are providing continuing professional education for instructional designers to keep them current in their content areas.

Another concern of PED designers has been their early involvement in the design process. The April 1981 report cited examples of the need for early designer involvement. The report explained that professionals in the field who identify the potential audience for training are often incorrect in their recommendations. Their experience does not necessarily qualify them to make these early and vital decisions in planning courses. Our Evaluation Services Unit, which presently includes ten professionals specializing in course and program evaluation, survey research,

statistics, and tests and measurements, has improved training needs analysis. However, we acknowledge the need for greater designer involvement in front-end analysis. Our designers generally have the necessary skills, and we are actively trying to use their knowledge and skills in the earliest phases of curriculum planning.

Evaluating Our Experience With Instructional Design

My training involvement at Arthur Andersen & Co. began in 1962. I have experienced the introduction of many concepts, methods and specialists during my twenty years in professional education. The past four years at PED have been challenging, sometimes exasperating, but always exciting.

The Professional Education Division has reached an impressive level of training. Instructional design definitely has contributed to our achievement, but it is important to acknowledge the unique, 40-year history of professional education at Arthur Andersen & Co.

Since 1978, we have learned about instructional design and how valuable it is to quality training. We also learned a great deal about our training environment and ourselves. We experienced the natural growing pains of any enterprise undergoing rapid growth and change—defining responsibilities and authority, establishing procedures and systems, and experimenting with new media and technology. I hope our experience at Arthur Andersen & Co. contributes to the instructional design profession and others in the field.

If I must point out one shortcoming in our design group, it is a general deficiency in business administration skills and overall business/industry background. We professionals build our business insight slowly, but I think fundamentals of management and business administration should be part of any instructional design education.

In PED we have two professionals managing a project: 1) an education manager who handles project budgeting, scheduling, human resources, and other management functions, and 2) a design manager, who is concerned with all educational aspects of the project. These two positions often overlap in PED, and this supports my feeling that one person can do both jobs—once an instructional design degree includes general business management skills.

I believe our experience and present position in the field of professional education suggests one final insight for training development. Equality among development team members should be recognized and respected. No one area of a systematic course development process can be neglected or deleted without suffering the consequences—deficient training.

Reaching the most efficient and effective training development process takes time and experimentation. Maintaining and refining that process is a never-ending, but extremely rewarding activity.

Arthur Andersen & Co. is an international public accounting and professional services firm with 157 offices in more than 40 countries. Professional Education Division (PED) personnel develop and conduct training in Arthur Andersen & Co. offices worldwide, although PED primarily is based at the firm's Center for Professional Education in St. Charles, Illinois.

Housing and classroom facilities at the Center for Professional Education accommodate 800 students and faculty per day. Nearly 300 employees at the center create and deliver training for firm, client and other business/industry professionals.

Gearold D. Miles, a member of the firm partnership since 1968, has served Arthur Andersen & Co. in its firmwide training program for 20 years. Presently, he is Managing Director—Educational Programs for the Professional Education Division at the Center for Professional Education. Professional memberships of Mr. Miles include the American Institute of CPAs, Illinois CPA Society, American Accounting Association, American Society for Training and Development, and the Association for Educational Communications and Technology.