

WORKING PAPER #39-80

Innovations in the Apprenticeship
Information System

*Richard Mackay
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A paper prepared for presentation at a conference on "Apprenticeship Training: Emerging Research and Trends for the 1980's" cosponsored by the New York State School of Industrial and Labor Relations, Cornell University and the Office of Research and Development, U.S. Department of Labor, Washington, D.C. April 30 - May 1, 1980.

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Introduction

Public Perceptions of Apprenticeship

Despite decades of effort by the U.S. Department of Labor and various state agencies to promote apprenticeship, there remains a pervasive ignorance among the general public in America regarding apprenticeship. Even those who have heard of apprenticeship have major misconceptions about it.

Some think apprenticeship is an obsolete form of training no longer practiced. In fact, the apprenticeship system currently has more than 300,000 American workers in training. In some trades, apprenticeship offers the most modern and best quality training available in America.

Some consider apprenticeship to be an informal or loose mode of training in which a young person learns on the job under the guidance of a master craftworker. In contrast, today's apprentices work under formal training schedules which specify work processes and rotation schedules so that apprentices learn all facets of the trade. Almost all apprenticeships also require supplementary related training to be taken off the job in a classroom.

Some think that all apprenticeship programs are the same and that the apprenticeship system is homogeneous. Actually, there is considerable variety among programs. Each program has its own jurisdictional area, selection methods and criteria, different starting wages, techniques of job dispatching, credit provisions for prior experience, and so on. Moreover, some programs attract huge numbers of applicants whereas others have difficulty finding sufficient numbers of qualified candidates.

Others think that apprenticeship programs are union programs. In fact, over 80 percent of apprenticeship programs are sponsored unilaterally by employers. Not a single apprenticeship program is sponsored exclusively by a union. Certainly, several unions have been strong supporters of apprenticeship but whenever they are involved as sponsors of apprenticeship, unions work jointly with employers.

Some view apprenticeship to be a closed system, reserved largely for sons and nephews of current craftworkers and discriminating against minority applicants. In fact, fewer sons are following in their fathers' footsteps in the trades and the proportion of relatives working in most apprenticeable crafts is probably no larger than found in many occupations. Further, over the past dozen years, in response to affirmative action pressures and with the help of special outreach efforts, apprenticeship has made great strides to include minorities. By the end of 1978, 17.7 percent of apprentices were minorities.

Public ignorance regarding apprenticeship is compounded by inadequate career counseling in schools. Few school counselors have any familiarity with apprenticeship. Information explaining apprenticeship is not a part of any regular curriculum for training school counselors. Further, the attitudes of school counselors tend to reflect our society's bias against manual work and in favor of college education. Thus, better students who could make excellent apprentices are steered away from working in apprenticeable trades and towards college.

Consequences of Inadequate or Inaccurate Information

The low level of public awareness of apprenticeship impacts on apprenticeship in at least three ways:

1) Government action detrimental to apprenticeship can be taken with public support or at least without public opposition. This makes apprenticeship more vulnerable over the long run.

2) Promoting the expansion of apprenticeship among new industries, occupations and employers is more difficult because misinformation has to be corrected.

3) Many apprenticeship programs fail to attract as good applicants as they could or should and almost all programs lack sufficient numbers of qualified minority or female candidates. Further, many of the applicants apprenticeship does attract are unaware of what they are getting into, or lack the motivation and qualifications to do well in their apprenticeships or at the trades.

In response to this third concern, the U.S. Department of Labor has taken several initiatives to help assure that information regarding apprenticeship is more widely available. In 1964, special units, called Apprenticeship Information Centers (AIC's), were established through the public employment service in several major metropolitan areas. Currently in existence in just over 40 cities, the Apprenticeship Information Centers exhibit a wide variation in the level and quality of service they offer. With a few important exceptions, they have been passive providers of information on apprenticeship opportunities for individuals who walked or called in.

An effort directed more specifically at recruiting minority males and coaching them through the apprenticeship entry process is the apprenticeship outreach program (AOP), modeled after a project pioneered by the Workers Defense

League in New York City in 1964. Replicated with Labor Department national funding beginning in 1967, apprenticeship outreach programs have been established by various community organizations in more than 100 cities across the country. More than a decade later, following the promulgation of goals and timetables for women in apprenticeship, formal goals for placement of women were required of apprenticeship outreach programs.

Also, national Labor Department funding was directed at various unions and employer associations to establish pre-apprenticeship programs and on-the-job training projects aimed at preparing minorities (and later women) for apprenticeship.

During the late 1970's several additional outreach and apprenticeship programs of various designs were initiated under local funding from prime sponsors under the Comprehensive Employment and Training Act (CETA). These projects have the objective of increasing the participation of economically disadvantaged women and minorities in apprenticeship.

Finally, of course, for several decades the U.S. Bureau of Apprenticeship and Training and various state apprenticeship agencies have been promoting interest in apprenticeship among potential applicants. Most recently, a series of public service announcements was begun in selected cities in a campaign to attract more women to apprenticeship. While such efforts have brought increasing recognition to apprenticeship and have made significant strides in bringing apprenticeship to the attention of potential minority applicants and (more recently) women, the proliferation of programs, initiatives and campaigns directed at apprenticeship entry along with dissatisfaction with the quality of available applicants has led industry apprenticeship officials to support the concept of a central agency for handling information and initial intake

for all apprenticeship programs in a locality. This support has provided part of the impetus for the apprenticeship opportunity center project described in the remainder of this paper.

Origins of the Apprenticeship Opportunity Center Concept

The idea of establishing one-stop apprenticeship opportunity centers first surfaced as a recommendation in a 1975 report by Sol Swerdloff commissioned by the Federal Committee on Apprenticeship (FCA), the key national advisory body on apprenticeship to the Secretary of Labor.¹ Swerdloff had interviewed various apprenticeship officials across the country seeking possible improvements in the apprenticeship system. One recommendation made as a result of that survey was a call for experimentation with area-wide apprenticeship registration centers in metropolitan areas. Such centers, which came to be called "apprenticeship supermarkets" or Apprenticeship Opportunity Centers (AOC's), would offer a single site where applicants for all local apprenticeship programs could be processed in one stop, rather than spending considerable time traveling from one program office to another and taking up program administrators' time at each location. Because the suggestion arose independently from several well-informed industry representatives, the FCA saw sufficient merit in the idea to recommend that a feasibility study be undertaken to assess the prospects of AOC's being accepted by the apprenticeable trades and their probable benefits to apprenticeship administrators and applicants.

¹Sol Swerdloff, (Study of Operations of Federal Apprenticeship Programs" (Prepared for the Federal Committee on Apprenticeship by Manpower and Education Research Associates, July 1975.)

The Office of Research and Development of the Employment and Training Administration, U.S. Department of Labor contracted in June 1977 with the Center for the Study of Human Resources of the University of Texas to perform such a feasibility study. Based on the positive findings of the study delivered in July 1978, a decision was made to proceed with a demonstration of the Apprenticeship Opportunity Center concept in two sites. In Portland, Oregon, where the existing Apprenticeship Information Center would be upgraded to an Apprenticeship Opportunity Center through augmentation of two professional staff through national funding. And Houston, Texas where the Human Resources Development Institute, cosponsor of the apprenticeship outreach program in that city, was granted a subcontract to begin an Apprenticeship Opportunity Center. The Portland demonstration began in May, 1979. The Houston site got underway in September, 1979. This paper gives a mid-course status report on the two projects, checking the progress in meeting original objectives, citing problems and achievements thus far.

The appeal of the AOC concept stemmed from its potential for providing a centralized intake and prescreening service which would result in savings of time and cost to applicants and program administrators alike. Apprenticeship coordinators especially could avoid the problems of dealing personally with scores of applicants, many of whom either lack the qualifications or the interest in skilled manual crafts required of apprentices. In addition, the AOC offered the potential to improve the quality of counseling available to applicants, to assist in the promotion and development of new programs, to improve the quality of applicants referred to lesser known apprenticeship programs, to rationalize the flow of applicants to individual programs, to facilitate the work of apprenticeship outreach programs and to raise the general visibility

and community awareness of apprenticeship.²

²For further details regarding the promises and pitfalls anticipated of apprenticeship opportunity centers, see William S. Franklin and Robert W. Glover, "The One Stop Apprenticeship Opportunity Center: A Feasibility Study" (Austin: Center for the Study of Human Resources, University of Texas at Austin, July, 1978).

Development of the AOC Demonstration Project

Site Selection

AOC's are appropriate and acceptable only to certain localities. Criteria used to select demonstration project sites included the following:

(1) an area offering apprenticeship openings of sufficient quantity and diversity; (2) an area where there is extensive cooperation among the trades; (3) an area in which the local apprenticeship community has an interest in demonstrating the AOC; and (4) a metropolitan area of medium size.

These selection criteria were applied to about 20 cities suggested by various knowledgeable individuals interviewed during the feasibility study for the project. One city--Houston-- was suggested most often by national officials. Local training directors in Houston also were receptive, even enthusiastic.

In part due to budget constraints for the project, Portland, Oregon was recommended as a second site. Beginning in 1970 the Portland Apprenticeship Information Center (AIC) had gradually evolved into a central intake facility for thirty-nine trades. By providing supplemental resources to upgrade the Portland AIC to a full Apprenticeship Opportunity Center, by including apprenticeship promotion and community activities, the one-stop concept could be examined at two sites at minimum expense. Further, the historical experience in Portland could be traced.

The two sites selected offer some similarities and contrasts that will be helpful to the demonstration. Portland and Houston currently have very robust economies, a fact that is extremely important to a fair trial of the AOC concept.

At both sites the percentage of construction related apprenticeships reflects the national figure of 60 percent; Portland, 55 percent; Houston, 66 percent.

In contrast to one another, Portland, which is under a State Apprenticeship and Training Council, has only 74 registered programs and 2,733 apprentices. Houston, a BAT administered site, has 7,662 apprentices in 351 programs. Houston is further characterized by several large petrochemical programs and a great number of small service industry and light manufacturing programs. In fact, 14 percent of the Houston programs, i.e., the fifty largest programs, which include the 34 construction programs, account for 94 percent of the apprentices. In Portland, the construction programs alone account for 40 percent of the programs and the remaining programs are dominated by medium sized (15-20 apprentices) manufacturing programs.

Sponsoring Organizations: Who Should Operate the AOC?

Any contractor selected to operate an AOC must be able to deal with local apprenticeship programs on a basis of respect, trust and cooperation. This generally implies the choice of an existing organization with a record of good performance and a relationship of trust with the trades. The particular choice of a contractor in any area must be made in the context of local conditions.

The selection of particular subcontractors may be highly contested since there are at least five major categories of agencies who could conceivably sponsor an AOC. These include community organizations involved in apprenticeship outreach (such as the Urban League, RTP or HRDI), Apprentice Information Centers (operated by the public employment service); local organizations of apprenticeship directors, government agencies dealing with apprenticeship

such as the Bureau of Apprenticeship and Training and state apprenticeship agencies, and vocational training schools.

For the demonstration of the AOC concept it was decided that each site be operated by different agencies so that the advantages and disadvantages of each type of agent could be assessed.

Research Design

The goal of the research design for the project is to assess the feasibility of the AOC concept per se and the implementability of that concept. The basis of the research design is to measure the AOC's development against the programmatic or operational objectives and to describe and assess the background and environment of the unfolding demonstration in terms of the research objectives.

Because the AOC must be an efficient, functioning service deliverer, the demonstration project cannot be subjected to a rigorous, controlled and highly structured evaluation. Rather, the research design must reflect the facts that:

- 1) the success of the demonstration is not in the control of any one person or organization but is dependent on a high level of cooperation among many individuals and organizations;

- 2) the AOC must be sufficiently flexible to adapt to the diverse needs of the apprenticeship programs and applicant population it serves; and,

- 3) because the demonstration is only 18 months long, many judgments will have to be based on short-term indicators rather than long-term results.

Three conventional methods of discovery are being used:

observation, interviews and document review (from apprenticeship-related sources and the AOC's). Observation is used to determine the effects of exogenous events, the informal roles and relationships of individuals and organizations. Interviews are the mainstay of the demonstration record. Interviews are used to establish the base-line for all unquantifiable data and to measure progress from these base-lines. Again, the nature of the AOC demonstration necessitates reliance on the subjective views of the participants and observers to establish the Center's impact on apprenticeship intake. This is especially true for the Portland assessment, because much of the implementation process took place prior to the formal assessment and cannot be observed but must be discovered through historical reconstruction. Finally, for document review, a management information system specific to the demonstration period was implemented from the first day of operation to provide activity measures against base-lines established from other sources.

The research staff has the responsibility to preserve a record of all relevant events in order to provide as objective a trail as possible. If this objectivity is doubted, the proper recording of events may still be subjected to the explanation, interpretation or specification of another evaluator. Research staff must anticipate the information needs of future evaluators and insure that the information collected is accurate and in a useful form.

As well as being an objective observer and recorder, the research component acts as the demonstration's mentor, protecting the integrity of the AOC concept and insuring that the concept is not compromised to the point that program operations no longer address the demonstration's objectives. In order to serve the concept in this way, research staff must provide continuous feedback for the sake of controlled program improvement, thus affecting the subject it also has

the responsibility to observe objectively. Though the roles of evaluator and mentor are in conflict they are not irreconcilable as long as the researcher is conscious of the roles and keeps them separated. However, their coexistence necessarily limits the researcher to a formative or process evaluation. The researcher of a demonstration project who also has some nominal administrative responsibilities cannot be given the responsibility for the final evaluation without raising the specter of conflict of interest resulting from participation in the implementation process.

The Experience in Houston

By April, 1980 the Houston Apprenticeship Opportunity Center has been open for approximately eight months. During that time the AOC has served over 2,200 applicants, with the volume gradually increasing over the months since the initial start-up period in the fall of 1979. Since the demonstration will continue through November of 1980, it is possible at this stage to present only tentative observations as to what is ultimately to be learned from the AOC experience. An interim examination may be made, however, of the center's current progress toward meeting its goals, highlighting certain key issues around which the success or failure of the project may finally revolve. This section of the paper will summarize initial findings on Houston AOC's status relative to each of the major objectives originally outlined for the demonstration.

1. To provide all services appropriate to the AOC concept to all registered apprenticeship programs.

In theory, all participating apprenticeship programs were to transfer the burden of answering general inquiries, explaining their trade, assembling applications, and testing applicants to AOC staff to perform exclusively. In practice, this "sole source" goal was soon found to be unrealistic.

For a variety of reasons, only a few programs proved initially willing to sign agreements with the AOC requesting a full range of available services be provided to all potential applicants. Some trades simply decided to postpone using any of the AOC's services until it had proven itself in practice - the "wait and see" approach. Others wanted the AOC to take certain stages of the application/testing pre-screening process

off their hands, while retaining in-house control of other steps. In this regard several training directors cited the pressures of EEO considerations as mitigating against delegation of all or portions of the pre-selection process to any outside agency. They felt that they would be held responsible for what the AOC may do or not do.

Some local program administrators and not a few of their national leaders are apprehensive about participating in any government sponsored program dealing with apprenticeship entry. Other programs are undergoing a revision of entry procedures and standards either at the local or national level. Participating apprenticeship sponsors commonly will agree to use most of AOC's services for most of their applicants, but prefer to retain the option of handling certain applications directly themselves in their own way.

Several subjective perceptions appear to have figured in at least some of the initial reservations evidenced on the part of program agents. First, many program operators (and especially JAC committee members and business agents) were uncertain of exactly what the AOC would prove to be once realized. A few had real misunderstandings about the concept itself fearing initially that their program's standards would be lowered and that they would not be selecting the apprentices. In addition, almost all non-union programs are hesitant to participate in the program until they learn whether it will prove to be, in effect, a union-oriented operation.

Many training directors initially expressed an underlying ambivalence about what the AOC's existence would mean to them in personal terms. On the one hand, the projected AOC services would relieve harassed program staff of a great deal of (often tedious) labor; on the other hand, the net effect would be the loss of a certain amount of close personal contact with prospective apprentices. Most directors would not be in their jobs if that relationship, for all of its demands, was not important and gratifying to them.

The geographical territory to be covered by the AOC also presents a complicating factor in the potential provision of services. The trades operating in the Houston area display an enormous variety of jurisdictional boundaries -- from taking applicants only within one area of the city of Houston to programs covering several states. The prospective savings of time and energy provided by the AOC to programs with wider jurisdictions is necessarily smaller because the trade might still have to maintain enough staff to serve applicants from outlying locations.

The AOC staff has handled all these responses with an emphasis on flexibility and accomodation to the trades. This stance has met with a positive reaction from the parties involved: a few initially reluctant programs are now using the AOC, and others who originally used only minimal AOC services have moved to a level of greater reliance. In both cases, the services are often being provided with no written agreement at all, but rather with a simple "request for services" as to referral procedures and reciprocal access of AOC to information on the disposition of each referral.

However, pressure is still being applied to the trades because there is a fear that if the AOC does not perform a "sole source" function for the trades, it will not be able to fulfill its intended role. This fear arises from indications that the rate of application increase is leveling off and that three proxies of the "quality" of the applicants are decreasing: the percentage of applicants with post high school education or training, the percentage who are employed full or part-time and the percentage keeping appointments for testing or interviews. It seems that those trades that are not using the AOC for all of their referrals are, whether consciously or unconsciously, maintaining a parallel application process which the more knowledgeable and motivated applicants will use because it more direct. As

long as this route is open to applicants, the AOC cannot be identified as the centralized intake point by any of the participants in the community.

2. To serve equally construction and non-construction, joint and non-joint and group and individual sponsored programs.

At this stage, the substantial majority of the AOC's cooperating programs are from the joint construction trades, although there are a few small programs served by the AOC that are exceptions to the pattern. There are several inter-related factors which have contributed to the present situation. One operative element is clearly historical: several of the building trades programs have been enthusiastic proponents of the AOC concept since the earliest investigations of the feasibility study. At one point a group of them considered applying to be sponsors of the center themselves through their local chapter of a state training directors organization called the Apprenticeship and Training Association of Texas (ATAT). Naturally, the organization that did ultimately receive the contract to operate the center (HRDI) enlisted the cooperation of these willing programs as the first participants in the AOC operation.

In addition, the joint building trades programs are a more organized, homogeneous and accessible group to deal with than other types of programs in Houston and the AOC sponsors made an early decision to attempt to provide adequate services to this part of the community first rather than over-extend themselves in the first six months of operation. This strategy was aimed at solidifying the AOC program's operation in dealing with this sizable segment of the potential market before actively recruiting non-joint construction programs and programs outside of construction. The initial emphasis on jointly sponsored apprenticeship in the building trades was never intended to be an exclusive focus of the AOC, however, and the staff is at present making efforts to

broaden the range of participating apprenticeship programs. The AOC runs the risk of being identified in the minds of others as a union program, both because of the organization that sponsors it, and the nature of the trades it has dealt with to date. This is a perception the AOC will have to overcome if it hopes to broaden its base by the end of the demonstration, and the staff appears well aware of the necessity of positive action.

In a related complication, half of all apprentices outside of construction in the Houston area are manufacturing programs which effectively, accept applications only from a restricted pool of current employees. Since most of these programs do not need referrals from outside their plants, there is little incentive to use the AOC. This situation is only now beginning to be addressed by the AOC, and it may be that some adjustments can be made in order to serve these programs; alternatively, it may be determined that the AOC as conceived in this demonstration cannot be expected to serve apprenticeship programs which recruit exclusively from among restricted pools of existing employees. The level of involvement by the non-construction programs the AOC ultimately generates will have to be judged in light of the available population: currently in the Houston area about 40% of registered apprentices are outside the construction industry and slightly more than half of these are selected from restricted pools. The remaining half of the apprentices outside of construction are in very small programs that average two or three apprentices. Further, the largest programs that recruit from within are located at the fringe of the SMSA.

3. To save time and expense for administrators of apprenticeship programs.

It is difficult to document exact savings due to the AOC's performing tasks previously handled by administrators, since the programs use the AOC to differing degrees and apprentice-

ship directors and their staffs spend their time on a variety of non-applicant related activities, and none keep time charts on time expended or saved by category. Nevertheless, the uniform response of participating administrators to date has been that the AOC has substantially reduced their burden of paperwork and informational activities; savings are cited both in the time-consuming application and testing process and in the less concrete but equally demanding area of answering telephone and written inquiries about the programs from the prospective applicants year-round.

Two areas of anticipated time and expense reduction, however, have had to be reconsidered on the basis of experience: 1) apprenticeship directors have wanted to be relieved of the burden of wasting time on unqualified applicants. The AOC has been able to deflect approximately 3% of the applicants away from all programs as not meeting any program's minimum qualification. However, there appears to be a filtering down process of applicants who do not meet one program's qualifications applying to another program whose qualifications they do meet. This process results from the responsibility felt by AOC staff to help as many of the applicants as possible. This process may increase the number of marginally qualified applicants referred to the programs with lower entrance requirements. Further, by providing a visible centralized intake point, the AOC may generate larger quantities of qualified applicants and thus increase the total number of people apprenticeship committees will have to interview. In Houston, this may well be welcomed, since one complaint of many of the apprenticeship coordinators there has been not having a sufficient qualified pool from which to make selections. 2) Another goal was to reduce administrator time and expense spent in publicizing openings of their programs for applications. However, because of apprehensions both among the trades and on the part of the AOC staff as to legal requirements for notification, at present programs are still doing their own public notices and letters of notice to their list of "interested groups."

Given this fear, every effort is being made by the AOC to have its name and address put on the announcements as the application and information source. The direct association of the AOC with available jobs instead of just information should contribute greatly to establishing the AOC as the centralized intake point for apprenticeship.

4. To save time and expense for apprenticeship applicants.

It is too early to fully assess this objective. To date many of the AOC's referrals have come from program coordinators who are using the AOC's services. Once the applicants flow directly to the center, they can be interviewed about their experiences.

5. To save time and expense for apprenticeship outreach efforts by reducing referral paperwork.

Although both apprenticeship outreach and the AOC project in Houston are operated by the same national sponsor; the relationship between the two units has not been altogether smooth. Unstated issues seem to involve definitions of roles that would lead to coordinated, non-duplicated services. Also at stake are credit for service to applicants, the trades, schools and other institutions. National HRDI is making a concerted effort to demonstrate an ideal relationship and has recently relocated the AOP to a location only a few blocks from the AOC, which will be an added convenience for female and minority applicants. Also after lengthy discussions, a system has been agreed to between the two agencies under which the AOC will make the availability of AOP special services known to all minority and women applicants, and the AOP will send all job-ready applicants to the AOC for processing. Under this relationship, the AOP concentrates its efforts on tutoring and special outreach/support activities for its target groups and gives up its application processing and apprenticeship program liaison functions.

6. To become the centralized apprenticeship information source, to raise community awareness and make the needs and standards of apprenticeship more widely known.

The AOC is on the road to fulfilling this objective. The trades themselves are anxious for the AOC to take over much of the generalized information function, and many program offices now will tell all telephone callers to contact the AOC to answer their questions.

Presently, the AOC is compiling a directory of information on all the apprenticeship programs dealt with by the AOC. This information will be made available to area school districts and community-based organizations for use by counselors and other staff. Initial contacts to this end have elicited a favorable response from the largest Houston school district. A radio and television spot announcement has just been completed, which will make a larger audience aware of the availability of apprenticeship programs in Houston and the existence of the AOC as a source of further information about them. BAT has also just begun a public service announcement geared specifically to women; respondents to this "spot" will be referred to the AOC by cooperative arrangement between the two agencies.

As the community awareness of the AOC has increased, so too has the volume of inquiries from both potential applicants and other interested groups such as educational institutions. As the AOC begins more aggressive apprenticeship promotion efforts, the function of the AOC as a central information point is anticipated to become more important -- both for the trades and for the community.

7. To balance the flow of applicants to the various apprenticeship programs.

Of all the original goals for the AOC concept, this is the one whose attainment seems least feasible given the experience in the first half of Houston's demonstration project. To a degree unanticipated in the feasibility study, participating program sponsors in Houston have proved acutely sensitive to any hints of AOC "steering" potential applicants away from one program to fill the needs of another. When asked the greatest pitfall the AOC might encounter in winning the confidence of the apprenticeship community, the training directors almost unanimously cited the danger of the Center's being perceived as attempting to balance the flow of applicants by "tampering" with the original desires of qualified applicants. Complicating this perception is the unrealistic expectation on the part of some apprenticeship coordinators that the AOC would qualitatively "cream" only the best applicants for referral to their programs. The AOC in fact is limited to using only the objective criteria set forth by each trade as a minimum qualification.

The AOC staff has been responsive to this apprehension, and suspicion of AOC's motives on this score appears to have subsided. The existence of these fears does mean, however, that any increase produced by the AOC in qualified applicants for programs reporting shortages (as well as for new programs just getting established) will have to come from generating absolute increases in the number of applicants, rather than influencing individuals to apply for a less "popular" program rather than the more crowded one originally wanted. The AOC can affect decisions indirectly by providing realistic information on the chances of acceptance in various programs and an objective presentation of available alternatives given the applicant's interests. Further, experience at the Houston AOC has already proved that applicants not selected or qualified

by their initially desired program frequently return to the AOC for referral to alternative trades--thus preventing the possible loss of a motivated candidate for apprenticeship.

It now appears that the AOC will be effective in generating a consistently larger total pool of applicants for apprenticeship, and this is anticipated to benefit programs reporting shortages. Fortunately, demand for apprentices in Houston for all trades is still expanding, despite economic downturns elsewhere and is predicted to remain at a high level for the remainder of the AOC demonstration period.

8. To improve counseling provided apprenticeship applicants and raise retention rate.

Progress on this issue appears mixed and may suffer from expectations that were unrealistic in the design phase. Certainly, there is counseling being administered now to potential applicants that harried training directors did not have time to offer; however, time constraints operate on AOC staff as well, and staff are limited in the attention they are able to give any individual applicant in order to keep the overall work load (and applicant waiting time) within acceptable limits.

Originally, it was contemplated that by administering the GATB at the Center, it could be used as a counseling tool in assisting an applicant's choice of craft; this approach has not proved workable, because the process of administering and scoring GATB tests requires much more staff time than anticipated and cuts down on time available for counseling. Fortunately, to date, a very high percentage of applicants already have decided upon a single trade for which to make application prior to seeing the AOC counseling staff. But as outreach/publicity efforts make the AOC more widely visible, the proportion of undecided applicants is likely to increase.

Producing apprentices with a realistic picture of the requirements of their chosen craft and a considered commitment to their training has been mentioned repeatedly as a benefit the training directors hoped the AOC would be able to provide. By improving the size of the qualified applicant pool and by providing counseling on the realities of apprenticeship prior to application and indenture, the AOC should produce apprentices who are better motivated and suited to their crafts. This should eventually be reflected in lower rates of attrition for apprentices who enter their apprenticeship through the AOC. However, data on retention of individuals placed by the AOC are not yet available in Houston.

9. To demonstrate the flexibility and utility of an AOC in meeting specialized needs of the apprenticeship community.

The creation of a centralized Apprenticeship Opportunity Center in Houston appears already to have encouraged the development of several fledgling programs. Three new programs in occupations not traditionally served by apprenticeship have solicited the AOC's help directly, and their agents have uniformly expressed their view that the availability of the AOC's services could make the difference as to whether their new program is able to get off the ground. Prior to the AOC these programs would have to handle all applications and the necessary program supervision and maintenance tasks with part-time of volunteer staff.

As had been hoped in the planning stages, the AOC has begun to serve as a catalyst for exchange among the various local elements concerned with apprenticeship. No such vehicle has existed in the past, and the level of positive response from the community indicates the AOC has helped to meet a felt need. Groups which previously had little contact are now meeting regularly together as members of the AOC advisory

board; included are BAT, AOP, Employment Service, CETA, community-based organizations, and Training Directors from a variety of craft areas.

Organizations which have had difficulty working together in the past have been brought together in positive working relationships: the Texas Employment Commission (TEC), for example, had in the past sponsored an Apprenticeship Information Center (AIC) in Houston, which closed due to lack of success in building linkages with the major apprenticeship programs. In contrast, the Texas Employment Commission and the AOC sponsor have worked together closely in the implementation of the new center; the TEC area director was the AOC's first advisory board chairperson, and was instrumental in working out a favorable arrangement for the administering of GATB testing on the center premises. In addition, BAT and HRDI local staff have begun meeting separately on a variety of issues, which has led to an ironing out of a number of areas of long-term misunderstanding between them. Similarly, a representative from the YWCA on the AOC advisory committee has proposed a pre-apprenticeship project for funding from the local CETA sponsor--the director of which is also on the council. Subcommittees have been appointed from Advisory Board members to assist the AOC in public relations and secondary school liaison and have served as additional means of enhancing communication among diverse institutions in Houston's apprenticeship community.

11. To increase the recruitment and the number of women and minority applicants and to reduce the number of programs indicating difficulty locating qualified minority and female applicants.

Although the AOC is not intended to be a targeted program, initial interviews with apprenticeship training directors clearly indicated that they were hopeful the center would generate larger numbers of qualified female applicants for their programs. All the Houston trades have had difficulty

meeting their goals for female indentures and several programs expressed the belief that the existence of a centralized intake, counseling and referral center would make apprenticeship both more visible and more accessible to women.

Whether or not this expectation will be realized cannot be judged until further along in the demonstration; active general outreach and promotion in the community at large are only now getting under way.

Many of the same factors operate in relation to minorities as to women, with some modification: the Houston trades have experienced more success in recruiting qualified minorities into their programs; the issue has been addressed over a longer period than that of women, and over that time a number of vehicles to facilitate minority goals have come into existence; these include not only special outreach and supportive programs such as the AOP, but programs operated on the part of trades themselves. Such programs directed at women are only now getting started.

The Experience in Portland

The Portland Apprenticeship Information Center (AIC) began centralizing apprenticeship intake functions in 1970 through the impetus of State Apprenticeship and Training Council rules and the efforts of the AIC staff and management and labor representatives involved in apprenticeship. The new direction was taken initially to simplify the intake process so that minorities would have easier access to apprenticeship. It soon became apparent that as the centralized intake function was evolving it was providing many advantages to apprenticeship programs, applicants and the general public, while still meeting the original intent of assisting minorities.

These evolving advantages in Portland have been monitored and analyzed and have become the general objectives for the AOC demonstration project. Because the general objectives have been basically met in Portland and have been used to define expectations in Houston, much of the Portland demonstration has been focused on a more limited set of objectives that address community awareness of apprenticeship. The general objectives are still being monitored in Portland for the effects of time and insights that may apply to other AOC sites.

1. To provide all services appropriate to the AOC concept to all registered apprenticeship programs.

Thirty-nine of the 41 major apprenticeship programs in the Portland area currently use the Portland AIC as their central

intake point where the applicants are counseled, tested, their documents collected and applications completed. Programs with fewer than five apprentices or with special application procedures (e.g. police officer, inhalation therapist) generally do not use the AIC's services. Also a few programs use a modified procedure that may include, for example filling-out a separate application at the committee's offices. The reason for the modified procedures reportedly is that the programs want closer identification with the application process either to develop loyalty or to feel they have some control prior to the interviews.

Three rules for the apprentice selection procedure which were adopted in 1967 by the Oregon State Apprenticeship and Training Council to implement Title 29 CFR 30, made centralization feasible and attractive to the programs.

- 1) Uniform application shall be made available at one central point.

- 2) All application blanks shall carry a serial number so that they can be accounted for.

- 3) There shall be a book or form in which each line carries a number corresponding to the serial number of an application. Columns shall be provided to show the progress, by dates, and final disposition of each applicant.

These rules applied to each program individually; that is, each program was to have a central intake point, but not necessarily the same point. The effect of the rules were twofold; 1) they brought about some uniformity to the selection procedures for most programs, and 2) they presented a common problem to the major programs that called for a common solution. The key to the evolution of the AIC as a common service provider to the major trades was bringing them together for a constructive purpose and reducing their diversity.

All apprenticeship programs in the State of Oregon must announce their opening dates through the State Apprenticeship and Training Council. As part of the Council's statewide announcements, the Portland AIC issues a Bulletin for virtually all the trades in the area specifying that application must be in person at the AIC. This role in the announcement process firmly establishes the AIC as the source of apprenticeable jobs.

2. To serve equally joint, non-joint, construction, non-construction, group and individually sponsored programs.

To meet this objective the AIC had to be sensitive to program differences and rivalries and to be patient while proving its objectivity. The AIC staff has maintained its impartiality by presenting the applicant with only those materials and information used by the programs themselves and by refraining from making subjective statements about the programs. The AIC staff makes the applicant choose on the basis of working conditions, wage rates, fringe benefits, hiring dates and past acceptance ratios. But most importantly, the AIC has convinced the program committees that they are impartial.

Manufacturers programs that hire apprentices from their own workers have asked the AIC to come in and test and assemble the documents for the applicants. They have found that the AIC's impartiality and the fact that they are a third party has greatly reduced challenges to the selection process from rejected apprenticeship applicants. The applicants seem satisfied that the AIC process was fair and rarely complain about the employers' promotion decisions.

3. To save time and expense for administrators of apprenticeship programs.

The Portland AIC example has become the model and

standard for defining the amount and kinds of time and expense saved by the programs. However, some long range implications for savings are developing from the AOC that deserve recognition.

As the Portland AIC has become identified as the centralized apprenticeship information source, and has developed linkages with other employment and training agencies, as it has participated in outreach efforts to women and minorities, and helped to develop new programs and perform trade specific recruiting, the number of new applicants has gone steadily upward at a rate of approximately 20 percent per year. But more importantly, the number completing the application process and being referred to program committees for interview has gone up 55 percent in the last year.

Thus, the AOC, by fulfilling its function as a labor market facilitator has produced ever increasing numbers of applicants. Moreover, as the quality of the information about apprenticeship has improved, the number of qualified and motivated applicants being referred to the programs has increased at a faster rate than the number of applicants in general.

While apprenticeship administrators have been spared the task of handling much of the application paperwork, the public inquiries, testing, recruitment efforts, and the screening out of unqualified applicants, it seems they will be interviewing an increasing number of qualified applicants. This added work will compromise some of the saved time and expense, but the programs will have the opportunity to select their apprentices from a larger and better qualified population than before.

4. To save time and expense for apprenticeship applicants.

The objective of saving time and expense for applicants was based on the assumption that, initially, potential applicants would explore different apprenticeship opportunities, applying to one or more programs at their different locations, each of which would require test scores and personal documents. Under these assumptions a "one-stop" center would save the applicant much. As it is, partly because of a wide dissemination of improved information, a great majority of the applicants are coming to the AOC with a specific trade in mind. In this case, effective outreach and promotion have augmented the centralization of the information sources. The applicant still saves much by having to assemble documents only once when more than one application is being made, by being able to apply to any participating program at any time of the year and by having consistent assistance through what can be a complicated process.

At both demonstration sites applicants must visit the AOC at least twice -- to register and to be tested. Most must come in three or four times -- to register, to be tested, to apply to a specific program once scores are in and to bring in stray documents. The application process is not a "one-stop" exercise, which points up the need for easy access, especially available parking.

5. To save time and expense for apprenticeship outreach efforts by reducing referral paperwork.

It has been a particular concern of the AOC demonstration to define the relationship and specific roles of the AOC and apprenticeship outreach programs such as the Apprenticeship Outreach Programs (AOP) funded nationally under CETA, Title III. From the beginning the AOP's have been concerned about the

usurpation of their "job" by an AOC and there have been fears that the two programs would be competitive. One objective of the AOC demonstration was to show that an AOC would save the AOP's the effort of document assembly and establishing and maintaining relationships with each apprenticeship program, thereby freeing it to specialize in outreach, counseling and tutoring of potential female and minority applicants.

While the Portland AIC has had several years to develop a working relationship with the local minority outreach program including membership on one another's advisory boards, the relationship is not yet smooth. The difficulty in coordinating activities between the two agencies is that their services are provided alternately. That is, for example, an outreach program refers a client to the AIC, the client is counseled to apply for an apprenticeship at the AIC, the AIC takes an application and schedules a qualifying test, the client returns to the outreach program for tutoring, the client goes to AIC for testing, if the client passes the tests he goes to the outreach program for coaching on interviewing with the apprenticeship committee. This process could take place over several weeks and many applicants are lost to one agency or the other. Referral slips are provided by the outreach program for the initial visit to the AIC, but these have not been returned in sufficient time for adequate follow-up to take place. The AIC has recently changed its procedure so that the slips are returned more quickly.

The alternative approach of having the same agency operate both programs was considered, but it was initially felt that problems might arise because minority and female applicants, who are competing with the others, would be eligible for supportive services and the rest of the applicants would not be eligible.

6. To become the centralized apprenticeship information source, to raise community awareness and make the needs and standards of apprenticeship more widely known.

These three objectives are closely related and are often addressed by the same activities. The Portland AIC was the centralized apprenticeship information source by virtue of state law and the agreement of the trades. The AIC's position in the community is the standard used for measuring this objective. The AOC demonstration project enlarged on this objective by attempting to expand the AIC's role in information dissemination by including community awareness and information improvement.

A major goal and accomplishment of the Portland AIC working with the Oregon State Apprenticeship and Training Council was to publish an Oregon Guide to Apprenticeship describing each apprenticeable occupation and its program. Each entry details job activities, skills needed, tools used, working conditions, terms and conditions of the apprenticeship program and minimum entry standards. Copies were distributed to all Employment Service offices, to secondary school counselors and a variety of community based organizations. The impact of the Guide was strong and immediate. It has since become a basic employment counseling tool throughout the State.

The impact of the Guide upon AIC operations was also immediate. Counseling time is reduced because the basic information and much trade specific information is provided by the Guide. The Guide generated requests to the AIC from school counselors, vocational instructors, employment related conferences and community-based organizations for speakers that have been accepted at a rate of 2 or 3 a week. According to AIC staff, applicants referred from agencies and individuals using the Guide have become better informed

and prepared for the application process, which along with reducing the need for counseling time, has helped to increase the percentage of applicants being referred to the apprenticeship committees.

7. To balance the flow of applicants to the various apprenticeship programs.

It was originally thought that an AOC through the applicant screening process could make the number of referrals to the programs more proportionate to the programs' needs. This has proven impossible and there are still programs that report excess applicants and some reporting shortages. As was explained above, the reason the AOC cannot greatly affect the number of applicants for a given program is that it must remain impartial towards an applicant's choice of trade or program. It must be remembered that the AOC cannot screen out applicants who meet the minimum qualifications. That would amount to acting as the program committee.

Shortages can be more easily addressed than an excess number of applicants by special advertising and recruitment efforts. Programs reporting an excess can only be helped by telling the applicant that competition is much higher for those programs than certain others. But the applicants usually are interested in one craft rather than an apprenticeship in general and want to take their chances. Their decisions seemed to be based on the trade's image and the wage rate.

8. To improve the counseling provided apprenticeship applicants and raise retention rates.

This objective was to be gauged by assessing the materials developed for applicant use, by soliciting the opinions of apprenticeship committee members and coordinators and by measuring the retention rate of AOC counseled apprentices. No test could be devised that could rate the level of preparedness before application.

As it is now, interest in apprenticeship, partially generated by the Portland AIC's outreach efforts and informational materials, has made it necessary to reduce counseling time as much as possible. The AIC staff of one supervisor, one assistant supervisor and two interviewers handled 10,394 initial and additional interviews in 1978 and 12,425 interviews in 1979. This averages out to just a few minutes per interview when administrative duties, reporting, telephone calls, public speaking, meeting with programs, and other tasks are considered. An additional problem is that the applicants come in waves in response to announcements of program openings.

The task now is to try to have the applicants familiar with apprenticeship, to have selected a specific trade and to be familiar with the process prior to application. Counseling time can then be devoted to any lingering questions, scheduling of tests and the detailing of the documents that need to be assembled. Preparation of the applicants is dependent on the quality of information that is available to the public either through groups or individuals who may refer clients to the AOC or through printed materials such as the Guide to Apprenticeship.

The Portland AIC has reached its limit. A staff of four cannot adequately handle the 14-15,000 initial and additional interviews expected in 1980. This fact points to a serious

inherent weakness in a successful AOC: an AOC can promote apprenticeship to the point that it cannot handle the interest generated. Further complications arise from the administrative structure of the Portland Employment Service office of which the AIC is a part. The AIC is one service program among many that are in need of additional resources: the programs compete for the few flexible resources that are available. Generally speaking, local resources cannot be expected to extend the AIC's limits.

Perhaps more staff could be added from national sources, but it must be remembered that, even with a much expanded public awareness about apprenticeship, the number of apprentices needed by the trades will remain the same. The promotion of apprenticeship will certainly help groups currently underrepresented in apprenticeship and may help some "unpopular" or little known trades. But generally apprenticeship should not be promoted beyond its capacity to serve.

9. To demonstrate the flexibility and utility of an AOC in meeting the specialized needs of the apprenticeship community.

In the nine months since the demonstration began, the Portland AIC has received several requests for special recruitment. Various programs headquartered outside the Portland area have asked the AOC for assistance in recruiting qualified applicants because of shortages in the program's home area. One apprenticeship director indicated that without an agency like an AOC to recruit and screen in his absence, it would have been impossible to meet his program needs. On behalf of these programs, the AOC was responsible for announcing the openings, preparing and taking applications, testing, assembling documents of those qualified, and scheduling interviews when the apprenticeship directors could be in Portland.

In another case the Oregon State Department of Human Resources sponsored a general skill pre-apprenticeship program for WIN eligible women for which the Portland AIC provided orientation to apprenticeship. But most importantly, the Portland AIC, through its working relationship with virtually all programs in the area, was able to act as placement agent for the programs' graduates. If the Portland AIC had not had that function, the WIN program coordinator would have had to initiate almost forty contacts and had to maintain a relationship with the individual apprenticeship programs which may or may not have been accepting applications at the time.

10. To increase the recruitment and number of women and minorities applicants and reduce the number of programs indicating difficulty locating qualified minority and female applicants.

The Portland AIC has joined the rest of the employment and training community in recruiting women for apprenticeship by participating in numerous conferences and speaking engagements usually through the agency of women-oriented community-based organizations. The Portland AIC's service statistics show the effort has been effective. From 1977 through 1979 the number of males interviewed increased 43 percent; the number of females increased from 710 to 2,067 or 191 percent; the number of males referred to the committees increased 66 percent, the number of females increased from 187 to 526 or 181 percent; and the number of males indentured was up 39 percent, females who made up 8.4 percent of total indenture increased 123 percent. It should be noted that the decision to indenture is solely the program committee's: the AOC can only increase the number of qualified applicants.

The percentages for minorities have increased in the 1977-79 period at a rate approximately the same as the general population. The reasons for this are unclear. An equilibrium may have been reached, or, possibly, it is because outreach efforts have been re-focused on female recruitment.

The number of programs reporting shortages of female applicants has not decreased significantly. Despite an outreach effort, a greater effort and more time will be needed to meet program goals.

YEAR	INTERVIEWS						REFERRALS TO COMMITTEE						INDENTURES/ACCEPTANCY					
	Male		Female		Minority		Male		Female		Minority		Male		Female		Minority	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1977	7225	100	710	100	701	100	1795	100	187	100	125	100	542	100	31	100	49	100
1978	8979	124	1415	199	876	125	1963	109	307	164	191	152	605	112	46	148	67	137
1979	10358	143	2067	291	940	134	2981	166	526	281	226	180	753	139	69	223	65	133

Summary of Interim Demonstration Results

The demonstration to date has indicated that an AOC can become the focal point for most apprenticeship activity in the community. Further, the AOC can serve as a catalyst for bringing together the numerous agencies and individuals interested and active in apprenticeship.

The AOC accomplishes this by becoming the one visible agency associated with apprenticeship. The general public and agencies with peripheral involvement in apprenticeship have needed such a centralized agency to make the very diverse institutional arrangements that surround apprenticeship comprehensible and approachable to applicants and service agencies.

The Portland site, an advanced model of the AOC concept, has shown that one way to attain this position in the community is to be perceived as the only source for apprenticeable jobs by being identified on the opening announcements and to be used by the trades as the exclusive agent for applications. The Portland site was able to do this because of the incentive to the trades provided by state rules on apprenticeship applications and to the careful, sensitive development of relations over a 10-year period between the trades and the Portland AIC.

The Houston AOC has not been given the incentives to the trades or the time to replicate the Portland model. Every effort is being made to short-cut the developmental process. Their success or lack of success at becoming the single agency associated with apprenticeship application will most likely be the most important result of the demonstration.

There is also an indication that the AOC can save applicants and apprenticeship directors considerable time and effort by assuming the tasks of information dissemination and applicant

processing. The simplified application process is considered to encourage minority and female applicants by making the programs more accessible and, by being a neutral intermediary, less alienating.

Training directors and applicants held some expectations that the AOC was never intended to address. The AOC's cannot guarantee sufficient numbers of minority and female applicants unless they come to the AOC. The AOC cannot screen qualified applicants from consideration by the program committees and it cannot guarantee any applicant that he or she will be accepted or indentured by a committee.

The demonstration has also revealed a few objectives that are proving unrealistic. The AOC's may not be able to serve all programs. Some programs that select apprentices from restricted pools have no need for centralized intake of applicants. Other programs have such large jurisdictions that an AOC screening and preparing applicants from one local area only is of little use to them.

The AOCs cannot totally redirect the flow of applicants away from a trade having an excess of applicants. Trades with shortages of applicants have benefited from special recruitment efforts by the AOC and by a general increase in the number of applicants.

The AOC has shown success in generating interest in and awareness of apprenticeship but such success brings more applicants which diminishes the time available for counseling individuals. The AOC's may have a tendency to evolve toward high speed intake centers as the number of applicants increases. This will add to the interviewing tasks of apprenticeship committees, but will also improve the average quality of the apprentice who is finally accepted by the trade.

The final major result is the inability so far for the AOC's and the targeted outreach programs to reach a smooth working relationship. The experience of the agencies reflect the difficulties of coordinating targeted and non-targeted programs in the same service area. In this case, problems arise because the services must be provided alternately; the client is passed back and forth between the agencies to receive the next service. Also, it is clear that problems of "turf" and fears about redundant roles are present.

Future Directions

The AOC demonstration project will continue for another seven months, until the end of November, at both sites. In that time, it is hoped that enough unambiguous information will have been gathered and understood so that definite assessments can be made about the AOC's progress toward its objectives.

Two final conclusions must be made at the end of the demonstration period:

- 1) Whether or not it is possible to replicate the AOC's, and
- 2) Whether or not the demonstration showed that the AOC concept should be replicated; and, if so, how might this best be accomplished?

If the demonstration is shown to be successful, the determinates of success will be identified and then analyzed for their contribution. Furthermore, the environment of a successful project will have to be assessed for its uniqueness to the demonstration site: was it unique to the time of the demonstration, was it unique to the locality of the demonstration? The nature of this environment will condition the possibility of replication in other labor markets. To replicate the AOC the major factors contributing to the success at the demonstration sites must exist in other locales. If they do not exist, there must be no barriers or limitations to their development.

If it is concluded that the AOC concept is feasible and implementable, criteria will be developed to help determine the most appropriate AOC operators, the most suitable labor markets for implementation, and criteria for the most appropriate funding source or sources for present and future AOCs.

A successful demonstration should be subject to a full impact or outcome evaluation conducted by independent evaluators who have no identification with the demonstration. In preparation for this possibility, the performance of the project is being carefully documented.