This analysis of current and future programs of the Massachusetts State College System examines the potential relationship between the Massachusetts State College System and the providers of Postsecondary Education other than degree-granting colleges and universities that might be established through the Massachusetts Open University, and identifies the special clientele groups that might be serviced by the Massachusetts State College System in cooperation with the proposed Massachusetts Open University. It was found that the open learning network should recognize and legitimize educational activities in non-degree-granting institutions and programs by providing means of certifying some of the existing programs for credit and of examining graduates of other institutions for competency. The target clientele is arranged into three general groups--disadvantaged, "second chance," and those already making use of the existing continuing education system. Discuss are group characteristics and needed services. Also discussed are financial structures for the open learning network and possible means of providing them, including aid to students, institutions, and target groups. (Author/KE)
TWO PLANNING STUDIES ON OPEN LEARNING

Potential Relationships between the Massachusetts State College System and Providers of Postsecondary Education Other than Degree-Granting Colleges and Universities Which Might be Established through the Massachusetts Open University

and

Preliminary Study to Identify the Special Clientele Groups Which Might be Served by the Massachusetts State College System in Cooperation with the Proposed Massachusetts Open University

George J. Nolfi, Jr., Project Director
Valerie I. Nelson, Assistant Director

Performed for
The Massachusetts State College System

January 1974
UNIVERSITY CONSULTANTS, INC.
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2 February 1974

Dr. Alan Ferguson
New England Board of Higher Education
40 Grove Street
Wellesley, Massachusetts 02181

Dear Dr. Ferguson:

Enclosed herewith is the final report of the study we recently completed as part of the Massachusetts State College System's Master Planning Process. As you will recall, the study had two parts:

Potential Relationships between the Massachusetts State College System and Providers of Postsecondary Education Other than Degree-Granting Colleges and Universities Which Might be Established through the Massachusetts Open University

and

Preliminary Study to Identify the Special Clientele Groups Which Might be Served by the Massachusetts State College System in Cooperation with the Proposed Massachusetts Open University

These related to the State College System Master Plan as noted below. They have also proven very useful to the planning efforts underway with regard to the Proposed Massachusetts Open Learning Network in which the State College System will participate to achieve more of its objectives.

This analysis was undertaken in consideration of the current and future programs of the Massachusetts State College System. It is the express recommendation of the State College draft master plan that 'the tempo of cooperation must be accelerated' among institutions. Determining the role of the SCS in the future was done with respect to other programs.

The eleven regionally-based institutions will provide a base for cooperation of the appropriate sort. The SCS has already pioneered in this area of cooperation in the Raytheon-Fitchburg State College program for employees of Raytheon. Other such contractual arrangements could be developed. Recommendations of the draft master plan (pp. 46-48) indicate an SCS priority to increase non-traditional adult learning options.

Further, the draft SCS master plan (p. 9 ff) contains an analysis of the economic needs of the Commonwealth and their impact on the future of the SCS. The results of this study supplement and improve that analysis with more refined data on the distribution of certifiable vocational competencies in the population.

The goal set by the Board of Trustees of the State College System is "to extend higher educational opportunities to the greatest possible number of students of all ages," and "to expand the extension, continuing education and public service functions of the State Colleges to meet the needs of all ages of citizens with differing interests." The Master Plan recommends specific programs for Action: "Outreach programs for recruiting, counseling, and tutoring students who have traditionally had limited access to higher education including among others, minority students, veterans, and working adults." (p. 33)

If the State College System in cooperation with the proposed Massachusetts Open University is to serve these currently unreached clienteles and not simply provide core services for these groups who are already participating in continuing education, then programs must be designed which are of interest to these groups and which minimize barriers to access for these groups. In planning for the SCS and MOU, the needs and interests of these underserved clienteles must be ascertained.

We enjoyed performing this work and I should personally appreciate receiving your professed reactions to it at some time.

Sincerely,

George J. Nolfi, Jr.
President
CHAPTER
ON
THE RELATIONSHIPS TO THE OPEN LEARNING NETWORK
OF NON-DEGREE GRANTING PROVIDERS OF
POSTSECONDARY LEVEL INSTRUCTIONAL SERVICES

January 19, 1974

Dr. George Nolfi    Ms. Valerie Nelson
Many institutions other than degree-granting colleges and universities are providing education to youths and adults in Massachusetts. Nationally, only 25% of part-time adult students are enrolled in degree-granting institutions. The other 75% are taking formal courses in proprietary schools, independent non-profit schools, public high school adult education programs, regional vocational/technical institutes, employer training programs, home study or correspondence schools, and private adult education centers.

The Open Learning Network should recognize and legitimize educational activities in non-degree-granting institutions and programs by providing means of certifying some of the existing programs for credit and of examining graduates of others for competency. Provisions should also be made for resource sharing and contracting of services both to and from the Open Learning Network.

The following types of arrangements should be made with non-degree-granting institutions:

--Program certification (particularly in proprietaries)

--Individual credit by exam or by life experience assessment for recipients of employer-based and union-based training

--Providing instructional services (e.g., technology or mobile faculty referral) to be used by proprietaries, unions, employers, etc.

--Purchasing or contracting for services for individual student referrals or groups of students.

These conclusions follow both from the underlying purposes of the MOLN and from the recognition of the current needs of new students.

First, a general objective of the Open Learning Network is to recognize learning in a variety of times, places and formats. As part of this concept, the MOLN should recognize and credit the educational activities of those students in non-degree-granting institutions who want credit. Credit should be assigned to courses if they are considered to be equivalent in subject level and quality to college or community college courses, but not to courses that do not meet minimum standards.


Research for this chapter was comprised of direct interviews and meetings with proprietary and independent institution directors, employer education directors, union leaders and representatives of other institutions. Additional data was gathered on proprietary and independent schools from the State Department of Education and from direct telephone calls. Data on employer training programs was gathered from a mail questionnaire.
Second, existing programs should not be duplicated by the Open Learning Network. To the extent that facilities, faculty, curriculum developed, experience in training, close links to certain markets of students and to employers are already functioning in non-degree-granting institutions, they should not be duplicated by new programs in the MOLN.

Third, many of the potential clienteles of the MOLN are interested in and need the curriculum, kinds of faculty, and placement services developed in the non-degree-granting institutions (See Chapter on Target Clienteles). In order for the needs of these new clienteles to be met wither a) resources of non-degree-granting institutions are to be utilized, or b) new programs are to be organized in the Open Learning Network. Option b would mean duplication of existing resources and would be more expensive than necessary, both in terms of curriculum development and faculty training.

Finally, no student should be penalized or inhibited in his educational aspirations by taking vocational training in a non-degree-granting institution. A student after high school may choose a proprietary school or the military, for example, and find a technical job. Several years later, he may want to move up or change careers and further education would help him to do that. But if his past training is not credited, the prospect of years of night school may be too much for him to realistically consider.

Education and Training in Non-Degree-Granting Institutions

Much of the education which goes on in non-degree-granting institutions is in fact comparable to that in colleges and universities. Courses range from vocational training in specialized fields to avocational courses in languages, music, etc., and the knowledge and skills obtained by students are often at the same or a more concentrated level than in degree-granting institutions.

Proprietary schools, independent institutes, and correspondence schools are most often in specialized vocational areas. They are generally at the 1st and 2nd year postsecondary level in business and clerical skills, trade and technology, medical, cosmetology, and other skill areas. Employer training programs cover needs of many levels of employees, ranging from trades to management skills. Adult education programs may have some vocational component, but they are mainly in avocational areas or general education.

Evidence supports the view that these programs are comparable in curriculum and quality to those in degree-granting institutions. Graduates of some programs do as well or even better in the job market than graduates of comparable programs in degree-granting institutions. Most of these schools in the vocational areas also have higher completion rates than do comparable degree-granting institutions.²


Although learning in non-degree-granting institutions has been comparable to that in degree-granting institutions for years, students were denied equivalent credit for work done. Credits would not easily be transferred into degree-granting institutions. Judgements were made on the basis of where learning took place, not on what was actually learned.

But in recent years, the focus of evaluation has begun to shift to the actual learning done rather than the institution. And non-degree-granting institutions are coming to be accepted for the quality of their work. Several trends can be seen across the country. Credit for life experience and credit by examination are concepts spreading across institutions. Former students can capitalize on their past experience if they can prove, by exam or otherwise, that their education was valid.

In addition, some degree-granting institutions are moving to accept transfer students and grant credit to them for work done in non-degree-granting institutions. Although individual institutions may make such arrangements, students are still generally prevented from attaining credit for their education in these schools.

Several factors distinguish these schools from colleges and universities in the students' perspective. First, they do not grant academic credit, although they may grant diplomas or skill certificates in vocational areas. In cases where no credit is given of any sort, as with avocational courses, the administrative costs of running the program are low and thus the charge to the student is significantly lower than in degree-granting institutions. This is a trade-off many students make: if they do not want credit, they go to a non-degree-granting institution.

Second, they are more accessible to the student who may not see himself as qualified to be in a college. The clienteles of non-degree-granting institutions are generally from somewhat lower income levels than those who go to college part-time. These people may have had discouraging experiences in previous schooling: either failure or lack of interest in standard curriculum. Students in non-degree-granting institutions may also see greater job benefits from attending a specialized vocational school than from attending an all-purpose community college, for example. Proprietary schools in particular have extensive placement services for their graduates and design their curriculum to the needs of the job market.

The kinds of services and programs developed by non-degree granting institutions are particularly appropriate for certain groups of new clienteles:

--Currently underserved groups are particularly interested in the kinds of vocational programs which are offered in non-traditional settings. They want education which will help them to advance in their jobs.

--Faculty in non-degree-granting institutions are often drawn from the labor force and not from traditional academic backgrounds. These experienced, skilled workers are found to be better in motivating and training non-academic types of students.
--The placement services developed by non-degree-granting institutions are particularly useful to an adult returning to school for the primary purpose of job advancement. Many of these clienteles do not have job market connections necessary to change jobs themselves.

--Many non-degree-granting institutions have developed different formats of course work for students than the typical college schedule. Short-term, intensified courses and a pattern of moving from the specialized to the general (rather than the academic move from the general to the specific) are better at motivating the non-academic student.

--These institutions in some cases provide a more comfortable and responsive environment to the person who in his past experience remembers failure or was not interested in traditional course work.

Relationships with Non-Degree-Granting Institutions

The exact nature of involvement of the Open Learning Network with each type of non-degree-granting institution will depend on a variety of factors having to do with the dispositions of students and the institutions, and with legal questions of aid or contracts to private institutions.

In general, a pre-condition for participation is that students attending non-degree-granting institutions would be interested in some form of credit through the Open Learning Network. Only if an institution has a substantial number of students interested in credit would it be worth its while to formally participate in the MOLN. The extent of interest in credit depends in large measure on whether the program is vocational or avocational. In general, institutions for vocational training, such as proprietary schools will be more interested in participating in the MOLN than adult education centers, for example. Proprietary schools would be expected to negotiate for certification of their programs, while the adult education programs would encourage the occasional interested student to take an exam for credit on his own.

Institutions vary as well in their interest in participation in the MOLN and their willingness to be examined for certification. Some would welcome examination of their programs by visiting committees and certification as further evidence of the legitimacy of the school. On the other hand, employer training programs would not want their competitors to know all their techniques and would resist the intrusion of visiting committees into their programs. Thus, the form of participation would vary with the institutional objectives of each type, and the extent to which they want or do not want educational evaluation.

Finally, the extent of participation will depend on what is legal in Massachusetts at that particular time. Currently, no state aid or contracting can go to private institutions of higher education unless for the programs of the "deaf, dumb, or blind". If an amendment to this "anti-aid" clause of the Massachusetts Constitution is passed for the third time in 1974, then a wide variety of arrangements can be made with non-degree-granting insti-
tutions as well as with private colleges. Until that point and if the amendment is not passed, certain arrangements with the State may be illegal. Scholarship aid may currently go to students in proprietary schools as well as in private colleges (it has not to date gone to proprietary schools), but institutional grants or contracting are not legal. If the MOLN is a public corporation, other factors will operate. Federal money can be used for support of private or profit programs (Voc. Rehab., Veterans and others).

The options for arrangements with non-degree-granting institutions are delineated in the chart below:

This chart delineates the variety of options for involvement in the Open Learning Network, and the likelihood that each type of institution would be interested in that particular option.

--All institutions would welcome information/referral services of the Open Learning Network (providing information on programs, exams, etc.)

--Educational institutions involved in credit - vocational areas would be interested in MOLN credit certification arrangements for both their students and MOLN students in their courses. Visiting committees could be used to certify programs and courses for credit.

--Educational institutions involved in noncredit activities and employer training programs would be interested in the provision of examination or other evaluation for their students, but would not be interested in certification of their programs.

--Educational institutions would be interested in contracting for faculty, facilities and courses.

More detailed discussion of various desired options is given in the Appendix.
<table>
<thead>
<tr>
<th>Planning &amp; Coordination of Programs</th>
<th>b) Vocational</th>
<th>Correspondence Schools</th>
<th>Employer Training Programs</th>
<th>Regional Vocational Technical Institutes</th>
<th>Military Programs</th>
<th>Adult Education</th>
<th>OIC &amp; Others</th>
<th>Arrangement with Private Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral of Students - Information Services</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Examination or other evaluation for credit to graduate</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>Not Necessary</td>
</tr>
<tr>
<td>Their Students Credits for Courses</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>Not Necessary</td>
</tr>
<tr>
<td>Credit for Programs</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>Not Necessary</td>
</tr>
<tr>
<td>MOLN Students Credits for Courses</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>Not Necessary</td>
</tr>
<tr>
<td>Credit for Programs</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>Not Necessary</td>
</tr>
<tr>
<td>Contract for Institutional Faculty to MOLN</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>--</td>
</tr>
<tr>
<td>Contract for Institutional facilities to MOLN</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>--</td>
</tr>
<tr>
<td>Contract for Institutional courses to MOLN</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>--</td>
</tr>
<tr>
<td>Instructional Services provided by MOLN (cassettes, tapes, etc) for a fee to institutions</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>--</td>
</tr>
</tbody>
</table>

X: indicates likely interest on part of institution
--: indicates possible option, but minimal likely interest on part of institution
There is a large group of clientele in Massachusetts who are now receiving or who have completed post-secondary level proprietary school training in a variety of fields. The following tables describe the detailed composition of this large "market" for competency certification services of the proposed MOLN. The tables represent thousands of adults who have effectively taken the equivalent of many credits of college-level study (in effect, they have completed part of the work toward a degree) for which they cannot get college credit. This inability to obtain credit however has nothing to do with what they have learned, which is often more than comparable programs in credit-granting two year colleges provide, but with where they studied. The MOLN should therefore provide an alternative route to degree credit and degrees, a route based on competence—that is on what one knows rather than how it was learned. There are many adults in Massachusetts waiting for such an opportunity.
### SUMMARY OF ENROLLMENTS AND GRADUATES IN PROPRIETARY AND INDEPENDENT SCHOOLS BY CATEGORY OF SCHOOL

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business &amp; Office</td>
<td>11,215</td>
<td>7,124</td>
</tr>
<tr>
<td>Medical &amp; Health</td>
<td>6,950</td>
<td>2,912</td>
</tr>
<tr>
<td>Trade &amp; Technical</td>
<td>14,800</td>
<td>6,334</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1,511</td>
<td>1,042</td>
</tr>
<tr>
<td>Other Institutions</td>
<td>3,035</td>
<td>2,622</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>37,311</strong></td>
<td><strong>19,934</strong></td>
</tr>
<tr>
<td>Correspondence</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>43,311</strong></td>
<td></td>
</tr>
</tbody>
</table>

Of Other than Correspondence Schools:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Schools</td>
<td>29,352</td>
<td>17,259</td>
</tr>
<tr>
<td>Independent Schools</td>
<td>7,959</td>
<td>2,675</td>
</tr>
</tbody>
</table>

**Note:** In cases where numbers were not available, estimates were made.
ENROLLMENTS AND GRADUATES IN
PROPRIETARY AND INDEPENDENT INSTITUTIONS
BY TYPE OF SCHOOL

<table>
<thead>
<tr>
<th></th>
<th>Business and Office</th>
<th>Medical and Health</th>
<th>Trade and Technical</th>
<th>Cosmetology</th>
<th>Other Institutions</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 mos.</td>
<td>3445</td>
<td>-</td>
<td>869</td>
<td>-</td>
<td>-</td>
<td>4314</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>570</td>
<td>-</td>
<td>1177</td>
<td>-</td>
<td>-</td>
<td>1747</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>1080</td>
<td>32</td>
<td>1615</td>
<td>1436</td>
<td>-</td>
<td>4163</td>
</tr>
<tr>
<td>1 year</td>
<td>1893</td>
<td>435</td>
<td>105</td>
<td>-</td>
<td>-</td>
<td>2433</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>2685</td>
<td>960</td>
<td>7871</td>
<td>75</td>
<td>3035</td>
<td>14,626</td>
</tr>
<tr>
<td>2 years or more</td>
<td>1542</td>
<td>5523</td>
<td>2963</td>
<td>-</td>
<td>-</td>
<td>10,028</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>11,215</td>
<td>6950</td>
<td>14,600</td>
<td>1511</td>
<td>3035</td>
<td>37,311</td>
</tr>
</tbody>
</table>

GRADUATES IN 1972-73 ACADEMIC YEAR

<table>
<thead>
<tr>
<th></th>
<th>Business and Office</th>
<th>Medical and Health</th>
<th>Trade and Technical</th>
<th>Cosmetology</th>
<th>Other Institutions</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 mos.</td>
<td>3257</td>
<td>-</td>
<td>839</td>
<td>-</td>
<td>-</td>
<td>4096</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>350</td>
<td>-</td>
<td>1010</td>
<td>-</td>
<td>-</td>
<td>1360</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>694</td>
<td>17</td>
<td>708</td>
<td>1004</td>
<td>-</td>
<td>2423</td>
</tr>
<tr>
<td>1 year</td>
<td>1128</td>
<td>355</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>1567</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>1223</td>
<td>701</td>
<td>2460</td>
<td>38</td>
<td>2622</td>
<td>7044</td>
</tr>
<tr>
<td>2 years or more</td>
<td>472</td>
<td>1839</td>
<td>1133</td>
<td>-</td>
<td>-</td>
<td>3444</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7124</td>
<td>2912</td>
<td>6234</td>
<td>1042</td>
<td>2622</td>
<td>19,934</td>
</tr>
</tbody>
</table>
NUMBER OF PROPRIETARY AND INDEPENDENT SCHOOLS IN MASSACHUSETTS, ENROLLMENTS AND NUMBER OF GRADUATES BY AREA

<table>
<thead>
<tr>
<th>Area</th>
<th>Springfield</th>
<th>Pittsfield/ North Adams</th>
<th>Amherst/ Northampton</th>
<th>Worcester</th>
<th>Fitchburg/ Gardner</th>
<th>Framingham</th>
<th>Salem/ Lynn</th>
<th>Andover/ Lowell</th>
<th>Burlington/ Bedford</th>
<th>Brockton</th>
<th>New Bedford/ Fall River</th>
<th>Falmouth/ Barnstable</th>
<th>Boston</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>29</td>
<td>56</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1026</td>
<td>-</td>
<td>-</td>
<td>310</td>
<td>-</td>
<td>500</td>
<td>540</td>
<td>350</td>
<td>160</td>
<td>210</td>
<td>390</td>
<td>70</td>
<td>7659</td>
<td>11215</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>699</td>
<td>-</td>
<td>-</td>
<td>202</td>
<td>-</td>
<td>340</td>
<td>376</td>
<td>140</td>
<td>132</td>
<td>150</td>
<td>110</td>
<td>63</td>
<td>4912</td>
<td>7124</td>
</tr>
</tbody>
</table>

BUSINESS & OFFICE

| Number of Schools     | 7           | 4                       | 1                    | 5         | 3                 | 12         | 8           | 2               | 5                   | 3        | 0                      | 50                   | 103     |       |
| Number Enrolled       | 504         | 174                     | 10                   | 583       | 296               | 163        | 578         | 381             | 20                  | 218      | 296                    | -3727                | 6950    |       |
| Number of Graduates   | 180         | 66                      | 4                    | 183       | 94                | 53         | 240         | 145             | 8                   | 92       | 94                     | -1753                | 2912    |       |

MEDICAL & HEALTH

| Number of Schools     | 7           | 0                       | 0                    | 1         | 0                 | 0          | 2           | 2               | 2                   | 2        | 0                      | 34                   | 48      |       |
| Number Enrolled       | 1128        | -                       | -                    | 328       | -                 | 400        | -           | 1297            | 59                  | -        | -                      | -11388               | 14600   |       |
| Number of Graduates   | 713         | -                       | -                    | 131       | -                 | 200        | -           | 511             | 53                  | -        | -                      | -4626                | 6254    |       |

ENGINEERING & TEACHING

| Number of Schools     | 3           | 1                       | 0                    | 3         | 1                 | 1          | 3           | 5               | 0                   | 2        | 5                      | 0                    | 18      | 42    |
| Number Enrolled       | 109         | 37                      | -                    | 108       | 37                | 36         | 110         | 182             | -                   | 73       | 182                    | -637                 | 1511    |       |
| Number of Graduates   | 74          | 25                      | -                    | 75        | 25                | 26         | 76          | 128             | -                   | 51       | 128                    | -434                 | 1042    |       |

ARTS & LETTERS INSTITUTIONS

| Number of Schools     | 3           | 2                       | 1                    | 1         | 2                 | 1          | 2           | 2               | 4                   | 3        | 0                      | 1                    | 1       | 23    |
| Number Enrolled       | 411         | 274                     | 137                  | 137       | 274               | 17         | 257         | 274             | 569                 | 411      | -                      | 137                  | 137     | 3055  |
| Number of Graduates   | 357         | 238                     | 119                  | 119       | 238.N/A           | 227        | 238         | 491             | 357                 | -419     | 119                    | 2622                 |         |       |

Note: In cases where numbers were not available, estimates were made.
The extent of vocational training in the population and the market for certification and further training is shown in the following tables of the Massachusetts population. In 1970 there were over 600,000 men and women 26-65 with formal educational backgrounds of 10 years of schooling to 3 years of college and vocational training in school or the Armed Forces (see definition). In addition are those trained in employer programs and correspondence.

For the purposes of career upgrading and mid-career change, many of these adults need re-training and upgrading of skills. Often a major hindrance to advancement is the lack of a formal degree. Certification of competence will facilitate this process. A variety of options should be made available ranging from the certification of programs school by school (as for proprietary schools) to the provision of exams for certification of graduates.

If the individual has taken the program years before his school is given credit status, then some provision must be made to test his learning. One option is to assign him credit for past training if he can take and pass more advanced courses in the M.O.L.N.

The length of training to be credited will vary from one month to two years. Further work to complete a degree in the M.O.L.N. would therefore be from several months to several years equivalent full-time.
### VOCATIONAL TRAINING BACKGROUND OF MASSACHUSETTS RESIDENTS

<table>
<thead>
<tr>
<th>Years Schooling</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total In Mass.</td>
<td>% With Voc. Training</td>
</tr>
<tr>
<td>10-12</td>
<td>164,582</td>
<td>49</td>
</tr>
<tr>
<td>College 1</td>
<td>17,672</td>
<td>64</td>
</tr>
<tr>
<td>College 2</td>
<td>22,187</td>
<td>33</td>
</tr>
<tr>
<td>College 3</td>
<td>9,511</td>
<td>16</td>
</tr>
<tr>
<td>44-45</td>
<td>132,205</td>
<td>52</td>
</tr>
<tr>
<td>College 1</td>
<td>10,928</td>
<td>62</td>
</tr>
<tr>
<td>College 2</td>
<td>18,259</td>
<td>47</td>
</tr>
<tr>
<td>College 3</td>
<td>5,791</td>
<td>-</td>
</tr>
<tr>
<td>54-55</td>
<td>258,122</td>
<td>36</td>
</tr>
<tr>
<td>College 1</td>
<td>16,475</td>
<td>43</td>
</tr>
<tr>
<td>College 2</td>
<td>28,443</td>
<td>51</td>
</tr>
<tr>
<td>College 3</td>
<td>8,795</td>
<td>44</td>
</tr>
</tbody>
</table>
### Fields of Vocational Training of Massachusetts Residents with 10 or More Years of Training But Less Than 4 Years of College

<table>
<thead>
<tr>
<th>Total</th>
<th>Business or Office Work</th>
<th>Nursing or Other Health Fields</th>
<th>Trades &amp; Crafts</th>
<th>Engineering or Science Technology</th>
<th>Agriculture or Home Economics</th>
<th>Other</th>
<th>Not Reported</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>90,098</td>
<td>15</td>
<td>2730</td>
<td>46410</td>
<td>16380</td>
<td>909</td>
<td>909</td>
<td>10010</td>
<td>90,098</td>
</tr>
<tr>
<td>84,272</td>
<td>36</td>
<td>29495</td>
<td>8427</td>
<td></td>
<td></td>
<td>1685</td>
<td>842</td>
<td>13484</td>
</tr>
<tr>
<td>84,102</td>
<td>13</td>
<td>1682</td>
<td>40369</td>
<td>15979</td>
<td>2944</td>
<td>3.5</td>
<td>9251</td>
<td>84,102</td>
</tr>
<tr>
<td>79,138</td>
<td>37</td>
<td>20516</td>
<td>11079</td>
<td></td>
<td>2770</td>
<td>3.5</td>
<td>12662</td>
<td>79,138</td>
</tr>
<tr>
<td>118,383</td>
<td>18</td>
<td>2960</td>
<td>62743</td>
<td>13022</td>
<td>2960</td>
<td>2.5</td>
<td>14206</td>
<td>118,383</td>
</tr>
<tr>
<td>151,057</td>
<td>60</td>
<td>22659</td>
<td>12085</td>
<td></td>
<td></td>
<td>3021</td>
<td>22658</td>
<td>151,057</td>
</tr>
</tbody>
</table>

### Vocational Training

Included as "vocational training" were formal vocational training programs completed in high school, through an apprenticeship program, in a school of business, in a nursing school or trade school, in a technical institute, in the Armed Forces, or in Job Corps training. Excluded from "vocational training" programs were single courses which were not part of an organized program of study, on-the-job training, training in company schools, training by correspondence, and basic training in the Armed Forces.

### Years of School Completed

Year of school completed includes only years in "regular" school. "Regular" school is defined as formal education obtained in public and private (denominational or non-denominational) secondary schools, colleges, universities or professional schools, whether day or night school and whether attendance was full-time or part-time. Schooling that was not obtained in a regular school and schooling from a tutor or correspondence courses were counted only if credits obtained were regarded as transferable to a school in the regular school system. This includes only "years completed", not the grade the person was in when the census was taken.
Greater specificity as to the most suitable arrangements the MOLN could employ for certifying and awarding credit for post-secondary learning in non-degree settings is provided in the appendix which supplements this chapter. Additional research is reported therein on:

--Proprietary, Independent Non-Profit and Correspondence Schools
--Proprietary and Independent Schools and Certification
--Options for Arrangements with Proprietary Institutions
--Evaluation and Certification of Programs and Courses
--The MOLN Contracting for and Providing Instructional Services
--Correspondence Schools
--Employer Training Programs
--Education Needs of Employers
--Employers and Services of the MOLN
--Union Apprenticeship Programs
--Public Regional Vocational/Technical Schools
--Military Programs
--Adult Education Programs
--OIC and Others
--Guidelines Available to the MOLN which can be Used to Determine Work for Which MOLN Credit can be Granted
DRAFT OF THE REPORT
OF THE
MARKETING MOTIVATION AND CLIENTELE SUBCOMMITTEE
BASED ON RESEARCH PERFORMED FOR THE
MASSACHUSETTS STATE COLLEGE SYSTEM

Note: Mr. Clare Cotton, Chairman of the Subcommittee, together with Dr. George Nolfi and Ms. Valerie Nelson, Consultants to the State College System, are responsible for this Draft. It reflects Mr. Cotton's personal inputs and those he gathered from Subcommittee meetings, and it reflects the major conclusions of Dr. Nolfi and Ms. Nelson based on the Target Clientele Research reported in the Clientele Chart and Clientele Appendix in this report.

January 19, 1974
The primary thrust of an open learning system in Massachusetts should be to extend post secondary educational opportunity to groups of people not now served by the existing system.

In his Executive Order No. 99 creating the Task Force, Governor Francis W. Sargent reviewed the rapid expansion and unprecedented growth of the publicly-supported sector of higher education in Massachusetts during the past decade, and then declared: "there is a need to provide continuing access to post-secondary education opportunities for a much broader age range and economic spectrum of the population than has ever been served before."

The U. S. Census of 1970 showed 3.3 million residents of Massachusetts over 18 with less than a college degree; the total for college graduates was 425,000. Of the 3.3 million with less than a degree, 42% have not completed high school, 38% have completed high school, and 20% have completed 1-3 years of college.

Recent studies have shown that 110,000 Massachusetts residents are already in continuing education programs. These students are typically under 40, relatively affluent, with some college experience if not a degree, internally motivated, and employed in professional or managerial jobs. They see continuing education largely in terms of its impact on future status and income.

The potential students not in these existing programs tend to have low incomes, lack educational preparation or have had bad educational experiences, or believe that continuing education as presently structured has no bearing on their real life prospects. Lack of participation, however, does not necessarily imply lack of interest. One survey, for instance, found that while 91% of professional workers expressed interest in continuing education, 74% of skilled workers also expressed interest.
The largest social and individual need for post-secondary education clearly lies among those who have not completed high school. At present, 3% of male students and 2% of female students enrolled in continuing education programs have less than a high school diploma, while they represent over 40% of the total population over 18 in the Commonwealth.

The Governor's Executive Order recognizes the inherent difficulties of extending the existing system to a new clientele by calling for the creation of a more flexible, diversified, and non-traditional system using existing educational resources. Surveys show that most potential students have the greatest interest in an open learning system that combines counseling services and credit for competency acquired during life experience. A national survey found that the largest interest in learning methods is still expressed for lectures or classes (28%); on-the-job training or internships (21%), and conferences and workshops (13%). Relatively less interest was expressed for TV and radio courses.

The initial experience of the new student with an open learning system will determine to a large extent whether or not it is successful in recruiting and retaining students. Access must be through a learning center where educational counseling involves out-reach to recruit students and placement to relate education directly to the job market. Competent and sensitive counseling at this initial point will be crucial to the success of the system.

Most existing continuing educational opportunities are program-based, with the distribution and concentration requirements of the typical college degree program. The gap in the system is in the lack of recognition of competency in the potential adult student. An open learning system should reflect a base in the concept of competency from the start by certifying and converting to academic
credit the competencies of the participating citizen, however gained.

The learning center will remove a large barrier to participation for a large number of potential students by respecting their real competencies. The system must be able to store credits of various kinds for accumulation toward competency-based degrees or certificates. The system must develop means of recognizing and crediting competency gained through study in proprietary institutions, (the attached chart shows 37,000 students enrolled in non-degree schools), corporate training programs, non-degree institutions, or home-study. The system must have a means of helping to finance some students, preferably through vouchers the student can take to participating institutions after a program has been worked out with the counselor at a learning center.

The Marketing and Motivation Sub-Committee of the Task Force believes that the importance of economic motivation among current students in continuing education -- 83% of men and 70% of women declare job advancement to be their main objective in continuing education -- will be true of the extended clientele as well, but the educational needs of the new groups may be radically different and, for many, must be much more explicitly rooted in vocational-technical and other occupational training.
The discrepancy between interest and participation has been highlighted in a study by A. Carp, R. Peterson, and P. Roelfs.

<table>
<thead>
<tr>
<th>Interest by Subject</th>
<th>First Choice</th>
<th>Actual Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational</td>
<td>78%</td>
<td>43%</td>
</tr>
<tr>
<td>General Education</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>Hobbies/Recreation</td>
<td>63</td>
<td>13</td>
</tr>
<tr>
<td>Home/Family</td>
<td>56</td>
<td>12</td>
</tr>
<tr>
<td>Personal Development</td>
<td>54</td>
<td>7</td>
</tr>
<tr>
<td>Public Affairs</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

The first column indicates percentages of people expressing an interest in each subject, with considerable overlap. The second column shows the first choice of each person and sums to 100%.

The table makes clear that hobbies and recreation interests are currently well-served -- 63% express interest and 42% participate. But only 12% show this as a first choice. General Education also is reasonably well-served. The greatest discrepancy between interest and actual study is in the vocational area with 78% expressing interest and only 35% in actual study. Further vocational subjects show three times the number of first choices as the next most popular subjects.

Those educational activities that are noncredit and typically avocational may be provided by a variety of other organizations at very low costs. There are 150,000 adults now participating in adult education programs run through the public high schools, and others in churches, private centers and community organizations. Some of these programs may yield competencies that can be tested and converted into credit (e.g. foreign language) in an open learning system. But generally, the sub-committee does not believe this kind of program meets the needs of the potential student body of an open learning system.
The potential market should not be conceived exclusively in terms of traditional college degree programs, though these should be included. There is clearly need for a variety of degrees and certificates including a high school completion certificate, associate's degrees with and without general education content, general education degrees and regular bachelors degrees. The system for testing competency could be expanded to include the granting of degrees and certificates by examination. Degrees and certificates are important to the potential student body, but the system should allow for a wide variety.

An open learning system conferring meaningful degrees or certificates will demand time, effort, and money of its students. The students will be willing to make these real sacrifices only if benefits are commensurate. And on its part, the Commonwealth should spend the additional funds to create and operate an open learning system only if there are real benefits to the whole of our society. Current continuing education programs and their students clearly perceive this direct connection between sacrifice and benefit. The sub-committee believes that some such direct connection will have to be perceived by the potential students of an open learning system if it is to recruit a significant proportion of the available population.

The largest number of potential students is among skilled and unskilled workers, many of whom might have gone to college if they had been born twenty years later, and women i.e., "second chance" groups. The greatest social need is for programs that will help the disadvantaged, racial minorities, institutionalized, and special groups such as high school dropouts, unemployed people, the elderly, handicapped, and so on.

The sub-committee believes that the results from programs aimed at the
"second chance" groups will show the highest immediate benefits to the largest number of students and to the Commonwealth; the population in the disadvantaged categories is smaller and the cost of programs will be high, but any success will show large individual and social benefits. The initial stages of an open learning system should concentrate on these two priorities -- the one a cost effective priority, the other a social priority.

A chart summarizing the types of potential students and the kinds of programs they would require is at the end of this chapter.

The disadvantaged clientele for an open learning system is characterized by low income, low previous education, basic language difficulties, physical or emotional problems. Surveys indicate that these people desire regular employment with the knowledge that a major barrier to their employment is inadequate education. These potential students will require the most careful counseling at a learning center. They may need special remedial courses, training in English as a second language, and so on. The costs of these special programs will be high, and these students have the least financial resources. For that reason, the financial aid allocated to these students will have to be proportionately greater than that allocated to students already employed.

The bulk of the "second chance" clientele is made up of people who have been vocationally trained, housewives, and those with some college credit but no degrees. Existing continuing education programs do not attract many of these people because they do not see a link between the sacrifice required and potential benefit. This group is stable and employed but with heavy time, financial, family and job responsibilities.
Many of these people now find that their competencies are not adequate for new kinds of jobs and careers in more direct competition with those now coming out of college -- they need degrees. An open learning system can be a way of breaking through dead-end careers or jobs. For this group particularly it will be necessary to certify competencies gained through apprenticeship, proprietary schools, vocational or trade schools, technical institutes, the Armed Forces, or in-service training on jobs. The creation of a system for certifying these competencies with credit will be a major incentive in attracting students to an open learning system to further advance themselves toward degrees.

For both these primary groups, there must be a clear idea of how educational opportunity leads to a better life and job. The learning center's counseling resources must be linked with job placement. The design of programs for these students must be related to the job market. A corollary is that the programs developed for these students will be more structured than is typical in many current continuing education programs, though the kinds of courses offered may be similar.

It will not be possible to attract these groups to educational facilities that are not centrally located. The steady drift of vocational-technical schools and community colleges from the centers of Massachusetts cities to the suburbs may cause problems. Courses must be offered in early mornings, in the evenings, at lunchtime, perhaps in facilities provided by employers or state agencies close to places of work.

Adults need a sense of community, of learning with other adults and a considerable amount of support. Counselors in learning centers should be people from the local region who can relate directly to the students on their own terms.
This will also provide a greater sense of continuity for the students and will make out-reach from the learning center to the community easier.

The learning center, the faculty and the program planners must be aware that a major barrier to education among many adults in skilled trades is the fear of failure. This has been reported by all major corporations with extensive training programs. The initial meeting of potential student and learning center must not be a confrontation by means of test or evaluation. The notion that the open learning system involves testing and certification at a later date will be itself a substantial deterrent to many people; this should not be compounded by introducing tests machinery, at the very start. Many of these considerations will be involved in the selection and preparation of faculty for these programs.

Financial aid should be in the form of vouchers given to the student at the learning center when his program has been worked out. Vouchers are preferable as a form of aid to flat-rate low tuitions at state-subsidized institutions because they effectively discriminate in favor of those in need. These vouchers might vary in size up to a maximum, depending on the financial condition and previous education of the student. Students who are employed and have sufficient means should pay all or most of the cost of continuing education. Students might use vouchers to shop between various institutions, making up differences in fees from their own resources. A voucher scheme ought to reflect the fact that the remedial courses and programs needed by some of the low-income disadvantaged clientele are much more costly to operate than general vocational or educational courses. The system should also be prepared to make grants to institutions for the development of needed programs.
It is not the intent of the Marketing/Motivation Subcommittee to argue against general education. But we see the State, as set out in the Executive Order, seeking the optimum flexible use of existing resources to meet the educational needs of citizens now outside the system for various reasons. We believe there is a sequence of priorities and that for the individual and for society as a whole the initial priority is one that relates post-secondary education for adults directly to jobs.

There are important implications of this position for the Task Force: a direct link between the counseling and job placement functions of a learning center; a heavy emphasis on vocational training opportunities in the early stages of an open learning system perhaps along the lines of the program now being developed in Pennsylvania; the certification of competency as a basic incentive to the potential student; a non-threatening curriculum and testing environment in the initial stages of a student's experience; openness to the student at the start, support for the student in the development of certifiable competency, and finally preparation of some students for later work in the kinds of courses and programs that form the core of existing continuing education.

The attached chart illustrates the various clienteles for an open learning system, defines these clienteles, focuses on central characteristics of each, and makes clear the characteristics the system must have if it is to be responsive to these needs.
CHART
ON
TARGET CLIENTELE NEEDS AND CHARACTERISTICS

The Research on Which This Chart
Is Based Is Presented in Greater
Detail and Specificity in the Appendix
On Target Clientele

George Nolfi       Valerie Nelson
Fulton Eaglin      Mildred Miller

January 19, 1974
Nineteen target clientele groups can be divided logically into three target populations as below. As argued elsewhere, priority on population I and II is recommended -- I as a social priority; and II as a cost/benefit priority -- for M.O.L.N. efforts. The groups are:

I. Disadvantaged Clientele
   A. Racial Minorities
      1. Blacks
      2. "Second Language"
   B. Institutionalized
      1. Chronic-Hospitalized
      2. Prison Inmates
      3. Nursing Home Residents
   C. "Special Problem"
      1. High School Dropouts
      2. Unemployed
      3. Elderly
      4. Physically Handicapped
      5. Drug Abusers and Alcoholics

II. "Second Chance" Clientele
   A. Adults who have at some past time received postsecondary level education or training of some sort but who do not have degrees.
      1. Career Upgrading and Mid-Career Change
      2. Formal Vocational Training
      3. Other Vocational Training
      4. Middle Aged Housewives
      5. Some College Credit/No Degree
   B. Students Currently Enrolled in Non-Degree-Granting Postsecondary Level Institutions and Education Programs.
      1. Students in Proprietary Schools
      2. Students in Employer-based, Union-based, or Armed Forces-based Education and Training.

III. Those Who Are Already Making High Use of the Existing Continuing Education System
   Those of relatively high previous education, income and job status

For each Target Clientele Group the following information is discussed:

DATA ON CHARACTERISTICS OF EACH CLIENTELE GROUP

-- Definition of Each Specific Clientele Group and Example of Group Member
-- Approximate Number in Massachusetts and Location
-- Needs and Interests
-- Barriers to Participation in the Existing Adult Continuing Education System

ESSENTIAL CHARACTERISTICS OF M.O.L.N. SERVICES TO BE PROVIDED TO EACH CLIENTELE GROUP

-- Outreach and Marketing
-- Type and Extent of Counseling
-- Modes of Certification of Knowledge and Competencies Gained Through Non-Degree-Credit Formal Education and Through Informal Means
-- Type of Curriculum Content
-- Mode of Delivery of Instructional Services
-- Financial Needs and Available Resources
-- Job Referral, Employment Counseling and Placement
<table>
<thead>
<tr>
<th>Clientele Groups</th>
<th>Definition of Each Specific Clientele Group and Example of Group Member</th>
<th>Approx. No. in Mass. &amp; Location</th>
<th>Needs &amp; Interests</th>
<th>Barriers to Participation in Existing Adult Continuing Education System</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Disadvantaged</td>
<td>As a group, generally low income, low education, recipients of some form of public assistance such as housing or vocational rehabilitation, may be physically or emotionally disabled.</td>
<td>403,000 below 125% of poverty level (18 and over) defined by Census (approx. $1,800 for unrelated individuals)</td>
<td>Short-term: education for jobs in skills, trades, clerical. Long-term: options for further academic work to enter professions, remedial work, outreach, local courses, sensitized teachers, commitment of State to their education.</td>
<td>Perception that education will not help them; perception that they cannot do the academic work; inability to pay costs; alienation from programs offered outside their locale and designed for middle class; limited State commitment of money for Blacks.</td>
</tr>
<tr>
<td>A. Racial &amp; Ethnic Minorities</td>
<td>Blacks comprise 3% of population; but 6% of poverty population.</td>
<td>26,000 below 125% of poverty level (18 and over)</td>
<td>(Same as above for Blacks)</td>
<td>(Same as above for Blacks)</td>
</tr>
<tr>
<td>1. Blacks</td>
<td></td>
<td></td>
<td>Bi-lingual programs</td>
<td>Can't take courses in English; greater problem of motivation than for Blacks.</td>
</tr>
<tr>
<td>2. Spanish-Speaking</td>
<td>Agrarian Puerto Ricans--first generation arriving over last 20 years</td>
<td>150,000 Puerto Ricans immigrants</td>
<td>(Same as above for Blacks)</td>
<td></td>
</tr>
<tr>
<td>3. Institutionalized</td>
<td>Average age: 40; 1/4 are over 65</td>
<td>15,000 in hospitals</td>
<td>a) Long-termers: entertainment, general enrichment. b) Short-termers: low level vocational skills</td>
<td>Lack of programs in institutions--no money to run them; some experimenting with vocational skills; entertainment provided, but limited.</td>
</tr>
<tr>
<td>1. Mentally Ill</td>
<td>Average age: 40; 1/4 are over 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) long-termers--on average, been in hospitals 10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) short-termers--3-6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach &amp; Marketing</td>
<td>Type &amp; Extent of Counseling</td>
<td>Modes of Certification of Knowledge &amp; Competencies Gained Through Informal Means</td>
<td>Type of Curriculum Content</td>
<td>Mode of Delivery of Instructional Services</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Black counselors; extensive encouragement &amp; support (as in OIC); job counseling, how education can help</td>
<td>Oral exams desirable High school certification Credit for life experience</td>
<td>Standard curriculum mainly in vocational skills linked to jobs, some provision for advanced academic work for those who want to continue; remedial work in 3 R's</td>
<td>Standard, highly structured delivery in classroom; additional resources from centers, option of T.V., but not home T.V.</td>
<td>High support needed; if possible stipend from federal resources for Blacks; local living expenses</td>
</tr>
<tr>
<td>(Same as above for Blacks) Puerto Rican recruiters, bilingual counselors</td>
<td>(Same as above)</td>
<td>(Same as above) Exams in Spanish, at least, initially</td>
<td>(Same as above)</td>
<td>(Same as above)</td>
</tr>
<tr>
<td>Discuss with hospital administrators, staff; patients by word of mouth; arrange with hospitals</td>
<td>Not applicable</td>
<td>Not generally applicable</td>
<td>a) Entertainment--astrology, space travel, etc. b) low level vocational skills</td>
<td>Group work, mobile faculty to institution, T.V., cassettes but feedback necessary</td>
</tr>
<tr>
<td>Clientele Groups</td>
<td>Definition of Each Specific Clientele Group and Example of Group Member</td>
<td>Approx. No. in Mass. &amp; Location</td>
<td>Needs &amp; Interests</td>
<td>Barriers to Participation in Existing Adult Continuing Education System</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>2. Prison Inmates</td>
<td>Incarcerated Those within 18 mos of release can leave on daily basis for educational programs 20-25% eligible for college level work</td>
<td>3,900 in State &amp; County prisons</td>
<td>Vocational training, some avocational or academic Intensive personal counseling and guidance to gain confidence Remedial work Evidence indicates that education reduces recidivism rate</td>
<td>18 mo. limitation on going outside; transportation not adequate for those on release; negative attitude of some prison staffs; lack of motivation by many prisoners; lack of cooperation by educational institutions</td>
</tr>
<tr>
<td>3. Nursing Home Residents</td>
<td>Over 65, 88% on public assistance, chronically ill (distinct from homes for elderly)</td>
<td>42,000 in homes</td>
<td>Entertainment, intellectual stimulation Psychology of Dying courses Group interaction Exposure to young people (5-10 years old)</td>
<td>Limited programs exist Lack of money in nursing homes</td>
</tr>
<tr>
<td>&quot;Special Problem&quot; Clientele</td>
<td></td>
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</tr>
<tr>
<td>1. High School Dropouts</td>
<td>Recent, younger dropouts--large percentage minorities Felt frustration, lack of interest in academics</td>
<td></td>
<td>Marketable skills needed, non-academic Broad range of learning formats for those who lost interest or failed in traditional academics</td>
<td>No high school diploma Costs of tuition too high Past failure or lack of interest in education</td>
</tr>
<tr>
<td>2. Unemployed</td>
<td>Both hardcore unemployed (see other disadvantaged) and unemployed professionals, skilled workers</td>
<td>100,000</td>
<td>Primary interest in finding source of income</td>
<td>Lack of financial resources Hardcore unemployed have psychological problems to overcome Need for income is paramount, may not see education as a possibility.</td>
</tr>
<tr>
<td>Prison administrators</td>
<td>Direct to prisoners to interest them</td>
<td>Through nursing home administrators Not to patients directly</td>
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</tr>
<tr>
<td>Job-related to positions outside; academic for degrees; psychological--overcome fear of education; give confidence; counselors attuned to needs, concerns of prisoners</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLEP and GED; Strong need for proof of achievement--traditional degrees; licenses for vocational training, certificates of completion</td>
<td>Vocational specialties such as computer sciences, nurses training Remedial work in 3 R's Courses designed with prisoners in mind</td>
<td>Agencies other than prisons.provide programs; small groups; flexible instruction--multimedia; in-prison and out.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not to patients: applicable</td>
<td>Mobile faculty with visual aids Group work</td>
<td>Prisons pay some; prisoners may pay part from work earnings in prison; federal aid from omnibus crime bill; Dept. of Corrections; Voc. Rehab.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locate where they are--market specifically for them; use of media and community groups; via employers</td>
<td>Job counseling essential Non-academic thrust</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job-related, capture interest with specific, practical work Short-term intensive goals</td>
<td>Lecture classes, practical lab work</td>
<td>Full support needed for courses</td>
<td></td>
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<tr>
<td>High interest in certificate of completion, skill certificate</td>
<td></td>
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<tr>
<td>Psychological Certification which support for life stresses job-related counseling</td>
<td></td>
<td>Crucial to link to job market</td>
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<tr>
<td>Advertising which stresses job-related programs, counseling</td>
<td></td>
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</tr>
<tr>
<td>Psychological support Job counseling</td>
<td>Certification for life experience to shorten time required</td>
<td>Vocational courses at basic levels for hardcore Retraining or upgrading of skills of professionals</td>
<td>Support needed, some payment by participants Sources: WIN, Employment Service, MBTA, EOA, STEP</td>
<td>Crucial to link to job market</td>
</tr>
<tr>
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<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>3. Elderly</td>
<td>65 years and older</td>
<td>640,000</td>
<td>Self-fulfillment</td>
<td>Costs too high</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pratical courses on</td>
<td>Poor self-image</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>medicare, etc.</td>
<td>Lack of transportation</td>
</tr>
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<td></td>
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<td></td>
<td>Feeling that they belong to group</td>
<td>Low education background</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fight sense of loneliness, uselessness</td>
<td>Night courses they will not attend</td>
</tr>
<tr>
<td>4. Physically Handicapped</td>
<td>Physical handicap severe enough to limit in some way the ability to hold a job</td>
<td>25,000 served by Mass. Rehab. in 1972</td>
<td>Similar to interests of general population</td>
<td>Architecture inaccessible; transportation difficult; many are poor--costs too high; lack of motivation, particularly as get older; lack of awareness of programs</td>
</tr>
<tr>
<td>Drug Abusers and Alcholics</td>
<td>Drug abusers: a minimum, 30,000 Alchohics: 250,000</td>
<td>Therapeutic programs for social, personality disorders</td>
<td>Academic and vocational education</td>
<td>Costs too high</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low self-image</td>
</tr>
<tr>
<td>II. &quot;Second Chance&quot; Clientele</td>
<td>A. Adults out of formal schooling  Working class, stable family people who would have probably gone to college or further in college if they had been born 10-30 years later and late bloomers. Many have competencies obtained through formal or informal postsecondary level study or training for which they have not received degree credit</td>
<td></td>
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</tr>
<tr>
<td>Outreach &amp; Marketing</td>
<td>Type &amp; Extent of Counseling</td>
<td>Modes of Certification of Knowledge &amp; Competencies Gained Through Informal Means</td>
<td>Type of Curriculum Content</td>
<td>Mode of Delivery of Instructional Services</td>
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<td></td>
<td>Don't direct advertising to &quot;elderly&quot;; they want to see themselves as part of general population. Locate through elderly groups. Mass mailing.</td>
<td>Reassurance of abilities. Stimulate interest.</td>
<td>Not generally applicable. Personal interests - medicare Intellectual-political Stimulation.</td>
<td>Group work essential Non-competitive. Day courses Mobile faculty to convenient centers.</td>
</tr>
<tr>
<td></td>
<td>Specifically market that resources for handicapped. Locate and publicize through community groups, Mass. Rehab.</td>
<td>Psychological, job-related, academic Information referral.</td>
<td>Credit for life experience Credit by exam Degrees and certificates.</td>
<td>Same as for general population. T.V. courses Mobile faculty to centers of established groups.</td>
</tr>
<tr>
<td></td>
<td>6. 4 organized groups All media</td>
<td>Psychological support and general counseling.</td>
<td>Standard needs. Standard needs.</td>
<td>Short-term exploratory courses Mobile faculty to halfway houses.</td>
</tr>
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<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------</td>
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<td>-------------------------------------------------</td>
</tr>
<tr>
<td>1. Job Upgrading and Mid-Career Change</td>
<td>Those dissatisfied with current position or feel at dead-end</td>
<td></td>
<td>Want to change jobs; need skills, job placement, and to understand what they want in career Need formal degree to upgrade</td>
<td>Lack of information about how to use education to better job Family, job responsibilities Limited time, financial responsibilities Low levels of education background</td>
</tr>
<tr>
<td>2. Vocationally Trained</td>
<td>a. Formal Formal programs in high school, apprenticeship, proprietary or public business, nursing or trade school or technical institute, Armed Forces (beyond basic)</td>
<td>Approx. 600,000 between 26 - 65 with 10 yrs of school to 3 yrs of college.</td>
<td>Job upgrading Certification of competence, past training Need formal degree to upgrade</td>
<td>(same as above) If no certification for training previously done -- time to complete program is too long</td>
</tr>
<tr>
<td></td>
<td>b. Other Vocational Training Single courses not part of an organized program, on-the-job training, company schools, correspondence</td>
<td></td>
<td>(same as above)</td>
<td>(same as above)</td>
</tr>
<tr>
<td>3. Middle-aged Housewives</td>
<td>Women considering returning to school work</td>
<td></td>
<td>Role outside the home Avocational interests Vocational interests</td>
<td>Difficulty of changing roles -- psychological Job discrimination Lack of child care Lack of finances</td>
</tr>
<tr>
<td>4. Some College Credit/No Degree</td>
<td>660,000 in 1970</td>
<td>Interests in completing degree, job advancement</td>
<td></td>
<td>Disappointing past educational experiences Transfer difficult Time, finances limited</td>
</tr>
<tr>
<td>B. Students Currently Enrolled in Non-Degree-Granting Postsecondary Level Institutions and Education and Training Programs</td>
<td>People who are now receiving or who will in the future be receiving quality, but non-degree credit, postsecondary education and training</td>
<td></td>
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</tr>
<tr>
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</tr>
<tr>
<td>General advertising</td>
<td>Job-related</td>
<td>Credit for life experience</td>
<td>Job-related particularly</td>
<td>Convenient times, locations and</td>
</tr>
<tr>
<td>through employers</td>
<td></td>
<td>Vocational training</td>
<td>managerial, technical</td>
<td>Employer programs</td>
</tr>
<tr>
<td>job-related Advertising</td>
<td></td>
<td>GED exam</td>
<td></td>
<td></td>
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<tr>
<td>theme</td>
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<tr>
<td>same as above</td>
<td>(same as above)</td>
<td>Certification of competence by exam and evaluation, or credit granted for</td>
<td>(same as above)</td>
<td>(same as above)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>program, high school and A.A. level in particular</td>
<td></td>
<td></td>
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<tr>
<td>same as above</td>
<td>(same as above)</td>
<td></td>
<td>(same as above)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>General media</td>
<td>Exposure to realistic</td>
<td>General</td>
<td>Academic</td>
<td>Daytime</td>
</tr>
<tr>
<td>of Women's</td>
<td>options</td>
<td>Credit for life experience</td>
<td>Social, community related</td>
<td>Convenient</td>
</tr>
<tr>
<td>ups</td>
<td></td>
<td></td>
<td>Job-related</td>
<td></td>
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<tr>
<td>General</td>
<td>General</td>
<td>General</td>
<td>General</td>
<td>General</td>
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<tr>
<td>Credit for life experience</td>
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</tbody>
</table>

*Note:* The table continues with similar entries not shown in the provided snippet.
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</tr>
</thead>
<tbody>
<tr>
<td>1. Students in Proprietary and Independent Schools</td>
<td>Business, trade and technical, medical, cosmetology, other</td>
<td>37,000</td>
<td>Attending schools for job-related training May later wish to further their education, change fields</td>
<td>Feel more comfortable in non-academic setting like practical, intensive training and education Cannot currently transfer credit into degree-granting</td>
</tr>
<tr>
<td>2. Students in Employer-based, Union-based, or Armed Forces-based education and training</td>
<td>Technical, managerial, trade</td>
<td>(Same as above)</td>
<td>Programs generally are job-related training</td>
<td>(Same as above)</td>
</tr>
<tr>
<td>3. Current Students of Continuing Education</td>
<td>Those who are already making high use of existing system: those of relatively high previous education, income and job status, veterans</td>
<td>110,000</td>
<td>Job advancement (80%) General education</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Outreach &amp; Marketing</td>
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</tr>
<tr>
<td>via proprietary schools</td>
<td>Not applicable (provided by school)</td>
<td>Certify programs for transfer credit Certify students by exam for those institutions who chose not to negotiate for credit</td>
<td>Provide general education when needed</td>
<td>Arrange for mobile faculty to teach in schools or for students to attend others</td>
</tr>
<tr>
<td>via Employers, Unions</td>
<td>Job-related counselling</td>
<td>Certification of students' by exam, evaluation Credit of military according to established standards</td>
<td>Vocational General education requirements</td>
<td>At employer's convenience of time, place</td>
</tr>
<tr>
<td>&quot;a suffi- cient&quot;</td>
<td>Greater personal, job counselling desired by current participants</td>
<td>Credit for life experience desired by current participants</td>
<td>Current programs More professional courses desired</td>
<td>Lectures, classes Local centers</td>
</tr>
</tbody>
</table>
MEMORANDUM

Date: December 29, 1973

To: Larry Dennis, Provost, Massachusetts State College System
    Chairman, Commonwealth Task Force on the Open University

From: George Nolfi, Consultant to the State College System

Subject: A SUGGESTED FINANCIAL STRUCTURE FOR THE PROPOSED MASSACHUSETTS
OPEN LEARNING NETWORK

CONTENTS

A. Operating Assumptions for the M.O.L.N. and This Analysis

B. Suggested Allocation of Funds

C. What That Allocation Will Buy

D. Supporting Discussion

(1) General Considerations of State Support: Continuing Education should be paid for by the individuals who benefit from it according to their ability to pay.

(2) Alternative Mechanisms of State Support: Subsidize demand (students) instead of supply (institutions).

(3) The Entitlement Concept: Vouchers designed to target aid on those of low income and low previous education.
A. Operating Assumptions for the M.O.L.N. and This Analysis

(1) The objective of creating an M.O.L.N. is to increase access to postsecondary education for identifiable target clienteles, with identifiable needs, who are not now participating in continuing education.

(2) In a time of limited education budgets, any state money used for the M.O.L.N. should be used to facilitate access for the target clientele.

(3) The M.O.L.N. should use wherever possible existing instructional resources, and build upon them.

(4) Given limited state funds for the M.O.L.N., priorities for use of those state funds should be, in order:

(a) direct subsidy concentrated upon adults who need it, with those of less need paying full cost, thus avoiding dilution of limited resources for aid

(b) operation of three pilot area learning centers

(c) central M.O.L.N. administration

(d) curriculum development.

(5) Non-state funds from foundations, federal and other sources should be sought for curriculum development. Priorities in curriculum development should be, in order:

(a) Train selected existing and new adjunct faculty from post-secondary institutions to teach new clienteles in new ways at new times and places.

(b) Provide incentive grant competitions for effort to tailor existing programs to new clienteles. Stimulate institutions to invest their own resources.

Note: Clientele research indicates that the substance of traditional curricula, particularly occupationally oriented curricula, is appropriate for target clienteles—the problem is how, when where, and by whom it is taught and how that substance is related to the clients perceived concerns and needs. Hence, (a) and (b) above.

(c) Obtain materials from other states where these have proven value in reaching the target clienteles.

(d) Long term development of curriculum materials.

(6) The learning centers should provide free service to all who choose to use them. As learning center location will be the crucial determinant of who uses them, the way to insure that the centers serve the target clienteles is to locate them in
areas of target clientele population concentration and to establish outreach liaison to target clientele groups. A foreseeable problem is the potential use of the centers by clientele currently served in continuing education to the virtual exclusion of target clienteles, and insuring that the centers in fact serve mostly the target clienteles will be a serious problem of resource allocation within the centers.

(7) Learning Center services will include outreach, information and referral, brokerage of resources, program counseling, certification of competency, finding sources of tuition aid and employment counseling.

(8) Initially, instruction will be provided by existing postsecondary instructional resources in the state. Hence, the cost should be the existing continuing education tuition at any particular participatory institution.

(9) To augment and strengthen these existing instructional resources and to provide an incentive for institutions to respond (through program adaptation and new self-developed curricula) to target clientele needs, tuition-entitlements (vouchers) administered by the M.O.L.N. will be directly tenderable at any participating institution. Instructional costs will be borne by the student, although these costs for some students will be subsidized. For adults who do not qualify for the maximum entitlement, or any entitlement, the difference between the entitlement and the course tuition will be made up by the student. The entitlement should be variable as a function of income and previous education with an upper limit of $40/ credit hour.

(10) Some students will receive tuition reimbursement from their employers. Most employers have such plans. Incentives to employers to extend such plans to target clienteles should be created through tax credit provisions.

(11) The M.O.L.N. will be a quasi-public corporation giving it flexibility to receive money from various sources and the freedom to contract with public, private or proprietary schools for services.

(12) While statutory standing and legislative endorsement will be sought for long term M.O.L.N. status and financial base, pilot efforts should be begun at once.

(13) While there is a clear need for the M.O.L.N. to have the authority to offer a variety of new competency-based degrees, proper BHE review and approval will take time. Hence, while such authority should be sought, other, higher priority functions than degree granting—namely, Entitlement Vouchers for those of low income and low previous education and Learning Centers—should not wait. These latter functions should begin immediately while degree authority is developed. Vermont Community College, which was begun in 1970 and which has become nationally acclaimed, began its classes on pilot basis then subsequently obtained AA degree authority for its operating program.
Certification of programs and courses in non-degree granting providers of postsecondary instruction as carrying M.O.L.N. credit will be performed by the central M.O.L.N. administration.

A reasonable 1974 state budget which can be expected is $1.5 million.

B. Suggested Allocation of $1.5 Million State Funds:

- $900,000--Open Learning Entitlement Vouchers
- $390,000--Three Learning Centers
- $210,000--Central Administration and Program Certification

Note: The search for private and federal funds to supplement this appropriation and to permit curriculum development should begin immediately.

C. What the Allocated State Funds Will Buy

1. $900,000 for Entitlement Vouchers

Given an average per-3-credit-course voucher of $100, 9,000 course enrollments can be fully or partially subsidized. If a client takes two courses per year, then 4,500 target clientele adults will be given financial access. For 4,500 Massachusetts adults this would mean a second chance to obtain education—the second chance they want and need but cannot afford on their own. No plan of flat uniform subsidy even with scholarship provisions can possibly aid as many target clientele as a direct target clientele specific voucher.

Given the choice of using the marginal dollar to aid a target clientele member or a person who is like current continuing education participants (of relatively high income, job status and previous education) our choice should be clear. Hence, across the board subsidy to all students would be socially regressive and should be avoided. Flat rate low tuition lacks the precision to discriminate in favor of those most in need since it provides a scholarship to all regardless of need. Clientele specific cash vouchers target aid precisely.

Optimum program operation will be achieved if the aid program is:

- set up as an entitlement rather than as a traditional scholarship program, so a person will know in advance that he will receive a voucher if he meets certain basic published criteria, and hence be potentially stimulated to enroll;

- set up two entitlements (vouchers) which vary in size as a function of both income and previous education. Those of low income and low previous education should be the only ones to qualify;

- have simple ways to control cheating as a random post audit
of 5-10% of the recipients with stiff penalties (fines?) for violation.

(2) $390,000 for Learning Centers

Data from related efforts and several analyses lead to the following conclusions regarding the cost-per-student-processed for learning center operations:

<table>
<thead>
<tr>
<th>Services Provided</th>
<th>Average Cost Per Student</th>
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</thead>
<tbody>
<tr>
<td>Outreach, information, and referral</td>
<td>$50-75</td>
</tr>
<tr>
<td>Outreach, information and referral, brokerage of resources, program counseling, certification of competency, finding sources of tuition aid and employment counseling</td>
<td>$130-200</td>
</tr>
<tr>
<td>All of the above plus instruction and tutoring</td>
<td>$300-3,000</td>
</tr>
</tbody>
</table>

Hence, each of three Learning Centers as presently conceived and budgeted at $130,000 will serve 650-1000 students. Two observations are clear: first, the Centers must be conscious of the trade-off of more students served vs. more attention per student; second, given such limited resources Learning Center services must be concerned and focused on target clientele members.

Query: Should the Learning Center charge a fee to all users who are not eligible for an entitlement voucher?

(3) $210,000 Central M.O.L.N. Operation

--startup, administration and planning
--seeking private and federal funds
--certifying credit-eligible programs and courses in proprietary institutions and other sites on non-credit instruction.

D. Supporting Discussion*

(1) General Considerations of State Support**: Continuing Education Should Be Paid For by the Individuals Who Benefit From It, According to Their Ability to Pay

* This discussion is adapted from G. Nolfi & V. Nelson, Strengthening the Alternative Postsecondary Education System: Continuing and Part-Time Study in Massachusetts.

** The material presented in the next few pages applies both to traditional full-time higher education and to continuing education, but it is of course the latter which is the focus of this discussion.
The premises underlying the recommendations in this section are several and are discussed here as background to the specific elaboration of the recommendations.

Historically there have been three arguments for public support of education: first, society benefits from higher educational levels of its citizens; second, there is a transfer of support by taxation from one generation to the next; third, low income populations should be preferentially subsidized in their pursuit of education. It is important to differentiate these arguments for some form of state support of education from the selection of the particular mechanisms of that support. The use of the term public support as used below is not limited to any particular form of support. Public policy regarding approved level of support should be distinguished from policy alternatives regarding mechanisms of support. Consider each of these issues in turn.

Who Benefits from Education: The first argument for public support to education is that society benefits from the education of its citizens. Benefits of education accrue to both the students involved and the society as a whole. The economic benefits are for the individual, better jobs and higher pay, and for the society, higher productivity of the economy as a whole. Society also benefits from a better-educated citizenry and students enrich their lives with social and learning experiences.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Individual</th>
<th>Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>economic</td>
<td>better jobs</td>
<td>higher on-the-job productivity</td>
</tr>
<tr>
<td></td>
<td>higher pay</td>
<td>technological advances</td>
</tr>
<tr>
<td>social</td>
<td>experiences</td>
<td>better citizens</td>
</tr>
<tr>
<td>academic</td>
<td>learning</td>
<td>social criticism development of knowledge</td>
</tr>
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</table>

Theoretically, students will decide how much education to take on the basis of equating the perceived benefits with the costs. Individuals will be unwilling to pay for education which benefits society but not themselves. If the decisions to enroll are left entirely to the individual involved, educational enrollments may be fewer than are in the public interest. As costs to students go down with increasing levels of public support, more people will decide to take more education. To the extent that the resulting social benefits are greater than the subsidies, public support is rational. Similarly, employers benefit from education and training of their employees. The employer's return on his investment in training is such that it is rational for him to subsidize education. Hence, 60% of men in continuing education in Massachusetts are receiving some form of employee subsidy. Further, since the student receives substantial personal benefits from education, it is appropriate for the total cost to be shared by the student. Rational public policy should set a level of support for postsecondary education which reflects the distribution of benefits between the individual or his employer (tuition) and the society at large (State support).
Intergenerational Transfers: The second argument for public support to education is as an intergenerational transfer of support. Working adults have the resources to pay taxes for education of young adults who have few resources on their own to pay the costs. When these students are older, however, they will pay the taxes to support the education of the next generation. Further, social policy on most subjects distinguishes between different clientele, often on the basis of age, with different policies for different age groups. Hence, differential State policies with regard to level and mode of support for youth-full-time-day higher education and adult-part-time-continuing postsecondary education are entirely appropriate. As argued elsewhere in this report, differential policies are desirable for a variety of other reasons having to do with the differing needs of these two population groups and the characteristics of educational institutions.

Subsidies to Low-income Populations: The third argument for public support is that education can be viewed as a right of all citizens. In principle, everyone should have the opportunity to attend if he wishes, regardless of his ability to pay for that education. Higher income taxpayers should support those who do not have the resources to attend.

There are three kinds of criteria in taxing citizens for public services. First, individuals should be taxed according to their ability to pay. Thus, higher-income individuals should be taxed more than lower-income individuals. Second, individuals at the same income levels should pay the same level of taxes for services. These principles should apply in the process of taxing the public for the support of education and in the pricing of educational services. Third, the ratio of user charges to general support for services should reflect the ratio of benefits derived by the individual and by the society.

Continuing Education: How do these arguments for public support apply to the specific area of continuing education? Although some individuals are in continuing education for reasons of general interest, the majority are there for job-related reasons. The benefits, both personal and social, are thus primarily economic. Students later get higher incomes and better jobs and the economy benefits. The benefits of development of knowledge, social criticism, and better citizenry are less important in the area of continuing education than in full-time education in traditional academic settings. For this reason, it is justifiable to have a lower level of direct public support for continuing education than for full-time education.

Because most students in continuing education are working adults, the issue of intergenerational transfer of funds is altered. In fact, the transfer is between one set of adults and another, not between generations.

Finally, because the bulk of current continuing education students in Massachusetts is in the middle class and upper middle class, as measured on either income or job status scales, the issue of subsidization of lower income groups is altered. Middle and upper-middle class adult students need not be subsidized; however, the case is clear for subsidization of lower income groups.
What is the equitable structure of public support for continuing education? In terms of horizontal equity: citizens at one income level should not be paying for the continuing education of individuals at the same income level. In terms of vertical equity, individuals should be paying for continuing education according to their ability to pay: the low income taxpayers should not be subsidizing higher income students as is now the case through the indirect subsidy received by continuing education in public institutions.

These criteria can be used to articulate a policy that continuing education should be paid for by the individuals who benefit from it according to their ability to pay. Middle income adults should not receive subsidies from the general taxpayer when they can afford to pay for the course and will receive income benefits from taking the course in the future. The lower income student, however, should be subsidized; he is not able to pay, but he and society will benefit in the long run from his education.

Who should subsidize the low income student? There are two alternatives: one, other continuing education students through paying higher fees, and two, the general taxpayer through general state revenues. The former is the current situation of subsidy to teachers and veterans who do not pay a tuition fee under certain conditions. Other students must pay higher fees to support the class at an expanded enrollment level. The latter policy, subsidy to special groups selected consistent with social policy objectives and out of general tax revenues, is more appropriate as a general policy. (Note that while higher public tuitions are justified in continuing education elsewhere in this section, that justification is on grounds of (a) educational costs, principally making explicit the indirect subsidy now received by public institutions, (b) the educational advantages, principally flexibility and responsiveness, of a self-supporting continuing education, and (c) the ability to pay of the class of students and employers who are now using the system). The suggested subsidy to special clientele groups is justified by social policy considerations and should be derived from general revenues.

(2) Alternative Mechanisms of State Support: Subsidize Students (Demand) Instead of Institutions (Supply)

Once the value of subsidizing education and the general principle of subsidizing low income or other underserved students (but not those who can afford to pay) has been determined, the appropriate mechanism of support must be selected. Structures of subsidies should be developed on the basis of their likely effects on both students and institutions.

Demand vs. Supply Subsidization: The basic choice in public policy for support of postsecondary education is to subsidize institutions (supply) or students (demand).

Public financial support in higher education has traditionally gone to the supply side, generally only to public institutions. State contracts with private institutions and other more direct forms of state aid are beginning to blur this pattern.
Institutional subsidization was appropriate when the objective was to build new institutions, to expand the base of providers of higher education services. It was so important to stimulate the system to provide more spaces for students that this mechanism was employed even though it was sometimes regressive. Lower income taxpayers on the average subsidized through taxes the higher education of children of middle and upper middle income families attending public institutions. While progressive income tax rates reduce this effect, the participation rates of higher income children in higher education are so much greater than for lower income children that progressive taxation schedules are overwhelmed.

Today the public policy objective in Massachusetts postsecondary education is no longer building new sectors and institutions—it is maximizing the diversity, balance, efficiency and responsiveness to social needs of the total postsecondary institutional universe. For this objective student (demand) subsidization is more appropriate. Demand subsidization through vouchers to students has advantages which make it especially appropriate in continuing adult postsecondary education in Massachusetts in 1973.

First, demand subsidies are far more precise than supply subsidies in targeting aid specifically on population groups in need. While institutional subsidies currently lead to lower tuition prices for all students in the public sector regardless of their personal resources, demand or student subsidies only go to those in need. Those who can afford to pay are charged tuitions closer to true cost.

Second, demand subsidies promote competition between institutions on grounds of educational quality rather than price. Supply subsidies to public institutions keep public tuition charges artificially low and student's choices are dominated by issues of price rather than program scope or level of teaching. As the Carnegie Commission on Higher Education recently noted, "The competition between public and private institutions is now too heavily based on price considerations alone...both systems would benefit if the competition were based more on quality". The Commission was referring to full-time higher education, but the comment also applies to the severe competition now prevalent between public and private continuing education programs in Massachusetts. The College Entrance Examination Board and the Committee for Economic Development have drawn similar conclusions.

Third, vouchers, by giving the student direct purchasing power, foster responsiveness on the part of education institutions to students' needs. While complete consumer determination of what educational services are provided is inappropriate, traditional supply subsidization has not led to the degree of responsiveness and accountability needed. The fact that continuing education in Massachusetts has been more responsive to student needs than full-time programs may be explained by the fact that continuing education is financially self-supporting and dependent on maintaining student enrollments.
Fourth, public policy decisions regarding high or low subsidy should be made by type of clientele and area of study, both of which can be clearly related to public needs rather than by type of institution. Differential subsidy decisions should be made on the basis of output criteria (e.g., a low income person educated or a new doctor) and not on the basis of legal differences in organization from between otherwise barely distinguishable institutions.

Fifth, subsidizing demand rather than supply in adult continuing education is most likely to encourage cooperation, efficiency, maximization of responsiveness, breadth of service, and use of the entire range of postsecondary educational resources.

Direct (Explicit) vs. Indirect (Hidden) Subsidies: Whatever form of public subsidy is employed, that subsidy should be explicit, and reflect total accurate costing of all elements of subsidy received. Present modes of financing continuing education are laced through with indirect institutional subsidies, rather more so in the public than private sectors. The premises underlying the financial management and tuition recommendations made in this report are that there are many advantages to a self-supporting system, that such a system should operate on a true total cost basis with any subsidies made explicit, and that there should be a rational linking of tuition charges to true total costs.

(3) The Entitlement Concept: Vouchers Designed to Target Aid on Those of Low Income and Low Previous Education

The Commonwealth should adopt financial policies and mechanisms responsive to the needs of special student clienteles and supportive of strong and independent continuing education programs in public and private postsecondary education institutions. Those most in need of financial assistance should receive it in a manner which has the precision to effectively discriminate in their favor. Flat-rate low tuition lacks that precision since it effectively provides a scholarship or public subsidy to all students regardless of need. Clientele-specific cash vouchers are therefore the policy instrument of choice.

The Commonwealth has an obligation to assist certain segments of the adult population in meeting the cost of part-time postsecondary education. The Commonwealth should establish a cash voucher program for selected adult clientele. Those Open Learning Entitlement Vouchers (OLEV's) should be designed such that recipients can take one or two continuing education courses per semester up to a total of thirty-two courses, the equivalent of four years of college or Bachelor's Degree, whichever comes first. The vouchers should vary in amount from partial to full tuition as a function of both the recipients' income and previous education. The target clienteles for the vouchers should be low-income, low-previous-education adults of all ages. The higher one's income (and assets) or previous education within the decided range, the lower the per course voucher. The vouchers should be tenderable at any postsecondary institution, provided the institution is a participating member of a Service Area Planning Board.
The crucial elements should be these: (a) that the aid should be in the form of cash course vouchers to students tenderable at any public, private or proprietary postsecondary educational institution which is a participating member of the proposed M.O.L.N. (licensing requirements assumed); (b) that the size of the voucher should be a function of both income and previous education; (c) that it is those adults of low income and low previous educational attainment who should be subsidized most; and (d) that adults, not traditional college age youth, be eligible.

This approach will in effect create a sliding scale tuition with those of lowest income and least previous education paying the lowest tuition rate and ranging to those with middle or higher income who will pay full tuition and receive no subsidy. For any given income level in the eligible range, those with least previous education should receive more than those with some previous college. Similarly, for any given educational background (e.g., high school diploma), those of lower income will receive greater subsidy than those of higher income.

The exact specification of what the eligible range of education and income levels should be is properly a subject of public debate in the Executive and Legislative offices of Massachusetts government. There are public programs nationally and in states and cities which use various levels, and the particular decision is one properly made in the forum of public debate. Similarly, the minimum eligible age is a subject proper for public debate and decision.

Regarding determination of eligibility, it is suggested that the need assessment formulas used by national scholarship programs be examined since these formulas assess financial need by examining both income and assets. Similarly, the mode of operation of the federal government's Basic Opportunity Grant Program should be reviewed before final policies are adopted.

Another option advocated by some is State funding of part-time and continuing education through an institutional subsidy on a FTE (Full-time Equivalent) basis in the public institutions only. It is argued that such an approach will increase access to those of lower income. At the present time, however, private continuing education tuitions are two or three times as great as public tuitions, and yet the socioeconomic character of the students in each sector is virtually identical. There is little evidence to suggest that a further reduction in the tuition rate at public institutions to half of its present rate through FTE funding would bring in substantial numbers of low income disadvantaged adults. To the contrary, it would be a quite cost ineffective way to reach and attract underserved poor clientele. Low tuition rates are a device which in fact provide scholarships to everyone regardless of need and do not specifically target on the poor. Furthermore, flat-rate low tuition in public continuing education in Massachusetts would be a very expensive proposition, requiring substantial state expenditures, much of which would result in subsidy to well-educated, middle and upper middle income adults. Moreover, such institutional finding would exacerbate the price competition between public and private institutions, as noted earlier with a long-run detrimental effect on the system as private institutions are forced to close their programs.
The merits and demerits of vouchers for financing full-time higher education are beyond the scope of this Study. The point should be made, however, that the two systems are not tied. The clientele served and the educational model involved are significantly different and may justify supply subsidization (in the eyes of some) of full-time higher education. In the case of adult continuing education, the case for precisely subsidizing needy adults and giving them the choice as to how and where to use their subsidy is compelling.

The creation and funding of the proposed Open Learning Entitlement Vouchers (OLEV) for special clientele is made more essential by the policies of existing federal and State student aid programs (Economic Opportunity Grant, National Defense Student Loan, College Work Study, Basic Opportunity Grant, and Massachusetts Higher Education Loan Program), all of which exclude students who are taking less than half-time study. Thus few adults can receive aid from these programs.

The program should be operated through the M.O.L.N. in the following manner: the program eligibility criteria should be widely published in local newspapers, etc.; any eligible adult could then apply; and the vouchers would then be awarded on a first come--first served basis up to the limit of appropriated funds for that year.

When the proposed M.O.L.N. has its Learning Centers operational, as recommended elsewhere in this report, much of the application process should be handled through the Centers, with the DHE overseeing the entire program. Given the confidentiality of information provided, appropriate procedures should be established. Other State efforts (e.g., financial aid programs or income tax) can provide models and advice on such matters. The simplest and lowest cost approach to administering the voucher program is through the mail. Rather than verification of data provided in each case, the authorizing legislation should provide penalties for misrepresentation, and a random audit of 5% of applications should be performed by asking the recipients to verify their data. For reasons of equity elaborated earlier, general State revenues should be the source of State funds for the OLEV's.

Critics of vouchers are fond of claiming that while vouchers are a good idea in theory, they are administratively unworkable or at least cumbersome. This is a specious argument for several reasons. First, there are ways the voucher program can be designed (as discussed above) so that a minimum of bureaucracy and red-tape will be required. Second, the alternative of institutional funding has demonstrated its requirement for large administrative staffs to plan, operate and monitor individual institutions and systems. Third, we have had experience with near-voucher type programs in this country (e.g., the G.I. Bill and the Law Enforcement Education Program and employer guarantees of tuition reimbursement to employees) on a national scale, and they have functioned remarkably well and smoothly in achieving these specific objectives. The critics should be heeded, however, in the care with which the OLEV program is designed so that it too will prove to be a Model of public administrative efficiency.

The recommended voucher size is $40.00 per credit hour or $120.00 per 3-credit course per semester. This amount should be the maximum and is predicated on the raise in public tuitions suggested below. The voucher should be $40.00 per credit hour or actual tuition, whichever is lower for the lowest income and previous education group and become progressively lower for higher income and education levels within the eligible range.
The effect of the voucher program would be to encourage new clienteles into the system, without driving any current students out of the system. Although cost inhibits many adults from attending continuing education programs, it is not generally a problem for those currently enrolled.

It is appropriate here to restate certain findings of the survey of continuing education students in Massachusetts performed in this study. It is clear that the group usually being served by continuing education is middle and upper middle class. Those who are poor, old or of low previous education are not being well-served. This is true of men and women, but more so for women. (See a specific comparison of occupation, income, previous education and age in the discussion of Access.)

The fact that continuing education currently serves individuals who are already high on social status scales means it is acting to widen the distribution of income within the State rather than to provide opportunities for low income people or equalize it. Instead of serving to upgrade the employability of the disadvantaged and unskilled, it is increasing the already high potential of people in the middle and upper middle class. The income gaps among these groups grow as a result.

It is important that continuing education programs be more open to citizens regardless of educational background. Adult education should be designed to provide a "second chance" for those people past the college age who can benefit from programs. Increasing financial access to programs through a voucher program is of primary importance in equalizing opportunity.

For those in the system, cost was not a determining factor in their decision to pursue additional study.

Of those currently being served, 60% of men and 24% of women are being subsidized by their employer. A sizeable majority of students indicate that they would take the course they are taking even if the tuition were higher. This fact is borne out by the fact that although public tuitions are roughly 1/2 to 1/3 private tuitions, the composition of the student clientele is identical in each case.

Although they are willing to pay more, they are able to recognize a bargain, and when identical programs and courses are offered by public or private institutions in the same service area, students are drawn to the lower cost public institution. Hence, while total demand among the group now served appears to be inelastic, the choice between competing institutions is highly price elastic. That is, that for those types of students now in continuing education programs, the decision to take a given subject is not affected much by price in the existing range ($60-$203 per course). However, when two geographically proximate institutions are offering the same course at two different prices, the consumer is likely to select the lower-cost course.

However, for adults with low income and small assets, the demand is highly price elastic. Thus, even current tuition levels are sufficiently high so as to constitute a barrier to participation. That barrier,
together with other barriers discussed elsewhere account for the low participation rates among these groups.

Social policy must therefore provide the means to remove this financial barrier. To implement that social policy by the instrument of flat-rate low tuition through institutional subsidies is a crude tool at best, for it subsidizes equally the low and the high income adult. The appropriate instrument is the clientele specific voucher because it is precise in targeting aid, and because it provides an advance guarantee of aid at the point when a low income person is making a decision to resume his education and is therefore likely to affect his decision.

Another source of support for adults in need could be employers. Thus, a tax credit policy should be implemented such that employers receive a tax credit for funds expended for tuition or contract educational services at any postsecondary institution participating in the M.O.L.N. Such a tax credit is desirable from another perspective. It will encourage closer ties between employers and continuing education institutions. A limited tax credit scheme passed the Legislature in 1973 (House 7056). It is a good beginning but it should be substantially broadened.

The reason a tax credit is justifiable on social policy grounds is that continuing education can be viewed as an investment which will yield a stream of benefits to the employer, the student (employee) and to the Commonwealth. The benefits to the employer (higher productivity of his employee) justify his expenditure; the employer gives as a fringe benefit the benefits which accrue to the student; and the State benefits from the contribution to economic growth and corporate and individual income which stems from the increased productivity. Thus a sharing of cost between employer and the State is appropriate.

Two existing State voucher programs must be noted in any discussion of student aid. The so called "teacher-vouchers" and "veteran-vouchers" are really not vouchers at all for they carry no money attached to them. Nevertheless, they set an important precedent for the use of specific-clientele-group vouchers in Massachusetts, a precedent applicable to other groups (e.g., low-income disadvantaged as recommended).

The problem with the present veterans vouchers is that as voted by the Legislature they entitle a Veteran to take continuing education courses free at public institutions subject to the approval of the institutional governing boards. However, the "veterans vouchers" cannot be redeemed by an accepting institution for cash from the State. Thus, they really are not vouchers at all from the point of view of education finance theory, or from the perspective of a budget conscious continuing education administrator. What happens is that veterans are enrolled in classes which still have to break-even on the tuitions of other students, and hence classes are larger than would otherwise be the case, and support expenditures for the classes are less per student. In effect the "veterans voucher" entitles the veteran to a free but diluted course and education.
Because of this factor of dilution of educational quality, and because of the problems of the occupying of class slots by non-paying students when they could be occupied by cash-paying customers, the Board of Regional Community Colleges has exercised its right to refuse acceptance of veterans vouchers at the community colleges. The Board of Trustees of State Colleges has not yet made the same decision, but some pressures exist to do so.

A solution is for the Legislature to make the veterans vouchers truly vouchers which carry a cash value. This would require a specific appropriation. If that were done, the vouchers could also be made usable at private institutions and proprietary and independent schools.

The second major voucher plan in operation is the State College System "teacher voucher". In return for school system teachers supervising State College day students in student teaching, the College grants them a non-specific "teacher voucher" entitling the teachers to a free course in continuing education at any State College. Exactly the same problems of revenue loss and dilution of educational quality as described above for the "veterans vouchers" apply, and there is considerable sentiment in the State College System against the teacher vouchers in their present form (i.e., without their being redeemable in cash by the recipient institution). The solution here too is for the Legislature to make them truly vouchers with a cash value. If student teacher supervisors have to be paid, then they should be paid as a direct cost of operation of the day programs at the Colleges and appear as a line item in the budget of the day College. The present arrangement means that cash paying students in continuing education have to absorb an expense of the day college by having their classes diluted in quality due to resource constraints.

Because of these weaknesses, the current program of allowing veterans and certain teachers to attend classes tuition-free should be terminated on their present basis and be subsequently conducted as true voucher programs with state cash appropriation. The cash vouchers should be tendable at either a public, private or proprietary institution. The principle of vouchers for veterans, and certain teachers who have provided in-service training guidance to a student from a Massachusetts public institution are not inherently unreasonable. However, the present system of offering a "voucher" without appropriating any money for it is a disservice to the intended recipient of the voucher.

Consider a veteran who is told by an act of the Massachusetts legislature that he has an entitlement to free courses in continuing education. He first finds that if he tries to use that entitlement at a community college, he will not be accepted for the Board of Regional Community Colleges has decided not to accept veterans on a no-tuition basis (this is a right each board has within the law). In the State college system, he finds that he can indeed take courses on a no-payment basis, but what he does not realize is that that entitlement causes an increase in the student-faculty ratio in classes to accommodate for the number of tuition-free veterans. Both he and the paying students in the class are receiving less in the way of attention and individualized instruction than they would have obtained in that same class had all the students been paying on a cash basis.
The existing Federal Law Enforcement Education Program vouchers provide an excellent demonstration of the responsiveness of the continuing education system to specific clientele vouchers. The availability of these vouchers for law enforcement personnel has led many institutions to respond to the need and create law enforcement education degree and non-degree programs. The program is a striking demonstration of the advantages of demand versus supply subsidization. It was not until this demand subsidy became available that most institutions (there are some commendable exceptions) seriously considered instituting criminal justice and law enforcement programs.
APPENDIX

FOR CHAPTER

ON

THE RELATIONSHIPS TO THE OPEN LEARNING NETWORK

OF NON-DEGREE GRANTING PROVIDERS OF

POSTSECONDARY LEVEL INSTRUCTIONAL SERVICES


January 19, 1974

Dr. George Nolfi        Ms. Valerie Nelson

Ms. Christelle Paynter
The text which this appendix serves to elaborate is a summary report which delineates the variety of options for involvement in the Open Learning Network and the likelihood that each type of institution would be interested in that particular option.

-- All institutions would welcome information/referral services of the Open Learning Network (providing information on programs, exams, etc.)

-- Educational institutions involved in credit-vocational areas would be interested in MOLN credit-credit-certification arrangements for both their students and MOLN students in their courses.

-- Educational institutions involved in noncredit activities and employer training programs would only be interested in the provision of examination or other evaluation for their students, but would not be interested in certification of their programs.

-- Educational institutions would be interested in contracting for faculty, faculties, and courses.

More detailed discussion of various desired options is given below for each type of institution and a chart of options for relationships of non-degree granting institutions with the Open Learning Network is included.
### Planning & Coordination of Programs

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<th>Employer Training Programs</th>
<th>Regional Vocational Technical Institutes</th>
<th>Military Programs</th>
<th>Adult Education</th>
<th>OIC &amp; Others</th>
<th>Arrangement with Private Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract for Institutional courses to MOLN</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>

### Instructional Services provided by MOLN (cassettes, tapes, etc) for a fee to institutions

<table>
<thead>
<tr>
<th>Proprietary &amp; Independent</th>
<th>a) Vocational</th>
<th>b) Avocational</th>
<th>Correspondence Schools</th>
<th>Employer Training Programs</th>
<th>Regional Vocational Technical Institutes</th>
<th>Military Programs</th>
<th>Adult Education</th>
<th>OIC &amp; Others</th>
<th>Arrangement with Private Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Services provided by MOLN (cassettes, tapes, etc) for a fee to institutions</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

X: indicates likely interest on part of institution

--: indicates possible option, but minimal likely interest on part of institution

Blank space: not relevant
Proprietary, Independent-Non-Profit, and Correspondence Schools

A variety of proprietary (for profit) and non-profit schools in Massachusetts offer vocational or avocational training programs. In 1972-73 there were 272 schools operating in business and office, medical and health, trade and technical, cosmetology, and other fields (not included in this count are dance and language schools). These schools enrolled 37,511 students in total. Added to this were 6,000 students in correspondence programs. Of the 37,511 students, 79% were in proprietary schools and 21% in independent non-profit schools. Average enrollment is low—137 students per school.

These schools vary the length of their programs from one week to over 2 years. Business and office courses show the widest spread in length of program, with many students taking less than 3 month programs, many taking between 1 and 2-year programs. Medical - nursing programs take 3 years, trade and technical schools concentrate around 18 months. See the following table for detailed data.

These schools are spread across the State; but 132 schools with 63% of enrollments are in Boston where community colleges have only this year begun to compete for students.

Proprietary and Independent Schools and Certification

Most of these schools offer some form of certificate for completion or diploma, but they do not grant degrees. This may be explained by several factors:

1) Until recently proprietary schools could not apply to the BHE for degree-granting authority. Now that that option has been opened to them, a few are filing applications.

The BHE should encourage proprietary and independent schools to apply for degree-granting status for current degrees with a general education component. Thirteen other states now authorize 2-year degrees from proprietary schools in technical fields (Pennsylvania, Georgia, New York, Arizona, New Jersey, Illinois, Texas, Missouri, Ohio, Florida, California, Indiana, and New Mexico.

2) Schools have to have a "2-year" Program to grant an associate degree. Many of these schools have only 12 or 18 month programs, though the total hours of instruction may be more than that obtained in 2 years in a less intensive college program.

73% of students are in schools with programs of less than 2-years. Unless these schools expand their programs, they are not eligible for independent degree-granting status and would need to be certified by the MOLN.

3) The BHE requires a certain percentage of courses be in general education. Proprietary schools are confined to specialized clusters of occupational training and have neither facilities nor faculty to teach a wider range of courses. It is risky to move into subjects they are not familiar with and many do not want to change their basic nature as specialized schools.
### SUMMARY OF ENROLLMENTS AND GRADUATES IN PROPRIETARY AND INDEPENDENT SCHOOLS BY CATEGORY OF SCHOOL

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business &amp; Office</td>
<td>11,215</td>
<td>7,124</td>
</tr>
<tr>
<td>Medical &amp; Health</td>
<td>6,950</td>
<td>2,912</td>
</tr>
<tr>
<td>Trade &amp; Technical</td>
<td>14,800</td>
<td>6,334</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1,511</td>
<td>1,042</td>
</tr>
<tr>
<td>Other Institutions</td>
<td>3,035</td>
<td>2,622</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37,311</td>
<td>19,934</td>
</tr>
<tr>
<td>Correspondence</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>43,311</td>
<td></td>
</tr>
</tbody>
</table>

Of Schools Other than Correspondence Schools:

- **Proprietary Schools**: 29,352, 17,259
- **Independent Schools**: 7,959, 2,675

**Note**: In cases where numbers were not available, estimates were made.
ENROLLMENTS AND GRADUATES IN PROPRIETARY AND INDEPENDENT INSTITUTIONS BY TYPE OF SCHOOL

<table>
<thead>
<tr>
<th></th>
<th>Business and Office</th>
<th>Medical and Health</th>
<th>Trade and Technical</th>
<th>Cosmetology</th>
<th>Other Institutions</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENROLLMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 3 mos.</td>
<td>3445</td>
<td></td>
<td>869</td>
<td></td>
<td></td>
<td>4314</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>570</td>
<td></td>
<td>1177</td>
<td></td>
<td></td>
<td>1747</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>1080</td>
<td>32</td>
<td>1615</td>
<td>1436</td>
<td></td>
<td>4163</td>
</tr>
<tr>
<td>1 year</td>
<td>1893</td>
<td>435</td>
<td>105</td>
<td></td>
<td></td>
<td>2433</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>2685</td>
<td>960</td>
<td>7871</td>
<td>75</td>
<td>3035</td>
<td>14,626</td>
</tr>
<tr>
<td>2 years or more</td>
<td>1542</td>
<td>5523</td>
<td>2963</td>
<td></td>
<td></td>
<td>10,028</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,215</td>
<td>6950</td>
<td>14,600</td>
<td>1511</td>
<td>3035</td>
<td>37,311</td>
</tr>
</tbody>
</table>

GRADUATES

<table>
<thead>
<tr>
<th></th>
<th>Business and Office</th>
<th>Medical and Health</th>
<th>Trade and Technical</th>
<th>Cosmetology</th>
<th>Other Institutions</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 mos.</td>
<td>3257</td>
<td></td>
<td>839</td>
<td></td>
<td></td>
<td>4096</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>350</td>
<td></td>
<td>1010</td>
<td></td>
<td></td>
<td>1360</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>694</td>
<td>17</td>
<td>708</td>
<td>1004</td>
<td></td>
<td>2423</td>
</tr>
<tr>
<td>1 year</td>
<td>1128</td>
<td>355</td>
<td>84</td>
<td></td>
<td></td>
<td>1567</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>1223</td>
<td>701</td>
<td>2460</td>
<td>38</td>
<td>2622</td>
<td>7044</td>
</tr>
<tr>
<td>2 years or more</td>
<td>472</td>
<td>1839</td>
<td>1133</td>
<td></td>
<td></td>
<td>3444</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7124</td>
<td>2912</td>
<td>6234</td>
<td>1042</td>
<td>2622</td>
<td>19,934</td>
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</tbody>
</table>
NUMBER OF PROPRIETARY AND INDEPENDENT SCHOOLS IN MASSACHUSETTS, ENROLLMENTS AND NUMBER OF GRADUATES BY AREA

### BUSINESS & OFFICE

<table>
<thead>
<tr>
<th>School Type</th>
<th>Springfield</th>
<th>Pittsfield/North Adams</th>
<th>Amherst/Northampton</th>
<th>Worcester</th>
<th>Fitchburg/Gardner</th>
<th>Framingham</th>
<th>Salem/Lynn</th>
<th>Andover/Lowell</th>
<th>Burlington/Bedford</th>
<th>Brockton</th>
<th>New Bedford/Fall River</th>
<th>Falmouth/Barnstable</th>
<th>Boston</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>29</td>
<td>56</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1026</td>
<td>-</td>
<td>-</td>
<td>310</td>
<td>-</td>
<td>500</td>
<td>540</td>
<td>350</td>
<td>160</td>
<td>210</td>
<td>390</td>
<td>-</td>
<td>70</td>
<td>7659</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>699</td>
<td>-</td>
<td>-</td>
<td>202</td>
<td>-</td>
<td>340</td>
<td>376</td>
<td>140</td>
<td>132</td>
<td>150</td>
<td>110</td>
<td>63</td>
<td>4912</td>
<td>7124</td>
</tr>
</tbody>
</table>

### MEDICAL & HEALTH

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>504</td>
<td>174</td>
<td>10</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>180</td>
<td>66</td>
<td>4</td>
</tr>
</tbody>
</table>

### TRADE & TECHNICAL

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1128</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>713</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### COSMETOLOGY

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>109</td>
<td>37</td>
<td>108</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>74</td>
<td>25</td>
<td>75</td>
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### OTHER INSTITUTIONS

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>411</td>
<td>274</td>
<td>137</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>357</td>
<td>238</td>
<td>119</td>
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### TOTALS

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>31</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>3178</td>
<td>485</td>
<td>147</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>2023</td>
<td>329</td>
<td>123</td>
</tr>
</tbody>
</table>

Note: In cases where numbers were not available, estimates were made.
In the long-term the BHE should institute a new degree, Associate of Occupational Science. Such a move would encourage high-quality 2-year occupational programs. New York now grants an Associate of Occupational Science degree. Pennsylvania has authorized an Associate of Specialized Business (ASB) and Associate of Specialized Technology (AST) since 1969. This degree covers 2 years of work, 3/4 of studies in a major area of specialization and 1/4 in related courses supporting the major area. There are no general education requirements. Licensed proprietary business, trade and technical, and health-care schools are eligible to apply for degree-granting status. The success of the program is judged by placement records of graduates as well as by standard evaluation of courses.

If the 2-year programs were authorized as degree-granting by the BHE, then transfer of credits into the MOLN would be by the same procedure as for private colleges. Until such time, however, as the BHE authorizes such programs, there is a need for the MOLN to certify proprietary students.

The need for certification of proprietary students is recognized by many individual degree-granting colleges already. Graduates from East Coast Aero Tech can transfer credits into colleges across the country. Northeastern and Stonehill accept transfer students with credits from several proprietary schools in Massachusetts. Other colleges are in the process of instituting such transfer arrangements. This recognition is also evidence of the fact the proprietary school programs are coming to be generally accepted among knowledgeable educators as offering quality programs.

But such arrangements between proprietary schools and degree-granting institutions negotiated on a school-by-school basis take time and are not yet adequate to serve the needs of students who would want to transfer their credits into a degree program. The MOLN can serve this function across a larger number of schools.

Currently if a student from a proprietary institution wants to get credit in a degree-granting institution, he has to try to negotiate on an individual basis with the school. If he had MOLN credit and could see that with a number of additional courses he could get an MOLN degree, he would be encouraged to do so.

Options for Arrangements With Proprietary Institutions

There are two means of crediting material taken in proprietary schools: 1) graduates take competency exams in the MOLN; 2) specific programs in these schools are evaluated by the MOLN and certified as creditable.

The first option should be open to all people interested in the MOLN to capitalize on their background and past education. But the second option is of particular interest to proprietary and independent institutions. They would like to make formal arrangements for certification of their courses and programs.
Certification of courses and programs would affect both A) their own students and B) students of the MOLN:

A. Students from non-degree-granting institutions enter the MOLN. This option concerns the student who enters the MOLN from a non-degree-granting institution. Schools would like to be able to offer their students the possibilities of additional courses through the MOLN and of eventually receiving a degree from the MOLN. For example, a school like Massachusetts Radio and Electronics would provide its one-year curriculum to its students and then either:

1) send students to MOLN-sponsored courses at other institutions such as Boston University for a year, or

2) contract for MOLN faculty to teach courses on the Mass. Radio and Electronics site.

Whether a school would choose 1) or 2) would depend on its size. Small schools would have to send their students out (1), while large schools would have enough students to warrant bringing in outside faculty (2). In either case, proprietary schools would favor courses taught by faculty and not by technological means.

Students would probably take MOLN courses after they had completed their proprietary school training rather than at the same time. Proprietary programs are usually intensive and not easily separable over long periods of time. Rather than mixing proprietary and general education at the same time, they should be sequential. The second phase of general education through the MOLN should be designed to show the relationship of occupational training studies and academic work, between the practical and the theoretical. This is to some extent an "upside down", reverse model of a curriculum--moving from the specific to the general.

At the end of this second year of MOLN courses, Massachusetts Radio and Electronics would be able to provide its students with the MOLN degree. This option has value to these schools because it would attract more students and because they would like to maintain control over the curriculum of students. They would like to keep their students coming to them rather than going to the MOLN. If enough students are interested then the school can be involved in the design of the second year as well.

This arrangement would have positive benefits for the students, since the extensive placement services and the personal touch of a small proprietary school would still be provided. The focus of their study would remain with the home institution.

B) MOLN students are referred to non-degree-granting institutions. This option concerns the student who comes directly to and enrolls in the MOLN. In this case, the MOLN would refer the student interested in certain vocational skills to a program or course(s) at a non-degree-granting institution.
Two possibilities exist:

1) the student pays the school directly at the school's regular fee. The MOLN would then grant credit for those courses.

2) the student pays the MOLN which contracts with the school to enroll the student. The MOLN could either pay the regular fee of the school or contract at a set fee per credit hour of study. For some courses in proprietaries this may involve more or less than three credits.

The standard fee payment poses a problem, however, for schools with high equipment costs. Classroom courses can be provided within the range of $25-$45/credit hour. But laboratory courses are substantially more expensive because of equipment costs. Special provisions would have to be made for these expensive courses, or schools would not participate.

Evaluation and Certification of Programs and Courses

In cases where there is interest on the part of students, the institution, and the MOLN in transferring credits from proprietary schools into the MOLN, two procedures must be followed. First, the program must be evaluated for offering coursework complementary to the objectives of the MOLN, in relevant subject areas at the postsecondary level, and with standards of quality set by the MOLN. Second, courses and lab work must be translated into credit/hours to be applied to an MOLN degree.

A. Evaluation of Programs

Proprietary and independent schools in Massachusetts are currently evaluated for quality by a variety of means:

First, there are two major national accrediting agencies--one in business fields and one in trades and technology. The Accrediting Commission for Business Schools (ACBS) and the National Association of Trade and Technical Schools (NATTS) each accredit between 10-20 of the best schools in those fields in Massachusetts. There are fifteen other specialized accrediting commissions in the health and engineering fields.

Secondly, all schools are evaluated by the Veterans Administration for eligibility to accept veterans, and the U.S. Office of Education for eligibility for the Federal and Insured Student Loan (FISL) program.

Third, most schools are required to be licensed by the State Department of Education or the Board of Registration. Forty trade schools and forty-six business-related schools are reviewed annually for licensing by the Department of Education. Nursing schools and cosmetology schools are reviewed by the Board of Registration. Tractor trailer schools are reviewed by the Division of Motor Vehicles. Health-related and other schools are not reviewed by any state agency.

Given these current evaluations of the quality of programs, what methods should the MOLN use to determine the certifiability of programs?
The appropriate MOLN procedure would be to accept NATTS or ACBS accreditation as the basis for program eligibility. Some states automatically accept NATTS or ACBS accreditation as qualifying schools for degree-granting status. The question becomes how many MOLN credits should be granted for the program. To determine the number, each proprietary school should submit an application to the MOLN which would comprise a self-assessment by the school of the credits which would be received by a student learning what the school program teaches if that student were in a credit granting school. This analysis should be based on program content. Programs are quite diverse across proprietary schools and blanket certification cannot be given. Then a visiting committee of faculty members from a spectrum of public, private, and proprietary institutions and employers in the given subject area should be appointed to visit the proprietary school and make an independent determination of the appropriateness of the number of credits to be granted for the program. In cases of dispute between the school and visiting committee over the number of credits to be granted, the matter should be appealed for final decision by an MOLN Certification Appeals Board.

For those schools without national accreditation, a review procedure must be instituted. It should involve formal application by each interested school and review by a visiting committee.

A section on specific guidelines available to the MOLN which can be used to determine work for which credit can be granted is provided in an attached section.

There is also a question as to how to certify past graduates of proprietary schools. In addition to the provision of examination options, the MOLN should consider granting credit for previous years if the current year has been certified and is similar and/or if the student can prove his competence by passing several courses at the next level of difficulty.

B. Translation of Clock Hours into Credit Hours

Most proprietary schools offer courses and programs measured in clock hours—time spent in the class or lab in total. Generally, students spend about twice as much time in class than students in colleges because a lot of study time is built into the program. Courses will also vary in their clock hour length and whether the class is a lecture or lab work will determine how much credit should be given.

These differences can be handled by a method of translation of clock hours into credit hours. Generally, 15-16 clock hours of a lecture course are equivalent to 1 credit/hour, (a 45-48 clock hour course would be 3 credits), while 25-30 clock hours of a lab course are equivalent to 1 credit/hour (a 75-90 clock hours course would be 3 credits). Such formulae have been developed for use by proprietary schools and a more refined set should be systematized by the MOLN.

The MOLN Contracting for and Providing Instructional Services

Another possible form of cooperation between the MOLN and proprietary schools is contracting for services and resource use. The MOLN might contract with a proprietary school to provide a new course or a program to an
11.

entire class of MOLN students. Part of the contract might involve provisions for development of new curricula or teaching materials. It might also contract for use of proprietary school faculty or facilities. Examples of extensive use of adjunct faculty are York Community College in Maine and Vermont Community College.

In addition, proprietary schools might contract with the MOLN for certain types of services to be provided by the MOLN. Examples are faculty to teach courses on proprietary school sites, video cassettes, and other instructional materials.

Correspondence Schools

In 1970 over 5 million people across the country were studying by correspondence. Of these about 1 1/2 million are in schools accredited by the National Home Study Council. If Massachusetts had 1/50th of this total, there would be 30,000 correspondence students in the accredited schools alone. In addition, there are 6,000 students in Massachusetts-based correspondence schools. The programs of correspondence schools are similar to those of proprietary schools--mainly in vocational skills.

Credits should be accepted by the MOLN for appropriate postsecondary level work in the accredited correspondence schools. These schools would be amenable to program review by a process similar to that for resident proprietary schools. Non-accredited correspondence schools would have to be reviewed by a stricter procedure.

Employer Training Programs

Employers in Massachusetts provide two kinds of formal education to their employees: in-house education programs and external tuition reimbursement programs at colleges. It is the in-house education programs which might be considered for credit by the MOLN, since employees taking courses at colleges are already receiving credit.

Employers should be divided into three types, by size, to distinguish their interests and needs in the MOLN:

1. large firms - over 500 employees
2. medium size firms - 50-500 employees
3. small firms - under 50 employees

In general, the in-house programs are in the large firms and it is for these that certification is a possibility. Medium-size firms are probably not able to support in-house programs; for these the external tuition reimbursement arrangements are of most concern. Small firms may not support in-house or external programs, but their needs for formal education and in particular for credit are likely to be minimal.

Education Needs of Employers

Employers in Massachusetts need employees with education and skills to run what is in general a more technically complex economy than in
Roughly speaking, education needs range from general education which would be valuable to work in a variety of firms, through skill training, to very specific job training which may be applicable and thus valuable to only one employer in the state.

Most training which goes on inside firms is actually on-the-job training, but sometimes training needs can be aggregated across employees and best provided in a classroom setting. This training may be specific to the needs of that firm or may be general education if the employer feels that his employees need it.

Basically, however, employers will prefer to send their employees to colleges and universities for courses offered on campus. Programs are offered in-house when either: a) education is more specific to the firm than what is offered in nearby colleges; or b) the employer feels he can do a better job of teaching. Better may be defined in terms of classroom atmosphere, design of curriculum, convenience to employees, lower cost, and other factors.

In a survey of 134 Boston area employers carried out by the American Society for Training and Development, it was found that 71 (53%) offered in-house courses, while 129 (96%) offered tuition reimbursement plans. The major reasons for providing tuition-aid were cited as "to enable employees to get ahead in company" and "to make employees more productive." In most firms (77%) less than 10% of the employees avail themselves of tuition aid. Employer assistance is a major factor, however, in the operation of continuing education programs. Currently, 60% of male students are subsidized in some form, 32% by public or private employers.

To the extent that in-house programs teach material comparable to and part of a college curriculum, employees should be able to receive credit for their work. This general principal is recognized in a Fitchburg State/Raytheon arrangement. Raytheon faculty teach Raytheon employees on the Raytheon site and Fitchburg State credits are awarded. If other firms are interested in such arrangements, this option should be open to them through the MOLN.

**Employers and Services of the MOLN**

The primary need for cooperation of employers with the MOLN is seen by employers to be in better linking of programs to the jobs in each local area. Employers feel that graduates of full-time and continuing education programs are mismatched to the local economy. As a result, serious shortages of workers exist in some skills, while surpluses of workers exist in others. These shortages and surpluses are costly to both the employers and the students who cannot be hired. Employers are greatly interested in participating in planning and counseling efforts to improve the process of skill retraining and upgrading. Cooperative arrangements should be made through each open learning center.

Interest in educational arrangements with the MOLN may vary by size of the firm:
1) Large firms: These firms employ about 1/5 to 1/4 of the labor force or 500,000 to 600,000. Their first interest is in having more direct instruction provided by the MOLN which is relevant to their needs, and which would presumably be reimbursed by the firm. Secondly, they are interested in credit options for their employees in in-house programs. They are minimally interested in media software, packaged programs or other instructional materials, since they feel that these are already available for purchase now from private business sources.

Employers vary in their view of the best way to certify work done in employer programs. Most feel that the employee should be given the chance to take examinations or be otherwise evaluated for credit by the MOLN on the basis of his employer training. They would like to be able to offer their employees this option which would involve evaluation of each student as an individual case.

There is difference of opinion, however, about whether employer programs themselves should be evaluated to carry credit. This option would mean any student who finished the course or program would automatically receive credit by virtue of prior MOLN evaluation of the course. Although some employers would be interested in having formal arrangements for crediting with the MOLN, on balance a majority would not.

The lack of interest on the part of some firms stems from a belief that their programs would not be creditable. Others resist any review or involvement with the MOLN because 1) they prefer to keep their programs relatively secret from competitors and 2) they feel formal arrangements would lead to undesirable changes in their program. Many firms run employee programs on a non-graded basis, for example, because they feel employers will not participate if there is a chance they will fail. Still others have had unfortunate experiences with government agencies or educational institutions and wish to design their own programs without interference.

2) Medium-sized firms: These firms are less likely to have extensive training programs than are large firms. However, they will sponsor tuition-reimbursement. The education needs of medium-sized firms are thus being met in some measure by the current continuing education system. There are two gaps in this system, however:

a) Some areas of the State are not adequately served by continuing education programs. In these areas of the State, the MOLN could provide more accessible programs, through mobile faculty, branch campuses or other means.

b) Current programs do not necessarily serve the needs of employers. Training directors are rarely consulted in the design of programs currently. They would be interested in the offering of courses more closely designed to their needs and with their insights in mind. Thus closer coordination with employers and the MOLN is desirable.

3) Small firms: These firms have different educational needs than large firms do. In general, they are retail operations and promotion
and advancement do not depend on general education or degrees. The Small Business Administration is also currently serving the needs of about 3-5,000 small business owners for management skills. These courses, although involving comparable subjects to college courses, are practical rather than theoretical. Those courses which are run on the community college campuses are noncredit. For these reasons, the MOLN need have no direct relationship with small firms.

Union Apprenticeship Programs

Procedures for certification are suggested similar to those for employer training programs; limited certification of programs but options for credit by examination or evaluation.

Public Regional Vocational/Technical Schools

Some of the 27 public regional vocational/technical schools in Massachusetts offer 13th and 14th year courses in technical curricula. Currently credits are not transferrable by their students into the associate level or bachelor's degree. However, some students from community colleges do take courses in the voc/tech schools and receive credit for such work.

The courses offered in the vocational/technical institutes should perhaps be creditable in the Massachusetts Open Learning Network. However, the expansion or contraction of such programs will depend on decisions about how much 13th and 14th year technical education should be given in voc/tech schools vs. community colleges. Pending this decision, formal arrangements with voc/tech schools should be explored on a case by case basis -- looking at individual 13th and 14th year programs in individual schools.

Military Programs

There are about one million veterans in Massachusetts, many with extensive training beyond the basic training level. In the last few years, the comparability of military programs to college level work has come to be generally accepted and such systems as New York accept military training for credit. The colleges of the military branches have been in existence for years -- West Point, Air Force Academy, etc. -- and recently community college programs have been formalized in such programs as Community College of the Air Force.

The transferral of credits from the military into the MOLN is greatly facilitated by the Committee on Accreditation of Service Experiences (CASE) guidelines.

Adult Education Programs

About 150,000 people enroll each year in adult education classes in the public high schools or in private centers. A majority of these students are women and they are taking avocational courses. They may take courses such as in languages which would also be offered in degree-granting institutions. A primary reason for enrolling in adult education is that it is noncredit and costs are low.
Because students have made this choice for noncredit courses, it is unlikely that they would be interested in MOLN credit. Thus provisions for course or program certification would be unnecessary. However, an occasional student may wish to receive credit for a general education course taken in an adult education program. For this student, an option of credit by examination would be desirable.

Adult education programs could be useful resources for contracting to the MOLN, particularly in terms of facilities. There are about 150 high school programs offering courses beyond basic education and these sites could be utilized as branch campuses. Course and faculty contracting from the MOLN is also a possibility.

Instructional services provided for a fee by the MOLN would potentially be utilized by adult education programs, particularly private centers.

**OIC and Others**

There are a variety of other public and private programs involved in education and training. Those involved in vocational training, in particular, would be interested in the options of credit by examination or other evaluation to their graduates. Contracting for services to the MOLN and use of services provided by the MOLN would be options of interest to them as well.

**Guidelines Available to the MOLN which can be Used to Determine Work for which MOLN Credit can be Granted**

A body of experiences has accumulated in the accreditation of post-secondary level learning in non-degree granting institutions, schools, programs and centers. Thus, the problem of deciding what learning, and where, is eligible for credit is simplified somewhat. The MOLN should regard as acceptable proven practices and accreditation by other bodies. Thus if a proprietary school is accredited by one of the national accrediting associations, advice from that association should be used as the basis for awarding MOLN credit. The same is true for the adaptation of practices in other states.

There are clearly appropriate times to use MOLN faculty visiting committees and/or to examine graduates to ascertain quality of learning.

**ASSOCIATIONS AND AGENCIES WHICH ACCREDIT PROGRAMS OR SPECIAL PURPOSE SCHOOLS***

| Accrediting Commission for Business Schools | Business Schools |
| National League for Nursing | Associate Degree Program in Nursing |
| American Association for Nurse Anesthetists | Anesthesiology |

* The Six Regional Accrediting Associations which accredit institutions, not programs are not listed here.
Cosmetology Accrediting Commission
American Dental Association, Council on Dental Education
Engineer's Council for Professional Development
American Board of Funeral Service Education
American Medical Association, Council on Medical Education
Accrediting Bureau for Medical Laboratory Schools
American Medical Association, Council on Medical Education
National Association for Practical Nurse Education and Service
National Association of Trade and Technical Schools
National Home Study Council
National League for Nursing
American Medical Association

Cosmetology
Dental assistant, dental hygienist, dental technician
Engineering Technology
Funeral Service education
Inhalation therapy technologist
Medical laboratory technician
Medical record technician
Practical nurse education
All trades and technologies
Nursing, practical nursing
Radiologic technologist

MODELS WHICH THE MOLN MIGHT ADAPT ON PART OF ITS GRANTING CREDIT FOR POST-SECONDARY INSTRUCTION IN NON-DEGREE GRANTING INSTITUTIONS, SCHOOLS, PROGRAMS AND CENTERS

Servicemen's Opportunity College

Community College of the Air-Force

Requires credit for in-service educational experience (USAF, CLEP, CPEP, AP, Challenge exams, CASE, etc.).

Career Education Certificates are received by CCAF for programs which combine technical education carried out through existing mutually affiliated schools of the Air Training Command - combined with related education from cooperating community and junior colleges. Objective is to create a career development pattern for enlisted personnel so they can get credit.
Committee on Accreditation of Service Experiences (CASE) for service related educational experience. CC of AF provides technical training in job specialties - uses semester hours and course technical content to transcribe into credit which combined with civilian course work is Accredited by Commission of Occupational Education Institutions of the southern Association of Colleges and Schools.

Southern Association of Colleges and Schools

The University of the State of New York

Southern Association of Colleges and Schools

This Commission of the American Council on Education evaluates USAFI courses and tests in terms of civilian credit and makes credit recommendations. A guide has been published which is widely used by colleges and universities across the government. Since the Commission has been engaged in the accreditation of non-traditional learning experiences since 1945 it is now considering the expansion of its activities in the measurement of formal and non-formal educational experiences. If this expansion takes place it will be useful as a guide for certain MOLN credit giving functions. Further, while CASE efforts to date have been concentrated on "academic" subjects, some attention is now being paid to occupational subjects.

The "Standard Nine" Study recommends procedures for accreditation in adult Continuing and Extension Education Programs and educational efforts arising from the public service function of higher education. Related to this study has been the development of the continuing education unit.

College Proficiency Examination for the Regents External Degree

This Regional Accrediting Association has been accrediting post-secondary non-degree-granting (non-collegiate) occupational education institutions for three years. It is suggested that the MOLN, and indeed the New
England Association of Schools and Colleges adopt the Southern Associations Procedures.

Study of Alternative Paths to the High School Diploma suggest a regional learning service and programs leading to an external high school diploma in central New York. Given the fact that 25% of the prime market for the MOLN has less than a high school diploma, this model is needed in Massachusetts. Further, a recent Dept. of Labor study has shown that for adult students, those who were former high school dropouts perform as well in college as high school graduates.

Procedures, policies and standards for granting proprietary schools associate degree-granting authority could be applied in Mass. with little change.

Well-established procedures for approval of programs of post-secondary institutions (often proprie-taries) requesting approval of authority to grant the associate in Specialized Business and for the Associate in Specialized Technology Degree. The ASB and AST are technical associate degrees without a general education requirement. These are good procedures except for the fact that the requirements are back on a program extending over two normal academic years. Thus, an intensive program covering the same or more substance in less time unfortunately does not qualify. Clark-house of instruction might be more appropriate as a measure of extent of instruction and learning.

Recently received report on model state legislation for the approval of post-secondary educational institutions (including proprie-taries) to grant degrees provides guidelines which the MOLN could well bear in mind when deciding case of credit granting.
American Association of Collegiate Registrars and Admissions Officers

National Occupational Competency Testing Program

Publishes information for advisors of servicemen and veterans and for certifying officials regarding the certification of students under veterans laws.

Testing Program operated by ETS to grant credit for competency in 24 trade areas.

The point being made here is that the MOLN in no way must start from scratch in the determination of credit awarding for institutional programs in non-degree-granting settings. Rather the job is one of first adopting other evaluations, which in many cases should be sufficient for a credit-granting determination, and then performing independent review in those cases where a proxy evaluation to be relied upon cannot be found.

Research for Summary and Appendix

Three sources of information and opinion were utilized in the preparation of this material: 1) group and individual interviews; 2) a literature review and 3) questionnaire and other data collected.

I. Group and Individual Interviews

Group meetings were held with representatives of proprietary and independent schools, employer training programs, and unions. The following topics were discussed at each three-hour session:

--Possible roles for the MOLN - instruction and certification services.
--Possible roles for proprietary schools, employer training programs, unions -- basic issues, subjects, levels, interests.
--Implementation of certification programs of the MOLN.
--Implementation of instructional programs of the MOLN.

Individual interviews were also made with representatives of proprietary schools and associations, employer training programs and training associations, military training offices, adult education programs, and a correspondence school association.

The names of persons interviewed will be provided on request.

II. Literature Review

A literature review was made for information on proprietary schools, employer training programs, correspondence schools and others with regard to programs, students, effectiveness of training. A bibliography will be provided on request.

III. Data Collection

Data on proprietary schools and students was collected from the State Department of Education and from direct phone calls. Data on employer programs was collected by mail questionnaire.
APPENDIX
ON
TARGET CLIENTELES

January 19, 1974

George Nolfi    Valerie Nelson
Fulton Eaglin   Mildred Miller
I. Disadvantaged Clienteles

Disadvantaged clienteles in Massachusetts are basically three: (A) racial minorities which we have classified as blacks and English as a second language groups; (B) institutionalized persons further characterized as those chronically hospitalized, prison inmates and nursing home residents; and (C) special problem persons broken down as high school drop outs, unemployed persons, elderly, physically handicapped individuals and drug abusers and alcoholics. As a group, persons who are disadvantaged are generally low income and have had low previous education and/or high school preparation. They are recipients of some form of public assistance such as housing or vocational rehabilitation. They may be in need of English as a second language, or may be physically or emotionally disabled.

A. Racial Minorities are blacks and persons who speak English as a second language.

1. Blacks
   a. General Characteristics
      In 1970 there were 100,000 Blacks of age 18 and over. Twenty-six per cent or 26,400 of these had incomes of less than 125% of a poverty level as calculated by the U.S. Census Bureau. (For individual living alone the poverty level was about $1800 and the 125% of poverty level was about $2250.) While Blacks comprised 3% of the total population 18 and over, they comprised 6% of those with incomes less than 125% of the poverty level. While 42% of the total population 25 and over has less than a high school diploma, 51% of Blacks 25 and over has less than a high school diploma.

      (1) Needs and Interests
      The educational needs and interests of the State's Blacks have been characterized by both individual interviews and published research reports to be: financial support, commitment on the part of the State to the education of Blacks, outreach programs, courses in the community, sensitized teachers, guidance and counseling, remedial work and opportunities for advanced and professional degrees, high school diplomas and college degrees.

      Persons interviewed felt the commitment of the State to educate Blacks was insufficient, citing the poor schools in Black areas as evidence. The question most often raised was: How could Blacks be prepared for college, when in fact they had overcrowded classrooms, poor materials, few additional instructional aids and insufficient funds to help correct some of these problems? "The commitment of the State is verbal but not economic," one person said. "The State should stop spending large amounts of money for consulting fees for studying Blacks and other minorities, and appropriate that money spent on research about them to their inner city high schools and colleges."

      Remedial work necessary for minorities to gain proficiency in
the basic skills such as reading, writing, and arithmetic was cited as critical by both published reports and persons interviewed. Some schools have provided this kind of instruction and have been successful, others have failed. Yet all interviewed felt this was absolutely necessary.

Outreach programs which attempt to pull Blacks into education were cited as necessary. Both published reports and people interviewed indicated that Blacks had been excluded so often in the past that some positive programs now had to be created to attract them to education.

Many Blacks interviewed said they are tired of studying outside their community about middle class society. They wanted courses in their own community with subject matter relevant to them. Some person interviewed felt only separate educational institutions run by Blacks for Blacks in the major urban centers would fill this need, while others felt programs from other institutions would work if the home community were used for classes.

Guidance counselors and teachers sensitized to the cultures and different life experiences of Blacks were considered crucial. Many feel that large numbers of Blacks have received poor education because the teachers and the counselors really did not understand their problems or did not want to do anything to help them learn. Most persons interviewed wanted Black instructors and guidance counselors where possible, but understood that in some instances this would be impossible.

High school diplomas and college degrees were considered important by both the persons interviewed and the published reports. Diplomas, degrees and certificates of completion were seen by many as entrance fees to jobs and income. Without these, people were severely hampered when seeking employment.

Vocational skills leading directly to jobs were of interest to many Blacks. Both the published research and the persons interviewed felt getting a job was vital to improving the opportunities of a disadvantaged Black.

(2) Major Barriers to Participation

The major barriers to participation in present educational programs were considered four: psychological, economic, transportation and the lack of commitment on the part of the State. Several persons interviewed thought many Blacks have traditionally felt education was for "dem white folks", since programs in school were not directed at them but at others. They point to the poor schools in their own neighborhoods as evidence and indicate that where there are good schools in the neighborhood, they are denied access because of the academic entrance requirements.

Transportation to and from an institution is often times critical. If public transportation does not exist, cost becomes prohibitive. Perhaps a program like Northeastern's minibus which attempts to alleviate this problem could be helpful.

Lack of commitment on the part of the State was again cited as a problem since many interviewed felt an education would be effectively denied to many if the State did not allocate sufficient resources.
b. Characteristics of an M.O.L.N. Which Would Be Helpful to Blacks

(1) Outreach and Marketing

Outreach and marketing programs which were aimed directly at poor Blacks such as high school drop-outs and laborers would be extremely helpful, some people interviewed thought. As was pointed out in the discussion around needs and interests, many felt such an approach done correctly would bring large numbers to an M.O.L.N.

Advertising the existence of an M.O.L.N. on radio, T.V., in newspapers and through local community agencies was considered the fastest way to pass the information. Catchy ads which led Blacks to believe they were really being sought out would probably meet with success if laid out correctly. A Black advertising firm might do the best programming.

(2) Type and Extent of Counseling

Both published reports and interviews in Massachusetts indicate that extensive individual counseling of three types would be helpful to many Blacks. First, Black counselors who had either worked in or were presently working in the field they were telling people how to enter would be extremely helpful. Students want to feel others like themselves have been successful in their chosen profession or area of learning.

Secondly, people want job counseling while going to school, as an outside source of income is an absolute necessity for most in school. Finally, counseling which helps solve individual housing problems would be beneficial to many. Many students, particularly those who have to move from home to attend school, have acute housing problems because of racial discrimination.

(3) Modes of Certification

Persons interviewed thought oral and not written exams should be given where possible. Written exams were felt to carry the cultural biases of the writers. Oral exams were thought to be best if given by a group of people rather than one individual. The model proposed for orals is the procedure followed by many universities which grant Ph.D.'s. One person works with the individual as a faculty mentor over an extended period of time, while several persons who know a particular field well, get together to question that person.

Licenses, degrees and credit for life experience were considered absolutely necessary by many persons interviewed. As was cited under needs and interests above, degrees and the like mean better paying jobs.

c. Services to be Provided by M.O.L.N.

(1) Type of Curriculum Content

One of the major concerns many Blacks interviewed had about the design of M.O.L.N. was a fear that they would not be included in the designing of courses for their own people. Blacks and other disadvantaged groups said they are tired of having other people tell them what they should be learning. Thus, the first service with regard to content is to include Blacks in the planning of the curriculum.

As was stated in need and interests above, vocational skills are needed and desired by many as a route to better jobs and higher incomes. However, some Blacks may want to advance to a bachelor's degree
and graduate work. Thus, general education should also be an option for those with ability and motivation.

(2) Modes of Delivery
   (a) Structured classroom with relevant teachers and materials.
   (b) Credit by examination for both course work and previous life experience.
   (c) On-the-job training.
   (d) Closed circuit T.V. in the local community center or other community meeting place.
   (e) Videotapes and audio cassettes
   (f) Early morning classes, 6:00 a.m. to 12:00 noon and evening classes 6:00 p.m. to midnight

(3) Financial Needs and Available Resources

As was mentioned in Needs above, persons need three kinds of money: money for educational courses; room and board; and general spending. Available resources are generally State, federal and private foundations. Poor Blacks engaging in educational programs have very limited personal resources.

(4) Job Referral and Employment Counseling--Placement

Both persons interviewed and published materials indicated a real need for job referral and placement. Left on their own, many Blacks are unaware of the variety of opportunities available to them.

2. Second Language Groups
   a. General Characteristics

   In Massachusetts there are several different second language groups, the Chinese, the Portuguese, and the Spanish. The largest group by far and the one on which the most information has been gathered is the Spanish. Most of the following discussion is directly about the Spanish-speaking, but is generalizable to other second language groups.

   The Spanish speaking population of Massachusetts is approximately 330,000 in number. However, 180,000 of these are educated, long-time immigrants from Spain and Venezuela and can be found in a variety of middle-class occupations. This discussion focusses on primarily agrarian Puerto Ricans who have recently arrived as first generation immigrants. They are poorly educated, low achievers with no real skills. They are generally found in sea coast cities like Boston and then in lesser numbers in large urban areas throughout the state such as Springfield and Worcester.

   (1) Needs and Interests

   All published materials on educational studies of people who use English as a second language in the U.S. stress the importance of a bilingual program. Although the study of English should be primary, the use of the mother tongue facilitates learning in other subjects until a person is proficient in English. Persons interviewed felt general education is currently most often sought.

   Many Puerto Ricans interviewed wanted their people to be doctors, lawyers, and so on, and thus pushed for educational experiences which would achieve these ends. Yet, they admit many of the people in the actual population have fourth and fifth grade educations which
make higher learning almost impossible without some really basic skills being taught first. Where Puerto Ricans are placed in traditional state and community college programs their flunk out rate has been estimated at 75%.

On the basis of interviews, it was found that needs clearly conflicted with the interests in most of the Puerto Rican population. Many people needed jobs to survive and the low level skills necessary for survival, not academic degrees. Those persons who do seek immediate income-producing skills look for work as secretaries, auto mechanics, launderers, factory works, janitors, etc. Most of these require no general educational skills, although secretaries need English. In the short-term vocational skills would better meet the needs of Spanish-speaking persons than would general education.

Published reports indicated that federal aid to the Spanish's education is a real need. Studies thought that federal aid to education should stress cost-cutting techniques, through education vouchers, performance contracts, and year round schools, all of which bear on equal educational opportunities. They tended to say more emphasis should be on (a) diagnosing the reasons why students lag—is it motivation or ability?, (b) guidance and counseling to find appropriate programs, and (c) research and development of other viable programs.

Published studies tended to opt for bilingual, bicultural programs because they inculcated an appreciation of the native heritage. Teachers, they said, must be native to the country whose language they are speaking or must be bilingual. Published studies further indicated that pre-service training should be required to insure competency in the teacher since he is the means of communicating with the student; he too should be made aware of the distinctive nature of the native culture. Published studies indicated training programs should be established at college and university levels for greater language competency of professionals in the areas of education, social work, law enforcement and public health.

(2) Major Barriers to Participation

Both interviews and published materials indicate that the major barriers to participation in the existing educational system for second language groups are: English, cost, motivation, and lack of commitment on the part of the State. English is being taught around the State in places like Cardinal Cushing Center, ABCD, etc. Not all programs are successful since the ability to learn is low for those with little education.

The cost of education and limited financial resources are a problem. Almost everyone interviewed stated "a job to go along with the academic learning is a necessity." If possible the job should be related to the education being taken. Even if the education were free, many people would be hard put to participate unless they had an additional stipend. They could not afford the lost earnings from time spent in the class no matter how little that was.

Lack of motivation is a problem for many who have taken siestas in the sun from 2 to 4 p.m. every day for 20 years. Many have grown up in slums like Bromley Heath in Boston where education has
no value in the homes or in the peer groups. For those who try, it’s an uphill battle against all odds. Yet some published studies tended to indicate that where people really care, a general desire to learn can be engendered.

Persons interviewed thought a lack of commitment on the part of the State to educate the Puerto Ricans was a major barrier to participation, as it was in the case of Blacks. Most individuals in this category said the State should decide upon how many Puerto Ricans it was going to educate over a given period of years -- 1,000; 2,000; 5,000; etc. -- and then appropriate all the resources necessary to see that those 5,000 people or so succeeded.

b. Characteristics of an M.O.L.N. Which Would Be Helpful to Second Language Groups

(1) Outreach and Marketing

Many of the points cited for Blacks in Section I.A.1.b. (1) apply here as well. Perhaps a Puerto Rican advertising firm would be best used as most persons interviewed wanted their own people delivering services.

(2) Type and Extent of Counseling

The types of counseling sought by Blacks are also sought by the Puerto Ricans: see Section I.A.1.b. (2) above. In addition counseling to Puerto Ricans should be bicultural and bilingual. Both published materials and persons interviewed said that at least people steeped in the culture of the Spanish should counsel the Puerto Ricans if Puerto Ricans counsellors were not available.

(3) Modes of Certification

The Puerto Rican wants the same modes of certification sought by the Blacks as outlined in Section I.A.1.b.(3) above; however, two additional forms were sought. First, people want exams in Spanish until the English language has been mastered and, second, they wanted either blanket certification or individual certification by the M.O.L.N. for degreees obtained in foreign countries.

People interviewed said entry level courses should almost always be given in Spanish because most individuals who would be attracted to these would be the least adept at English.

The persons interviewed thought certification of foreign degrees would be very helpful. At present, thousands of foreign professionals in the U.S. are prohibited from practicing their professions here without first going to a U.S. school of the same type for extended periods of time. An M.O.L.N. would help many Spanish and others with English as a second language who are presently unable to practice their professions without first taking five or six years of work at an American university.

c. Services to Be Provided by An M.O.L.N.

(1) Type of Curriculum Content

Comments expressed by Spanish speaking persons were similar to those expressed by blacks in Section I.A.1.c.(1) above.

(2) Modes of Delivery

Modes desired were similar to those for Blacks as listed in Section I.A.1.c.(2) above.
People wanted courses or instruction taught in local Spanish speaking community centers. In Roxbury the Spanish and the Black communities frequently overlap, but Spanish persons interviewed made it clear they didn't want classes or instruction in black institutions.

(3) Financial Needs and Available Resources

Published materials and persons interviewed indicated that financial needs are the same as for Blacks (see Section I.A.1.c.(3)). The financial resources from personal incomes of Puerto Ricans may be even smaller. Federal and State programs do not exist for Spanish speaking although Massachusetts is one of the 20 states that has instituted the bilingual educational act.

(4) Job Referral and Employment Counseling-Placement

Such counselling is seen as necessary for Blacks; Spanish are often equally unaware of the opportunities that exist.
B. Institutionalized Persons: Mentally Ill, Prisoners and Nursing Home Residents

1. The Mentally Ill

a. General Characteristics

Persons interviewed said there are approximately 8500 mentally ill persons in 10 hospitals in the state of Massachusetts with a median age of 40-41. They divide into two groups: long termers, or people who were hospitalized when they were young, and have been in a hospital for an average of ten years or more; and short termers, or those who have been in a hospital for from 90 days to 6 months. Persons who do not get out in the first year or so will probably be in for an extended period of time. This is the case because of the present state of knowledge about mentally ill persons: either they respond early or they don't at all.

Educationally, chronically ill people tend to have high school educations or less, and if they have been hospitalized for 20 years or more, they are likely to have an only eighth grade education. Approximately 2500 people are 65 years of age or older and are on Medicaid. Perhaps 5-6% of all persons incarcerated are there because they are drug users. Most people are poor.

(1) Needs and Interests

Persons interviewed thought the educational interests and needs vary from group to group within the mental institutions depending on age and length of stay. The young and those incarcerated for short periods of time, they said, are both interested in and capable of sustained paces for short periods of time, generally shorter than eight hours.

Those interviewed thought that older persons and those incarcerated for long periods of time tend to lose interest in almost everything and want only to be pleasantly entertained in a passive manner. General enrichment programs like travelogues, plays, T.V. and picnics and the like make up their everyday worlds. The needs of both short and long termers are succinctly stated as two: (1) stimulation -- get them out of a rut by providing them with astrology, space travel, historical novels and the like and (2) entertainment -- provide them with this over a long period of time.

(2) Major Barriers to Participation

There are two major barriers to participation: logistics and money. All programs have to be brought to the institutions and money to run the programs has to come from outside. Although psychological problems of the clientele are considerable, they are inconsequential to this analysis as everyone inside the institution has them.

b. Characteristics of an M.O.L.N. Which Would be Helpful to Those Mentally Ill

(1) Outreach and Marketing

Persons interviewed thought a program should be advertised to a hospital through a few key personnel first and then through staff, who would in turn pass it on to the patients. Finally, the patients themselves would make the program generally known by word of mouth throughout the institution.
(2) Type and Extent of Counseling
Counseling is not applicable.

(3) Modes of Certification
Persons interviewed said that exams are impossible unless they are dexterity types. Intellectual work is nearly impossible.

c. Services To Be Provided by An M.O.L.N.

(1) Type of Curriculum Content
Persons interviewed thought low level vocational skills could be taught to short termers and some long termers; however, most long termers' curriculums should be entertainment-oriented with no degrees or certification at the end.

(2) Modes of Delivery
Those interviewed said educational experiences should be given to the mentally ill through T.V., mobile faculty, records, and audio cassettes, in conjunction with group work. Some felt that a structureless program would be a real waste for people who needed constant reinforcement. Correspondence courses were even seen as viable, as long as "an instructor comes into the institution on occasion to talk about the work." Feedback was considered an absolute necessity for most people have serious feelings of inferiority and need continual reassurance.

(3) Financial Needs and Available Resources
Persons interviewed said that neither the patients nor the institutions have any available resrouces set aside for funding educational programs. Although some basic low level (dexterity skill) type courses are being experimented with in one or two hospitals, most hospitals consider the entertainment type of curriculum as a part of their daily responsibility and as a result provide this continuously.

Finally, those interviewed felt that funding should be provided to roving faculty members in sufficient amounts to enable them to purchase entertainment type programs for the great majority of patients. There would be low participation initially, but the quality of the instructors and their sensitivity to the patients' problems would probably determine the programs' success.

(4) Job Referral and Counseling-Placement
This was considered irrelevant to the patients until they are very near release or are in fact being released.

2. Prison Inmates

a. General Characteristics
Published reports divided prisoners into two categories: those in county jails and those in State institutions. On August 31, 1973, there were 969 men and 33 women sentenced to terms in the County Jails, and 599 men and 11 women awaiting trial in Massachusetts. On November 24, 1973, there were 2005 inmates (111 of whom were prisoners at Bridgewater State Institution of Correction) in State Institutions of Correction and 787 patients at Bridgewater (alcoholics, drug addicts, sexually dangerous), making a total of 2792 in State Institutions of Correction. Bridgewater is run by the Department of Corrections for security and Department of Mental

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Health for treatment.

Persons interviewed further subdivided prisoners into short termers and long termers. Short termers are generally within 18 months of discharge, and are found in institutions like Deer Island and Framingham Prison while lifers and other "hardened" criminals are found in maximum security institutions like Walpole and Norfolk.

(1) Needs and Interests

Published materials tended to show that prisons should be corrective and rehabilitative, not punitive and retributive. This implies a commitment to the ultimate goal of changing behaviors of the offending population. Studies show that rarely has a man who has earned a minimum of twelve semester hours while in prison returned to prison. Persons interviewed agreed with this.

Some studies indicate that a career oriented educational program might reduce the recidivism rate by about 10%. In Colorado, it has been determined that it costs $3,800 to confine a person in the penitentiary, after costing $4,000 to process him. If the rate of recidivism were cut by 10%, the annual return rate would drop by about 60, resulting in savings to the State of $750,000 at the penitentiary alone. It has been ascertained that the lifetime of an average felon will cost the taxpayer $100,000 if the felon is not rehabilitated into society.

In Oregon, The Upward Bound Prison Project funded by the Office of Economic Opportunity became Project NewGate. NewGate is a program of higher education and counseling. It works both in and out of the prison for inmates of a maximum-security prison, and advocates additional follow-up support services in the post-release period. Of those who participated in the NewGate Project in Oregon, there were only five new convictions from 136 releases. Kentucky's project NewGate has a recidivism rate of 7%

Published materials as well as personal interviews indicate that capacity and desire, not credentials, should make a prisoner eligible for education and/or training. A State of Pennsylvania study shows that present inmates are generally younger, more perceptive, and have had more education than previous generations of prisoners. Twenty to twenty-five per cent of the prison population each year could do college-level work. Persons interviewed in Massachusetts cited the same figure. According to a National Advisory Council report in 1966, 12.4% of the prison population completed high school, 4.2% completed one to three years of college, 1.1% completed four years. 17.7% are eligible for college-level courses. Published reports and persons interviewed thought prisoners should be guaranteed the right to transfer credits to other colleges after release. Most thought this would make studies meaningful and therefore successful.

The interests and needs of prisoners varied considerably depending upon whether they were short termers or long termers. Both groups were interested in vocational kinds of learning; however, many short termers were interested in avocational or academic pursuits such as remedial reading, basic math, and English (or the acquisition of good writing skills) which would, upon release, lead them to a college degree.
Framingham State College, in cooperation with Norfolk State Prison, has a Training Program for prisoners who will be paroled in eighteen months or less. They are trained as Human Service Technicians and work at Medfield State Hospital, a program that is beneficial to all concerned. Persons at Framingham State Prison are also attempting to coordinate a fully academic program with Framingham State College.

To evaluate effectiveness of the Vocational Rehabilitation Program of the Adult Correctional Facilities (A.C.F.) of the State of Washington, four groups of parolees were reviewed to determine their successful adjustment 18 months after parole. A.C.F. offers training in auto mechanics, barbering, drafting, electronics, radio and T.V., office machine repair, body and fender work, meat cutting, data processing, welding, sheet metal work, and other basic industrial and work programs.

- **Group I** 88 cases - felons completed VR services successfully; 76% succeeded on parole.
- **Group II** 88 cases - felons who failed to complete VR services; 32% succeeded on parole.
- **Group III** 112 cases - felons who completed certain VR programs successfully through Adult Correctional Facilities; 58% succeeded on parole.
- **Group IV** 126 cases - felons who needed but received no vocational services; 47% succeeded on parole.

Persons interviewed thought some short termers who were "academically qualified" wanted to be in educational programs simply because they saw this as a way out of prison prior to their actual time for release. Several prisoners in Massachusetts are attending Bunker Hill Community College, Roxbury Community College, U. Mass. Boston's College 3 program, Boston State College, and others.

Published reports and persons interviewed said long term and short term prisoners need intensive personal counseling and guidance at all times. They need psychological support to breed confidence in themselves and help in overcoming feelings of insecurity in order to develop awareness of their capabilities. Some prisoners lack the skills needed to identify their problems, lack basic communication skills and are ineffective in interpersonal relations.

Personal interviews in Massachusetts uncovered the existence of real conflict between the administration, staff and inmates in one institution as to whether programs for short termers should be internally or externally directed. The administration argued strongly for outside direction, while prisoners and staff people thought the program should have inside direction! Staff and prisoners

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4 Most of the parolees were white, single males whose mental level was average or above average. They had usually completed at least one year or high school before imprisonment and were usually imprisoned for crimes such as burglary, larceny, robbery, and auto theft. They normally had no known history of drug abuse or mental illness and were generally first offenders.

5 Framingham Prison for Men and Women
wanted GED testing, CLEP exams and programs inside the institution for prisoners while the administration wanted the same kind of programs outside the institution.

(2) Major Barriers to Participation

The major barriers to participation are six: the law, transportation for those on educational release, cost, prisoners' attitudes, negative atmosphere created by some prison staffs, and lack of cooperation by local educational facilities.

The law in Massachusetts says a prisoner can take part in academic programs outside the institution when he is within 18 months of release. All other programs are in-house. But, in most institutions, there are barely even facilities for high school programs, let alone college-level materials. Persons interviewed felt in-house courses provide poor educations.

Framingham prison is seeking $200,000 to run a program for twenty prisoners in conjunction with Framingham State College. Persons involved knew money was not forthcoming from the State and were therefore scouring lists of foundations for funds.

When people are in institutions away from the prisons, they often have to rise early to travel great distances via public transportation. This acts as a deterrent to some, particularly where they find prison life comfortable.

Inmates' attitudes are often a barrier to participation. Incarceration tends to decrease an individual's ability to find a legitimate way to make a living. Proper guidance and counseling are essential to help the prisoner to help himself. It is necessary to evaluate the courses the prisoner takes and to make him realistically assess their value to him in society. If aspirations or expectations are unrealistically heightened, the end result would probably be a worsened adjustment to society.

Prison staffs' attitudes are also a barrier to learning for many. Only the most resolute will learn when the administration is really against it.

The cooperation of post-secondary educational facilities and administrations within the general location of the correctional institutions would considerably expedite the training process. Such an ongoing process could assist in stabilizing the acceptance of the trainee by the community and hasten his admission into the mainstream of community life by affording him gainful employment.

b. Characteristics of an M.O.L.N. Which Would Be Helpful to Prisoners

(1) Outreach and Marketing

Two methods were feasible: first was to use the prison staffs, both administrative and internal, for outreach; the second was to market the program directly to the prisoners. The first could be accomplished through regular administrative channels while the second could be done through direct mail to the prisoners and by T.V. advertising.

(2) Type and Extent of Counseling

Four types of counseling were seen as necessary by both published reports and interviews: (a) Job related, or that
which connected immediately sought skills to positions outside; (b) Academically related, or that which would lead to college degrees and beyond; (c) Psychological, which would reduce an inmate's pensiveness, fear of education, or his ability to do the work; (d) Counseling for instructors to sensitize them to the needs and interests of prisoners.

(3) Modes of Certification
  (a) Traditional degrees
  (b) Credit by examination - CLEP and GED
  (c) Certification for life experiences
  (d) Licenses for vocational training
  (e) Certificates of completion

Basically prisoners wanted indicators of achievement because these meant proof of rehabilitation which generally increased the opportunities for employment when released from prison.

c. Services To Be Provided by An M.O.L.N.

(1) Type of Curriculum Content
  As described in the A.C.F. program in Colorado, those courses which are vocational in nature are most often sought. Some individuals wanted specialties like nurses' training, computer sciences, and credit management.

  Prisoners like almost every other group interviewed wanted to be involved in designing the curriculum. One of the major failings of Framingham Prison's UWW established in 1969 was its course content. Prisoners interviewed felt that it reflected the interests of the persons teaching the courses rather than of those persons who were taking the courses.

(2) Modes of Delivery
  Published materials showed that agencies other than the prison are better qualified to offer postsecondary education, be it academic or vocational. Small groups were perceived by inmates to be close and friendly. Many would feel freer to discuss their problems if there were less possibility for ridicule. Since some inmates are more relaxed in this type of learning situation, some say it is a more effective mode of delivery.

  Published reports said different teaching techniques are necessary in correctional institutions because the inmate is not always successful in the traditional system. The Contingency Management study of the Experimental Manpower Laboratory for Corrections at Draper Correctional Center in Elmore, Alabama, uses a system of contingency contracts. This covers units of programmed instruction prescribed for each subject on the basis of his pretest score on the Test of Adult Basic Education. Identification, selection and utilization of effective curriculum on an individual basis is used. Scheduling and instructional techniques are flexible to best suit the needs of the individual.

  Published reports said that all media of communication should be used in presenting material. A diversity of carefully selected multi-media materials, ranging from printed programmed materials, to cassettes and tapes will stimulate the interest of the inmate. The resources of nearby universities should be
brought in to those not allowed off the prison grounds. Correspondence courses can be used if supplemented by maximum teacher assistance, and wise and discriminate use of every educational opportunity is advantageous.

(3) Financial Needs and Available Resources

Published reports indicate there is no consistent policy as to who pays for educational programs in the prisons. In some cases the inmate pays something for his courses from the money he earns by working in jail. Also, there is Federal aid through the Omnibus Crime Bill, aid from the Department of Vocational Rehabilitation, and the contribution of some courses by the State Colleges and Universities.

An example of funding for prison educational programs is being established in New York. There the State University of New York and the State's Department of Correctional Services propose to establish a college for inmates at the Department Complex at Bedford Hills by September, 1974 contingent upon approval of the plans by the Governor and the Legislature. This facility, the first of its kind in the country, will enable 250 inmates from the state's 24 correctional facilities to undertake full time study towards a 2 year degree in liberal arts or science while supplementing credit and occupational courses currently offered by SUNY at seven state correctional facilities. An unoccupied building in the complex will be refurbished to provide classrooms and living space for about 200 male inmates; 50 women will use facilities already occupied by women at Bedford Hills. SUNY and the Corrections Department will share the cost of modifying and operating the new college. Administrative personnel and faculty will be recruited from within the university. It is planned to have a year-round, four quarter academic calendar to derive the utmost benefit for the greatest number.

(4) Job Referral and Employment Counseling-Placement

Persons interviewed and materials studied indicated a heavy need for job referral and employment counseling. The closer people come to release, the more critical the need becomes.

3. Nursing Home Residents

a. General Characteristics

Nursing homes tend to house poor people who are on public assistance. 88% are said to be on public assistance and 99% are 65 or over. Some disagreement exists over how long they live on an average; one estimate being 400-450 days, another being several years; yet most people tended to think that nursing homes carry terminal cases. Nursing homes are to be clearly distinguished from homes for the elderly where these facts certainly do not apply. Persons in nursing homes tend to be chronically ill as well as old.

(1) Needs and Interests

Those interviewed felt that educational interests and needs vary from person to person and that most people are clearly not interested in vocational work, nor are they interested in competitive academic work. Most seem to want to be kept entertained and stimulated, although a course in the psychology of dying for both those located in
nursing homes and their immediate families outside would be received with great interest by many. Any such course could not be packaged as "The Psychology of Dying", but might be packaged as "Group Dynamics of the Elderly".

Arts and crafts, travalogues, cooking and general social programs where people frequently interact are of greatest interest and need. A program which would bring the very young to the nursing homes (5-10 year old) to be taught by them or just talked with by them would probably meet with great acceptance.

(2) Major Barriers to Participation
There appear to be two major barriers: the first is logistical and the second is economic. Logistics is a problem because all courses have to be brought to the institution since almost everyone is incapable of leaving. Money is a problem because nursing homes interviewed felt they barely had enough funds to meet their present expenses, let alone additional ones.

b. Characteristics of an M.O.L.N. Which Would be Helpful to Those in Nursing Homes

(1) Outreach and Marketing
Persons interviewed felt this should be directed to nursing home administrators as a group rather than to the patients. Patients are generally too concerned with their own problems to get involved in the overall operation of the facility.

(2) Type of Counseling and the Modes of Certification
Type and extent of counseling and the modes of certification were felt to be inapplicable to nursing home persons because people are not interested in degrees or certificates. They want to be entertained.

c. Services to be Provided By an M.O.L.N.

(1) Type of Curriculum Content.
See Needs and Interests section above for the curriculum is the same as the courses specifically requested.

(2) Modes of Delivery
Two forms of delivery were most often suggested by persons interviewed: (a) mobile faculty persons travelling about with visual aids like films, slides, etc. and (b) all work being group work. People want a sense of community--individuals are left alone enough.

(3) Financial Needs and Available Resources
Those interviewed said that most patients have no personal resources and there are no special resources that the State has allocated for their education.

(4) Job Referral and Employment Counseling
This is inapplicable since people are not seeking employment.
C. "Special Problem"

1. High School Dropouts

High school dropouts are those people who have entered but never completed the work required for a high school diploma.

a. General Characteristics

According to the 1970 Census there are 593,000 people in this category. They are located throughout the state in both urban and rural settings. Although most tend to be on the lower end of the socio-economic spectrum, numerous examples exist of persons with minimal educations in the upper economic reaches of the system.

Persons in this category are from all races; White, Black, Spanish, Portuguese, etc. Some of those interviewed felt that larger numbers of the minorities are found proportionally in this group than they are in the general population.

Reasons for dropping out are so numerous that many felt poorly equipped to generalize. Yet, people said many leave school because they feel programs are not addressed to their needs; others have little ability to read and write and are frustrated by the continual stresses of academia. Where work other than college preparation is offered, persons tend to finish high school. Poor counseling of the alternatives which lie ahead for those with and those without high school educations was given as another reason for people being outside the learning institutions. Sometimes a physical plant is so repellant that people do not want to attend classes there.

(1) Needs and Interests

Studies have shown that there are a variety of reasons why people want to learn. Technical schools with good facilities are thought to be first preference because they give immediately marketable skills(49%) (i.e., women want to learn secretarial and bookkeeping skills, while men are more interested in technical skills, engineering and industrial trades.). However, many want to learn out of a desire for knowledge, for personal reasons, social reasons, or to comply with employer requirements. When a potential market was asked if they were aware of the high school equivalency test whereby they could earn a certificate that is the equivalent of a high school diploma, it was found that: 1) 67% of those 18 and over in Massachusetts are aware; 2) 77% of the men and 59% of the women are aware; 3) those over 30 are most aware, probably because their education has been interrupted most recently and they find increasing competition in the job market; 4) those with an income under $5,000 are less aware than those with a better income. This indicates that people with minimum education who do not know how they can help themselves are on the lowest level on the income scale.

Formal credit is desired by those who have completed 8th grade but have not finished college. Fortunately or unfortunately, the major interest in education tends to be money-oriented.

Counseling which would open up individual horizons is considered absolutely necessary. In a WIN study it was shown that there is a definite relationship between the dropout rate and the degree to which a job goal represents a realistic, feasible choice. One quarter of those whose job goal was judged by the WIN staff to be "highly or moderately realistic" remained in the program and among those judged
"unrealistic or moderately unrealistic", 76% left the program before completion.

A job is merely a source of income for many who do what they like when they come home from work. A good example is politics or community organizing. People who work all day at one kind of occupation or another come home and work another eight hours for some "status or influence" kind of reward. Some felt that where a M.O.L.N. could capitalize on these kinds of interests, it could be helpful to many. It takes quite a few years to learn how to be a good community leader, and although much of that kind of influence is based on who else is in the group, some educational short cuts might be helpful.

(2) Major Barriers to Participation

Studies show that for those who have dropped out of high school, the barriers to learning are 68% financial, since the dropouts come from predominantly lower socioeconomic levels. Family background and ability factors must be considered when proposing more education to high school dropouts. Psychological or motivational barriers for some became almost insurmountable. One person, seeking information about how to get enrolled in a particular course which was being offered, complained that it took him three days to get up enough nerve to come in because he could not read and write well enough to fill out the requisite forms. Lack of time, home responsibility, and job responsibility have also been given as inhibitions to availability for more learning.

b. Characteristics of an M.O.L.N. Which Would be Helpful to High School Dropouts

(1) Outreach and Marketing

In order to market education to high school dropouts, one must first identify where they are. In a project or slum, people can be reached through the supermarket, day care center, etc. because that is where they are.

All media should be used to make high school dropouts aware of the opportunities available to them through an open learning system.

Church groups, private clubs, and organizations like Kiwanis could be extremely helpful in passing on the information. Employers can be most cooperative in upgrading their employees through on-the-job training. The existing political structure could be used to disseminate the information on the M.O.L.N. and bring many of the high school dropouts to it.

(2) Type and Extent of Counseling

Guidance and counseling are vital to high school dropouts if they are to take advantage of the general availability of the programs.

Faculty mentors or counselors who have very few persons assigned to them should be provided. It was suggested that one of the major failings of the Empire State program in New York has been its faculty's attempt to deal with everybody instead of small numbers of people.

People want current job counseling as it is necessary for many to work to earn essentials while going to school.

(3) Modes of Certification

Licenses, degrees, and credit for life experience were desired by many high school dropouts to attain their goals of either
entering the job market or advancing in their present jobs. Of those interviewed who were interested in learning some subject, when asked about their desire for credit, 22% indicated they wanted a certificate of satisfactory completion, 21% a credit skill certificate, 17% credit and a high school diploma; 50% were not interested in credit.

c. Services to be Provided by M.O.L.N.

(1) Type of Curriculum Content
The curriculum offered to high school dropouts should be concomitant with their interests and needs as already discussed. Basic remedial work in the 3 R's is necessary in many cases before the high school dropout can attempt further study. Many times a shaky foundation was the reason for dropping out in the first place. Aim work at people's personal non-income producing interests. If a man is learning something because he wants to as opposed to his having to, he is more likely to stay with it.

(2) Modes of Delivery
(a) Lecture classes
(b) Correspondence courses
(c) On-the-job training
(d) Courses in groups and in non-academic settings where possible.
(e) Faculty mentors with very few persons assigned to them.
(f) Personalized education through self-contained classrooms and home contacts.

Surveys have shown that T.V., radio, and cassettes are not favorable modes of delivery, perhaps because of the lack of knowledge and self-discipline necessary to be able to work alone and derive benefit.

(3) Financial Needs and Available Resources
Usually high school dropouts have minimal personal resources, but this varies from case to case. In Philadelphia, Edison Project work-stipend positions were made available for those attending classes with favorable results.

(4) Job Referral and Employment Counseling-Placement
This is deemed absolutely necessary in order for the high school dropout to have a successful educational experience.

2. Unemployed

a. General Characteristics
The 1970 Census lists 52,799 unemployed males 16 and over, 38,451 unemployed females 16 and over, for a total of 91,250 unemployed in Massachusetts. The unemployment rate in Massachusetts is far in excess of the national average of about 5%. The largest areas of unemployment seem to be in the Lowell-Andover-Chelmsford area to the north with Fall River and Brockton being major areas to the south. Ghetto areas of the cities housing large numbers of Blacks and Puerto Ricans also seem to have very large numbers of unemployed persons.

(1) Needs and Interests
Studies and interviews indicate that the primary interest of the unemployed is to find a source of income. The hard-core unemployed (HCU) do not feel the same pressures to find a job as the working class does. Not everyone in this body of people is looking for a job.
which will pay the bills; some are looking for a way the system can pay them to live: whether it be welfare, Aid to Dependent Children or unemployment compensation, they are looking for income. Some of those interviewed expressed fear that people would not go to school even if paid, although the WIN program does pay some welfare mothers to do just that—go to school and get an education. Study has shown that their willingness to take a job and the rate of pay they require is related to their family income, marital status, health, welfare payments, and other factors.

Studies say supportive supervisory styles should be encouraged and those in charge should understand that the HCU are unaccustomed to external, rigid demands upon their behavior and that they have to adjust to steady employment. Intervention in this group must be aimed at the norms rather than the individual since it has been shown that there is strong tenacity of the norms governing choice in the continuing group. Training to give the HCU the necessary skills to adapt to the pace of a changing society might decrease the size of the group by 1/4 to 1/3 of those who are expected to become HCU if not trained. Work is a way of life that determines where a worker will live, his associates, and what his children will become. The program must be extremely practical. All activities should be relevant to the experience and aspirations of students and administrators should be cognizant of the fact that they cannot superimpose interests from other environments on these people.

Interviews indicated that when an unemployed person looks for help, he gets pushed into existing agencies; if these cannot help him, he literally has nowhere to go. An M.O.L.N. could possibly be of some service here as an alternative which would allow persons to pick up skills outside specific existing programs.

Almost everyone interviewed agreed that the immediate need is the same as the immediate interest; income-providing work. But, the long range need was seen more as a need for programs which interest people not just things which get them money. Yet, where large numbers of unemployed persons are expected to participate, some sort of economic reward must be attached. If learning activities are organized in short, achievable units, the student will feel a sense of accomplishment as he completes each one. The length of the courses can be increased gradually as the student's attention span, work habits, and interest improve. The curriculum must have elements of success built into it. Encouragement from the instructor, peer approval, and community support and recognition will help the student to acquire a positive self-image and aid him in updating and upgrading his skills and knowledge.

Unemployed professionals have special needs for skill-conversion studies and retraining programs. Unemployed scientists and engineers require special strategies, persuasive skills, retraining programs and skill-conversion studies to find out how to redevelop their technical talent to occupational areas outside defense and aerospace.

If an attempt to identify occupations and contact employers which are either going out of business or laying large numbers of persons off for extended periods of time is made, and a training program for some of these individuals prior to their departure is instituted, some unemployment may be avoided. If a person can be given
a new skill before losing his job, he may avoid the unemployeds' roles.

Unemployed professionals feel that it would be extremely helpful to them to have information about graduates and/or dropouts in their field at the beginning of their education or earning career. Since they are interested in the rate of economic return on their education, this information could provide direction in their career decisions. Professionals who are unemployed are primarily concerned about a job at the end of their retraining or skill transfer experience. Retraining programs for highly educated specialists do not exist as a regular feature of higher education. When major layoffs of scientists and engineers occurred, no ready-made programs were available to serve their needs.

(2) Major Barriers to Participation

The major barrier to participation in an open-learning program for the unemployed is financial. The uneducated unemployed have psychological problems to overcome as well, such as cultural deprivation, education retardation, history of unemployment, job difficulties, police records, and patterns of discrimination they have experienced resulting in negative interpersonal relationships. Their adjustment problems are different from those of the educated, trained person, but both groups experience them. Most people without money or income get so caught up in the struggle to find meaningful employment that they lose sight of everything else.

Race, sex and ethnic group are also barriers. However, they are more ultimately connected with the psychologies of the persons which keep them from getting into educational programs, rather than with the actual programs themselves.

b. Characteristics of an M.O.L.N. Which Would be Helpful to the Unemployed

(1) Outreach and Marketing

All media should be used to reach the unemployed, to advertise and stress the job-counseling portion of the M.O.L.N. The existing State and Federal unemployment programs should be looked at to see if they can provide funding for educational programs directed at the unemployed! Cash is critical for participation by this group and even this will not insure long-range participation.

(2) Type and Extent of Counseling

It is vitally important for the HCU and other disadvantaged people to have trust in the person who gives them guidance and counseling since it has been shown that their relationship with their supervisors (particularly early in their HCU experience with an organization) is directly related to job success. They need help to overcome the psychological barriers inherent in being unemployed.

(3) Modes of Certification

Certification for previous life experience where applicable would help to shorten the time necessary for the unemployed to achieve educational goals. Certification of previous education or degrees for the unemployed professional would enable them to redefine their goals and make the transition with minimum effort.

c. Services to Be Provided by M.O.L.N.

(1) Type of Curriculum Content

Basic level vocational courses such as typing, basic business machines and the like as well as some basic academic courses
such as marketing, accounting and interpersonal relationships should be provided. These courses in particular are recommended because they are entry level and require further work, but usually have some immediate positions attached to them.

Courses should be free or have very minimal cost attached to them. Unemployed people as a rule have no money. It is well to refer to the discussion of the interests and needs of the unemployed professional to determine their type of curriculum content.

(2) Modes of Delivery

(a) Provide mobile faculty to teach courses to groups of people at some central location within an area. Attach college credit to all instruction possible. Transportation was not cited as a problem by many, but it could become one if people were required to travel long distances to participate in educational programs.

(b) Discourage independent work and encourage group work when delivering any type of education to the unemployed. The major problem as stated above is psychological and motivational. Yet it seems that when people are put into groups with others who have similar problems they are quite often capable of functioning.

(3) Financial Needs and Available Resources

This group must have income while they are learning.

Five basic programs exist in Massachusetts which provide funding--WIN, Employment Service, The MBTA Act, the Economic Opportunity Act and the STEP program. A few Federal sources are also available. It is felt, however, that some contribution, monetary or otherwise, should be made by the unemployed person when participating in the M.O.L.N. to make the experience more meaningful.

(4) Job Referral and Employment Counseling-Placement

Job counseling as well as educational counseling should be provided when attempting to attract the unemployed, particularly the hard core unemployed. It has been found to be beneficial for people with similar experiences to counsel those seeking employment. Perhaps this is where the unemployed could make some contribution toward their education.

3. Elderly

The Elderly are defined as persons 65 years of age or older. They are found in large numbers in homes for the elderly, nursing homes, mental institutions and the general populace.

a. General Characteristics

The aging as a group is increasing faster than the total population. From 1960-70 the entire population of the U.S. increased by 3%, while those 65+ increased 21%. At the present time, life expectancy at 65 is about 15 years, but because of increased medical knowledge, that figure is expected to rise during the next 30 years to 30-31 years! Life expectancy for women is increasing even faster than for men. One out of every 10 people in the U.S. is in this segment of the population, or 20,050,000. In Massachusetts in 1970, 11.2% of the population, or 636,185, was 65+.

In the U.S. 20% of those 65+ are foreign born and received some or all of their education in other countries; 50% never went beyond elementary school; 17% are functionally illiterate; only 5% are college
In Massachusetts, according to the U.S. Census, there are 137,711 65+ who have completed high school; 13,902 completed one year of college; 23,029 completed two years; 8,692 completed three years; 24,297 completed four years; and 15,034 completed five years--making a total of 82,954 with some college education.

(1) Needs and Interests

The elderly are primarily interested in self-fulfillment programs, although an occasional person wants to learn to get a degree or part-time job. Interests seem to focus around things like medicare, pre-retirement programs, the psychology of aging, working with younger people on a non-competitive basis, and general enrichment programs.

We must be concerned with improving the quality of old age. A basic need of the elderly is a future--they must feel that they have a place in society, are good for something, and are needed by someone, somewhere.

Probably the greatest battle of the elderly is to fight the sense of loneliness and uselessness they feel when released from their traditional responsibilities; their families have left home and they are no longer working. The overwhelming majority of the older people are not decrepit, but can manage very well in the community and would manage even better if society would develop programs that would help them with self-expression. It is our obligation to make the last of life a reality, as Browning said, "the best yet to be for which the first was made." One major social decision of the next 20 years will be to determine what proportion of people over 65 should be in the labor force by the year 2000. This implies an immediate reassessment of personnel policies, particularly early retirement.

The elderly are politically active. Some go to the U.S. and State courthouses to listen to trials, thereby becoming legally knowledgeable. In the academic year 1970-71, the University of the State of New York offered 150 courses in civil and public affairs to older people--8,312 enrolled. In Massachusetts, Worcester State, Worcester Polytechnic Institute and private colleges in the Central Region are interested in offering courses to "older people" and expect a larger proportion of them to enroll in some courses in the next few years. They have the time to read newspapers, watch T.V. news and discuss current events, and they act on what they learn. Those 65+ comprise 15% of the eligible voters--in the future they will be 25%--and they vote in impressive numbers. In the November 1970 election, 68% of the 65+ group voted as compared to 75% of those 45-64, and only 35.5% of those 21-29.

The needs of the very old, the old, the newly retired and those facing old age are obviously somewhat different. However, all must program their time to adjust to their new-found leisure. Many have the inner resources to create new places for themselves and to develop new interests, but many more are unable to do this and without external help will become problems in society. Guidance and counseling are vital for all so that each one may proceed in the proper direction for himself. We must look at the aging in terms of one's capacity to function physically, mentally, and socially. Everyone needs assistance in sustaining a sense of worth and dignity which helps to foster the motivation so important in the concept of successful aging. One
of the goals described in "Invitation to Design a World"--a publication of the Administration on Aging--is, "Each individual would be able to find education tailored to his needs any time during his lifetime." College programs should be developed for older persons in second careers to decrease the time necessary for a degree or certification.

The fundamental needs of the retiree, therefore, are adequate income for necessary expenses; personal discipline; health routines to replace work routines and maintain activity; social, emotional and intellectual fulfillment. Some forward-thinking companies and unions have their own programs to prepare their employees and members for retirement.

There are some 20 federal agencies which have statutory authority for programs and services for older people. A concerted effort is needed to see that these are used to best advantage. The educational level of the aging will rise as better educated people in the existing population move into the 65+ age group. We can anticipate greater demands for quality and quantity of services of all types by the aging. We are seeking a fluid society which does not limit entry points into education and careers to prescribed age groups. "Before I built a wall I'd ask to know what I was walling in or walling out and to whom I was likely to give offense." (Robert Frost)

Planned obsolescence--forced early retirement age--as practiced in our society produces psychological and economic (for some) concerns. There may well be a direct relationship between adjustment in old age and educational attainment. There is more social participation among older people with a higher level of education and occupational status.

(2) Major Barriers to Participation

The primary barrier which limits participation by the elderly in educational programs is financial. Fully half of the elderly have incomes less than $75 per week and social security is the only income for millions of aging people. However, some, as in every class, would participate irrespective of cost, if in fact the work was truly interesting. Psychologically, they must be helped to build confidence in their self-image and be assured that they can compete with the very young. Transportation is an obvious problem for the elderly. Though most can manage to get around, they do not always have access to vehicles. Motivation is a real problem for the infirm particularly. Many feel it is hard enough just to live, and they are not interested in getting about at all. This has to be overcome!

Classes at night will keep many from participating at all--particularly elderly women who live in cities. There are many stories of purse snatchings, killings, and rapes of older persons.

b. Characteristics of a M.O.L.N.

(1) Outreach and Marketing

There is a strong desire among those 65+ to be considered older adults, not "elderly". They seem to resist the idea of growing old and incapacitated. In marketing consumer products, it has been found that the most successful method in reaching the aging is to direct the presentation to the general adult population while citing the product advantages to a large portion of aging individuals. A mass mailing directed at all persons over 65 in Massachusetts might
meet with some success.

Most of the elderly are located in the inner cities where they can take advantage of lower rent, inexpensive transportation, and easily available shopping and services.

46% of the elderly in Massachusetts would prefer morning instruction, 36% would prefer instruction from noon to 6:00 p.m., while 18% would prefer instruction from 6:00 p.m. to midnight.

(2) Type and Content of Counseling

Some psychological counseling might be helpful in encouraging the elderly to participate in a M.O.L.N. and in reassuring them of their abilities. Guidance is necessary to acquaint the elderly with the programs available to them and to provide direction as to their best course of action.

Some of those interviewed thought that motivation to get people out of their homes to where programs of instruction are being given is every bit as critical as the programs of instruction themselves! Mental stimulation in various forms was what many considered important, not to mention the group aspect of any work.

(3) Modes of Certification

Certification is deemed unimportant in most cases among the elderly. However, there is some occasional interest if certification is necessary for the work being considered. Interest in credit decreases with age—59% for individuals under 25, 15% (any credit) and 5% (academic credit) over 55.\[^{1}\]

c. Services to be Provided by M.O.L.N.

(1) Type of Curriculum Content

Give interpersonal types of instruction to the elderly on subject matters like Medicare and etc., which are intended to fulfill personal interest and are not academic or vocational types of instruction.

At the University of Colorado, more than 100 people 60+ are taking tuition-free daytime classes ranging from principles of anthropology to personal finance. Middlesex Community College is planning two programs concerning the elderly and aging, "Elderly Affairs" to begin September 1974 and "Pre-Retirement" to begin in 1975. North Shore Community College is designing courses, projects and workshops which are non-credit in typing, speed-writing, woodworking, basic office procedures, income tax preparation, etc. Massasoit Community College has a new program, "Elderly" established to develop better-trained people to work with elderly and assess the value of utilizing the elderly as research personnel. Massachusetts Bay Community College is planning programs in conjunction with Boston University Adult Education Centers in the State to offer general courses that are less career-oriented and appeal to persons taking them for personal development or interest. Dean Mason of the University of Kentucky propounds that, "By late 1970's knowledge industries (which produce and distribute ideas and information rather than goods) will account for half of the total U.S. national product. Every other dollar earned and spent in the American economy will be earned by producing and distributing ideas and information. A process of continuing learning (life-long learning) retraining and on-the-job education, post-graduate education will be accepted and considered necessary."
(2) Modes of Delivery

All media (i.e., T.V., radio, newspapers) should be capitalized upon in delivering educational programs to older adults. The local library has great potential as a central reference facility which is expected to increase in proportion to the rising educational attainments of the population. Libraries have a unique opportunity to serve the intellectual and recreational interests of the elderly. After studying existing institutional library service, it has been determined that institutes to develop librarian skills in working with the aging is needed. It has been shown that reading can be a preventative measure in relation to mental health and public libraries are free to the user.

There are many programs already available in libraries which can be expanded and capitalized upon to bring educational programs to the elderly. There are extension services such as book mobiles and services to nursing homes; special materials for those with reading handicaps--large-print books, talking books, projectors for use with conventional print, special reference books, and group programs (i.e., clubs, book talks, discussion groups, educational or instructional programs).

All instruction should be given during the day in areas where there are large concentrations of elderly persons or where eight or ten persons would be willing to congregate to discuss a subject matter. Many of those interviewed felt that the elderly persons want a continued sense of community and a feeling that many others like themselves are also participating.

Make almost all instruction, group instruction with individualized work reserved for the few learners attempting to achieve degrees.

(3) Financial Needs and Available Resources

Most of the elderly have limited financial resources beyond Social Security although some 20 Federal agencies work with them and could be explored for available resources.

(4) Job Referral and Employment Counseling and Placement

Employment of people 65+ has decreased dramatically since 1900 when everyone was employed in something useful since all hands were needed. However, meaningful work is still a necessity, whether or not an income support system is needed. Human service work, helping others, is particularly suited to older persons. The older person in the job market seeking a new position or having retired and seeking new opportunities on a paid or voluntary basis is too valuable resource to be ignored or wasted. The success of the OEO programs "Medicare Alert" and "Foster Grandparents" makes them models for older persons serving others. The old and the very young are a very good combination. Old people have more patience, like to repeat themselves many times and the very young enjoy listening to the same stories over and over. In Clearwater, Florida, older people are serving in recreation, legal services, information and referral programs. In Fort Lauderdale, they assist teachers in 40 schools by working with disruptive children. In Orleans County, Vermont, 12 rural libraries are kept open by "older" staff. In Burlington, Vermont, older experienced people run five different consumer education programs.
4. **Physically Handicapped**
   
a. **General Characteristics**

Physically handicapped persons being discussed are those with a physical handicap severe enough to limit in some way their ability to hold a job. In 1972, the Massachusetts Rehabilitation Commission served 24,922. Of this number, 4,898 are considered rehabilitated; 658 had been Welfare recipients and 639 were rehabilitated from tax supported institutions.

Many of the handicapped are very young, others very old. A few are located in institutions like places for the blind, but the great majority are located in all parts of the population.

1) **Interests and Needs**

When given the opportunity, handicapped persons can be as successful academically and/or vocationally as those more fortunate. Because their bodies are limited, it does not necessarily follow that their minds are limited. Persons interviewed were afraid to classify interest for the handicapped as a whole precisely for this reason. They said the handicapped were just like everyone else except for their physical problem. The Vocational Education Amendments of 1968 stipulate the use of Federal funds for the purpose of assisting the disadvantaged and the handicapped to succeed in vocational education programs. 15% of the vocational education funds of each state must be allocated to the teaching of the disadvantaged and handicapped or returned to the Federal government if not used. Those in Massachusetts who have been rehabilitated this past year have started new lives in a wide range of careers such as: professional, semi-professional, managerial (13% or 657), clerical and sales (20% or 964), service occupations (19% or 938), farming, fishing, etc. (1% or 76), processing operations (2% or 116), machine trades (7% or 323), bench work (9% or 454), structural work (7% or 362), miscellaneous industrial (7% or 361), homemakers (11% or 530), sheltered workshop (2% or 109), unpaid family workers (0.2% or 8).

The National Technical Institute for the Deaf (NTID) was created because of the need for educational opportunities for the deaf in fields such as science, technology and the applied arts. NTID is the nation's first postsecondary technical program for the deaf. It is located at the Rochester Institute of Technology and is a program designed to educate large numbers of deaf students at a college with a hearing environment, but with programs and services for the deaf. In addition to NTID courses of study, deaf students who meet the requirements also may enroll in any of the major areas of study available to hearing students.

According to a survey of the Social Security Administration, 18 million adults in the U.S. are physically handicapped. The incidence of disability is three times higher among the poor in America than among other groups. Yet a much lower proportion of these people receive rehabilitation than do the handicapped of other income levels thereby resulting in a much higher proportion of low-income handicapped being non-functioning. There is a dire need for dissemination of the facts among low-income families. There must be information campaigns to tell the disadvantaged handicapped what re-
habilitation means, what it can do for them, what it consists of, and where to get it; including clear instructions on how to get to their local vocational rehabilitation office.

Local promotional efforts are also needed to launch a campaign directed to employers urging them to hire the handicapped. The rate of joblessness is extremely high among the handicapped and one reason is that not too many employers will give them a chance. Some national statistics on unemployment among the handicapped follow:

(a) Epileptics - 1,500,000 (drugs control seizures in 85%) - 1/4 out of work.
(b) Blind - 435,000 - 50% out of work.
(c) Deaf - 236,000 (totally), 2 million with hearing loss - high unemployment.
(d) Cerebral Palsy - 750,000 - 1 in 5 could be trained for work - over 90% unemployed.
(e) Multiple Sclerosis - 250,000 - most reach a plateau and can work for years - high unemployment.
(f) Muscular Dystrophy - 200,000 - mainly children - certain form strikes adults who are still able to work - unemployment high.

A local campaign directed toward the handicapped themselves, encouraging them to prepare for jobs they can fill, is vitally important. They can receive some guidance and counseling, and thereby some direction, at their local vocational rehabilitation office, public employment office, Veterans Administration hospitals and offices. The vocational counselor can help the person to achieve the best vocational adjustment based on his interests, needs, and abilities and talents.

It would be extremely helpful to the handicapped and to those planning programs if a survey of buildings were conducted to determine which facilities or institutions can be used by the handicapped and to what degree, and then to publish the findings in the form of a guide.

(2) Major Barriers to Participation

Lack of awareness, transportation, architectural barriers, psychological problems and cost were cited as the major barriers to participation. Lack of awareness was acute because many felt that unless a program was directed strictly at them, they really were not supposed to participate. For example, if a course was being offered in auto mechanics, a blind man would know he was not included because one has to see to participate. A wheel chair cripple would also know the same thing unless he was told there would be special ramps for him to enter and leave the class, and that special overhead mirrors were going to be provided so that he could see what he was working on.

Transportation like architectural barriers creates special problems for the handicapped. Getting from one's house to a place three miles across town means an aide is necessary for a blind person or a cripple, or it means they have to be picked up. Getting up steps can be a real problem for some.

Cost, though a problem, was discounted by some. Studies say there is financial assistance available for the handicapped and they should be made aware of it. There are federal guidelines for
determining the economic needs of the handicapped and each case must be considered individually.

b. Characteristics of an M.O.L.N. Which Would be Helpful to the Physically Handicapped

(1) Outreach and Marketing

Persons interviewed thought the physically handicapped should be approached on a one-to-one basis, rather than through broad advertising. They said broad marketing tends to exclude many because they know special equipment is needed in many cases and unless specifically stated, people know it is not there. An individualized letter to every handicapped person the M.O.L.N. might serve, which explains that facilities were available to overcome physical handicaps, would probably put large numbers of persons into any educational program. Published studies on the other hand suggested the use of all media to inform people of available programs. If programs are advertised as being strictly for the handicapped, persons interviewed would probably agree with the all-media theory.

Published materials favored direct publicity toward employees to hire the handicapped. As part of the publicity campaign directed towards employers, it was suggested that successful cases of seriously handicapped persons who have gone to work be publicized and the employers who hire them be honored publicly.

Some community groups such as Zenta, Pilot, Kiwanis, Lions, and Rotary would cooperate in delivery of education to the handicapped. Other community groups which could be useful in reaching the handicapped are local churches, welfare offices, health institutions (V.A. hospitals and voluntary health organizations), local vocational rehabilitation and public employment offices which are experienced in serving the training and job needs of the disadvantaged, labor unions, youth groups, and women's organizations.

(2) Type and Extent of Counseling

Job related, psychological, and academically related counseling as outlined in Section I (b) (2) above for the prisoners is the same type needed here. However, physically handicapped persons need to be made more aware of the programs in existence which specifically are directed at them.

(3) Modes of Certification

All the modes listed for prisoners in Section I B 2 b (3) above should be used for the physically handicapped.

c. Services to be Provided by an M.O.L.N.

(1) Type of Curriculum Content

This should be the same as for the general populace say those interviewed and the general studies; a real trend towards vocational education.

(2) Modes of Delivery

(a) Give T.V. courses in general academic subjects. These will probably be received favorably by some handicapped with the exception of the blind: a program of instruction using audio cassettes would be better for the blind. T.V. and cassettes are good for the handicapped because they do not have to get out and go somewhere to participate. Group work was in some instances thought to be more acceptable, but because of transportation problems and the like, that is not as crucial as access to the instruction. One criticism directed
against T.V. is the amount of T.V. that many people already watch. Therefore, some other form of delivery would also be helpful.

(b) Mobile faculty should be assigned on an individual basis to a number of handicapped persons. The Massachusetts Commission of the Blind already does this on an occasional basis; however, it was felt that this kind of program when extended would meet with wide receptivity. Almost everyone felt programs had to be brought to the handicapped, or participation would be low.

(c) Open up vocational and proprietary institutions to the handicapped as they are interested in many vocational courses not presently offered in institutions of higher learning. People want degrees attached. Again, learning for the sake of learning is rare.

(d) Credit for life experiences should be given where possible, particularly in the case of people who have not been physically handicapped all their life. Many have had experiences which would lead to good degrees.

(e) Give instruction in or through the local churches, labor unions, youth groups and women's organizations. Each group tends to work with the handicapped in some way and as such the studies considered these good modes of delivery.

3. Financial Needs and Available Resources

Often times Federal funding exists for the physically handicapped since 15% of all federal educational funds appropriated to the State have to be used for the handicapped and disadvantaged. Many times the physically handicapped have some additional personal resources of their own.

4. Job Referral and Employment Counseling

This, as with other groups, is a must. However, employers who have hired the physically handicapped should be given awards and their successes made public so others will follow in their footsteps.

5. Drug Abusers and Alcoholics

a. General Characteristics

To try to control the growing numbers of drug abusers, it is necessary to correct the social and personality disorders conducive to drug abuse. The innovation of broad scale programs in groups most likely to become addicts such as those on welfare, mental health, public health, and poverty would be preventative. Residential centers have been developed for drug abuser therapy. Group dynamics and self-discipline are the central operating themes whose purpose is to reduce recidivism and to prepare people for productive living. There have been good results in an experiment involving the combined efforts of the Bureau of Occupational Educational Research and Nassau Community College (New York). A complete report of the procedures and findings of the planning study may be obtained from:

N.Y. State Educational Department
Room 468 EBA
Albany, New York 12224

In East Boston, there are two halfway houses servicing recuperating alcoholics. Since 1970, more than 400 alcoholic men and women have lived there with a 65% recovery rate. The halfway houses operate on an annual budget of $116,000 coming from various government
agencies and private donations. They are now eligible for additional State money. It costs the State of Massachusetts $1 million per year to jail alcoholics. Since the 1973 State law eliminating drunkenness as a crime, that money can now be used in rehabilitation programs.

Therapeutic programs which have strong emphasis on education, both academic and vocational, as preparation for returning to "straight" society, are essential. In-service training for professionals involved in all phases of the education program must be required before counseling is undertaken. Financial pressures of tuition and living expenses should be removed so that the greatest number of drug abusers and alcoholics can participate in rehabilitation. Some form of compulsory supervision after discharge has been shown to be beneficial.

(2) Major Barriers to Participation

To offset some of the financial problems involved, businessmen could be encouraged to contribute some of their resources to vocational and educational programs which will benefit the entire community. The drug abuser and alcoholic needs psychological help to improve his self-image so that he is ready to learn.

b. Characteristics of an M.O.L.N.

1. Outreach and Marketing

Probably the best way to reach drug addicts and alcoholics is through individuals and groups of rehabilitated addicts and alcoholics. T.V., radio and newspapers could be used to attract the attention of the drug users and alcoholics as well as their families and friends.

(2) Type and Extent of Counseling

Professional psychiatric counseling is mandatory for the drug-addict and the alcoholic.

(3) Modes of Certification

Drug addicts and alcoholics would have to examined for certification.

c. Services to be Provided by the M.O.L.N.

1. Types of Curriculum Content

85% to 90% of the residents of halfway houses attended the pilot program in New York for drug addicts. Most were 18 to 22 years old, 37% were female, slightly less than half had received high school diplomas through G.E.D. and none failed a course. They exhibited a more positive reaction to the liberal arts program than to the vocational or business programs. The reasons for this were thought to be because of the dynamics of the subject matter, the personalities of the teachers, and the similarities of the liberal arts courses with the existing group therapy discussions in-house. There was found to be a much lower "split rate" among educationally involved residents.

(2) Modes of Delivery

In the pilot program undertaken in New York State, short-term explanatory courses were conducted at residential therapeutic centers so that even those not permitted off the premises could enroll. The courses were lengthened as the students' interest and ability to persevere increased. Seminars were planned in cooper-
ation with the direction of treatment and education, the coordinator and staff members. The staff members are important; their support is essential since they are closest to the residents and know them best.

Courses were offered for 1-1/2 hours, three times a week after an exploratory educational phase to determine the abilities, interests and needs of the student through investigator-led orientation sessions. Teaching personnel from colleges, business and industry were trained to handle emergencies and screened to be sure they understood the causes of addiction and had the proper attitude. Tutorial programs were offered to bring students up to the level of courses being conducted. When the student was ready to leave the grounds of the residence, he would continue his study or training at nearby schools, colleges, vocational rehabilitation centers, business schools, etc. This involves the development of cooperation of key segments of the business community through appropriate promotional materials.

(3) Financial Needs and Available Resources

As a general rule, the addict and alcoholic are poor. However, there is a growing number of more well-to-do persons in this category who are capable of contributing to their own support.

Business people should be encouraged to contribute something to support the programs developed for the drug addicts and alcoholics since the general population will benefit from their rehabilitation.

(4) Job Referral, etc.

Once rehabilitated, the former drug addict and/or alcoholic needs counseling and assistance in being placed in the community.
II. Second Chance Clientele

This group is basically working class, stable family people who would probably have gone to college or further in college if they had been born ten to thirty years later; or they are people who are late bloomers. Many have competencies obtained through formal or informal postsecondary level study or training for which they have not received degree credit.

A. Adults who have at some time received postsecondary level education or training of some sort but who do not have degrees

1. Career Upgrading and Mid-Career Change

   a. General Characteristics

   The need for mid-career change or job upgrading comes from two sources: a changing job market or a personal motivation for improvement. In the first case, a person wants to change or upgrade his career (not just change from one job to another in the same field) because he has been put out of work in a changing job market. As industries contract or technology is introduced, many skills are no longer needed in the Massachusetts economy. These conditions can affect workers across a broad spectrum of jobs, from the scientist or engineer put out of work by the Route 128 recessions to the machinist put out of work by the decline in the shoe industry or the closing of the Boston Navy Yard.

   The second motivation for mid-career change is to improve a job or income position. It may be that a person has advanced as far as he can within a certain skill and job classification. Unless he retrains and/or changes careers, he cannot rise to higher income and job status levels. It may be that his lack of education prevents him from advancing.

   There are myriad examples of people who arrive at a dead-end position in their careers and who often could use education to advance. On the lower end of the scale are people working in jobs which require very little in the way of skills or on-the-job training. For a variety of personal or financial reasons they may have chosen a laborer's job at a young age, but now feel that they would like to and can handle a better job. They may want to consider a wide variety of better jobs: however, numerous barriers exist to their participation: age discrimination in the job market, lack of time, lack of financial resources, lack of talent and others.

   At another level is a skilled tradesman who has reached a seniority level and can advance no further. Perhaps he went through a union apprenticeship or employer training program, worked in his skill area for several years and now he would like to be considered for a middle management position. Unless he has some business training and often a college degree, he will lose that job option to a recent college graduate.

   At another level are technicians who have had some college, proprietary school, military or other technical training. They might want to move into management and administration or into professional jobs in those technical areas. Many practicing engineers have no degree, but worked as technicians for years and have been upgraded to engineers. Retraining in management or upgrading technical skills are services education can provide.
Professionals and managers may have achieved a relatively high income and job status, but see greater options in other areas. Professionals may want to move into management; or they may personally prefer a different, second career.

Continuing education is currently serving this last group of professionals and managers relatively well and to some extent it is serving people at the level of technicians. However, it is doing relatively poorly with those in unskilled and in trade and skill jobs. Thus, most of the following discussion relates to people in unskilled, trade or technical jobs.

(1) Needs and Interests

For the purposes of career upgrading and mid-career change, unskilled, trade and technical workers need retraining and upgrading of skills. These may range from the level of remedial work, clerical skills and trades, to technical and managerial skills. Often a major hindrance to advancement is the lack of a formal degree. Even though people have the requisite skills, they may not be hired or promoted without the degree. Thus formal credit and degrees are vital to job advancement. Certification of competence (as delineated in the following Section II.A.2) will facilitate this process.

Many people are unaware of opportunities in the job market to change careers or upgrade their jobs. They may not know what jobs are available in their local area and what kinds of training they would need to be hired for those jobs. Thus, job counseling and the coordination of programs around preparing a student for the job opportunities he wants to consider, are essential.

As discussed below, there are barriers of time, place and cost which inhibit many from participating in the current system. Financial support and flexibility of scheduling are important factors in facilitating their participation.

Younger people and those unmarried have the greatest potential for job change and advancement as well as the time to pursue more education. Those under 35 have a greater desire for additional education, specifically college level courses for credit, than older people (75% - 20%). The difference in interest in continuing education between those 30-34 and those 35-44 is 43% versus 34%. 38% of those under 25 compared to 22% of those 45-64 believe education can make a difference in their career.

Laborers, representing the smallest employment category, are somewhat more aware than other working people that education could improve their unskilled job status. They tend to look for anything available as long as it would replace their last income. The unemployed seem to recognize that additional education might help them in the competitive job market in which they are not succeeding.

People usually are willing to study to take advantage of placement opportunities within their company. When they determine the job opportunities elsewhere, they usually think in terms of minimal relocation.

Since people are able to work longer because of increased life expectancy and better health, the notion that a person should be trained for a single vocation is obsolete. Some are
dissatisfied with their present careers and are interested in study for change or change through study - 23% clerical, 15% sales, 15% operatives, 25% laborers are dissatisfied with their current work. According to the Becker Report, "Career improvement through change and better education to facilitate change can become a prime motivation for potential students."

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(2) Barriers to Participation

Many people do not participate in continuing education because they do not perceive it to be a realistic option for them. First, they may not know what job opportunities exist in their area and what kinds of training they would need to be hired for those jobs.

Second, the responsibilities may be so great in their lives that they have trouble committing limited time and money to continuing education, particularly when the payoffs are so unclear. Many of these people have families and money will go first to supporting them. Their time will be taken up by job and family. The two factors, time and money, explain most of the non-participation of these groups.

b. Characteristics of an M.O.L.N.

(1) Outreach and Marketing

General advertising through newspapers, T.V. and radio could be used extensively for this group. Particular emphasis should be placed on the relevance to career upgrading and jobs available for adults in the area.

Contacting workers through their employers and unions would be effective. In particular, coordination with employers closing down would help to ease the prospects of unemployment by providing other skills. A two-hour a day training program provided by an M.O.L.N. in conjunction with the Federal government might have been provided to many employees at the Boston Navy Yard prior to and immediately following the Yard's closing.

(2) Type and Extent of Counseling

Employment and training counseling is essential to facilitate the participation of this group in the M.O.L.N. The success of programs at all levels depends on the belief of participants that a job will be at the other end. Project "Adapt" was attempted at M.I.T. at the Department of Urban Studies and Planning in 1972 to test the convertability of skills of professionals from
aerospace and defense industries to the needs of the public sector. It was found that if there is no promise of job opportunity, re-education is not successful. At the other end of the job scale, it has been found that a specific job at the end of the program is an important incentive to the disadvantaged.

It may be useful to provide counselors who have specific working experience in a particular field to work with persons seeking the education in that area. For example, if a man says he is interested in management, someone who preferably has moved from foreman to manager should be counseling him about how to use education to advance. At Johns Hopkins University, a study of careers and curricula developed a self-administered vocational guidance device and a self-directed vocational guidance system to promote vocational development for high school, college and the adult populations.

There is no reason to believe that the needs of this group for personal counseling would be any greater than for the group already in continuing education. Unlike some of the disadvantaged groups, these people may not have problems of inadequate self-image or a predisposition to fail. Their primary counseling need is how to use the M.O.L.N. to advance their job prospects.

(3) Modes of Certification
Give credit for live experiences whenever possible. This is particularly critical when transferring from one program to another. A lot of cross certification could take place without having to repeat some course work similar to that already done. In most cases, traditional degrees will be necessary to accomplish a mid-career change.

c. Services to be Provided by the M.O.L.N.

(1) Type of Curriculum Content
The curriculum for mid-career change people would have to be developed according to their interests and needs on an individual basis, but it will be largely directed to occupational and degree requirements.

For those who are not too long out of school and who can cope from the start with academic work, a standard curriculum and teaching format is appropriate. However, many of those who dropped out of school before finishing a degree and those who chose vocational rather than general education may have done so because of a bad experience in school. They may not have had the interest or motivation at that time in their lives to work at a standard curriculum. For these people the re-introduction in the M.O.L.N. to standard academic work may be disastrous.

Most of these adults are afraid of examinations and are not interested in theoretical studies. At least initially, they should be reached in non-competitive and practically-oriented programs.

The kinds of programs best suited to these "second chance" clienteles may be found in the variety of other institutions which have traditionally served them, as discussed below in Section II.A.2. Proprietary schools and the military have served the lower half of each high school class by providing a variety of short, intensive courses, starting with practical kinds of work to interest students and moving to theoretical work later on.
(2) Modes of Delivery
   (a) Employer training programs
   (b) Mobile faculty
   (c) Convenient time -- evening and weekend

(3) Financial Needs and Available Resources

Limited finances are a major barrier to participation of this group in continuing education. Courses must be provided at a low enough cost to be paid -- a voucher scheme helping those of lower income and lower education would be desirable.

There are a variety of other sources of funds for this group. First, most employers have tuition reimbursement plans for their employees (96% of Massachusetts firms responding to a recent survey). These could be better utilized to the advantage of both the employer and the employee. However, many workers will not want to stay in their original firm, but instead move to another firm in the same industry or out of the industry entirely. For this group, federal sources should be investigated in manpower programs: MDTA, Voc. Rehab., etc.

Finally, loans of a long-term, low interest nature might be feasible for some people who have some job security on the one hand or who are forced by unemployment and out-of-date skills to try something new.

(4) Job Referral and Employment Counseling

Job referral is crucial to the success of the program (see Counseling section). Counselors should have ongoing contacts with employers and manpower agencies in the area to be able to effectively coordinate programs with employer needs.

In a study at U./Mass. Division of Continuing Education, it was ascertained that companies could work in cooperation with the university to develop placement opportunities within the company, training materials, guidance and counseling procedures, and in recruitment and selection of participants to the benefit of everyone. Company personnel and the university staff would hope to develop new marketing opportunities that would lead to pilot training programs. For example, the Occupational Safety and Health Act has created a need for increased attention to factory safety standards and many firms cannot afford and do not know how to train Safety Engineers. A large insurance company, active in industrial underwriting, could be approached and the suggestion made that they add safety engineers to do missionary work and training for smaller companies. If feasible, the university would investigate training needs, prepare necessary courses, etc., recruit and select candidates acceptable to the insurance company as employees upon successful completion of the training period.

2. Vocationally Trained

These include "second chance" clienteles as described in A above who specifically have competencies obtained through formal or informal postsecondary level study or training for which they have not received degree credit. These are divided into two categories according to a definition used by the U.S. Census; 1) formal and 2) other vocational training.
a. Formal Vocational Training
   (a) General Characteristics
   These include graduates of high school vocational programs, union or other apprenticeships, proprietary or public business, nursing, trade schools or technical institutes, and armed forces and Job Corps training programs.

   (1) Interests and Needs
   The interests and needs of this group have been described in Section II.A.1 above.

   However, this group has the additional need for certification of their past vocational training. Although their training was in a non-degree-granting institution, it may have been comparable in quality and level to postsecondary work in degree-granting institutions. In such cases, this training should be certified directly or by examination of the student for competence.

   Provision of means to certify past vocational training can prove to be a powerful incentive to people to return to school. For many returning to school part-time and at nights is not feasible if they would need four to eight years to complete a degree program. Their other commitments of time and money are too great to sacrifice and their time horizon short.

   Giving a person the option to receive credit for past training would mean both a reduction in the time needed for him to complete a degree and an indication that his work is considered legitimate by the education community. Both these factors are strong incentives to a person to return to school.

   (2) Barriers to Participation
   In addition to time, money and lack of information as barriers to participation of "second chance" clienteles is the current lack of acceptance of training in non-degree granting institutions. If a person went through a program in a proprietary school five to ten years before and found he could not get credit for it, then he would be less likely to enroll in a program where he would have to begin all over again. He also might feel that if his training was "unacceptable" in the system of continuing education, there would be no place for him there. Bad experiences with academic education may have contributed to his choosing vocational training over further school and would predominate his view of continuing education unless he was given greater encouragement.

   (b) Characteristics of an M.O.L.N.
   (1) Outreach and Marketing
   See Section II.A.1 above.
   Proprietary schools and unions should be appraised of credit transfer options so that they may inform their past graduates. Many return to the schools five to ten years after graduation and express interest in further education and training. Schools should be able to inform them of possibilities in the M.O.L.N.

   (2) Type and Extent of Counseling
   See Section II.A.1 above.

   (3) Modes of Certification
   The certification modes necessary for awarding credit for programs in non-degree-granting institutions are discussed in detail in a chapter on other providers. A variety of options

   113
### Vocational Training Background of Massachusetts Residents

<table>
<thead>
<tr>
<th>Age &amp; Years of Schooling</th>
<th>Total In Mass. (Male)</th>
<th>% With Voc. Training</th>
<th># With Voc. Training</th>
<th>Total In Mass. (Female)</th>
<th>% With Voc. Training</th>
<th># With Voc. Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h.s. 10-12</td>
<td>144,582</td>
<td>49</td>
<td>70,845</td>
<td>185,353</td>
<td>30</td>
<td>55,606</td>
</tr>
<tr>
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<td>64</td>
<td>11,310</td>
<td>17,708</td>
<td>47</td>
<td>8,323</td>
</tr>
<tr>
<td>College 2</td>
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<td>33</td>
<td>7,321</td>
<td>23,677</td>
<td>45</td>
<td>10,655</td>
</tr>
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<td>College 3</td>
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<td>1,522</td>
<td>12,917</td>
<td>75</td>
<td>9,688</td>
</tr>
<tr>
<td>36-45</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>h.s. 10-12</td>
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<td>52</td>
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</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>92,924</td>
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<td>14,506</td>
<td>32,833</td>
<td>46</td>
<td>15,105</td>
</tr>
<tr>
<td>College 3</td>
<td>8,795</td>
<td>44</td>
<td>3,869</td>
<td>12,904</td>
<td>47</td>
<td>6,065</td>
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</tbody>
</table>
FIELDS OF VOCATIONAL TRAINING FOR MASSACHUSETTS RESIDENTS WITH 10 OR MORE YEARS OF SCHOOLING BUT LESS THAN 4 YEARS OF COLLEGE

<table>
<thead>
<tr>
<th>BUSINES OR OFFICE WORK</th>
<th>NURSING OR OTHER HEALTH FIELDS</th>
<th>TRADES &amp; CRAFTS</th>
<th>ENGINEERING OR SCIENCE TECHNOLOGY</th>
<th>AGRICULTURE OR HOME ECONOMICS</th>
<th>OTHER</th>
<th>NOT REPORTED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>26-35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2730</td>
<td>3</td>
<td>46410</td>
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<td>36-45</td>
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<td>20516</td>
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<td>11079</td>
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<tr>
<td>46-64</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<td>18</td>
<td>2960</td>
<td>2.5</td>
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<td>13022</td>
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<td>60</td>
<td>22659</td>
<td>15</td>
<td>12085</td>
<td>8</td>
<td>-</td>
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</table>

Vocational Training
Included as "vocational training" were formal vocational training programs completed in high school, through an apprenticeship program, in a school of business, in a nursing school or trade school, in a technical institute, in the Armed Forces, or in Job Corps training. Excluded from "vocational training" programs were single courses which were not part of an organized program of study, on-the-job training, training in company schools, training by correspondence, and basic training in the Armed Forces.

Years of School Completed
Year of school completed includes only years in "regular" school. "Regular" school is defined as formal education obtained in public and private (denominational or non-denominational) secondary schools, colleges, universities or professional schools, whether day or night school and whether attendance was full-time or part-time. Schooling that was not obtained in a regular school and schooling from a tutor or correspondence courses were counted only if credits obtained were regarded as transferable to a school in the regular school system. This includes only "years completed", not the grade the person was in when the census was taken.
should be made available ranging from the certification of programs school by school (as for proprietary schools) to the provision of exams for certification of graduates.

If the individual has taken the program years before his school is given credit status, then some provision must be made to test his learning. One option is to assign him credit for past training if he can take and pass more advanced courses in the M.O.L.N.

The length of training to be credited will vary from one month to two years. Further work to complete a degree in the M.O.L.N. would therefore be from several months to several years equivalent full-time.

(c) Services to be Provided by the M.O.L.N.

See Section II.A.1 above.

b. Other Vocational Training

All those persons not included in II.A.2.a above, such as those trained in single courses not part of an organized program, on-the-job training, company schools, correspondence schools, and basic training programs in the Armed Forces.

No statistics are available as to numbers of Massachusetts adults trained in such programs.

Needs and services to be provided are similar to those described in Section II.A.1 and II.A.2.a above.

3. Middle Aged Homemakers

a. General Characteristics

Several converging social trends are leading to women expanding their interests and activities outside the home:

First, women are having fewer children. The birth rate has been declining in Massachusetts for the past 15 years due to liberalized abortion laws and widespread use of contraceptives. In 1960, the U.S. birth rate was 23.5 per thousand women; in 1972 15.0 or 2.28 per woman over her lifetime. This means that the last child is now born at a woman's average age of 30 and this child would begin school at a woman's average age of 35. With homemaking now easier, it is no longer necessary for a woman to remain at home all day to keep the house in order. The average woman then has 30 employable years beyond the time her last child enters school.

Second, more women are staying single into their late twenties and early thirties, and as divorce rates increase there are many more single women with children. These independent women have the time or are forced by circumstances to pursue a career. It is estimated that 42% of working women are either single or supporting a family on their own.

Third, as the society becomes more affluent, families can afford to send women back to school. As housework is made easier by labor-saving conveniences, women have more leisure time to go back to school and a job.

Fourth, the women's liberation movement has encouraged women to question the traditional roles in society and to consider whether they might want additional or different activities in their lives.

Fifth, colleges and universities are being encouraged to respond to women's needs. In some cases, scholarship funds are provided
and lower fees charged to encourage women to return to school. The Project on the Status and Education of Women of the Association of American Colleges and the Women's Bureau of the U.S. Department of Labor are but two of the national organizations pushing for equal educational opportunities for women. A bill currently before the House of Representatives, "Women's Educational Equity Act of 1973" would encourage and provide support for specific new programs for women.

(1) Interests and Needs

Published materials indicate women have strong interests in leisure, home crafts, and personal development courses which will continue into the future. Home economics courses may even attract more students if food, clothing, and other living costs continue to rise rapidly. Women will want to learn skills to economize on home expenses.

General education interests are also at present very high and are likely to remain high. These are being encouraged by programs such as Sarah Lawrence's for women returning to academic studies or Radcliffe's for women to carry on independent research.

However, the greatest increase in demand for courses is likely to be in vocational areas. In a society where status is so much determined by occupation or income, it is important that women who want roles outside of the home find good jobs. If trends of the 1960's continue, female participation rates in the labor force will not increase beyond 45% or 46% (from 37% in 1960). However, women who are now or who in the future will enter the labor market will pressure for better jobs. Labor force participation rates are also higher among educated women and the more women who return to school, the more who will also return to work.

The ETS survey in 1973 uncovered much greater interest among women for vocational learning than was actually being met by participation in programs. Interest rates as compared to participation rates are shown below as a percentage of would-be learners or actual learners, respectively.

Many women still think in terms of the traditional occupations for women: teachers, nurses, social workers, librarians, and service workers. Yet the demand for new teachers is down and most of these jobs pay low salaries. Some studies believe it will be clear in time that the best opportunities for large numbers of women are in traditional men's occupations: business, engineering, law, medicine, academics, and technical or industrial jobs. Demand for vocational subjects in these areas will no doubt increase.

(2) Major Barriers to Participation

Perhaps the greatest barrier to women's returning to school or work is psychological. Some will need support in a decision to return to school, while others will need to have their high expectations matched against the real possibilities for their lives.

Child care is a real barrier for many, but less of a problem for middle-aged housewives. Younger women with children and no husbands are often times forced to rely on their mothers to take care of their children. Yet in many instances mothers are not present to lend their support. In cases where the child is young and the mother married - there is still no one to take care of the child, particularly where the person comes from poorer circumstances and all income is needed to support the family with little left for education.
Vocational Interests Participation

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Men</td>
<td>40%</td>
<td>24%</td>
</tr>
<tr>
<td>Women</td>
<td>36%</td>
<td>7%</td>
</tr>
<tr>
<td>housewives</td>
<td>42%</td>
<td>34%</td>
</tr>
<tr>
<td>non-housewives</td>
<td>36%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Hobbies

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13%</td>
<td>36%</td>
</tr>
<tr>
<td>Men</td>
<td>14%</td>
<td>48%</td>
</tr>
<tr>
<td>Women</td>
<td>15%</td>
<td>55%</td>
</tr>
<tr>
<td>housewives</td>
<td>14%</td>
<td>44%</td>
</tr>
<tr>
<td>non-housewives</td>
<td>13%</td>
<td>48%</td>
</tr>
</tbody>
</table>

General Education

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12%</td>
<td>27%</td>
</tr>
<tr>
<td>Men</td>
<td>13%</td>
<td>24%</td>
</tr>
<tr>
<td>Women</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>housewives</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>non-housewives</td>
<td>14%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Home and Family

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Men</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>Women</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>housewives</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>non-housewives</td>
<td>25%</td>
<td>14%</td>
</tr>
</tbody>
</table>

While the interests of women are being fulfilled in hobbies, general education, and home and family subjects, they are not being satisfied in vocational subjects. Non-housewives are more interested than housewives in vocational courses, but neither group participates to the extent men do.

The interests of women are still in the traditional women's skills: business, nursing, cosmetology, and medical technology.

Interest in Vocational Topics

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business skills</td>
<td>3%</td>
<td>14%</td>
</tr>
<tr>
<td>Technical skills</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Industrial trades</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Nursing</td>
<td>--</td>
<td>8%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Management skills</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Engineering</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>Computer science</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>--</td>
<td>4%</td>
</tr>
<tr>
<td>Medical technology</td>
<td>--</td>
<td>4%</td>
</tr>
</tbody>
</table>

125
Lack of finances is a real barrier for many. However, many middle-aged housewives do not have this problem because their families have been raised and their husbands are at the peak of their earning power.

Discrimination against women in the labor force has acted as an educational barrier for some. Some say why should I get a good education, or enter a first rate profession when I will not get paid for it. Even accounting for differences between women and men in hours worked, education, and experience, women's earnings still average only 80% of men's. Overall, women earn only about 60% of what men earn, because they are also concentrated in occupations with low wages. In 1970, women still were 97% of the nurses, 95% of the secretaries, and 95% of the telephone operators, while only 9% of the doctors, 5% of the lawyers, and 2% of the engineers.

b. Characteristics of an M.O.L.N. Which Would be Helpful to Women

(1) Outreach and Marketing
For the woman who knows that she wants a career and who is self-confident in her talents, the primary services which continuing education can provide have to do with enhancing her job skills and increasing her awareness of the issues which will arise in returning to work. This kind of woman would probably respond well to all media directed at her. If she reads about a program or hears about it on T.V., and it is her cup of tea, she is likely to participate.

For the woman who does not know she wants a career, consciousness raising is important. Many women have found that meeting in groups to discuss problems either psychological or practical is supportive and directive: a forum for women to develop an awareness of their options is essential. This could be done by marketing to clubs, or organized women's groups, like the League of Women Voters.

(2) Type and Extent of Counseling
An M.O.L.N. should provide counseling or group sessions for professional women to develop an awareness of how they relate to men on the job and how to play the "rules of the game." Many think it is important for women to relate to men on the job in a professional manner.

Individual or group counseling and exposure to some of the options available should be given to women who have not made the decision to commit themselves in any degree to a career or work outside the home, but who are considering the possibility. Some women may subsequently decide they want to pursue a career or other activities; others may decide they prefer not to. But this decision should be made with a realistic understanding of what such a move would involve. Many women have been out of school for years and do not know what going back to school entails.

(3) Modes of Certification
Particular interest in credit for life experience.

c. Services to be Provided by an M.O.L.N.

(1) Type of Curriculum Content
On the basis of historical data, there is great reason to believe that many women will continue to be interested in avocational
courses. However, as stated above in the section on Needs and Interests, some say women will become interested in areas like law, medicine, etc. However, current statistics are:

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular academic</td>
<td>25%</td>
<td>42%</td>
</tr>
<tr>
<td>Trade and industrial</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Technical</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Business</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>Professional</td>
<td>27%</td>
<td>8%</td>
</tr>
<tr>
<td>Social and Community Service</td>
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<td>28%</td>
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<tr>
<td>Arts and Crafts</td>
<td>--</td>
<td>2%</td>
</tr>
<tr>
<td>Family and personal skills</td>
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<td>2%</td>
</tr>
<tr>
<td>Cultural or personal interest</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Thus, the M.O.L.N. might offer some regular academic courses and experiment with some professional type courses to see if women are in fact entering them in increasing numbers.

(2) Modes of Delivery
In particular, courses should be offered in daytime hours.

(3) Financial Needs and Available Resources
Similar to needs of general population.

(4) Job Referral and Employment Counseling
This is critical for women since many are unaware of the options available while still others are discriminated against and given lower salaries.

4. Some College - No Degree
   a. General Characteristics
In 1970, there were 658,000 people in Massachusetts who has gone to college from 1-3 years but did not earn a degree.

(1) Needs and Interests
Accreditation is a highly potent factor in post-secondary education. It has been found that the major difference in American higher education in retention occurs not between high and low quality colleges, but between those accredited institutions that can create fully legitimatized B.A. and B.S. degrees and those not accredited and which therefore do not have the power to turn students into "college grads".

According to the ETS Study, the reasons for people having gone to college at all are to become better informed (48%), for job advancement (35%), out of curiosity and to satisfy employer requirements (31%), to become a happier person (26%), to get a new job or certification of license (23%), while a very small percentage went to college for social goals, religious, or cultural goals. The trend to return to college increases according to the number of years completed since the trend is that for those who have completed one year of college 35% are likely to return while for those who have completed three years of college 53% are likely to return. There have been a variety of reasons why people have dropped out of college. Some had not planned to take a degree when they enrolled but wanted to supplement their earlier education, or prepare for later education, or were interested in a particular subject, or were often involved in some form of vocational education or employment at the time of
admission. Many people who drop out of a college change to another type or place of postsecondary education.

Teachers and administrative staff should be aware of the student's needs and make sure that the required work is consistent with his goals. Desire for increased income is a tremendous motivator for wanting a degree. 40% of those with an incomplete college education in Massachusetts are interested in an Open University as an accrediting institution. Greater efforts are necessary to develop financial resources to enable students to remain in college and efforts to support and train adequate administrative and teaching staff to keep students interested in remaining in college. There is a 50% drop out or flunk out rate during the freshman year in many large municipal institutions of higher education, especially those operating under an open admissions policy, because the student has not developed the basic skills necessary to facilitate learning. Guidance and counseling before entrance and placement in a program to strengthen these skills would affect the drop-out rate positively.

According to the Becker Study (1973) there is a strong trend toward resuming their education among those who have had some college. The following chart is a result of the question, "If an External-Degree Program were available at reasonable cost, how likely is it that you would enroll in this program to pursue a college degree in the next few years?"

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Fairly Likely</th>
<th>Not Very Likely</th>
<th>Very Unlikely</th>
<th>Don't Know</th>
<th>% Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 yr. college</td>
<td>13%</td>
<td>22%</td>
<td>28%</td>
<td>32%</td>
<td>5%</td>
<td>(150)</td>
</tr>
<tr>
<td>2 yrs.</td>
<td>17%</td>
<td>25%</td>
<td>25%</td>
<td>31%</td>
<td>2%</td>
<td>(246)</td>
</tr>
<tr>
<td>Assoc. Degree</td>
<td>10%</td>
<td>37%</td>
<td>18%</td>
<td>31%</td>
<td>4%</td>
<td>(51)</td>
</tr>
<tr>
<td>3 yrs.</td>
<td>25%</td>
<td>28%</td>
<td>20%</td>
<td>26%</td>
<td>1%</td>
<td>(81)</td>
</tr>
</tbody>
</table>

If cost $200 per year (p. 5)

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Fairly Likely</th>
<th>Not Very Likely</th>
<th>Very Unlikely</th>
<th>Don't Know</th>
<th>% Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 yr. college</td>
<td>33%</td>
<td>45%</td>
<td>8%</td>
<td>12%</td>
<td>2%</td>
<td>(52)</td>
</tr>
<tr>
<td>2 yrs.</td>
<td>35%</td>
<td>46%</td>
<td>15%</td>
<td>4%</td>
<td>-</td>
<td>(103)</td>
</tr>
<tr>
<td>Assoc. Degree</td>
<td>13%</td>
<td>57%</td>
<td>13%</td>
<td>17%</td>
<td>-</td>
<td>(24)</td>
</tr>
<tr>
<td>3 yrs.</td>
<td>56%</td>
<td>33%</td>
<td>9%</td>
<td>2%</td>
<td>-</td>
<td>(43)</td>
</tr>
</tbody>
</table>

There is another group who have graduated from college, entered graduate school, but did not earn a graduate degree who could benefit from an M.O.L.N.

In the academic year, 1969-1970, a substantial number of the 10,000 graduate students at the University of California at Berkeley dropped out of graduate school, a number significant enough to prompt the question of whether graduate school admission requirements are indicative of successful students. The loss of educated manpower to society caused great concern and a questionnaire was sent to 1800 former students to try and determine the reasons for this phenomenon. 48% of those in the study completed and returned the questionnaire. More women, more California residents and more with high grade-point averages participated. There were three reasons why these graduate students dropped out: (a) financial factors;
(b) academic - either they were dissatisfied with the program or it was terminated by the department; (c) personal - physical or emotional, marriage, service pregnancy, disappointment in graduate study.

(2) Major Barriers to Participation

47% of the people questioned felt that the cost of an external degree program would influence their decision to participate. Of those who would be interested, 64% of the men and 43% of the women prefer evening courses. 55% felt that they would not have enough time to participate while 40% do not want to participate full-time but would be interested in part-time. Responsibilities of their job (37%), home (33%), being required to be present somewhere (17%) prohibit some of these people with some college but no degree from being interested. Others are not sure of the field of study they want to pursue, but guidance and counseling could give direction.

b. Characteristics of an M.O.L.N.

(1) Outreach and Marketing

Newspapers, T.V., and radio again are prime means of reaching a market in this instance, those people with some college—no degree.

Employers have shown interest in helping their employees achieve higher status through more education.

(2) Type and Extent of Counseling

People with some college and no degree should be able to take advantage of various educational programs and job opportunities once they are made aware of what is available.

(3) Modes of Certification

Credit for past life experience and training is important to those with some college and no degree to shorten the time necessary to attain their goals once they reenter the educational mainstream. By eliminating some unnecessary requirements they will be more interested.

c. Services to be Provided by the M.O.L.N.

(1) Type of Curriculum Content

This would have to be determined on an individual basis according to needs and interests.

(2) Modes of Delivery

Of those with some college, but no degree who have participated in other modes of learning, 27% preferred lectures and classes, 19% conferences and workshops, 17% on-the-job training, 12% discussion groups, 8% individual lessons, 4% studied on own or took correspondence courses, 3% used T.V. or video cassettes. Some of the media measured in the study have not yet been fully developed as learning modules.

(3) Financial Needs and Available Resources

This would also have to be determined on an individual basis. Some personal commitment should be required even if in the form of a loan.

(4) Job Referral and Employment Counseling

Guidance and counseling is necessary for those with some college but no degree to help find job opportunities.
B. Students currently enrolled in non-degree granting postsecondary level institutions and educational programs

These are people who are now receiving or who will in the future be receiving quality but non-degree credit, postsecondary level education and training.

1. Students in Proprietary and Independent Schools
   a. General Characteristics

   The attached charts show that in the 1972-73 academic year, 37,311 students attended 272 proprietary and independent schools in Massachusetts: 6,000 were in correspondence school programs. There appear to be two types of clienteles in proprietary institutions. First are the students clearly enrolled for job-related reasons. They are taking courses in proprietaries for job skills, either beginning or refresher courses. In this category are many types of students; young high school graduates, dropouts, housewives, returning veterans. They are likely to be lower-middle and middle class in background.

   Some trade schools cater largely to men; other schools, such as business and cosmetology, cater to women.

   A second but smaller group of students are those enrolled for recreational reasons. They are taking courses in art schools, cooking schools, language schools, and flight schools. These students are likely to be middle or upper-middle class in background.

SUMMARY OF ENROLLMENTS AND GRADUATES IN PROPRIETARY AND INDEPENDENT SCHOOLS BY CATEGORY OF SCHOOL

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Office</td>
<td>11,215</td>
<td>7,124</td>
</tr>
<tr>
<td>Medical and Health</td>
<td>6,950</td>
<td>2,912</td>
</tr>
<tr>
<td>Trade and Technical</td>
<td>14,800</td>
<td>6,334</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1,511</td>
<td>1,042</td>
</tr>
<tr>
<td>Other Institutions</td>
<td>3,035</td>
<td>2,622</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>37,311</strong></td>
<td><strong>19,934</strong></td>
</tr>
<tr>
<td>Correspondence</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>43,311</strong></td>
<td></td>
</tr>
</tbody>
</table>

Of Schools Other than Correspondence Schools:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Schools</td>
<td>29,352</td>
<td>17,259</td>
</tr>
<tr>
<td>Independent Schools</td>
<td>7,959</td>
<td>2,675</td>
</tr>
</tbody>
</table>

Note: In cases where numbers were not available, estimates were made.
ENROLLMENTS AND GRADUATES IN
PROPRIETARY AND INDEPENDENT INSTITUTIONS
BY TYPE OF SCHOOL

<table>
<thead>
<tr>
<th></th>
<th>Business and Office</th>
<th>Medical and Health</th>
<th>Trade and Technical</th>
<th>Cosmetology</th>
<th>Other Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENROLLMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
</tr>
<tr>
<td>Less than 3 mos.</td>
<td>3445</td>
<td>-</td>
<td>869</td>
<td>-</td>
<td>4314</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>570</td>
<td>-</td>
<td>1177</td>
<td>-</td>
<td>1747</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>1080</td>
<td>32</td>
<td>1615</td>
<td>1436</td>
<td>4163</td>
</tr>
<tr>
<td>1 year</td>
<td>1893</td>
<td>435</td>
<td>105</td>
<td>-</td>
<td>2433</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>2685</td>
<td>960</td>
<td>7871</td>
<td>75</td>
<td>3035</td>
</tr>
<tr>
<td>2 years or more</td>
<td>1542</td>
<td>5523</td>
<td>2963</td>
<td>-</td>
<td>10,028</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>11,215</td>
<td>6950</td>
<td>14,600</td>
<td>1511</td>
<td>3035</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37,311</td>
</tr>
<tr>
<td><strong>GRADUATES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 3 mos.</td>
<td>3257</td>
<td>-</td>
<td>839</td>
<td>-</td>
<td>4096</td>
</tr>
<tr>
<td>3 to 6 mos.</td>
<td>350</td>
<td>-</td>
<td>1010</td>
<td>-</td>
<td>1360</td>
</tr>
<tr>
<td>6 to 12 mos.</td>
<td>694</td>
<td>17</td>
<td>708</td>
<td>1004</td>
<td>2423</td>
</tr>
<tr>
<td>1 year</td>
<td>1128</td>
<td>355</td>
<td>84</td>
<td>-</td>
<td>1567</td>
</tr>
<tr>
<td>to 2 years</td>
<td>1223</td>
<td>701</td>
<td>2460</td>
<td>38</td>
<td>2622</td>
</tr>
<tr>
<td>2 years or more</td>
<td>472</td>
<td>1839</td>
<td>1133</td>
<td>-</td>
<td>3444</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7124</td>
<td>2912</td>
<td>6234</td>
<td>1042</td>
<td>2622</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19,934</td>
</tr>
</tbody>
</table>
NUMBER OF PROPRIETARY AND INDEPENDENT SCHOOLS IN MASSACHUSETTS, ENROLLMENTS AND NUMBER OF GRADUATES BY AREA

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springfield</td>
<td>11</td>
<td>1026</td>
<td>699</td>
</tr>
<tr>
<td>Pittsfield/</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>North Adams</td>
<td>0</td>
<td>310</td>
<td>120</td>
</tr>
<tr>
<td>Amherst/</td>
<td>0</td>
<td>310</td>
<td>120</td>
</tr>
<tr>
<td>Northampton</td>
<td>0</td>
<td>500</td>
<td>150</td>
</tr>
<tr>
<td>Worcester</td>
<td>0</td>
<td>540</td>
<td>150</td>
</tr>
<tr>
<td>Fitchburg/</td>
<td>1</td>
<td>350</td>
<td>110</td>
</tr>
<tr>
<td>Gardner</td>
<td>1</td>
<td>350</td>
<td>110</td>
</tr>
<tr>
<td>Framingham</td>
<td>2</td>
<td>160</td>
<td>40</td>
</tr>
<tr>
<td>Salem/Lynn</td>
<td>3</td>
<td>210</td>
<td>40</td>
</tr>
<tr>
<td>Andover/Lowell</td>
<td>1</td>
<td>300</td>
<td>10</td>
</tr>
<tr>
<td>Burlington/</td>
<td>2</td>
<td>300</td>
<td>10</td>
</tr>
<tr>
<td>Bedford</td>
<td>3</td>
<td>300</td>
<td>10</td>
</tr>
<tr>
<td>Brockton</td>
<td>1</td>
<td>110</td>
<td>30</td>
</tr>
<tr>
<td>New Bedford/Fall River</td>
<td>1</td>
<td>110</td>
<td>30</td>
</tr>
<tr>
<td>Falmouth/</td>
<td>0</td>
<td>63</td>
<td>10</td>
</tr>
<tr>
<td>Barnstable</td>
<td>1</td>
<td>4912</td>
<td>712</td>
</tr>
<tr>
<td>Boston</td>
<td>1</td>
<td>4912</td>
<td>712</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>7659</td>
<td>11712</td>
</tr>
</tbody>
</table>

BUSINESS & OFFICE

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>7</td>
<td>504</td>
<td>180</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>4</td>
<td>174</td>
<td>66</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>102</td>
<td>41</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>3727</td>
<td>695</td>
</tr>
</tbody>
</table>

MEDICAL & HEALTH

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>7</td>
<td>1128</td>
<td>713</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>4</td>
<td>328</td>
<td>131</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>11388</td>
<td>4626</td>
</tr>
</tbody>
</table>

TRADE & TECHNICAL

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>109</td>
<td>74</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>108</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>637</td>
<td>434</td>
</tr>
</tbody>
</table>

ETOLOGY

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>109</td>
<td>74</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>108</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>637</td>
<td>434</td>
</tr>
</tbody>
</table>

HE INSTITUTIONS

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>109</td>
<td>74</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>108</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>637</td>
<td>434</td>
</tr>
</tbody>
</table>

TOTALS

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Schools</th>
<th>Number Enrolled</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3</td>
<td>109</td>
<td>74</td>
</tr>
<tr>
<td>Number Enrolled</td>
<td>1</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>3</td>
<td>108</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>637</td>
<td>434</td>
</tr>
</tbody>
</table>

Note: In cases where numbers were not available, estimates were made.
(1) Needs and Interests

Students in proprietary and independent schools who are enrolled for job advancement are likely to be interested in formal certification of their work by the M.O.L.N. See the chapter on Other Providers for arrangements to be made for students to transfer credits. Those who are enrolled for leisure courses are unlikely to be interested in credit from the M.O.L.N. Those who are interested in M.O.L.N. credit would need general education requirements filled in order to get a traditional degree.

(2) Barriers to Participation

Students in proprietary schools and not in degree-granting institutions because they want vocational training, feel more comfortable in non-academic settings and like the practical, intensive training offered. They are also unlikely to participate in degree-granting programs unless they can transfer credits into those programs.

b. Characteristics of an M.O.L.N. Which Would Be Beneficial to Students in Proprietary and Independent Schools

(1) Outreach and Marketing

Students should be reached through the administrators of proprietary schools. Arrangements should be made with each individual school to certify credit.

(2) Type and Extent of Counseling

Not applicable (provided by school).

(3) Modes of Certification

Programs in proprietary schools should be certified for credit into M.O.L.N. degrees. For those institutions who choose not to negotiate for credit arrangements, provisions should be made to certify interested students by examination. See chapter on Other Providers.

In order to receive an A.A. or A.S. degree from the M.O.L.N., students will have to fulfill general education requirements. Since most proprietary schools will not want to provide these courses on their own, arrangements will have to be made for courses to be provided. It is possible that mobile faculty from degree-granting institutions could teach general education courses in proprietary institutions to interested students. Alternatively, proprietary school students could travel to a campus or a branch campus for course work.

If Massachusetts moves, as other states such as Pennsylvania have done, to offer associate degrees in occupational areas (Associate of Specialized Business and Associate of Specialized Technology), then some proprietary schools could begin to offer degrees of their own. Until such time, however, proprietary students will have to work through the M.O.L.N. to receive credit for their training.

c. Services to Be Provided by the M.O.L.N.

(1) Type of Curriculum

The M.O.L.N. can provide general education courses to proprietary school students who cannot take them in the school in which they are enrolled. Proprietary schools will provide a core curriculum in an occupational area, but will not generally provide courses in liberal arts. Students may attend out or interest or to fulfill requirements for an M.O.L.N. degree.

(2) Modes of Delivery

If students in proprietary schools need general edu-
cation courses, they can be provided by the M.O.L.N. in one or two ways: mobile faculty can teach courses in the proprietary schools and students can attend other M.O.L.N. participating schools for specific courses. The first option is feasible only if there are enough students in a proprietary school to comprise a full class.

(3) Financial Needs and Available Resources

Not applicable.

(4) Job Referral and Employment Counseling-Placement

Not applicable -- provided by individual schools.

2. Students in employer-based, union-based or Armed Forces-based education and training

a. General Characteristics

Much education and training goes on in places of work which may be closely or only remotely related to jobs. The kinds of programs organized are described in the chapter on the Providers. Basically, there are two for employers: in-house courses offered to employees and external tuition reimbursement for courses taken on a campus. Union apprenticeship programs may be offered by the state or the union. Armed Forces programs may be run as formal classroom programs beyond Basic Training.

No specific numbers are available on how many people in Massachusetts are currently involved in employer-based, union-based or Armed Forces-based education and training.

(1) Needs and Interests

People in these programs are primarily interested in job advancement. They would have interests in the M.O.L.N. only if 1) a degree were valuable for job advancement or 2) relevant courses were offered by M.O.L.N. affiliated institutions which they could take.

(2) Barriers to Participation

Many people currently participate in employer tuition reimbursement plans. About 22,000 continuing education students are reimbursed by private employers alone: similar barriers exist, as for proprietary students, in transferring in-house study into academic credit.

b. Characteristics of an M.O.L.N. which would be Beneficial to Students in Employer-Based, Union-Based or Armed Forces-Based Education and Training

(1) Outreach and Marketing

Students should be reached through employer training directors, unions, and Armed Forces training directors.

(2) Type and Extent of Counseling

Counseling should be provided to those interested since (unlike proprietary schools), counseling is not a regular component of employer, union and Armed Forces programs.

(3) Modes of Certification

Programs in other institutions may be certified by credit by the M.O.L.N. if they chose to negotiate. However, many employers would not be interested in such arrangements and would prefer to have their employees take exams or be evaluated for credit on an individual basis.

Many programs in the Armed Forces have already been evaluated for credit transfer in other states.
See the chapter on other providers for more detail on certification modes.

c. Services to be provided by the M.O.L.N.
   (1) Type of Curriculum
       Vocational, job-related courses would be taken as part of an employer's tuition reimbursement plan. General education courses would be of interest to those who want to complete degree requirements.
   (2) Modes of Delivery
       Some employers or unions might wish to have courses offered by the M.O.L.N. in their own plant or facilities. Mobile faculty could be used at convenient times for employees.
   (3) Financial Needs and Available Resources
       Utilize employer's tuition-reimbursement plans and subsidies. Union members may need financial support.
   (4) Job Referral and Employment Counseling-Placement
       Job counseling should be provided in conjunction with and separately from employers, unions and the Armed Forces.
III. Those who are already making high use of the existing continuing education system:

Those of relatively high previous education, income and job status.

1. General Characteristics

In general, the current student clientele is young, affluent, upwardly mobile from their parents' level of education and jobs, and are already employed in professional or managerial jobs. Two-thirds of students are men, one-third women. The primary reason for enrolling in continuing education is job advancement.

The group is highly internally-motivated, and they already have some college or even graduate education. The current continuing education system does not include numbers of disadvantaged or other minority groups. Women are only one-third of the total student population, and many of these women are teachers taking extra education courses. Disadvantaged or welfare mothers, and women returning to careers after child-rearing are not adequately represented in the current student population.

a. Needs and Interests

The needs of current participants are mainly related to job advancement. 80% indicate their primary reason as either to advance in their job or to get a new job. Meeting this need will be by single courses in specific vocational areas and by degree programs.

The subjects current students take vary with sex. Men students are heavily concentrated in business (23%) and professional (27%) subjects and regular academic (25%) subjects. Women are more concentrated in social or community service (28%) and regular academic (42%) subjects than men. Women also dominate the subjects of arts and crafts, family, personal and cultural interest, while men dominate trade, industrial and technical subjects.

By virtue of special programs and federal support, veterans have higher participation rates than other people in their respective socio-economic groups. A variety of programs have been designed to meet their needs in the current continuing education system.

b. Barriers to Participation

By definition, there are no major barriers to participation. Motivation for job advancement is high and internalized: 67% of men feel on their own that the program is necessary for their own job advancement, while only 12% report that their employer requires it or that the program is necessary to take a licensing exam.

2. Characteristics of an M.O.L.N. which would be helpful to persons already participating in continuing education programs

  a. Outreach and Marketing

Most students presently enrolled in continuing education programs found out about the program through their own initiative or from friends or family. 17% of men found out about the program at work (10% of women) while only 10% of men and 15% of women heard of the program through public communication services--newspapers or brochures. There is no reason to believe this word of mouth method would not continue to be effective, if new programs were made available.

  b. Type and Extent of Counseling

Great interest is expressed by current participants for increased counseling services of both a personal and academic nature. 61% of male students and 67% of female students state they would use more counseling services. Existing programs of counseling in continuing education are inadequate to meet the need.
c. Modes of Certification

Most students are taking courses for credit, but they are not necessarily degree candidates. Men are more likely than women to be degree candidates (88% vs. 77%). 30% are studying for a graduate or professional degree. Great interest is expressed by this group for options of credit for experience outside the classroom. 72% report they would utilize such opportunities.

3. Services to be provided by an M.O.L.N.

a. Type of Curriculum Content

Current students are interested in more courses of an academic and professional or graduate nature: 58% state they would use courses if more were offered at the professional or graduate level. 54% would use academic courses if offered. Less interest is expressed in total in other course areas: 50% of women state they would use social and community service courses (36% of men) and 51% arts and crafts, cultural or personal interest (33% of men). Men express some interest in business courses (42% vs. 23% of women) and trade and technical courses (39% vs. 25% for women).

b. Modes of Delivery

Only moderate interest is expressed by current participants in an "open university" program when it is defined as expanded home television and correspondence or in more local or branch campuses. 41% state they would use an "open university" program, 45% another branch campus. However, there may be some areas of the State or some middle and upper class persons who do not now attend programs because they are not close to the campus. New branch campuses might draw them in.

Surveys of the general population and across the country all indicate a lack of interest in educational technology and a preference for lectures or classes in classrooms.

There is little interest among current men participants (27%) and moderate interest among women (41%) for more courses offered in work places and only 22% of all would be interested in longer class meetings such as on weekends.

Of those current participants who are married, 55% of men and 59% of women state they would go to a family center where programs for adults and children would be offered separately but at the same time and in the same building.

c. Financial Needs and Available Resources

Current participants do not generally need financial support. 59% of men and 24% of women report that they are being reimbursed already in part or in full for this course. 36% of those being reimbursed are on a veteran's subsidy, 54% receive an employer subsidy -14% from a government employer and 40% from a private employer. Of women receiving a subsidy (only 24% do) m 54% receive a subsidy from a private employer, 10% have a teacher's voucher and 11% receive a subsidy from the school (vs. 2% of men).

Not surprisingly, women are more concerned with the fee for the course (44% considered the course fee when deciding to enroll vs. 34% of men). 61% of women and 45% of men say they would take more courses if they were cheaper.

However, of those being reimbursed, 71% of men and 78% of women state they would still take the course if they had to pay the entire cost themselves.
d. **Job Referral and Employment Counseling**

Most of these persons are clear in how education can help in their jobs, but would probably avail themselves of counseling in any case. These people would quickly see the advantages offered in any counseling program and would capitalize on it.
The research done on special clientele groups which could be served by an M.O.L.N. in Massachusetts was divided into three parts. First, published materials were scoured for relevant information on each group concerned; secondly, interviews were conducted with persons who either were a part of a group to be served or knew a lot about a particular group because of their jobs; and thirdly a group meeting was held with persons from several of the special clientele groups to discuss how an M.O.L.N. might benefit said groups.

Published materials were so current that most was found on microfilm as it had often not been catalogued. Published materials covered information in Massachusetts and outside, and was based primarily on the experience other states and schools in those states were having with open learning programs.

Interviews were both by telephone and in person. Telephone conversations were limited to those persons with whom some familiarity was had, with the exception of extraordinary cases where time or distance were problems. All other interviews were personal. See Exhibit A attached hereto for a listing of the questions asked.

A group meeting was held on Thursday December 13, 1973 with representatives from four groups in attendance: Blacks, Spanish, Mid-Career change, and the unemployed. See Exhibit B attached hereto for the questions raised and discussed.
Exhibit A to Research Methods
Special Clientele Groups

QUESTIONS PURSUED IN DIRECT INTERVIEW RESEARCH WITH TARGET CLIENTELES

A. WHY DO YOU THINK THE HAVE SUCH LOW PARTICIPATION RATES IN CURRENT EDUCATIONAL PROGRAMS?
(If no answer, is it cost? lack of interest? no access to transportation? no relevance to their lives?)

B. IF ALTERNATIVE PROGRAMS WERE OFFERED, WHAT KINDS OF EDUCATION WOULD INTEREST THE

1. Academic Skills
2. Vocational Skills
3. Trade
4. Managerial Skills
5. Secretarial
6. Professional
7. Interpersonal
8. Physical
9. Religious
10. Other

C. WHY DO YOU THINK THIS GROUP IS INTERESTED IN LEARNING THESE KINDS OF MATERIALS AS OPPOSED TO OTHERS AND WHAT IS THEIR MOTIVATION?

1. General Information
2. To improve or advance in job
3. To get a new job
4. For Community Activity
5. For personal or family interest
6. For social or recreational interest

D. THINKING ABOUT THE KINDS OF INTEREST YOU JUST SPOKE ABOUT, HOW DO YOU THINK THIS COMPARES TO WHAT THE GROUP NEEDS?

In short, people are interested in a lot of things, but some things they need whether interested in learning them or not. What I'm really getting at here is the dichotomy between perceived interest and needs and real interest and needs to become proficient in a particular area.

1. Does this group perceive the value an education can have to them?

2. Why are the group's interests different from their needs?

E. HOW CAN THESE INTERESTS AND NEEDS BE MET?

1. Would removal of some of the more traditional barriers to participation such as cost and transportation help meet these interests and needs?

2. Would the creation of new methods of instruction help to meet some of these needs, and if so, what kinds of instruction do you think would be most helpful?
a. T.V. in the home with special channels carrying certain types of information.

b. Mobile faculty coming to certain learning centers or a residence where several persons could gather.

c. Allowing credit to be given for working on the job.

d. Giving credit for having travelled extensively or worked actively in the community.

e. Developing independent programs with a counselor which is then carried out by a person completely on their own.

f. Having radio, records, or audio cassettes as learning tools.

g. Giving traditional methods of instruction such as going to classes at a particular school in the area.

h. Going to vocational schools or employer programs and being able to receive academic credit for this.

3. Would the granting of degrees or licenses or certificates of completion for other than college work help meet the interest and needs of this specific group? If so, how and why?

4. If a program were advertised through radio, T.V., newspapers, and other media that an open learning program including counseling existed, as we have discussed it here, would this help to meet the interests of this specific group and why?

F. HOW LIKELY DO YOU THINK IT IS THAT SOME OF THE PEOPLE WE HAVE JUST BEEN TALKING ABOUT WOULD AVOIL THEMSELVES OF AN OPEN LEARNING PROGRAM IN SOME OF THE AREAS WE HAVE JUST DISCUSSED IF IT WERE IN FACT AVAILABLE?
Exhibit B to Research Methods
Special Clientele Groups

Questions raised and discussed at the meeting of persons who either were a part of, or worked with, the Blacks, Spanish, unemployed and mid-career persons follow:

What can the Massachusetts Open University be?
Nolfi study recommendations
Task Force for the Governor
Instruction Services and Certification Services

Why are certain clientele groups not served by the current system?
interests and needs
barriers to participation

What does the State need in higher education services that are not now available?
instructional modes
---curriculum
---delivery
certification modes

Current concepts of the MOU - are they adequate to meet the needs?
learning centers across the State
---where located?
---informal counselling sessions with faculty mentors?
---funding the institution or funding the clients?

faculty mentors
coordination with employers
certification by examination

How structure clientele participation in development of programs?
I. Disadvantaged Clienteles

A. Racial Minorities

1. Blacks
   a. Ms. Erna Ballantine, Director
      Community Interaction through Youth
      675 Massachusetts Ave.
      Cambridge, Mass.
   b. Dr. Prentiss Moore, Director
      University Without Walls of Boston
      Walnut Avenue and Dale St.
      Roxbury, Mass. 02119
   c. Dr. Larry Johnson, President
      Roxbury Community College
      2401 Washington St.
      Roxbury, Mass.

2. Second Language Groups
   a. Ms. Norma Stanton, Director
      Concilio de la Comunidad
      21 James St.
      Boston, Mass. 02118
   b. Alex Rodriguez, Associate Director
      United Community Services
      14 Somerset St.
      Boston, Mass.
   c. Mr. Carmello Iglesian
      Assistant to Governor of Massachusetts
      Room 180
      The State House
      Boston, Mass. 02133
   d. Sister Anna Mary Kelly
      Director of Continuing Education
      Regis College
      Weston, Mass. 02193
   e. Mr. Donald Atencio
      Assistant to President, Roxbury Community College
      2401 Washington St.
      Roxbury, Mass.

B. Institutionalized

1. Chronically Hospitalized
   Dr. George Grosser
   Assistant Commissioner of Mental Health
   190 Portland St.
   Boston, Mass.

2. Prison Inmates
   a. Mr. Russel Stockard
      Educational Director
      Deer Island Prison
      Boston, Mass.
b. Numerous Persons at Framingham State Prison
Framingham, Mass.

(1) Mr. Kenneth Bishop
   Director of Treatment
(2) Ms. Florence Dupuis
   Director of Educational Programs
(3) Ms. Mary Jo Reed
   Social Worker
(4) Ms. Shelly Isaacson
   Community Coordinator
(5) Molly Eno
   School Teacher
(6) Selma Shariff
   Staff Person
(7) Mrs. Mary Crisp
   Sr. Correction Officer
(8) Glenn Manez
   Inmate
(9) Kenneth Bishop
   Inmate

3. Nursing Home Residents
   a. Mr. Charles Kelly
      President, Federation of Nursing Homes in Massachusetts
      Director Franvale Nursing Home
      20 Pond St.
      Braintree, Mass.
   b. Ms. Barbara Risi
      Head Staff Nurse
      Franvale Nursing Home
      20 Pond St.
      Braintree, Mass.

C. Special Problem
   1. High School Drop Outs
      Mr. Robert Kates
      Director, New England Regional College Entrance
      Examining Board
      470 Taunton Pond Road
      Waltham, Mass.

   2. Unemployed
      a. Mr. William Sullivan
         W.I.N. Administration
         Division of Employment Security
         Charles F. Hurley Bldg., 2nd Floor
         Boston, Mass. 02114
      b. Mr. John McKenna
         Assistant Director of Employment Services
         Hurley Building, 2nd Floor
         Boston, Mass. 02114
c. Mr. Raymond Thomasini  
Assistant Director for Manpower  
City of Boston  
Boston City Hall  
Boston, Mass.  
d. Mr. Gail Backus  
Federal Manpower Administration  
John F. Kennedy Federal Building  
Boston, Mass.  
e. Mr. Charles Minoya  
Director, Roxbury II - Neighborhood Employment Center of ABCD  
2247 Washington St.  
Dorchester, Mass.  

3. Elderly  
Mr. Paul K. Willenbrock  
Director of Community Services  
North Shore Community College  
Beverly, Mass. 01915  

4. Physically Handicapped  
a. Mr. George Zerman  
Achievement Club of the Physically Handicapped in Lowell  
Lowell, Mass.  
b. Miss Eleanor Marnock  
President Indoor Sports Club of the Physically Handicapped  
109 Curtis Ave.  
Quincy, Mass.  

II. Second Chance Clientele 

Mid-Career Change  
Mr. Martin Martinian  
Bureau of Student Services  
Massachusetts Department of Education  
182 Tremont Street  
Boston, Mass. 02111  

III. Those who are already making high use of the existing continuing education system.  

Veterans  
1. Mr. Robert Salsburg  
Vice President  
Newbury Junior College  
921 Boylston St.  
Boston, Mass.  
2. Mr. Thomas Arnott  
U.S. Veteran Assistance Center  
John F. Kennedy Federal Building  
Boston, Mass.
3. Kenneth and Robert Apfel
   Counselors
   Newbury Junior College
   921 Boylston St.
   Boston, Mass.

4. Mr. James Burke
   Veterans Director
   Mass. Department of Higher Education
   182 Tremont St.
   Boston, Mass.
BIBLIOGRAPHY FOR
"UNDERSERVED CLIENTELE GROUPS"

English as a Second Language


Veterans

4. Pamphlet. "V.E.T.S."
5. "Reveille." Newspaper of V.E.T.S.

Prisoners


Mid-Career Change

5. "Refocus." Preliminary Proposal by Division of Continuing Education. University of Massachusetts, Amherst.

Drug Abusers and Alcoholics


Elderly


Unemployed

2. "Develop a Trust." Indiana State University, Indiana, 1970.

Some College - No Degree


High School Drop Out

Handicapped
5. "What Can the Commonwealth of Massachusetts Do For You If You Are Disabled?" Pamphlet. Massachusetts Rehabilitation Commission.

Disadvantaged