

Center for Labor Research and Education .  
Institute of Industrial Relations.  
University of California, (Berkeley)

The following tables represent preliminary results from a survey of former carpenter apprentices, undertaken by the Center for Labor Research and Education at the request of the Bay Counties Carpenters Joint Apprenticeship and Training Program and the Bay Counties District Council of Carpenters. The purpose of the research is to determine the reasons for a high drop-out rate among carpenter apprentices and to determine what problems, if any, require evaluation by officials of the program.

The sample for the survey was drawn from the records of the Bay Counties Carpenters Joint Apprenticeship and Training Program Office. We sampled all former apprentices (regardless of their duration in apprenticeship status) who entered the program at any time starting with 1961 through mid-1966. Because of the large size of the drop-out group, we sampled 50 percent of those men listed as drop-outs. However, all men listed as journeymen receiving their certificates, journeymen without certificates, and clearance card holders were included in the survey. The original sample included 2,656 men. Because of the inability to locate 900 men, the questionnaire was ultimately sent to 1,756 men. Of this group, 850 persons responded, for a response rate of 48.4 percent.

The results of this survey are now being coded and key-punched for tabulation. Attached are a group of preliminary tables that were prepared for the Apprenticeship Conference so that participants could become familiar with the work now underway.

Tables 1 and 2 indicate how response rates varied among the different types of persons included in the survey. Tables 3, 4, and 5 relate to responses by the former apprentices to an open-ended request at the end of the survey (Question 71) which reads as follows:

In the space below we would like to have your ideas on apprenticeship. Suppose you could set up an apprentice training program, what changes, if any, would you make in the existing program? Please put down any ideas you have. By knowing what you think, our results will have much more meaning. Whatever you say will be kept strictly confidential.

As can be seen in Table 3 (attached), 89 percent of all of the respondents made at least one comment that we could code. The comments were divided into 10 major classifications as shown in Table 4. This table shows the reader the number of men making a comment relating to the different classifications and in addition the percentage that these men were of all respondents who made comments. For example, of the 758 men who commented in Question 71, 52.2 percent had something to say regarding Specific Issues Relating to Classwork.

In Table 5, we show the detailed responses to Question 71. In this table, also, the responses are shown separately for men who were carpenters at the time of the survey and for men who were not carpenters at that time. As the reader will observe when reviewing columns 2 and 4 in this table, in several cases marked differences appear between the carpenters and the noncarpenters. For example, while 59 percent of the carpenters made some comment relating to Specific Issues Relating to Classwork, only 33 percent of the noncarpenters made a comment about this issue. In contrast, 69 percent of the noncarpenters made a comment on Issues Relating to On-the-Job-Training, while only 34 percent of the carpenters commented in this category.

In Tables 6 and 7, responses to Questions 20 and 22 in the questionnaire have been cross tabulated. In Question 20, we asked the men to indicate how much on-the-job training they received in each of the following activities: layout, form building, framing, finish, remodeling, reading blueprints, and stair building. In Question 22 we asked what type of contractor they mostly worked for, i.e., specialty contractors, small general contractors, and big general contractors.

In Table 6, the actual number of responses are given for each contractor group by the amount of training. Table 7 converts the content of Table 6 into percentage terms so that the responses can be compared. Several interest facts emerge from Table 7. (1). Stair building ranked first as the activity for which no training was received in each type of contractor category. (2). For all seven activities, the percentage of men receiving no training was smallest for those who had worked mostly for small general contractors. (3). Form building and framing were the two leading activities in which much training was received.

Before turning to the attached tables, the summary below indicates that those men who dropout of the program are not as likely to remain in the trade as are those who receive journeyman status either through certification or without certification. However, we do see that about one out of four men who dropped out of the program did remain in the trade.

| Status Assigned at the<br>Time of the Sample<br>Selection | Occupation at Time of Survey<br>(Percent Distribution) |           |                  |         |
|---|--|-----------|------------------|---------|
|   | Total  | Carpenter | Not<br>Carpenter | Unknown |
| Dropouts  | 100.0  | 26.3      | 73.2             | 0.5     |
| Certificated Journeymen                                   | 100.0  | 90.6      | 9.2              | 0.2     |
| Noncertificated Journeymen                                | 100.0  | 81.8      | 17.6             | 0.6     |
| Clearance Card Holders                                    | 100.0  | 68.3      | 31.7             | 0       |

As mentioned above, all of the data in this brief review are preliminary. We are indebted to Mrs. Jeanette Podvin who coded the responses to Question 71. A report on the survey will be written after all of the results are coded, verified, and tabulated.

Dr. Sara Behman  
Director of Research  
May 15, 1968

Table 1

Distribution of Former Apprentices<sup>1</sup> by Status

| Status                        | Total<br>Number<br>Selected<br>for<br>Sample | Sample<br>Per-<br>centage | Number<br>not<br>located | Usable<br>Sample | Non-<br>Respondents | Respondents |                             |                               |
|-------------------------------|--|---------------------------|--------------------------|------------------|---------------------|-------------|-----------------------------|-------------------------------|
|                               |  |                           |                          |                  |                     | Number      | As % of<br>Usable<br>Sample | As % of<br>Original<br>Sample |
| Total                         | 2,656  |                           | 900                      | 1,756            | 906 <sup>2</sup>    | 850         | 48.4                        | 32.0                          |
| Dropouts                      | 1,248  | 50%                       | 673                      | 575              | 396                 | 179         | 31.1                        | 14.3                          |
| Certificated<br>Journeyman    | 753  | 100%                      | 84                       | 669              | 244                 | 425         | 63.5                        | 56.4                          |
| Noncertificated<br>Journeyman | 427  | 100%                      | 57                       | 370              | 222                 | 148         | 40.0                        | 34.7                          |
| Clearance Card<br>Holder      | 228  | 100%                      | 86                       | 142              | 60                  | 82          | 57.7                        | 36.0                          |
| Status Unknown                | -  | -                         | -                        | -                | -                   | 16          | -                           | -                             |

<sup>1</sup>Former apprentices are all men who were listed as having been in the apprenticeship program of the Bay Counties any time from January 1961 through June 1966. The Bay Counties included are Alameda, Marin, San Francisco, and San Mateo.

<sup>2</sup>This total is 16 less than the sum of the subparts because 16 respondents returning the questionnaire could not be identified by status. These 16 respondents appear under the category Status Unknown.

Table 2  
Response Rate of Former Apprentices  
According to Source of Address

| Source of Address                      | Usable<br>Sample | Number | Respondents              | Nonrespondents           |      |
|--|------------------|--------|--------------------------|--------------------------|------|
|  |                  |        | % of<br>Usable<br>Sample | % of<br>Usable<br>Sample |      |
| <hr/>                                  |                  |        |                          |                          |      |
| I. <u>Dropouts</u>                     |                  |        |                          |                          |      |
| A. Provided by<br>Pension Fund Data    | 254              | 77     | 30.3                     | 177                      | 69.7 |
| B. Other Sources                       | 321              | 102    | 31.8                     | 219                      | 68.2 |
| Total                                  | 575              | 179    | 31.1                     | 396                      | 68.9 |
| <hr/>                                  |                  |        |                          |                          |      |
| II. <u>Certificated Journeymen</u>     |                  |        |                          |                          |      |
| A. Provided by<br>Pension Fund Data    | 637              | 411    | 64.5                     | 226                      | 35.5 |
| B. Other Sources                       | 32               | 14     | 43.8                     | 18                       | 56.3 |
| Total                                  | 669              | 425    | 63.5                     | 244                      | 36.5 |
| <hr/>                                  |                  |        |                          |                          |      |
| III. <u>Noncertificated Journeymen</u> |                  |        |                          |                          |      |
| A. Provided by<br>Pension Fund Data    | 338              | 137    | 40.5                     | 201                      | 59.5 |
| B. Other Sources                       | 32               | 11     | 34.4                     | 21                       | 65.6 |
| Total                                  | 370              | 148    | 40.0                     | 222                      | 60.0 |
| <hr/>                                  |                  |        |                          |                          |      |
| IV. <u>Clearance Card Holders</u>      |                  |        |                          |                          |      |
| A. Provided by<br>Pension Fund Data    | 116              | 65     | 56.0                     | 51                       | 44.0 |
| B. Other Sources                       | 26               | 17     | 65.4                     | 9                        | 34.6 |
| Total                                  | 142              | 82     | 57.7                     | 60                       | 42.3 |
| <hr/>                                  |                  |        |                          |                          |      |

Table 3

Response Rate to the Open Question Regarding  
Comments on the Apprentice Program

| <u>Occupation</u>                | <u>All<br/>Respondents</u> | <u>Men making<br/>at least one<br/>comment</u> |                             |
|----------------------------------|----------------------------|--|-----------------------------|
|                                  |                            | <u>Number</u>                                  | <u>% of<br/>Respondents</u> |
| Carpenters at time of survey     | 625                        | 569  | 91.0                        |
| Not carpenters at time of survey | 222                        | 186  | 83.8                        |
| Occupation unknown               | 3                          | 3  | 100.0                       |
| Total                            | 850                        | 758  | 89.2                        |

Table 4

Summary of Major Comment Classes for all Respondents

| <u>Comment Class</u>   | <u>Number<br/>of<br/>Men</u> | <u>As %<br/>respondents who<br/>made comments</u> |
|--|------------------------------|---|
| 1. Books and Instructional Materials                             | 107                          | 14.1  |
| 2. Issues Relating to Teachers                                   | 159                          | 21.0  |
| 3. General Issues Relating to Classwork                          | 263                          | 34.7  |
| 4. Specific Issues Relating to Classwork                         | 396                          | 52.2  |
| 5. Issues Relating to On-The-Job Training                        | 322                          | 42.5  |
| 6. Comments Regarding Labor Supply or<br>Oversupply in the Trade | 48                           | 6.3   |
| 7. Ideas on Insecurity and Earnings                              | 52                           | 6.9   |
| 8. General Comments on the Whole Program                         | 121                          | 16.0  |
| 9. Personal and Miscellaneous Comments                           | 66                           | 8.7   |
| 10. Any Positive Comments on the Program                         | 57                           | 7.5   |

Table 5

Responses of Former Apprentices Regarding  
Open Comments on the Apprentice Program

| <u>Comments</u>  | <u>Carpenters<br/>(569)</u> |                                  | <u>Not<br/>Carpenters<br/>(186)</u> |                                  |
|--|-----------------------------|----------------------------------|-------------------------------------|----------------------------------|
|  | <u>Number</u>               | <u>% of Total<br/>Commenting</u> | <u>Number</u>                       | <u>% of Total<br/>Commenting</u> |
| <u>Books and Instructional Materials - Total</u>   | <u>87</u>                   | <u>15.3</u>                      | <u>20</u>                           | <u>10.8</u>                      |
| 11 - Complain about books (obsolete, etc)  | 11                          | 1.9                              | 4                                   | 2.2                              |
| 12 - Update books and instructional material; eliminate obsolete material                                | 65                          | 11.4                             | 12                                  | 6.5                              |
| 13-19 - Other comments   | 11                          | 1.9                              | 4                                   | 2.2                              |
| <u>Issues Relating to Teachers - Total</u>   | <u>122</u>                  | <u>21.4</u>                      | <u>37</u>                           | <u>19.9</u>                      |
| 21 - Complain about teacher: e.g., need good teachers or teachers are un-qualified. (Complain only.)     | 99                          | 17.4                             | 31                                  | 16.7                             |
| 22 - Teachers should have teacher training   | 10                          | 1.8                              | 4                                   | 2.2                              |
| 23 - Teachers should know carpentry  | 11                          | 1.9                              | 0                                   | 0                                |
| 24-29 - Other comments   | 2                           | 0.4                              | 2                                   | 1.1                              |
| <u>General Issues Relating to Classwork-Total</u>  | <u>200</u>                  | <u>35.1</u>                      | <u>63</u>                           | <u>33.9</u>                      |
| 31 - Complain because classes are poorly organized, noisy, undisciplined                                 | 52                          | 9.1                              | 20                                  | 10.8                             |
| 32 - Increase classroom standards  | 51                          | 9.0                              | 7                                   | 3.8                              |
| 33 - Complain about work-book orientation  | 8                           | 1.4                              | 2                                   | 1.1                              |
| 34 - Use up-to-date teaching methods   | 34                          | 6.0                              | 8                                   | 4.3                              |
| 35 - Complain about simplistic nature of program   | 15                          | 2.6                              | 8                                   | 4.3                              |
| 36-39 - Other comments   | 40                          | 7.0                              | 18                                  | 9.7                              |
| <u>Specific Issues Relating to Classwork-Total</u>   | <u>335</u>                  | <u>58.9</u>                      | <u>61</u>                           | <u>32.8</u>                      |
| 42 - Increase training in use of tools   | 30                          | 5.3                              | 3                                   | 1.6                              |
| 45 - Complain about operations taught (e.g., they are obsolete, or inappropriate to West Coast building) | 23                          | 4.0                              | 3                                   | 1.6                              |
| 46 - Increase teaching in new methods  | 19                          | 3.3                              | 7                                   | 3.8                              |
| 48 - Insure teaching in <u>all</u> operations  | 45                          | 7.9                              | 8                                   | 4.3                              |
| 49 - Increase practical work in classroom (e.g., apply theory, increase shop time, etc.                  | 72                          | 12.7                             | 18                                  | 9.7                              |



Table 5 - continued.

|   |            |             |            |             |
|---|------------|-------------|------------|-------------|
| 51 - Increase blue-print reading  | 40         | 7.0         | 5          | 2.7         |
| 52 - Increase amount of mathematics   | 10         | 1.8         | 1          | 0.5         |
| 53 - Take field trips   | 10         | 1.8         | 1          | 0.5         |
| 54 - Relate shop work to books  | 15         | 2.6         | 2          | 1.1         |
| 55 - Had no shop and should include it  | 27         | 4.7         | 2          | 1.1         |
| Other comments  | 44         | 7.7         | 11         | 5.9         |
| <b>Issues Relating to On-the-Job Training</b>   | <b>193</b> | <b>33.9</b> | <b>129</b> | <b>69.4</b> |
| 61 - Assure continuous employment<br>(guarantee work to apprentices)  | 11         | 1.9         | 15         | 8.1         |
| 62 - Union should assist in finding jobs  | 8          | 1.4         | 4          | 2.2         |
| 63 - Rotate on jobs so apprentice can<br>learn all operations   | 62         | 10.9        | 25         | 13.4        |
| 65 - Provide better supervisory practices   | 54         | 9.5         | 38         | 20.4        |
| 66 - Restrict use of apprentices as<br>laborers   | 26         | 4.6         | 14         | 7.5         |
| 67 - Relate o-j-t to class work and<br>vice-versa   | 20         | 3.5         | 16         | 8.6         |
| Other comments  | 12         | 2.1         | 21         | 11.3        |
| <b>Comments Regarding Labor Supply or<br/>Oversupply in the Trade</b>   | <b>36</b>  | <b>6.3</b>  | <b>12</b>  | <b>6.5</b>  |
| 71 - Regulate entry; make entrance<br>standards higher  | 16         | 2.8         | 5          | 2.7         |
| 72 - Require all carpenters to take the<br>same exam given to apprentices before<br>permitting them to enter union as<br>journeymen | 5          | 0.9         | 1          | 0.5         |
| 73 - Restrict entry to trade only to<br>trained apprentices   | 4          | 0.7         | 4          | 2.2         |
| 74 - Limit union membership   | 5          | 0.9         | 0          | 0           |
| Other comments  | 6          | 1.1         | 2          | 1.1         |
| <b>Ideas on Insecurity and Earnings</b>   | <b>24</b>  | <b>4.2</b>  | <b>28</b>  | <b>15.1</b> |
| 81 - Complain about unemployment<br>in trade  | 1          | 0.2         | 5          | 2.7         |
| 82 - Mention instability in trade   | 1          | 0.2         | 3          | 1.6         |
| 83 - Other comments about unemployment<br>or instability  | 5          | 0.9         | 8          | 4.3         |
| 84 - Higher initial % of journeyman rate  | 4          | 0.7         | 4          | 2.2         |
| 85 - Ask for flexibility in % of<br>journeyman rate   | 0          | 0           | 2          | 1.1         |
| 86 - Less pay for more steady training  | 1          | 0.2         | 1          | 0.5         |
| 87 - Other comments relating to wages   | 12         | 2.1         | 5          | 2.7         |

Table 5 - continued.

|                                       |  |    |      |    |      |
|---------------------------------------|--|----|------|----|------|
| General Comments on the Whole Program |  | 85 | 14.9 | 36 | 19.4 |
| 91 -                                  | Duration should be more flexible                             | 10 | 1.8  | 11 | 5.9  |
| 92 -                                  | Duration should be shorter                                   | 10 | 1.8  | 9  | 4.8  |
| 93 -                                  | Four-year length is appropriate                              | 5  | 0.9  | 0  | 0    |
| 94 -                                  | Whole program should be updated                              | 15 | 2.6  | 4  | 2.2  |
| 95 -                                  | In-class part of program should be modernized                | 11 | 1.9  | 5  | 2.7  |
| 96 -                                  | Entire program needs improvement                             | 7  | 1.2  | 5  | 2.7  |
| 97 -                                  | Need to emphasize commercial and industrial construction     | 8  | 1.4  | 0  | 0    |
| 98 -                                  | Apprentices should be able to train for a specific specialty | 7  | 1.2  | 1  | 0.5  |
| 99 -                                  | Other comments   | 12 | 2.1  | 1  | 0.5  |
| Personal and Miscellaneous Comments   |  | 48 | 8.4  | 18 | 9.7  |
| 02 -                                  | Did not like the union                                       | 1  | 0.2  | 5  | 2.7  |
| 05 -                                  | In-class part of program should be modernized                | 6  | 1.1  | 0  | 0    |
| 06 -                                  | Should have day classes during work week with pay            | 11 | 1.9  | 3  | 1.6  |
| 07 -                                  | Should have day classes during work week                     | 8  | 1.4  | 2  | 1.1  |
|                                       | Other comments   | 22 | 3.9  | 8  | 4.3  |
| Any Positive Comments on the Program  |  | 30 | 5.3  | 27 | 14.5 |
| +2                                    | Satisfied with teachers                                      | 2  | 0.4  | 1  | 0.5  |
| +5                                    | Satisfied with on-the-job training                           | 1  | 0.2  | 6  | 3.2  |
| +9                                    | General satisfaction, not elsewhere classified               | 27 | 4.7  | 15 | 8.1  |
|                                       | Other comments   | 0  | 0    | 5  | 2.7  |

Note: Where persons gave comments by complaining about a specific problem and then made a constructive proposal to alleviate the problem, the comment is coded in the latter category. For example, under Books and Instructional Material, Code 11 includes only complaints. Under Code 12, solutions to this problem were proposed. If the person complained and then gave the solution of updating books, his comment was coded in 12. In this way, we avoided double-counting and repetition of ideas.

Table 6  
Amount of Training Received by Former Apprentices<sup>1</sup> in Various  
Activities by Type of Major Contractor Classifications  
(Absolute Numbers)

| Activity              | Small General Contractors <sup>2</sup><br>Amount of Training |      |      |              | Big General Contractors <sup>3</sup><br>Amount of Training |      |      |              | Specialty Contractors <sup>4</sup><br>Amount of Training |      |      |              |
|-----------------------|--|------|------|--------------|--|------|------|--------------|--|------|------|--------------|
|                       | None   | Some | Much | Answer<br>No | None   | Some | Much | Answer<br>No | None   | Some | Much | Answer<br>No |
| Layout                | 41   | 153  | 151  | 9            | 55   | 136  | 112  | 7            | 9  | 25   | 21   | 2            |
| Form<br>Building      | 19   | 98   | 228  | 9            | 21   | 78   | 203  | 8            | 19   | 22   | 14   | 2            |
| Framing               | 7  | 59   | 279  | 9            | 22   | 97   | 183  | 8            | 8  | 21   | 26   | 2            |
| Finish                | 66   | 154  | 125  | 9            | 81   | 142  | 80   | 7            | 14   | 20   | 21   | 2            |
| Remodeling            | 91   | 134  | 118  | 11           | 120  | 135  | 48   | 7            | 15   | 22   | 17   | 3            |
| Reading<br>Blueprints | 86   | 145  | 114  | 9            | 86   | 126  | 91   | 7            | 18   | 25   | 12   | 2            |
| Stair<br>Building     | 149  | 135  | 61   | 9            | 140  | 123  | 40   | 7            | 29   | 21   | 5    | 2            |

<sup>1</sup>Excludes those former apprentices who indicated that they had worked for more than one class of contractor.

<sup>2</sup>Responses of 354 former apprentices.

<sup>3</sup>Responses of 310 former apprentices.

<sup>4</sup>Responses of 57 former apprentices.

354  
310  
57  
---  
721

315  
721  
---  
1436

281  
254  
27  
---  
562

1436  
2884  
3860

Table 7

Percentage Distribution of Former Apprentices by Amount  
of Training for Each Major Contractor Classification

| Activity           | Amount of Training  |         |           |                     |         |           |                     |         |           |           |         |           |
|--------------------|---------------------|---------|-----------|---------------------|---------|-----------|---------------------|---------|-----------|-----------|---------|-----------|
|                    | None                |         |           | Some                |         |           | Much                |         |           |           |         |           |
|                    | Contractor Classes: |         |           | Contractor Classes: |         |           | Contractor Classes: |         |           |           |         |           |
|                    | Small               | Big     | General   | Small               | Big     | General   | Small               | Big     | General   | Small     | Big     | General   |
|                    | Specialty           | General | Specialty | Specialty           | General | Specialty | Specialty           | General | Specialty | Specialty | General | Specialty |
| Layout             | 11.6                | 17.7    | 15.8      | 43.2                | 43.9    | 43.9      | 42.7                | 36.1    | 36.8      |           |         |           |
| Form Building      | 5.4                 | 6.8     | 33.3      | 27.7                | 25.2    | 38.6      | 64.4                | 65.5    | 24.6      |           |         |           |
| Framing            | 2.0                 | 7.1     | 14.0      | 16.7                | 31.3    | 36.8      | 78.8                | 54.0    | 45.6      |           |         |           |
| Finish             | 18.6                | 26.1    | 24.6      | 43.5                | 45.8    | 35.1      | 35.3                | 25.8    | 36.8      |           |         |           |
| Remodeling         | 25.7                | 38.7    | 26.3      | 37.9                | 43.5    | 38.6      | 33.3                | 15.5    | 29.8      |           |         |           |
| Reading Blueprints | 24.3                | 27.7    | 31.6      | 41.0                | 40.6    | 43.9      | 32.2                | 29.4    | 21.1      |           |         |           |
| Stair Building     | 42.0                | 45.2    | 50.9      | 38.1                | 39.7    | 36.8      | 16.9                | 12.9    | 8.8       |           |         |           |

Note: Derived from Table 6.