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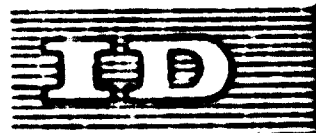
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POST PROGRAMME EVALUATION 1/

prepared by

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We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

UNIDO has initiated a post programme evaluation by questionnaire which are sent to former participants between one and two years after the completion of the training programme. For the programmes carried out in 1969 to 1971 UNIDO has sent out 487 questionnaires of which 260 were completed and returned by former participants.

A compilation of the reply and an analysis programme by programme, as well as a consolidated one are made; those by programme have been or will be presented to each individual training director. The following text is the consolidation of all replies irrespective of programme. The questionnaire itself is given in Annex I and the tabulation of replies in Annex II. The figures in brackets refer to question numbering of the questionnaire.

Present employment of the former participants (questions 6 and 7):

The great majority (94%) of the respondents were employed at the moment of the survey in the same company or institution as before attending the training programme; almost 50% were promoted. Only 14 individuals changed their employment.

Notable exceptions are the programmes:

- Maintenance (Italy 1971): none of the 6 respondents was promoted (yet)
- Metalworking Industry (USSR) and Iron and Steel (USSR): about 65% of the respondents had received a promotion since their return home.

Impact of the training programme on participant and his company (question 5 to 9):

- (9) The great majority of the number of respondents replied that:
1. More experience in their own field (86%)
 2. Acquisition of a new skill (72%)
 3. More prestige (52%)
- were the three main personal gains (in that order) as a result of the

participation in the training programme.

Roughly a quarter mentioned also (in that order)

1. Higher position
2. Higher salary
3. No change (18 individuals)

An exception is the programme Standardization (USSR) where more "prestige" comes second and "the acquisition of a new skill" comes third.

Note: There is a certain discrepancy in the response in regard to promotions. From question 7 it is learnt that roughly half of the former participants were promoted, while sub-question 9 shows that only a quarter mentioned that they work in higher positions.

A possible explanation is:

- (i) A higher position is not necessarily considered as a promotion.
 - (ii) In question 9 is asked what the participant considers as the effect of the training: obviously a quarter of the participants got a higher position as a result of attending the training, while the promotion obtained is not necessarily considered as an effect of attending the training programme.
- (10) The great majority of the respondents felt that the experience gained through the training programme made them:
1. Better equipped for their work (86%)
 2. Able to advise others (78%)
 3. Able to introduce new techniques and systems (54%)
(without exception in that order)
- Eighteen participants (7%) also mentioned items such as:
- Better organization
 - Wider view of the industry concerned
 - Better idea of management.

(11) Almost three-quarters of the respondents could use their newly acquired knowledge and experience immediately after their return home.

Those who could use their new knowledge immediately (28%), mentioned the following time lapses before they could apply it:

- 3 to 6 months (about 2/3)
- 1 to 2 years (about 1/3)

(12) Most participants (84% of the respondents) indicated that they could transfer their experience and knowledge through lectures, reports, meetings or daily work within their company. There is little variation in response between the different programmes.

(13) About one-third of the of the respondents were or had been engaged in actual training of other persons within their company or institution.

Exceptionally high score: Plastic Technology(Austria): 10 ex-participants out of a total of 18 were actually engaged in the training of others and Pulp and Paper (Sweden): 11 out of 19 trained others.

The following table gives the distribution of the answers according to the approximate number of persons trained and the average duration of the training period.

Table 1

Number of trainees	less than a week	1-4 weeks	1-4 months	5 months to a year	more than a year
100 and more		1	6	2	1
20 - 99	2	3	10	5	1
5 - 19	x	6	7	2	-
less than 5		2	5	1	1

14. Those participants who introduced new techniques or systems in their industries with which they are employed (54%) were asked to state the benefits:

1. "Increase of quality of products"
2. "Reduction of cost"

Both were mentioned by a little more than one-third of the respondents.

3. "Increase of output or quantity of products" was indicated by approximately one-quarter of the respondents.

Several participants felt that question (14) and (15) did not apply to their situation or that they were not (yet) in a position to introduce new techniques, which explains the relative low number of answers (approx. 54%) on both questions. This is also partly due to the nature of the programme concerned.

Seventeen participants also specified:

- "More efficiency"
- "Better utilization of production methods"
- "More understanding of production methods"
- "Saved time"

as the results of the participation in the training programme.

(15) About 42% of the respondents had difficulties with the introduction of new techniques, processes or systems in their home industries. The major reasons given were:

1. Lack of machinery
2. Lack of trained personnel
3. Lack of funds
4. Resistance to change

(The order varies often but the percentages remain fairly constant).

Twelve individuals (5%) also indicated:

- Local reasons (social-historical)
- Political - economical reasons
- Lack of foreign currency for machine import
- No responsible position
- Defiance of top management

The following table give the geographical distribution of the specified answers (in specific regions of the world):

Table 2

	Lack of trained personnel	Lack of machinery	Lack of funds	Resistance to change	Total
Africa	12	9	7	4	32
Asia and Far East	22	27	19	13	81
Middle East and Mediterranean	9	7	5	5	26
Latin America	11	6	7	11	61
Europe	3	7	5	3	18
Total:	57	56	43	36	192

(16) The majority (61%) of the respondents reported that they could also pass on their knowledge and experience acquired during the training programme through lectures, reports or conferences outside their employing organization.

Significant exceptions:

- Iron and Steel (USSR) only 16 out of 38; and
- Maintenance (Sweden) only 9 out of 21 could pass on their knowledge to outside organization, which may be explained by the fact that these former participants are employed with large industrial complexes, hence the transfer of obtained knowledge is confined to within the company.

(17) Although all former participants are employed with industry, about a quarter (23%) of the respondents were or had been actually engaged in teaching or training other persons outside their company (no significant exceptions).

The following table (table 3) shows the distribution of the answers according to the approximate number of persons trained and average duration of the training period:

Table 3

Number of trainees	less than a week	1-4 weeks	1-4 months	5 months to 1 yr.	more than 1 yr.
100 and more	-	2	3	-	3
20 - 99	3	5	4	2	-
5 - 19	4	5	5	5	-
less than 5	-	1	1	1	-

(18) About two-thirds of the respondents could advise companies or institutions other than their own.

Evaluation of training programme by participant

(19) 60% of the respondents answered positively to the question whether the training programme did meet their expectations.

Note: 18% had some reservations and 16% answered that the training programme was not fully up to what they had expected.

The major reasons given by the last two groups are (in order of frequency)

1. the training programme is too wide and too general; it misses some particular aspects; and it is not adapted to the individual needs
2. the level of training is too low and preparations insufficient
3. the training does not provide enough practical work time
4. teaching and learning problems, such as: lack of supervision, language barrier, etc.

(20) More than half of the respondents (55%) thought that the duration of the training period was adequate; less than a third (32%) felt it was too short and only 17% indicated 'too long'.

The following table gives the distribution of the answers concerning a suitable duration of trainings:

Table 4

Number of answers	1	14	16	6	3	3	9	15
Duration of training	1m	2m	3m	4m	5m	6m	6-11m	1 year or more

(21) and (22)

- 21% of the respondents found the training too practical
- 43% of the respondents found the training too theoretical
- Conversely, the majority indicated the training was neither too practical nor too theoretical.

(23) In terms of what the ex-participants intended to do after their return, more than half (52%) could accomplish a considerable part, a quarter (25%) accomplished nearly everything, while only 20% could do nothing or little.

Little more than half of those who failed (28 persons) to carry out everything they intended, mentioned reasons referring to the training programme and the selection of participants (i); the other 25 persons stated difficulties connected with the home company or country (ii).

(i) reasons referring to training programme and selection of participants (in order):

1. training too short and too general
2. training too theoretical and not applicable (to local conditions)
3. training of little use because working in another field
4. no actual working visits to plants
5. language barrier
6. training not up-to-date
7. technical information, hand-out in English insufficient
8. miscellaneous (group too heterogeneous, not enough supervision, not enough preparation, low level, etc.).

(ii) difficulties connected with the company or country (in order):

1. lack of equipment
2. political - economical reasons
3. top not co-operative
4. lack of funds
5. lack of time
6. resistance to change
7. lack of skilled personnel.

(24) More than three quarters (76%) of the respondents consider up-dating and refresher courses essential to prevent their knowledge from becoming obsolete.

Table (5) gives the distribution of the answers according to the length of up-dating intervals mentioned:

Table 5

Length of interval	up to 3 months	6m	1 year	2y	3y	4y	5y	6y
Number of answers	6	6	37	58	25	12	16	2

(26) Suggestions for improvement - Finally the former participants were asked to state suggestions for making the programme more effective. These can be suitably grouped as follows:

I. Action required by UNIDO (55 replies; 21%)

A1 Action before training (16 replies; 6%)

A number of former participants asked that more information concerning the training programme and even some literature (scripts, handouts, etc...) should be sent in advance; some also requested more information about the host country and language courses.

A2 Selection and group composition (24 replies; 9%)

It was felt that the selection procedure should take (more) account of:

- (i) the participants' language ability (English)
- (ii) his level of education, knowledge, and experience
- (iii) he should be taken from the same occupation or profession
- (iv) the group should be as homogeneous as possible (age, profession, knowledge, experience, etc.) (10 replies; 4%)

A3 Action after completion of the training (15 replies; 6%)

The training was thought to become more and longer effective if:

- (i) UNIDO would supply the ex-participants with up-to-date information in their field of work (technical bulletins, records or reports of meetings, etc.)
- (ii) UNIDO would ask ex-participants to send follow-up reports on their accomplishments
- (iii) UNIDO would organize refresher courses and courses providing supplementary specialized knowledge
- (iv) UNIDO would support ex-trainees in the implementation of the acquired knowledge (talks with top management in seminars, etc.).

II. Suggestions regarding general aspects of training (32 replies; 12%)

B1 Selection of host country (10 replies; 4%)

Ten ex-participants noted that UNIDO training courses or refresher courses should be held in other countries with different social and industrial conditions.

B2 Level of training (10 replies; 4%)

Ten ex-participants thought that the level of training should be higher, the methods and plants more up-to-date and the whole of the training more serious.

- B3 Organization of the training programme (114 replies; 50%)
Eleven ex-participants found that the training should be more strictly programmed and organized in a different way.

III. Suggestions or specific aspects of the training (146 replies; 67%)

C1 Specialization (25 replies; 10%)

It was felt by 25 ex-participants that the training programme was too general and covering a too broad field, and that it should be more specialized so that at least one subject could be studied in depth and detail.

C2 Selection of subjects (32 replies; 12%)

Thirty-two ex-participants mentioned that

- (i) the training should include some other particular subjects (16); mostly management aspects of the industry concerned
- (ii) the participants should be free to study extensively one specific subject of his own interest (9)
- (iii) the training should be better adapted to the individual needs (7).

C3 Applicability (9 replies; 3%)

Nine participants suggested that

- (i) the training should be more applicable to the conditions in their home countries
- (ii) there should be regional seminars.

C4 Practical study (41 replies; 16%)

A great number of ex-participants (41) thought that

- (i) the training programme should cover more practical subjects
- (ii) the programme should provide more opportunities for active participation and on-the-job training.

25. Excursions (11 replies; 11)

It was recommended that excursions to plants and factories should be a regular program or selected (more modern and various plants; longer visits, as touristic visits).

26. Teaching and supervision (11 replies; 11)

Thirteen ex-participants felt that the teaching and supervision was not fully satisfactory (closer supervision, more modern teaching methods; more contacts).

27. Language training (11 replies; 6)

Fifteen ex-participants thought that language courses given before the beginning of training or during training would be useful.

IV. Suggestions regarding living conditions (20 replies; 8')

28. Salaries (7 replies; 3')

Seven ex-participants felt that they required more money to cover their expenses during training.

29. Accommodation (5 replies; 2')

Two others had problems with their accommodation and asked that it should be improved.

30. Miscellaneous (7 replies; 2')

Among the other topics mentioned were:

- more social contacts
- climate too cold in winter
- tedious formalities
- there should be more opportunities to travel.

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

LEIPNIZFELDER STRASSE 1, A-1070 VIENNA, AUSTRIA
P.O. BOX 707, A-1011
TELEPHONE: 43 800 TELETYPE ADDRESS: UNIDO TELEFAX: 78812

EVALUATION OF UNIDO IN-PLANT GROUP TRAINING PROGRAMMES

A. Background:

- 1. Name:
- 2. Home country:
- 3. Programme:
- 4. Host country: Year:
- 5. Mailing address:

B. Present Employment:

6. Are you employed with the same company (agency, institution etc.) as during the time you participated in the training programme?

yes no

If no: Where are you at present employed?

Same field but different company (agency, institution).....

Different field (please specify).....
.....

Please state reason for changing company (agency, institution or field).....
.....

7. Have you since your return in your home country been promoted (holding a more important position)?

yes no

8. What is your present position? Please be as specific as possible.
.....

C. Impact of training programme on yourself and on company (agency, institution):

9. What do you consider as the effect of the training programme on yourself (mark all that apply):

- more experience in your own field
- learned new skill, new field
- moved to higher position
- received higher salary
- more prestige
- no change
- negative impact (please explain)

.....
.....

10. To what extent could you make use of the experience gained through the training programme (mark all that apply):

- I am better equipped for my own work
- I can advise others
- I am introducing new techniques, processes, systems in my company (agency, institution)
- other (please specify).....

.....

11. After you returned from your training programme were you in a position to make use of your newly acquired knowledge and experience immediately?

- yes
- no

If no, how much time elapsed before you were able to make use of your newly acquired knowledge and experience?.....months.

12. Could you pass on your experience/knowledge through lectures, reports or meetings within your company (agency, institution)?

- yes
- no

13. Have you ever engaged in teaching or training other persons in the company (agency, institution, in the field of your study?

yes no

If yes, approximate number of persons trained.....
average length of training period.....

14. If you have introduced new techniques, processes, systems, what has been the benefits?

- increase of quality (of products)
- increase of quantity (of products and/or output)
- reduction of cost
- other, please specify.....

15. If you introduced new techniques, processes, systems, were there difficulties involved within your company (agency, institution)?

yes no

If yes, what was the reason? (mark all that apply)

- lack of funds
- lack of trained personnel
- lack of machinery, equipment
- resistance to change within company (agency, institution)
- Other, please specify.....

B. Impact outside of your own company (agency, institution):

16. Could you pass on your experience/knowledge through lectures, reports of participation in conferences?

yes no

17. Have you been engaged in teaching or training other persons in the field of your study?

yes no

If yes, approximate number of persons trained.....
average length of training period.....

18. Could you advise other companies, agencies, institutions in the field of your study?

yes

no

B. EVALUATION OF TRAINING PROGRAMS:

19. In retrospect, did the training programs meet your expectations?

yes

partly

no

If no, what are the reasons?.....
.....
.....

20. Do you consider the length of the training period to be:

too short

adequate

too long

If too short or too long, what, in your opinion, would be suitable length of training?.....

21. Was the training too practically oriented?

yes

no

22. Was the training too theoretically oriented?

yes

no

23. In terms of what you intended to do after the end of the training program how would you evaluate your accomplishments within your field of study?

I could accomplish nothing or only very little

I could accomplish a considerable part

I could accomplish nearly everything

If you checked "nothing or very little" or "a considerable part" what do you believe are the most important reasons that you could not accomplish nearly everything you intended to do?

.....
.....
.....
.....

24. In the kind of work you perform, do you consider up-dating essential to prevent your knowledge from becoming obsolete?

yes no

If yes during what intervals?.....

25. Did your family receive satisfactory monetary support during the period of your training?

yes no

Was your position in your country held open for you during the period of your training?

yes no

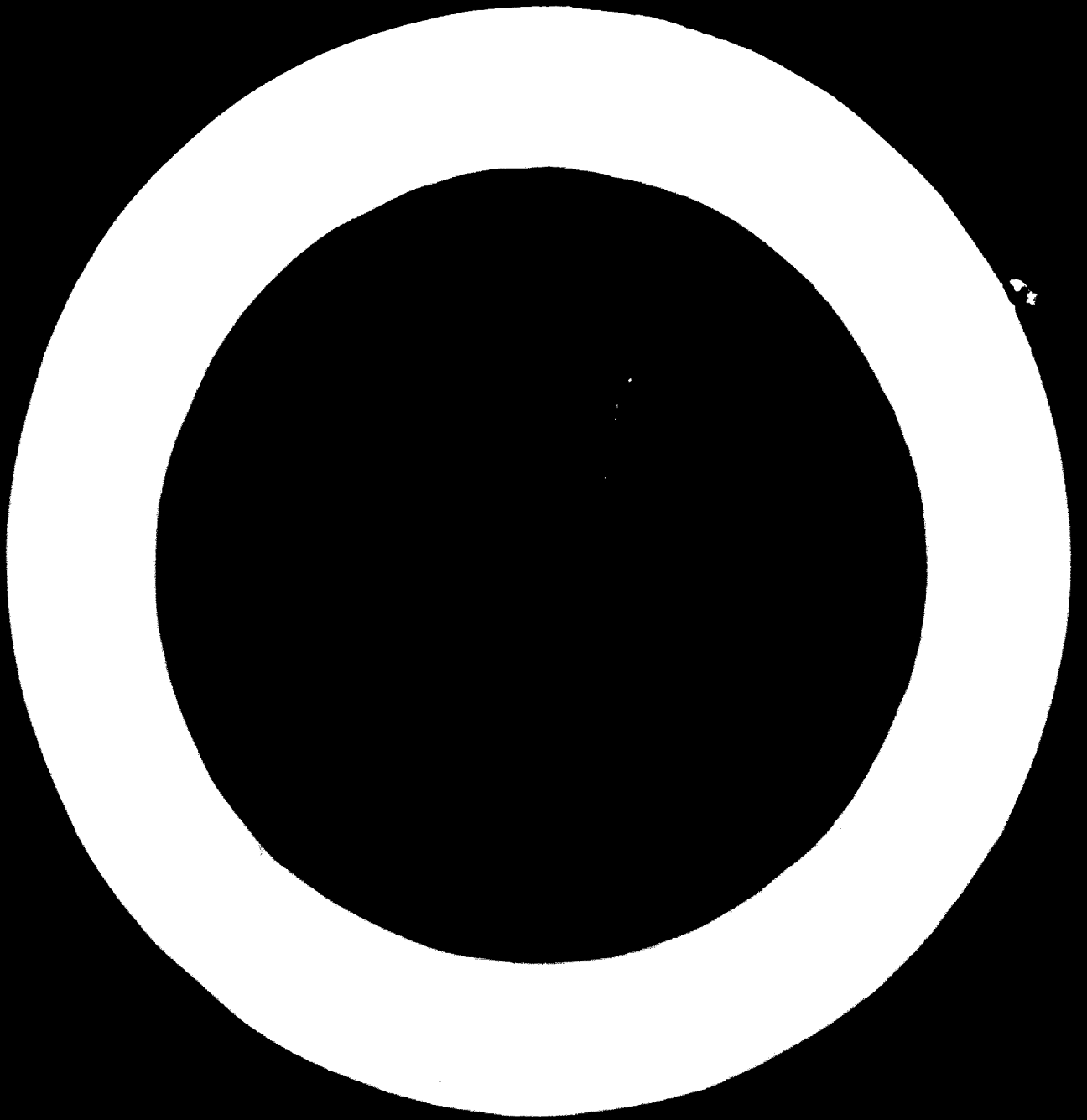
Other problems (please specify).....
.....
.....

26. Do you have any suggestions for making the programme more effective?

.....
.....
.....

Completed questionnaire to be returned to:

Industrial Training Section
IITSD
P.O. Box 707
A-1011 Vienna
AUSTRIA



Evaluation of In-Plant Group Training Programmes
(1969 - 1971 Programmes)

	Total numbers		% in terms of the number of answers	
Number of questionnaires sent out	487			
Number of answers received	260			
No replies	227			
B. Present employment				
	<u>yes</u>	<u>no</u>	<u>yes</u>	<u>no</u>
(6) in the same company	243	17	93%	6%
(7) promoted	125	132	48%	50%
C. Impact training				
(9) on participant				
'more experience in own field'	223		86%	
'learned new skill'	187		72%	
'more prestige'	135		52%	
'higher position'	67		26%	
'higher salary'	65		25%	
other (no change)	18		7%	
(10) use made of the experience gained				
'better equipped for work'	222		86%	
'can advise others'	202		78%	
'introduces new techniques'	140		54%	
'other'	18		7%	
(11) could apply new knowledge/experience				
<u>immediately</u> after return	188	71	72%	28%
(12) transfer of knowledge/experience				
<u>within</u> company	219	38	84%	14%
(13) training of others in own field				
<u>within</u> company	92	168	35%	65%

(14) benefits of the introduction of new techniques

'increase of quality'	92	35%
'reduction of cost'	88	34%
'increase of quantity'	70	27%
other	17	7%

(15) difficulties involved with the introduction of new techniques

	109	73	42%	28%
'lack of machinery'	62	24%		
'lack of trained personnel'	59	23%		
'lack of funds'	51	20%		
'resistance to change'	40	15%		
other	12	5%		

D. Impact outside own company

(16) transfer of knowledge/experience

	160	100	61%	39%
(17) training of others in own field	61	192	23%	74%
(18) advise other companies	171	76	66%	29%

E. Evaluation of training programme

(19) did training programme meet expectations?

	157	40	60%	16%
'partly'	46	18%		

(20) length of training period

'adequate'	144	59%
'too short'	85	32%
'too long'	29	11%

(21) training too practical

55	194	21%	75%
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(22) training too theoretical

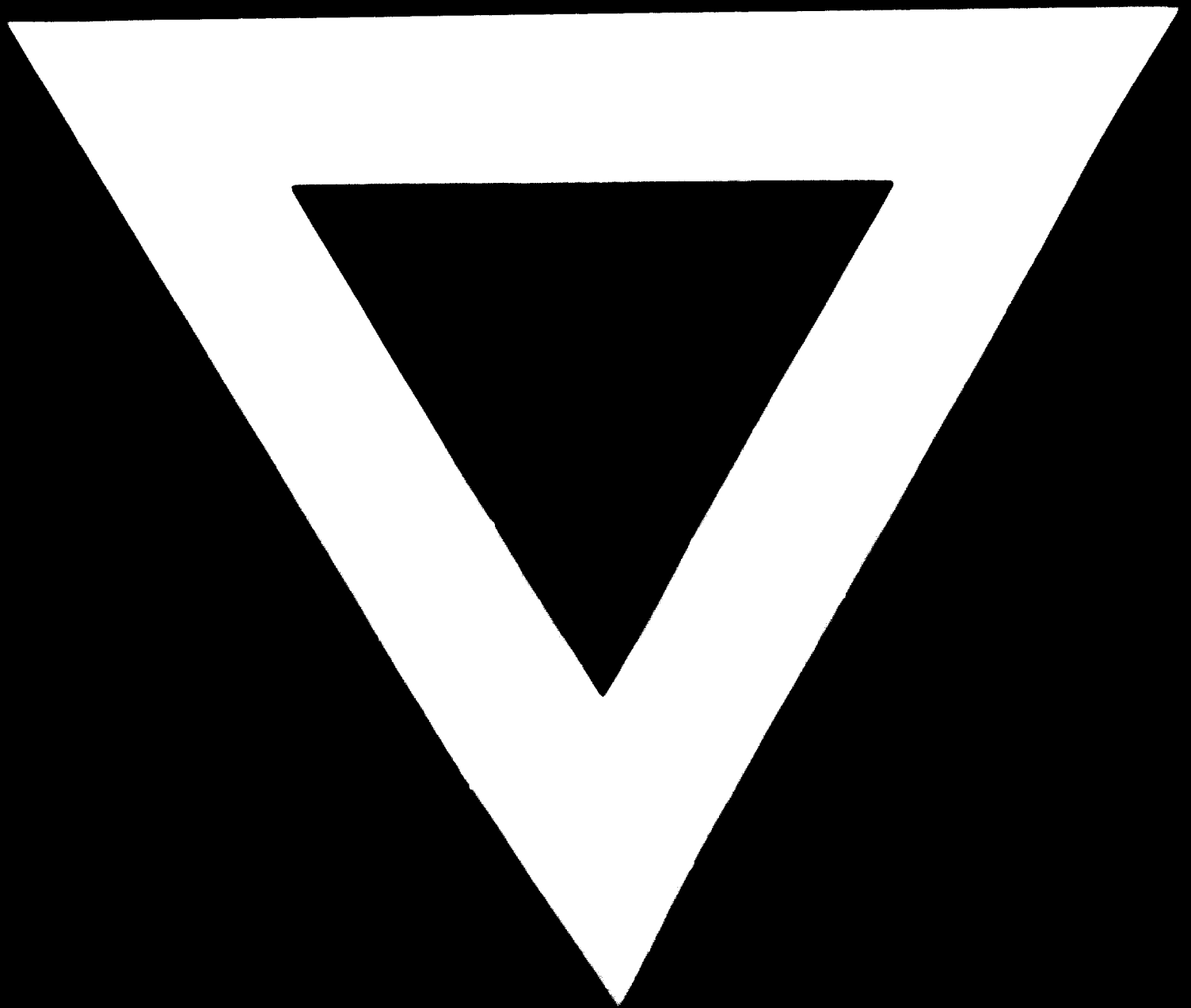
122	137	43%	52%
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(23) accomplishments after return

'a good part'	137	52%
'nearly everything'	64	25%
'very little'	53	20%

(24) up-dating essential	198	53	76%	22%
(25) family received support	223	24	9%	9%
position held open	240	10	95%	4%





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