DOCUMENT RESUME

ED 104 820 SP 009 053

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TITLE Assessing Inservice Training Needs through Teacher Responses.
INSTITUTION National Center for the Development of Training Materials in Teacher Education, Bloomington, Ind.
PUB DATE 2 Apr 75
NOTE 32p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, D.C., April 1975)

EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS *Affective Objectives; *Differentiated Staffs; Inservice Teacher Education; *Public School Systems; Surveys; Teachers; Teaching Skills

ABSTRACT

The focus of this study was to develop a reliable method through which a variety of school systems could gather data on inservice needs and use that data to augment inservice planning. The subjects of the survey were 745 elementary, junior high, and senior high school teachers from four school districts. Certain generalizations and suggestions emerged from the data. First, the teachers in this survey expressed a need for skills training in the affective domain. Second, differences in responses of elementary or secondary school teachers, or between teachers of greater or lesser experience, clearly support differentiated training within inservice training. Implications for the use of such information in making decisions for inservice training and future development are proposed. A bibliography and appendix illustrating teacher responses are included. (Author/JS)

Assessing Inservice Training Needs Through Teacher Responses

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Presented to the annual meeting of the American Educational Research Association, Washington, D.C. April 2, 1975.

Acknowledgement

Before anything is said about the data included in this report, special thanks are given to the administrators and teachers in the Elkhart, Indiana Community School System, the Springfield, Illinois Schools, the Michigan City, Indiana Schools and the Whitesboro, New York Central System for their help and cooperation. Their willingness to participate and their unusually high rate of return provide invaluable contributions to the advancing of our knowledge of inservice needs. To those teachers who took from their valuable time to respond to yet another questionnaire, I am truly grateful. Thanks also are given to Bernard Shaw and Gordon Goodwin who did much of the early footwork for this study. Finally, James Walden and David Gliessman should be cited for their constructive comments.

Assessing Inservice Training Needs Through Teacher Responses

Gary M. Ingersoll

Evaluations of the viability and effectiveness of most inservice teacher training have ranged from gloom to despair. Rubin (1971) laments that teachers' professional growth via inservice teacher education has not been taken seriously and that we have failed to develop an appropriate scheme, or methodology, for monitoring inservice education. What inservice training has occurred has generally been mismanaged. Teachers, administrators, and the community view it with some distain. Tyler (1971) adds that the system which promulgates inservice education typically fails to provide any substantive payoff to those for whom it is supposedly created -- the teachers.[1] Both agree, however, that inservice education has the potential for immediate and long range payoff for improved professional training since for any change in the process of teaching, some training is typically necessary. Since a primary locus of continued professional training for teachers is, and will continue to be, the inservice setting, it is to that area that this study was directed.

As it stands, inservice education is most often something that is done <u>at</u> the teacher rather than <u>with</u> the teacher. Decisions as to content, form, and needs for inservice training have typically been handled at an administrative level with little input from the teaching faculty. As

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[1] There are, however, notable exceptions. Since the publication of the Rubin volume, several school systems have established stipends or course credit for inservice training. One notable example is the Minneapolis City Schools. Nonetheless, such procedures are the exception rather than the rule.

Rubin (1971) notes, teachers feel totally left out of a decision making process that has direct impact on their professional welfare. We have, as Meade (1971) suggested, failed to avail ourselves of what may serve as the single most important source of information available for inservice training -- the teacher. Brimm and Tollett (1974) have presented evidence to suggest that teacher attitudes reflect a general feeling that most inservice training is not responsive to their own needs.

We must start to accommodate for teacher differences much as we try to accommodate for student differences. Teaching requires a variety of competencies and teachers differ in their professional needs. Research has tended to support the fact that each teacher has unique and diverse needs during his/her professional career (Allen, 1971; Lippitt & Fox, 1971). Inservice training to be maximally effective should thus be differentially arranged to complement differing needs.

Increasingly, teachers -- especially in urban communities -- are demanding a greater voice in decisions about curriculum, hiring and other policy areas that affect their teaching status. Teacher professional groups are demanding a greater voice in these policy areas with particular emphasis on policies that are directly related to the teachers' own professional welfare.

To fail to include the teacher in the decision making process lacks sense for a variety of reasons: (1) when teachers are involved at the choice point they are more likely to carry their interest into actual training; (2) it fails to make financial sense to offer something that has little relevance to teachers' needs; (3) to make all the decision at an administrative level is little more than patronizing.

Gathering Teacher Input

Previous exploratory and descriptive studies using teacher input have proceeded along two lines. The first is reflected in the planning and evaluation of inservice training by sharing the responsibility of content choice (e.g., Abelson, 1972). The second concerns the identification and assessment of teacher needs. It is to that end that this report is principally directed, specifically needs for training in a variety of teaching skills. Within this area researchers have either attempted to help teachers become aware of their needs or to express their needs through a variety of instruments intended to assess and identify perceived concerns, needs, and interests.

For utilizing teacher responses in clarifying training needs Abelson (1972) generated an instrument by procurring items from lists of teaching abilities, topics in education psychology, and statements regarding the teaching-learning process. Teachers were asked then to rate themselves for (1) their mastery of a given skill, (2) their need to study it, (3) its applicability to the teaching process, and (4) the extent to which they felt it should be included in pre- or inservice training. The results of that study were used mainly to revise an educational psychology course.

Similarly The Adult Basic Education (ABE) Needs Study (ABE, 1972) drew items from a review of literature, created and administered a survey instrument to ABE teachers, students, and administrators. The purpose of that survey was to clarify needs within a relatively homogeneous population of learners attempting to attain an equivalency diploma.

Franc (1970) had beginning elementary school teachers describe their perceived needs under two conditions, an open ended questionnaire and a structured interview. The results of her study suggested that beginning

teachers perceive instruction, control and attention, use of time, materials and space, and interpersonal relations as primary problem areas. The teachers also argue that the response to those needs through inservice education is very low. However, it may reasonably be argued that the lack of responsiveness is a function only of their short time in the field.

While not directly related to inservice assessment, Harrow, Dziuban & Rothberg (1973) explored perceived problem areas by returning student teachers. Harrow et al. factor analyzed responses to some 50 variables. The data produced five principal factors which the investigarors labeled as: Administrative, discipline, student peer groups, student motivation and school policy.

Fuller has made some attempt to describe course experiences which are responsive to concerns of teachers. In a series of studies Fuller, (1969 a, b, 1972) developed a three stage model for preservice, inservice and experienced teacher inservice needs. Each model consists of six categories of concerns: role orientation, self adequacy, self-perception, are pupils learning what is being taught, are student needs being met, improvement of the system. Fuller identified teacher concerns through a 10-item open ended questionnaire. The instrument is a free response statement with an elaborate coding and socring manual. Fuller states that the inter-rater reliability of .81 is offset by increased expression of extremely meaningful concerns and the nature of the language within which they are couched. Use of the results of that instrument increase the relevancy of teacher training and comcomitantly, teacher satisfaction.

The Triple I Project (Sciara, et al., 1972) attempted to utilize an individualized approach to inservice training by establishing learning modules based on areas identified by elementary school teachers through the use of an Inservice Interest Inventory. The survey consisted of forty statements in various categories derived from areas of difficulty commonly

reported by teachers and researchers in inner-city situations. A five point likert scale was used to assess degree of intensity of interest: a mean score of four or greater meant retention of the area as an inservice module. The most significant result of the study was that teacher attitude and involvement were greater determinant of success or failure in the project.

Howell's (1973) study addressed the problem of assessing teacher in-service needs by first determining possible categories of needs through five open-ended questions administered to school principals. Second, Howell developed an instrument using the most significant responses from the principals and asked teachers to respond to what their teaching interests were, what mode of inservice training was most appropriate. Teachers were to express the most important area for self improvement, technique, mode of training, and performance through a forced choice technique. Overall, teachers rated the areas of inservice instruction, techniques of discipline, motivation, etc. and use of media resources as most pressing. A similar desire for inservice activities in discipline and classroom control has been reported by Fleming and Calendine (1972). Both sets of studies, however, were concentrated to a given large urban school system.

The purpose of the instrument described herein was to provide a reliable and convenient format through which a variety of school systems could gather data on inservice needs and use that data to augment inservice planning. An additional eventual benefit of this standard format should be the specification of more broadly defined, perhaps national, needs areas for which training and development is necessary. Finally, even within the restriction that the respondents to the inservice needs assessment survey are teachers, the range of needs was constricted to reflect areas of need for skill training. This characteristic distinguish this assessment

from other needs surveys, such as the National Education Association survey (NEA, 1971) or the Gallup Poll (Elam, 1973) which attended to more broadly defined problems of the school community.

Procedures

Instrument Construction

Two primary resources were used to generate the Teacher Needs Assessment Survey. First, categories of teaching skills were abstracted from the existing catalogs of teacher competencies. Second, the responses reported in previous attempts to classify teacher concerns or needs were surveyed. On the basis of these sources, a series of 43 items (listed as Table 1) describing a variety of teaching skills were selected for use in the first version of the Teacher Needs Assessment Survey. The items were sorted into seven clusters which had apparent commonality. Teachers were asked to respond to each item of the Survey questionnaire in two ways, indicating (1.) how they saw each training area as a personal need and (2.) how they saw each training area as a need of teachers in general The purpose of this dual rating was to determine whether any major discrepancy existed between the two points of view. The teachers were asked to indicate on a Likert-type scale whether or not inservice training in a specific area or skill would be beneficial. Demographic data were also collected to indicate years of teaching experience, grade level of teaching, sex of teacher, and subject matter specialty of the teacher. Thus, the responses could be tabulated in terms of specific demographic subgroups across school systems.

Sample

The data included in this report were gathered from four school systems. The data included in this report were gathered from 163 teachers in the

Table 1

Items Included on Teacher Questionnaire

(1) Diagnosing basic learning difficulties.
(2) Constructing and using tests for evaluating academic progress
(3) Identifying student disabilities that need referral or special remedial work
(4) Identifying student attitudes in order to better relate to problems
(5) Establishing appropriate performance standards
(6) Involving students in self-evaluation
(7) Coping with the task of assigning grades
(8) Deciding what teaching technique is best for a particular intended outcome
(9) Selecting and specifying performance goals and objectives
(10) Collaborating with other teachers or administrators in planning teaching activities
(11) Creating useful remedial materials
(12) Evaluating instruction/instructional design
(13) Developing instructional procedures or modifying procedures to suit your own strengths
(14) Keeping abreast of developments in your own subject matter area
(15) Selecting and developing materials activities appropriate for individualized instruction
(16) Implementing individualized instruction and supervising individual activities
(17) Using questioning procedures that promote interaction discussion
(18) Utilization of audio-visual equipment and other mechanical aids
(19) Gearing instruction to the problem solving, inductive/deductive thinking level
(20) General presentation of information and directions
(21) Providing for motivation and reinforcement
(22) Deciding on appropriate pupil grouping procedures for instruction
(23) Constructively using evaluation in helping student progress
(24) Managing classroom affairs in order to get maximum benefit from supervising aids, tutors, etc.
(25) Arranging the physical environment (e.g., deciding on seating arrangements, etc.)
(26) Compromising personal administrative practices with directives from the principal, etc.
(27) Knowing where to refer student problems beyond what can be handled by the teacher
(28) Deciding upon which methods of classroom discipline to use and when to use them
(29) Effectively meeting immediate classroom problem situations without appearing as an ogre to the students
(30) Communicating and interacting with parents
(31) Counselling and conferring with students
(32) Representing the school and school programs at meetings
(33) Involving others in the school program
(34) Maintaining professional relationships with other teachers and administrators
(35) Developing a personal self-evaluation method
(36) Developing a broad acceptance of self
(37) Accepting responsibilities
(38) Developing a capacity of accepting others' feelings
(39) Facilitating pupil self-concept and worth
(40) Facilitating pupil social interaction
(41) Facilitating development of pupil responsibility
(42) Stimulating growth of pupil attitudes and values
(43) Instilling in the student the will to learn on his own initiative

Springfield, Illinois Schools, 202 teachers in the Whitesboro, New York Schools, 277 in the Michigan City, Indiana Schools, and 104 teachers in the Elkhart, Indiana Schools.[2] In all, these 745 teachers responded to the instrument. Of these 364 were elementary school teachers, 187 were junior high school teachers, and 188 were high school teachers. Furthermore, categorizing teacher responses by years of experience shows 204 teachers with 1 to 4 years of teaching experience, 195 teachers with 5 to 9 years teaching experience, and 346 teachers with 10 or more years teaching experience.

Results

The data which constitute the bulk of this report are summarized in Tables 2 and 3. In Table 2, percentages of teacher responses to each of the 5 Likert categories and an additional "no response" category for each of the 43 items are presented. Additional tables for "Other," and for each of the demographic subgroups have been attached as Tables A1 through A7 in Appendix A. For reasons delineated below, the analysis of the teacher ratings of "Others'" needs was not viewed as appropriate. Table 3 presents the adjusted mean ratings for selves and others for each of the 43 items. The adjusted mean rating is an arithmetic average rating based only on responses to the items. That is, failures to respond were not included. The adjusted mean rating provides a shorthand way of determining the degree to which the teachers view the training area as one of need. The lower the score the greater the perceived need. While normally mean responses would be compared to a neutral midpoint of 3.00 that comparison was deemed

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[2] (Each school system that participated was sent a report of the data. Included within the report to each school system was a listing of the questionnaire items and interpretation of selected tables reflecting the needs defined by the teachers of that school system.)

Table 2

Percentages of Responses of Surveyed Teachers (N=745)

Indicating Personal Training Needs

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	33.15	37.45	12.21	11.41	3.22	2.55
2	19.33	31.14	16.64	20.00	9.13	3.76
3	29.93	34.50	13.02	15.97	3.89	2.68
4	23.36	38.79	15.44	14.50	4.03	3.89
5	20.54	33.96	20.00	16.91	5.37	3.22
6	24.03	33.96	18.93	14.36	5.23	3.49
7	13.02	21.21	19.33	25.37	17.32	3.76
8	20.40	37.85	17.85	16.64	4.70	2.55
9	17.85	33.15	17.45	21.21	7.25	3.09
10	29.26	31.28	15.30	16.91	4.56	2.68
11	36.24	33.15	14.77	9.13	3.36	3.36
12	14.90	32.75	27.11	16.24	4.30	4.70
13	20.81	35.57	17.18	16.38	6.85	3.22
14	42.82	31.54	8.59	8.19	4.30	4.56
15	44.83	31.95	8.99	8.72	3.22	2.28
16	37.05	32.08	12.48	11.68	4.30	2.42
17	22.01	32.89	17.85	18.52	5.50	3.22
18	19.73	27.65	12.21	23.89	13.15	3.36
19	21.74	37.58	18.39	14.63	4.70	2.95
20	9.66	21.74	20.13	27.92	16.78	3.76
21	25.71	38.52	11.68	12.48	5.50	5.10
22	13.66	29.93	18.93	19.46	9.13	3.89
23	20.40	38.39	18.66	15.57	3.36	3.62
24	17.32	27.65	17.32	20.27	13.56	3.89
25	7.52	16.91	14.77	27.65	30.34	2.82
26	5.71	14.63	27.52	27.79	19.79	3.76
27	13.12	24.03	14.36	24.03	16.38	3.09
28	21.16	28.05	14.23	18.79	11.95	2.82
29	22.82	28.59	15.17	19.19	11.81	2.42
30	10.60	28.46	15.44	24.70	9.80	2.01
31	17.05	33.96	16.38	22.15	7.92	2.55
32	7.65	22.15	22.28	26.58	18.12	3.22
33	13.56	32.21	22.28	18.26	9.26	4.43
34	14.77	20.40	16.78	26.71	18.52	2.82
35	21.21	38.39	16.11	15.97	6.04	2.28
36	14.50	24.43	19.19	24.43	14.77	2.68
37	14.36	15.03	17.72	24.56	25.23	3.09
38	17.05	22.82	16.91	23.76	16.78	2.68
39	33.02	40.13	10.60	10.07	4.16	2.01
40	23.76	33.42	16.64	17.45	6.31	2.42
41	36.24	38.26	10.47	9.40	3.49	2.15
42	36.78	41.07	10.07	7.11	3.22	1.74
43	49.66	31.81	8.19	5.91	2.68	1.74

Table 3

Adjusted Mean Ratings of Surveyed Teachers (N=745)

For Selves and Others

Item	Self	Others
1	2.06	1.81
2	2.57	2.15
3	2.21	1.90
4	2.25	2.01
5	2.43	2.12
6	2.32	2.05
7	3.01	2.46
8	2.40	2.10
9	2.58	2.27
10	2.28	2.00
11	2.00	1.86
12	2.48	2.21
13	2.43	2.12
14	1.86	1.69
15	1.87	1.71
16	2.07	1.84
17	2.43	2.10
18	2.73	2.29
19	2.34	2.09
20	3.09	2.61
21	2.16	1.97
22	2.59	2.22
23	2.32	2.03
24	2.73	2.34
25	3.48	2.89
26	3.28	2.77
27	2.87	2.43
28	2.58	2.05
29	2.61	2.15
30	2.71	2.29
31	2.62	2.21
32	3.16	2.68
33	2.64	2.37
34	3.05	2.52
35	2.40	2.15
36	2.92	2.45
37	3.22	2.55
38	2.92	2.37
39	2.06	1.83
40	2.42	2.16
41	1.99	1.82
42	1.94	1.77
43	1.75	1.61

inappropriate since the response patterns seen in Table 2 reflect an overall positive bias in the ratings of all items. It was thus more appropriate to compare the adjusted means for separate items to the overall adjusted mean of 2.51.

Estimates of internal consistency for the instrument were exceptionally high. The reliability estimate for ratings of training needs for "self" was .95 while the comparable estimate for perceived training needs of "others" was .97 for the needs assessment instrument. In spite of the high reliability coefficient for "others' needs," however, certain statistical findings and conceptual problems led to a decision to remove that dimension of the questionnaire from further analysis. An inspection of the adjusted mean ratings for "selves" and "others" indicated that of the 43 identified training need areas, all 43 were viewed as being needed more by "others" than by "self." Further, the correlation between the mean ratings for "selves" and "others" over the 43 skill areas was $r_{xy} = .96$ suggesting that the differences in ratings of "selves" and "others" reduce to a nearly perfect linear transformation.

A number of anecdotal comments written by respondents on the Survey form indicated discrepancies in what they viewed as "others." Suffice it to say that the label was apparently not viewed with much commonality. Indeed, some respondents refused to rate "others" on the grounds that the target group was not specific enough. Overall, failure to respond to specific items was much more a factor in the data associated with ratings of "others" in comparison to "selves." The mean rate of failure to respond to an item was 3.1% for "selves" and 12.1% for "others." That is, the failure-to-respond rate was four times greater for rating "others" than for rating "selves." Given these methodological and conceptual difficulties in interpreting ratings of "others," the remaining analyses in this report are based only on "self" ratings.

Analysis of Data

The data were subjected to a factor analysis to identify clusters of training needs specified by the teachers. The resultant matrix of rotated factors (Table 4) yielded seven factors accounting for 95% of identifiable common variance, identified and labeled as follows:

1. Interpersonal communication and administration
2. Developing pupil self
3. Individualizing instruction
4. Assessment
5. Discipline
6. Developing personal self
7. Classroom management

While the emergence of these factors is of interest, factors by themselves offer little insight as to the directional trends in responses within the factors. These factors simply reflect sources of common variance among the items.

To compensate for the lack of specificity implicit in factor analysis, the data within the factors were analyzed more closely. To study overall patterns of training needs, ratings of the teachers on each of the items were converted to adjusted mean scores. The adjusted mean rating is an arithemetic transformation of the Likert data into a common format. Overall, perfectly unbiased distributions of such adjusted means would yield an average rating of 3.00. However, there is a tendency in these data (sometimes referred to as a Pollyanna effect) to rate all the items as more positive. The average adjusted mean rating was 2.51 with $\sigma = .41$ reflecting this bias. Thus, it is more appropriate to compare average ratings within the factors to the overall average rating rather than to the "neutral" 3.00. The result of those comparisons should yield pertinent patterns of training needs from the teachers' perspectives.

Using this basis for comparison, the two factors that represent the skill domains which teachers view as need areas were Factors 2 and 3. The adjusted mean rating for skills described in Factor 2, Developing

Table 4

Rotated Factor Matrix* of Teacher Ratings

	Factor						
Item	I	II	III	IV	V	VI	VII
26	491	013	081	108	318	149	202
27	483	073	060	020	331	123	288
30	505	243	018	140	176	223	114
31	511	330	072	153	208	185	092
32	743	104	009	178	062	124	071
33	670	262	179	126	-062	054	034
34	591	156	-024	165	188	288	146
21	088	394	147	257	107	143	386
39	211	748	101	164	113	196	042
40	337	579	071	172	096	164	083
41	175	809	064	089	133	103	100
42	095	824	144	098	115	080	080
43	041	768	166	139	090	066	052
11	062	089	490	187	-002	-042	100
15	017	095	747	140	085	053	-027
16	-001	179	699	126	130	066	089
02	183	027	086	416	052	054	224
04	153	259	070	355	005	180	018
05	093	170	061	609	109	068	009
06	060	316	256	401	-059	045	-060
07	083	064	119	462	146	061	141
08	027	182	230	375	120	149	211
09	223	160	116	431	047	124	121
12	172	071	327	455	-003	-027	166
13	088	088	292	448	196	207	134
23	227	330	187	351	125	046	301
28	191	226	083	173	763	098	128
29	227	257	129	155	728	143	116
35	270	339	115	222	072	406	121
36	358	274	095	157	165	682	130
37	472	198	000	147	144	572	274
38	400	285	031	116	175	631	126
20	261	135	014	294	153	173	533
22	204	159	234	262	149	093	404
25	366	051	177	107	351	244	390
C1	083	106	199	115	074	086	077
C3	138	162	104	201	118	039	140
10	219	108	320	261	-036	-022	097
14	133	122	206	188	026	136	025
17	140	228	294	204	056	201	212
18	286	048	083	122	133	138	376
19	145	276	240	245	062	111	203
24	339	078	300	114	274	164	307

*Decimals omitted

pupil self, was 2.05 (z = -1.11) while the mean rating for the skills described in Factor 3, Individualizing instruction, was 1.98 (z = 1.29). Both of these adjusted means were a full standard deviation away from the overall mean in a direction indicating a favorable predisposition. Furthermore, the cluster of skills defined by Factor 3 was rated differently by teachers in various grade levels. Elementary school teachers rated Individualizing instruction as statistically more important than did junior high school or senior high school teachers. In a similar vein, the cluster of skills associated with Individualizing instruction was rated as much more in demand by less experienced teachers (e.g., those with 1-4 years teaching experience) than by those with 5-9 years experience or 10+ years experience.

The first factor to emerge from the factor analysis, Interpersonal communication and administration, was the source of an exceptionally large amount of common variance. However, the adjusted mean rating for that cluster of skills was marked by a clear lack of demand for training. The adjusted mean rating for that cluster of scores was 2.90 (z = +.96), almost a full standard deviation in the opposite direction from the composite mean as compared to Factors 2 and 3. Similarly, training in the cluster of skills associated with Factor 6, Developing personal self ($\bar{X}$ = 2.86, z = +.86), 7, Classroom management ($\bar{X}$ = 3.05, z = + 1.32), is viewed by teachers as not likely to be beneficial. In fact, the adjusted mean rating of the latter cluster of skills is one and a third standard deviations away from the overall mean indicating a clear objection to training in that area.

The adjusted mean rating for the cluster of skills defined as Factor 5, Discipline ($\bar{X}$ = 2.86, z = +.22), can be interpreted as indicating a generally less than positive reaction by the teachers. However, an analysis by groups of teachers differing in years of teaching experience

indicates that the less experienced teachers may be more inclined to view training in this skill area as beneficial.

The failure of specific items to appear as members of one or another of the factors should not be interpreted to imply that they are viewed as unimportant by teachers. For example, items 1, 3, and 14 have adjusted mean values of 2.06, 2.21, and 1.86 respectfully. Their failure to cluster is merely a result of their failure to covary with other items.

Discussion

The results of this analysis clearly contradict, e.g., the findings of Howell (1973) who found that teachers indicated techniques of discipline, motivation, and use of media were principal concerns. While the factor analysis yielded factors associated with classroom management and discipline, the patterns of response were marked by less than enthusiastic need for training. In contrast, two factors that may be called Developing pupil self and Individualizing instruction account for a considerable amount of variance and the overall patterns of response reflect a strong desire on the part of teachers for training in these areas. The first of those factors reflect a clear positive desire by teachers for training in the affective of social-emotional domain.

Ultimately, inservice training must be relevant to teacher needs, demonstrative of solutions, and responsive to teacher input is still valid. In inservice training, accommodations must be made for teacher differences much as we have accommodated for student differences. Teaching requires a variety of competencies and to assume general equivalence of competence for all teachers is simply not valid. It is equally invalid for a school system to offer a single program of inservice training for all teachers irrespective of experience, grade level, etc. Inservice instruction must be differentially

arranged to meet the varying competencies of the teaching clientele to maximize positive interactive effects derived from assigning appropriate training to appropriate groups.

In another source Ingersoll, Jackson and Walden (1975) point out that significant disparities exist between teacher defined needs, the training materials available to meet those needs, and the conditions under which inservice training actually occurs. For example, the areas defined as most in need by teachers are those given least attention by developers. Further, developers have proceeded largely in ignorance of actual training conditions. Time and cost demands often exceed reasonable limits when considering typical allociations. Lastly, Ingersoll et al. cautioned that definition of materials as appropriate for both inservice and preservice settings may not be completely functional since the characteristics of the groups and training conditions differ sharply.

Finally, as stated earlier, the needs identified for inservice training may differ as a function of whom is asked to respond. In fairness to other groups in the total educational process, additional instrumentation should be developed to offer a multifacited view of inservice need. To depend solely on teacher responses for decisions may be as much in error as previous policy was patronizing. Often, teachers are not in a position to provide needed perspectives. For example, two other groups, one a standard reference group and one not standard, might be solicited.

Community input. Most programs of inservice teacher training have been conducted with little input from the community that it serves. If the school is to serve as a vehicle of social change within a community, then the consitutent groups within the community must be sampled for effective decision making. The needs that constituent groups might identify

for inservice training may be very different from those reflected in teacher or administrator reports, yet be not less valid.

Fantini (1970), for example, has argued that the community has the right and responsibility to monitor decisions of school administrators on any issue that has direct impact on the welfare of their children. The community should hold the schools accountable for the nature and content of the instruction provided by teachers.

Understandably, the inclusion of community input for purposes of decision making in a realm that has traditionally been viewed as the private domain of the professional is likely to be viewed with some alarm. As Cronin (1973) notes:

> ...the sharing of power will be quite painful for a generation of professionals... The history of beuracracies... demonstrates the great difficulty in persuading "mandarins" in any nation to relinquish power or open the gates to those who have not learned an intricate code of rules and procedures. All the debate about decentralization, control, and accountability suggests that once again the cities need to respond to the very immediate needs of the newcomers and allow them access to decisions themselves. [p. 242.]

Administrator input. Typically, the responsibility for decision making about the content and process of inservice education has resided with school administrators. A recently completed survey at the National Center (Ingersoll, Jackson and Walden, 1975) indicates clearly that the choice of inservice activities is most frequently made by a curriculum coordinator, a school principal or the superintendent. A minority of the school systems surveyed made use of a faculty council to make inservice decisions. It is difficult to say what specific criteria are used by administrators in making decisions about the content of inservice programs; no studies are apparently available on this question. It is probable, however, that decisions are made on the basis of such expeditious factors as the availability of speakers, convenience of facilities, salience of

current educational themes and topics, etc. It seems clear that more systematic data and more carefully defined criteria should enter into administrative decisions about inservice training. Administrators do, after all, have perceptions about the most critical needs of teachers with reference to skills, understandings, and knowledge of content. A means should be devised (through a validated test instrument) to more systematically gather data regarding the perceptions of administrators on training needs and this data should be to provide a incorporated with teacher and community input into decisions about the content and process of inservice training.

Summary

Certain generalizations and suggestions are evident in the data reported in this study. First, the teachers in this survey expressed a need for skill training in the affective domain, represented by the cluster of skills in Developing pupil self, and in the area of Individualizing instruction. Second, the differences reflected in the responses of teachers with greater or lesser experience and between elementary and secondary school teachers clearly support differentiated training within inservice settings. We should at least afford teachers some degree of individualization based on their perceived needs. To ignore the teacher in the early stages of defining training needs fails to make sense for a variety of reasons, not the least of which is the patronizing effect upon teachers when academicians or administrators are the primary source of decision making about teachers' professional training. Far too often these decisions are based on convenience, convention, current trends or expediency rather than on actual need. Also, there are clear motivational reasons for including teachers in the planning stages of training material selection and development since inclusion of the teachers at a primary "choice point" will be more likely to lead to individual interest during actual training. It is also financially unsound to invest funds

in training that has little relevance to teacher needs. Finally, additional instrumentation is clearly needed for other sections of the school community.

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APPENDIX

Summary Tables

Table A1

Percentages of Responses of Surveyed Teachers

Indicating Training Needs of Others (N=745)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	30.74	35.30	17.32	4.83	1.61	10.20
2	17.99	31.01	22.95	13.15	2.68	12.21
3	26.71	35.30	17.85	8.05	1.48	10.60
4	18.79	35.03	22.55	8.99	1.61	13.02
5	17.45	31.01	27.11	10.07	2.28	12.08
6	20.54	30.47	24.56	9.26	2.55	12.62
7	11.81	24.70	25.50	15.78	8.32	12.89
8	17.32	34.63	25.10	9.93	1.61	11.41
9	15.57	30.07	24.30	13.83	4.56	11.68
10	25.10	29.93	21.07	10.20	2.15	11.54
11	27.25	31.81	21.61	5.77	1.34	12.21
12	10.74	31.01	30.87	11.28	2.15	13.96
13	17.32	30.74	26.71	10.07	2.55	12.62
14	34.63	28.99	15.03	6.58	1.07	13.69
15	33.29	34.50	15.70	4.83	.54	11.14
16	28.59	34.36	18.39	5.71	.94	11.01
17	18.79	31.95	25.37	10.34	1.88	11.68
18	15.70	30.07	20.00	17.18	4.83	12.21
19	17.72	32.48	26.44	8.72	2.42	12.21
20	3.59	21.48	27.79	20.27	8.99	12.89
21	21.88	34.50	19.06	9.13	2.42	13.02
22	14.90	29.66	26.44	12.62	3.62	12.75
23	17.99	36.51	21.61	9.66	1.74	12.48
24	13.56	26.44	27.92	13.15	6.17	12.75
25	6.58	17.18	23.62	23.22	16.78	12.62
26	4.30	15.97	36.38	20.40	10.07	12.89
27	15.30	24.56	22.15	19.33	6.98	11.68
28	22.95	30.34	20.67	11.54	2.68	11.81
29	19.73	27.38	24.70	12.35	3.36	12.48
30	15.57	27.52	26.98	14.77	3.76	11.41
31	14.36	32.75	25.77	12.48	2.68	11.95
32	6.71	19.87	31.28	20.40	9.26	12.48
33	10.47	25.50	31.54	14.36	4.70	13.42
34	13.29	20.81	25.77	18.12	9.53	12.48
35	15.97	31.81	28.72	9.26	2.42	11.81
36	11.95	21.34	32.35	16.38	5.64	12.35
37	15.30	15.17	29.53	19.60	8.46	11.95
38	15.44	22.42	29.80	14.90	5.64	11.81
39	28.59	33.56	19.87	5.23	1.34	11.41
40	18.26	30.34	25.50	11.28	3.09	11.54
41	28.05	35.70	18.12	5.10	1.48	11.54
42	29.13	37.72	16.38	4.03	1.34	11.41
43	40.00	30.34	13.56	3.49	1.21	11.41

Table A2

Percentages of Responses of Elementary School Teachers

Indicating Personal Training Needs (N=364)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	38.19	37.36	10.71	10.16	2.20	1.37
2	18.41	31.59	17.31	21.15	8.52	3.02
3	32.97	31.59	13.19	16.76	3.57	1.92
4	23.08	38.46	15.93	15.11	4.12	3.30
5	18.13	34.07	23.35	16.48	5.49	2.47
6	24.18	35.71	16.48	16.21	4.12	3.30
7	13.46	22.53	17.03	23.90	20.33	2.75
8	18.68	37.91	20.60	16.21	5.22	1.37
9	14.84	31.59	19.23	24.18	7.97	2.20
10	31.59	29.12	17.58	16.76	3.57	1.37
11	46.98	31.59	7.69	8.24	3.57	1.92
12	15.66	33.52	25.55	16.76	4.95	3.57
13	22.25	33.79	17.86	17.31	6.59	2.20
14	40.38	35.44	9.07	8.52	3.30	3.30
15	49.18	31.04	8.24	7.97	1.92	1.65
16	43.96	29.95	10.44	10.44	3.85	1.37
17	21.70	34.62	17.31	19.78	4.67	1.92
18	19.51	24.18	14.01	26.10	14.01	2.20
19	20.88	40.11	18.96	14.84	3.30	1.92
20	9.62	19.78	20.05	30.22	18.13	2.20
21	23.02	35.44	12.36	15.38	5.49	3.30
22	23.35	29.12	15.66	20.60	8.79	2.47
23	22.25	34.62	19.51	17.86	3.30	2.47
24	21.43	32.42	16.21	18.68	8.52	2.75
25	7.97	18.41	13.19	28.85	29.95	1.65
26	6.04	15.66	28.30	29.12	18.68	2.20
27	20.05	22.25	12.91	28.02	15.11	1.65
28	29.12	27.20	13.19	19.51	9.62	1.37
29	27.20	31.04	12.09	18.13	10.44	1.10
30	23.08	28.85	10.71	26.92	9.07	1.37
31	15.93	35.99	14.84	23.63	7.97	1.65
32	6.87	19.78	22.53	29.67	18.41	2.75
33	13.74	29.95	20.60	21.98	9.62	4.12
34	13.74	19.51	16.76	28.02	20.05	1.92
35	20.60	36.81	16.48	18.13	6.32	1.65
36	14.29	25.55	17.31	26.10	15.38	1.37
37	13.74	14.56	18.13	27.47	23.90	2.20
38	15.76	23.35	15.11	26.65	16.48	1.65
39	35.81	39.01	7.14	9.62	6.04	1.37
40	25.10	36.81	11.81	18.13	5.49	1.65
41	36.81	37.90	8.79	10.99	5.22	1.10
42	38.46	40.38	8.24	7.69	4.12	1.10
43	49.73	31.04	8.79	5.49	4.12	.82

Table A3

Percentages of Responses of Junior High School Teachers

Indicating Personal Training Needs (N=187)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	26.74	39.04	16.04	11.76	4.81	1.60
2	21.39	27.81	16.04	19.79	11.23	3.74
3	29.41	34.22	17.11	13.37	4.28	1.60
4	24.06	38.50	13.90	14.44	5.35	3.74
5	20.86	34.22	17.11	17.11	8.02	2.67
6	22.46	34.22	21.93	13.37	5.35	2.67
7	12.30	20.86	21.93	26.74	14.44	3.74
8	18.18	41.18	17.11	16.58	3.74	3.21
9	19.25	31.02	18.18	21.39	6.42	3.74
10	27.27	32.09	14.97	18.72	3.74	3.21
11	29.41	35.83	19.79	9.63	2.67	2.67
12	14.44	29.95	33.16	14.97	1.60	5.88
13	18.72	38.50	17.11	15.51	6.95	3.21
14	38.50	27.81	11.76	9.63	6.95	5.35
15	41.18	33.69	11.23	7.49	4.28	2.14
16	33.16	31.02	19.79	10.70	3.74	1.60
17	20.32	33.16	18.18	18.72	6.95	2.67
18	20.32	28.88	11.76	25.13	10.70	3.21
19	27.81	32.09	15.51	16.58	5.35	2.67
20	11.23	25.67	19.25	27.81	11.76	4.28
21	24.06	41.71	11.76	10.16	5.88	6.42
22	15.04	33.16	18.72	16.58	10.16	5.35
23	13.72	39.04	22.46	12.30	3.21	4.28
24	12.83	23.53	17.11	24.60	18.72	3.21
25	8.02	14.44	17.11	27.81	29.41	3.21
26	8.02	14.97	26.20	26.20	19.79	4.81
27	15.04	24.06	14.97	23.53	17.65	3.74
28	21.93	29.41	15.51	16.58	12.83	3.74
29	24.60	23.53	17.65	19.25	11.76	3.21
30	19.25	26.74	19.79	22.99	9.63	1.60
31	20.32	28.34	19.79	20.86	8.02	2.67
32	5.95	20.32	26.74	23.53	18.72	3.74
33	13.90	33.16	24.60	14.97	10.70	2.67
34	15.58	19.95	17.11	24.60	20.32	2.14
35	25.13	33.69	18.18	15.51	5.88	1.60
36	13.90	21.93	22.46	23.53	14.97	3.21
37	13.37	13.37	19.79	20.86	29.95	2.67
38	14.97	20.32	18.18	23.53	20.32	2.67
39	25.74	41.71	16.04	11.23	2.67	1.60
40	19.25	27.81	24.60	18.18	8.56	1.60
41	35.83	37.43	14.44	8.02	2.67	1.60
42	33.16	42.25	13.90	5.35	3.21	2.14
43	47.06	33.69	9.63	5.35	2.14	2.14

Table A4

Percentages of Responses of Senior High School Teachers

Indicating Personal Training Needs (N=188)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	29.26	36.17	11.70	13.30	3.72	5.85
2	19.15	34.04	15.96	17.55	8.51	4.79
3	25.00	40.96	9.04	15.43	4.26	5.32
4	22.87	39.36	15.96	13.83	2.66	5.32
5	25.53	31.38	17.02	18.09	2.66	5.32
6	26.06	30.32	19.15	12.23	7.45	4.79
7	12.77	19.68	20.74	26.06	14.89	5.85
8	23.94	35.11	13.83	18.09	4.79	4.26
9	21.28	38.30	13.83	15.43	6.91	4.26
10	27.66	32.98	11.70	15.43	7.45	4.79
11	22.87	32.98	23.40	10.11	3.72	6.91
12	14.36	33.51	24.47	15.96	5.85	5.85
13	20.21	35.64	16.49	14.89	7.45	5.32
14	51.60	28.19	4.79	5.32	3.72	6.38
15	40.43	31.38	7.98	11.70	4.79	3.72
16	27.66	36.17	9.57	15.43	5.85	5.32
17	24.47	29.26	18.62	15.96	5.85	5.85
18	19.15	33.51	9.57	18.09	14.36	5.32
19	17.02	38.83	19.68	12.23	6.91	5.32
20	8.51	20.74	21.28	23.94	19.68	5.85
21	26.60	41.49	10.64	9.57	5.32	6.38
22	12.77	28.72	25.53	19.68	8.51	4.79
23	18.62	44.68	13.83	14.36	3.72	4.79
24	13.30	22.87	19.15	19.15	18.62	6.91
25	5.85	16.49	15.96	23.94	32.98	4.79
26	6.91	12.77	27.66	25.53	21.81	5.32
27	15.96	26.60	17.02	17.02	18.98	5.32
28	17.02	27.66	14.89	19.68	15.96	4.79
29	13.30	29.26	17.55	20.74	14.89	4.26
30	13.83	29.26	19.68	21.81	11.70	3.72
31	15.49	35.11	16.49	19.68	7.98	4.26
32	9.57	29.26	17.02	22.87	17.55	3.72
33	13.30	35.64	22.87	14.36	7.45	6.38
34	15.43	22.87	16.49	26.06	14.36	4.79
35	19.15	45.21	12.77	12.77	5.85	4.26
36	15.43	24.47	19.68	21.81	13.83	4.79
37	17.02	17.55	13.83	22.34	23.94	5.32
38	20.21	23.40	18.62	18.62	14.36	4.79
39	31.91	40.43	12.23	9.57	2.13	3.72
40	23.94	31.91	18.09	15.43	5.85	4.79
41	35.64	40.96	10.11	7.98	1.06	4.26
42	36.17	41.49	10.11	7.98	1.60	2.66
43	51.06	31.91	5.85	7.45	.53	3.19

Table A5

Percentages of Responses of Teachers with 1-4 Years Teaching Experience Indicating Personal Training Needs (N=204)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	34.31	38.73	11.73	10.78	2.45	1.96
2	22.55	27.94	16.67	19.12	10.29	3.43
3	34.31	37.75	12.25	11.76	2.45	1.47
4	23.53	41.67	12.75	13.73	6.37	1.96
5	13.73	40.20	22.55	13.73	7.84	1.96
6	22.55	36.76	17.65	13.73	5.88	3.43
7	11.27	24.02	19.61	22.06	19.12	3.92
8	18.63	43.14	20.10	12.75	3.43	1.96
9	12.25	36.27	20.10	22.06	6.86	2.45
10	33.82	25.49	15.69	13.63	4.41	1.96
11	43.14	29.90	14.71	7.35	2.45	2.45
12	11.27	34.31	30.39	16.67	4.41	2.94
13	22.06	32.84	16.18	20.59	5.88	2.45
14	39.71	29.41	11.27	10.78	5.88	2.94
15	47.55	34.31	6.86	7.84	2.45	.98
16	41.67	32.84	13.73	7.84	2.94	.98
17	20.59	36.76	17.65	20.10	3.92	.98
18	19.12	27.45	12.25	26.47	12.75	1.96
19	20.59	45.10	15.20	14.22	2.94	1.96
20	10.29	22.55	22.06	26.47	16.67	1.96
21	29.90	36.76	12.75	11.27	4.90	4.41
22	22.55	32.84	20.10	15.69	6.86	1.96
23	20.59	41.67	18.14	14.71	3.43	1.47
24	13.14	29.41	19.12	21.57	9.80	1.96
25	3.33	20.10	13.73	30.39	25.98	1.47
26	5.86	15.20	32.84	25.00	17.65	2.45
27	19.61	27.94	14.71	23.04	13.73	.98
28	30.88	32.84	9.80	17.16	7.84	1.47
29	28.43	35.78	11.76	15.20	7.84	.98
30	26.47	30.39	12.75	21.57	8.33	.49
31	23.04	35.78	16.67	17.16	6.86	.49
32	6.86	21.57	22.55	28.92	18.63	1.47
33	16.67	33.33	19.61	20.10	7.84	2.45
34	14.71	18.14	18.14	26.96	20.59	1.47
35	24.02	39.71	15.69	13.24	5.88	1.47
36	18.63	25.00	19.12	17.16	18.63	1.47
37	17.65	16.18	17.65	20.10	27.45	.98
38	21.08	22.55	16.67	22.55	15.69	1.47
39	34.80	46.08	9.80	6.86	1.96	.49
40	25.98	36.76	16.67	15.69	4.41	.49
41	41.67	42.16	10.78	3.43	1.47	.49
42	42.16	40.69	11.76	3.43	1.47	.49
43	50.49	34.31	8.82	4.41	1.47	.49

Table A6

Percentages of Responses of Teachers with 5-9 Years Teaching Experience Indicating Personal Training Needs (N=195)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	31.79	40.00	13.33	12.31	1.54	1.03
2	18.46	28.21	18.46	26.15	6.67	2.05
3	27.69	35.90	14.36	18.97	1.54	1.54
4	22.56	40.00	14.87	17.44	3.59	1.54
5	23.08	34.36	19.49	16.41	4.62	2.05
6	24.10	36.41	18.46	15.38	3.08	2.56
7	11.28	21.54	21.03	28.72	15.90	1.54
8	23.59	32.82	16.41	22.56	4.10	.51
9	20.51	29.23	13.33	26.15	10.26	.51
10	28.21	30.77	15.38	20.00	3.59	2.05
11	34.87	37.95	11.28	10.77	3.08	2.05
12	16.41	29.23	26.15	21.54	3.59	3.08
13	19.49	37.95	17.44	17.44	7.18	.51
14	36.92	35.90	10.26	10.26	3.08	3.59
15	45.64	33.85	8.21	9.23	2.56	.51
16	36.92	32.82	12.82	12.82	3.59	1.03
17	25.64	30.26	15.90	20.51	7.18	.51
18	14.87	29.74	11.28	24.10	18.46	1.54
19	22.56	33.33	23.08	16.41	3.59	1.03
20	7.69	18.97	16.92	37.44	17.44	1.54
21	23.59	40.00	10.77	16.41	5.13	4.10
22	14.36	32.31	19.49	22.56	10.26	1.03
23	20.00	35.38	20.00	18.46	3.59	2.56
24	15.90	25.13	20.00	23.59	13.33	2.05
25	6.67	18.97	14.36	31.28	28.72	0.00
26	7.18	15.90	24.10	31.28	20.51	1.03
27	14.87	22.05	17.44	26.15	19.49	0.00
28	23.08	29.23	12.82	22.56	11.79	.51
29	23.08	26.67	15.90	21.03	12.82	.51
30	15.38	29.23	14.36	31.28	9.23	.51
31	15.38	33.33	15.38	26.15	8.72	1.03
32	4.62	22.05	23.08	30.77	18.97	.51
33	13.33	33.85	20.00	21.54	8.72	2.56
34	8.21	23.08	14.87	33.33	17.95	2.56
35	18.46	41.54	16.92	18.46	4.10	.51
36	10.26	21.54	21.54	33.85	33.31	.51
37	9.74	12.31	19.49	31.79	25.13	1.54
38	11.79	24.10	18.97	28.72	15.90	.51
39	28.21	44.62	9.23	14.36	3.08	.51
40	19.49	33.85	13.85	23.59	8.21	1.03
41	33.33	35.90	11.79	13.85	4.10	1.03
42	30.26	45.64	10.77	9.74	3.08	.51
43	45.13	36.92	8.72	6.67	2.05	.51

Table A7

Percentages of Responses of Teachers with 10+ Years Teaching Experience Indicating Personal Training Needs (N=346)

Item	Def. (1)	Prob. (2)	I Don't Know (3)	Prob. Not (4)	Def. Not (5)	No Resp.
1	33.24	35.26	11.85	11.27	4.62	3.76
2	17.92	34.68	15.61	17.05	9.83	4.91
3	28.61	31.79	12.72	16.76	6.07	4.05
4	23.70	36.42	17.34	13.29	2.89	6.36
5	23.12	30.06	18.79	19.08	4.34	4.62
6	24.86	30.92	19.94	14.16	6.07	4.05
7	15.03	19.36	18.21	25.43	17.05	4.91
8	19.65	37.57	17.34	15.61	5.78	4.05
9	19.65	33.53	18.21	17.92	5.78	4.91
10	27.17	34.97	15.03	14.16	5.20	3.47
11	32.95	32.37	16.76	9.25	4.05	4.62
12	16.18	33.82	25.72	13.01	4.62	6.65
13	20.81	35.84	17.63	13.29	7.23	5.20
14	47.98	30.35	6.07	5.49	4.05	6.07
15	42.77	29.48	10.69	8.96	4.05	4.05
16	34.39	31.21	11.56	13.29	5.49	4.05
17	20.81	32.08	19.08	16.47	5.49	6.07
18	22.83	26.59	12.72	22.25	10.40	5.20
19	21.97	35.55	17.63	13.87	6.36	4.62
20	10.40	22.83	20.81	23.41	16.47	6.07
21	26.59	38.73	11.56	10.98	6.07	6.07
22	18.79	26.88	17.92	19.94	9.83	6.65
23	20.52	38.15	18.21	14.45	3.18	5.49
24	17.63	28.03	14.74	17.63	15.90	6.07
25	7.51	13.87	15.61	23.99	33.82	5.20
26	6.36	13.58	26.30	27.46	20.23	6.07
27	19.08	22.83	12.43	23.41	16.18	6.07
28	20.81	24.57	17.63	17.63	14.45	4.91
29	19.36	25.43	16.76	20.52	13.58	4.34
30	17.92	26.88	17.63	22.83	10.98	3.76
31	14.45	33.24	16.76	22.83	8.09	4.62
32	9.83	22.54	21.68	22.83	17.34	5.78
33	11.85	30.64	25.14	15.32	10.40	6.65
34	13.50	20.23	17.05	22.83	17.63	3.76
35	21.10	35.84	15.90	16.18	7.23	3.76
36	14.45	25.72	17.92	23.41	13.87	4.62
37	15.03	15.90	16.76	23.12	23.99	5.20
38	17.63	22.25	15.90	21.68	17.92	4.62
39	34.68	34.10	11.85	9.54	6.07	3.76
40	24.86	31.21	18.21	15.03	6.36	4.34
41	34.68	37.28	9.54	10.40	4.34	3.76
42	37.28	38.73	8.67	7.80	4.34	3.18
43	51.73	27.46	7.51	6.36	3.76	3.18