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AUTHOR Klein, Stephen P.
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ABSTRACT

A study was conducted to determine the educational objectives that the school districts in New Mexico consider most important. Secondary purposes were to determine whether the two methods yielded similar or different priorities and whether there were any systematic differences in the views of certain districts and/or kinds of raters. Twenty-seven school districts formulated important objectives in social studies, communication skills, math, and science. Each of the 153 objectives was printed on a card, and the cards were divided into 4 decks for each of the subject areas. Within each of 31 additional district, four teams of raters were formed, each consisting of a student, a teacher, an administrator, and a community representative. Each team member, sorted each deck of cards into three piles--below average importance, average importance, and above average importance--with a minimum of five in each pile. Each team also researched a consensus as to the 5-15 objectives it considered most important. The procedure was then repeated with the 27 districts involved in developing the objectives. The results indicated that certain objectives tended to be considered much more important than others and that this trend was consistent across different kinds of raters and districts and the two methods (i.e., individual raters vs. group consensus). (KM)

An Evaluation of New Mexico's Educational Priorities

Stephen P. Klein

Educational Evaluation Associates*

Purpose

This study was conducted to determine the specific educational objectives that the school districts in the state of New Mexico considered to be the most important. Two secondary purposes were to determine whether the two methods used to ascertain those preferences yielded similar or different priorities and whether there were any systematic differences in the view of certain districts and/or kinds of raters.

Procedures

A representative random sample of 27 of the State's school districts were asked to develop what they considered to be important educational objectives in each of the following four areas:

1. Social Studies
2. Communication Skills
3. Mathematics
4. Science

This construction process involved State Department of Education staff working with community representatives, students, and school and district personnel in each of the 27 districts sampled.

The total pool of objectives from all districts were then edited and

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additional ones written to ensure a comprehensive set in each of the four areas. A total of 153 objectives were constructed as well as at least one sample item for each objective to illustrate how it might be measured. Each objective and its sample item(s) were printed on a 5x8" card. In this way, a deck of cards was prepared for each of the four areas noted above.

These decks of cards were taken to 31 additional high school districts by State Department of Education staff. Within each district, there were four teams of raters. Each team was composed of a representative from each of the following four types of raters:

1. Students
2. Teachers
3. Administrators (e.g., principal, assistant superintendent)
4. Community representatives (e.g., parent, school board member)

Each team member was given a deck of cards for a given content area and was asked to sort them into the following three piles:

— 1. Below Average Importance

— 2. Average Importance

— 3. Above Average Importance

Each rater had to put at least five objectives into each pile, but beyond that there were no restrictions as to the number of objectives that had to be placed in any one pile. After a team member completed his sorting of the objectives and tallied his results, he then discussed with his other team members the reasons for his choices. Generally quick consensus was

then reached as to the 5-15 objectives that the team considered to be most important. This process took about one hour to complete including an explanation of how the objectives were developed and the rationale for the procedures.

Once this step was completed, the teams switched decks of cards and repeated the process of making both individual ratings of the relative importance of each objective and achieving consensus as to the 5-15 objectives within each set that they felt were the most important. This procedure was repeated two more times so that each rater rated each goal area. The final step involved each team submitting its set of important objectives to the superintendent who in turn met with the team captains to determine the district's consensus as to the 5-15 most important objectives within each of the four areas. Thus, the total time involved in the entire process of selecting objectives was about 5 hours per rater per district.

A description of these procedures and the decks of cards were then mailed to the 27 districts that were involved initially in the development of the objectives. These districts carried out these procedures with relatively little help from State Department staff.

All the foregoing procedures produced the following two sets of data:

1. Each rater's individual judgment as to the relative importance of each of the 153 objectives (the total number of judgments equalled 58 districts X 16 raters X 153 objectives).
2. The consensus judgment within each of the 58 districts as to the 5-15 objectives that it felt were the most important in each of the four areas surveyed.

Results

Tables 1-4 contain the results of the analyses of variance for each area for the first type of data collected; i.e., the independent individual ratings of each objective. An inspection of these tables indicates almost identical results in each area. These results may be summarized as follows:

1. The main effects due to the District and Rater Type factors were statistically significant at .001. This means that certain districts and certain rater types tended to be more lenient than others in their assignment of objectives to the three categories of importance; e.g., putting more or less objectives into the category of "an important" objective.

This result suggests that the procedural requirement of putting at least five objectives into each of the three categories of importance did not substantially curtail the raters' ability to indicate the nature of their preferences.

2. The main effect due to the objectives factor was statistically significant at .001. This result was very important since it indicates that some objectives were consistently rated much more important than others. Thus, the observed differences between the mean ratings of objectives within an area are interpretable and not just due to chance fluctuations.

3. None of the interactions were practically significant although the districts by objectives effect appeared to reach the level of statistical significance because of the very large number of ratings gathered. This is a very interesting result because it means that one type of rater and/or district did not tend to rate the objectives substantially differ-

Table 1. Summary of Analysis of Variance for Social Studies

Source	df	Mean Square	F
Between Subjects			
Districts	57	5.11	2.79*
Raters	3	13.37	7.29*
Districts X Raters	171	1.30	0.71
Subjects within groups (between group error)	232	1.83	
Within Subjects			
Objectives	35	30.07	59.80*
Districts X Objectives	1995	0.62	1.24*
Raters X Objectives	105	0.54	1.07
Districts X Raters X Objectives	5985	0.42	.83
Objectives X subjects within groups (within group error)	31255	0.50	

* = significant beyond .01

Table 2. Summary of Analysis of Variance for Communication Skills

Source	df	Mean Square	F
Between Subjects			
Districts	57	6.63	2.15*
Raters	3	15.54	5.05*
Districts X Raters	171	2.45	0.80
Subjects within groups (between group error)	232	3.08	
Within Subjects			
Objectives	51	47.10	103.23*
Districts X Objectives	2907	0.57	1.24*
Raters X Objectives	153	0.44	0.96
Districts X Raters X Objectives	8721	0.38	0.82
Objectives X subjects within groups (within group error)	45696	0.46	

* = significant beyond .01

Table 3. Summary of Analysis of Variance for Mathematics

Source	df	Mean Square	F
Between Subjects			
Districts	57	6.13	3.59*
Raters	3	11.62	6.81*
Districts X Raters	171	1.20	0.70
Subjects within groups (between group error)	232	1.71	
Within Subjects			
Objectives	32	109.46	265.49*
Districts X Objectives	1824	0.57	1.38*
Raters X Objectives	96	0.59	1.43*
Districts X Raters X Objectives	5472	0.36	0.88
Objectives X subjects within groups (within group error)	28928	0.41	

* = significant beyond .01

Table 4. Summary of Analysis of Variance for Science

Source	df	Mean Square	F
Between Subjects			
Districts	57	5.23	3.25*
Raters	3	11.95	7.42*
Districts X Raters	171	1.10	0.68
Subjects within groups (between group error)	232	1.61	
Within Subjects			
Objectives	31	68.22	144.03*
Districts X Objectives	1767	0.60	1.27*
Raters X Objectives	93	0.57	1.20
Districts X Raters X Objectives	5301	0.41	0.87
Objectives X subjects within groups (within group error)	27714	0.47	

* = significant beyond .01

ently (in the sense of selecting certain ones as being more or less important than others) than did other types of raters and/or districts. This finding was very important because it means that one can use the overall rating for a given objective as indicative of what New Mexicans think about it without being overly concerned that a given rater type and/or district was not represented properly. On the other hand, issues dealing with particular districts should probably heed the obtained statistically significant result that some districts rated the objectives somewhat differently than did other districts.

One of the major questions in the present study was whether the two methods for determining the relative priorities of objectives would lead to similar or different results. In other words, was the average individual rating for an objective indicative of whether the district finally selected it as being one of the 5-15 objectives they considered to be most important for a given area. The mean rating for each objective and the number of times it was selected by the 57 districts as being important has been tabulated in Appendix A. Table 5 contains the correlation coefficient between these two methods for each area. An inspection of these coefficients indicates that there is generally a very high but not a perfect agreement between the results obtained with the two methods for determining priorities.

Table 5

Correlation between the average individual rating of each objective and the number of times it was chosen as being one of the 5-15 most important objectives by a district

Area Rated	Correlation
Social Studies	.94
Communication Skills	.88
Mathematics	.96
Science	.88

The final set of analyses involved an examination of the intercorrelations among the objectives within each area. The purpose of this analysis was to determine whether there were any objectives that appeared to be duplicates. An inspection of the four intercorrelation matrices revealed no practically significant r's in the sense that certain objectives appeared to be rated in essentially the same manner as any other objective (no r was higher than .55 and most were below .10).

Discussion

The results of this study indicated that certain objectives tended to be considered much more important than others. Further, this trend was consistent across different kinds of raters and districts and the two methods employed for determining the relative importance of each objective (i.e., average across raters vs. group consensus). It appears, therefore, that there is widespread unanimity within the State as to the relative importance of various educational objectives since a representative sample of two-thirds of the State's 89 districts participated in this study.

There are, however, a number of limitations of the present study. First, the choice of who represented each type of rater within a district was determined by a member of the district staff so it may be assumed that it was not always as random as the procedures dictated. The fact that the Raters X Districts interaction was not significant suggests that this was not an important bias. Second, a total of 75 sets of ratings were not obtained (i.e., about 10% missing data) and dummy data had to be inserted for them (the average rating for the objective for the type of rater who was missing). This loss did not appear to be systematic as to the type of

rater or district and thus, it was assumed to be random. Third, and perhaps most important, the instructions to the raters only required them to judge the relative importance of each objective without attention to the levels or standards of performance required. Thus, some changes in priorities might have occurred if the objectives also contained a description of the level of performance required, e.g., some raters may have felt that only a minimal level of a certain objective was very important and that this accounted for its high ratings. The somewhat unusual choices as to the important objectives within the area of communication skills may have been caused by this problem (e.g., punctuation and library skills were among the highest rated objectives while reading comprehension and writing skills were near the middle and bottom of the list, respectively).

Conclusion

The results of this study indicate the relative importance of educational objectives within the State, provided one takes into consideration the limitations noted above. The two procedures used to obtain these ratings yielded essentially identical results and thus, it appears that they reflect accurately the present priorities.