A Sample Conference Evaluation by Objectives--Including Forms, Procedures, Tabulation, and Data Interpretation.

New York State Educational Communication Association.

A Sample Conference Evaluation by Objectives was designed to be an objective way of measuring program impact upon participants. At a convention program, speakers were asked to summarize their presentations in three or four participant-centered objectives. Participants were given a brief, easy to fill in and easy to tabulate form to evaluate each speaker by objectives. Results of participant evaluation were tabulated and sent immediately to the speaker. Speaker success in accomplishing identified speech objectives was evaluated. This evaluation included a simplified statistical analysis. Uses of this evaluation method, as described in this sample kit of forms, procedures, tabulation guidelines and examples, and data interpretation sample, include pinpointing: (1) effective speakers, (2) effective presentations, (3) the most effective portion of any presentation, (4) benefits to participants, and (5) possible benefits to learners in institutions sending participants to conventions. (Author/BJG)
A SAMPLE CONFERENCE EVALUATION
BY OBJECTIVES
--- INCLUDING FORMS, PROCEDURES, TABULATION, AND DATA INTERPRETATION

HOWARD P. ALVIR, PH.D.

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INTRODUCTION TO CONVENTION EVALUATION BY OBJECTIVES

This publication, AN INTRODUCTION TO CONVENTION EVALUATION BY OBJECTIVES, is intended for both the general and the specialized reader. The general reader is given an easy to understand example of a new way to evaluate conventions. The specialized reader is given, in addition to the simplified overview, a basic statistical tool with which to evaluate almost any type of convention.

This means that the general reader should be able to derive a simplified overview of EVALUATION BY OBJECTIVES after reading pages 1 to 18. In addition, the evaluation specialist should be able to envision the procedures, the forms, the timetable, the data tabulation, and the statistical analysis necessary by reading pages 19 to 41.

In order to evaluate a convention by objectives, the evaluator should get together with the program chairman in order to look over the convention program. Most convention programs are uniquely developed in order to facilitate the objectives of the associations sponsoring the convention.

This prepares the evaluator by objectives for CHANGE 1:

ADD speaker-written participant-centered presentation objectives to the existing program.

Change 1 is not dramatic, but it does set the stage for the organization and instrumentation necessary to succeed with evaluation by objectives. Obviously, even the amateur evaluator will now ask, "How does one get the speakers to develop participant-centered objectives?"
The answer is simple. The speakers were asked in a short letter to develop objectives that would tell the participant exactly what could be of benefit to the listener at each presentation. A sample of this letter appears on page 13. It is to be noted that the sample letter gives specific examples of objectives correlated to a specific presentation title.

After the speaker-written objectives have been added to the convention program, it is appropriate to use a brief, easy to fill in and easy to tabulate, evaluation form that evaluates by objectives. There are many different variations possible here. The form used in this example is reproduced on page 16.

It might be noticed that, in this experimental validation of evaluation by objectives, an evaluation has been made both by objectives and by conventional criteria. This duplication of evaluation coverage is not always essential in situations with limited time and personnel.

Immediately, the experienced evaluator sees a certain difficulty here. The evaluator begins to envision the situation where many different evaluations are coming from many different sources. The resulting tower of Babel is enough to convince anyone that such a method can't work.

Such a possible source of confusion has been anticipated and prevented by the procedures spelled out on pages 14 and 15. These pages tell exactly what was done to organize and simplify the evaluation procedure.

It must be noted here that immediate feedback to the individual speaker was considered of paramount importance. This immediate feedback enables the speaker to get ready for next time or next year. In other words, immediate knowledge of results helps prevent a bad habit from becoming an incorrigible habit.
Also, immediate knowledge of successful results helps develop good habits that can produce solid learner benefits.

This prepares the evaluator by objectives for CHANGE 2:

USE a brief, easy to fill in and easy to tabulate, evaluation form that evaluates by objectives.

All of this can be summed up in CHANGE 3:

PROVIDE immediate (within 4 weeks after the convention) feedback to the speaker on the results of evaluations from participants.

This change 3 is a direct result of the above mentioned CHANGE 2.

Now that the speaker has submitted objectives, that the brief form has been utilized, and that immediate feedback has been provided to speakers, it is time for CHANGE 4:

EVALUATE the objectives aimed at as well as the participant estimation of success.

EVALUATING THE OBJECTIVES AIMED AT simply means to categorize, count, and examine the speaker-written objectives in order to make sure that these objectives are participant-centered and observable. In addition, care can be taken to make sure that these objectives are in congruence with the overall aim of the convention.

Examples of this process of evaluating the objectives can be found on pages 24 to 33.

In order to EVALUATE THE PARTICIPANT ESTIMATION OF SUCCESS, it is necessary to come up with a proper tally of responses that clearly provide discrimination between objectives achieved and objectives not achieved.
Obviously, there are pitfalls to avoid. These easy-to-commit errors are explained on pages 34 to 38. An accurate and simple way to tabulate evaluations by objectives is presented on pages 39 to 41.

Any reader who is scared off by the words "statistics" or "tabulations" should look at the simplicity of the data presented on page 40 in order to regain courage. Anytime the data gets more complicated than that on page 40, both the evaluator and the decision maker should try to find out what errors enumerated on pages 34 to 38 have got the tabulator off the track.

Some individuals instinctively feel that the long way is the best way. Other individuals feel that the more difficult solution is the best way for a disciplined mind.

The data summarized on pages 19 to 23 points up at least two examples wherein long counts and detailed analyses were misleading because the counts were based upon the rules of mathematics unadapted to the particular requirements of a specific convention. Grouping should have come before counting.

This long winded last paragraph boils down to the following: sometimes a short, well organized counting is better than a long and involved arithmetic process as far as evaluation is concerned.

This leads us to CHANGE 5:

**SIMPLIFY** the math.
CONCLUSIONS

In order to capsulize the unique characteristics of this approach to CONVENTION EVALUATION BY OBJECTIVES, the following five changes are presented as a concluding summary. Here are the five changes necessitated:

CHANGE 1:

ADD speaker-written participant-centered presentation objectives to the existing program.

CHANGE 2:

USE a brief, easy to fill in and easy to tabulate, evaluation form that evaluates by objectives.

CHANGE 3:

PROVIDE immediate (within 4 weeks after the convention) feedback to the speaker on the results of evaluations from participants.

CHANGE 4:

EVALUATE the objectives aimed at as well as the participant estimation of success.

CHANGE 5:

SIMPLIFY the math.

Each of these changes is illustrated in the following pages.
NYSECA CONVENTION EVALUATION SUMMARY

The purpose of the 1974 NYSECA convention evaluation was to provide an easy to use format upon which conference program decisions could be based. This objective breaks down into two subobjectives: Subobjective 1 is the PRESENTATION OF A FORMAT AND SAMPLE FORMS. This material is found in section I beginning on page 11.

Subobjective 2 is an ANALYSIS OF THE EVALUATION FORMS together with INDICATIONS OF SAMPLE PROGRAMMING SUGGESTIONS. This is found in section II which begins on page 19.

The forms provided in section I are as follows:

The form for evaluating INDIVIDUAL PRESENTATIONS is found on page 16.

The form for evaluating both THE OVERALL CONFERENCE and THE FACILITIES AND SERVICE is found on page 18.

The session by session evaluations were conducted during and immediately after each presentation. Detailed instructions for this session by session evaluation begin on page 15.

The overall conference evaluation and the facilities and services evaluation was done at the evening meal preceding the final last day of the convention. Specific directions for this evaluation begin on page 17.
Section II which presents a session-by-session evaluation is summarized by the following lists of correlated FINDINGS and RECOMMENDATIONS.

FINDINGS: Out of a possible 780 evaluation forms, 563 were filled in, returned, and tabulated.

RECOMMENDATIONS: The forms to be used in the 1975 evaluation should be as easy to fill in as the forms used in the 1974 evaluation.

DATA SOURCE: Page 19.

FINDING: As easy as the forms were to fill in, the tabulation took a large amount of time since it was difficult for the tab clerks to place the forms alongside one another for a quick eye count.

RECOMMENDATIONS: The response portion of the evaluation questionnaires should be redesigned with a view to increase tabulation speed. For example, the ratings such as POOR, AVERAGE, VERY GOOD, EXCELLENT, should be pushed more to one side to facilitate speed of tabulation.

DATA SOURCE: This is based upon the fact that it was easier to tabulate the YES, NO, NA responses than the POOR, AVERAGE, VERY GOOD, EXCELLENT responses. This is due to the fact that the YES, NO, NA responses were bunched together towards the right hand side. Refer to page 15 and to page 19 for examples.
FINDINGS: Only 29 evaluators out of 563 completed forms made any comments.

RECOMMENDATIONS: Thought might be given to devising a questionnaire that would be more effective in eliciting a greater percentage of response comments from evaluators.

DATA SOURCE: Page 19.

FINDINGS: The overwhelming majority on a 1% level of confidence rated all conference room evaluation items either excellent or satisfactory.

RECOMMENDATIONS: The questions about conference rooms might be deleted or changed in format in order to come up with evaluation findings that can be used to improve the program for 1975.


FINDINGS: General questions used to evaluate speakers and presentors were answered favorably by an overwhelming majority at the 1% level of confidence. This confirms statistically the impression that the vast majority of evaluators responded to these questions with yes.

RECOMMENDATIONS: Either these questions be deleted since they do not discriminate between effective and ineffective speakers or that the yes/no categorization be spread out to allow greater differentiation.

DATA SOURCE: Pages 21-23.
FINDING: Seventy-eight program sessions were given, of which 6 had no stated objectives and 72 had stated objectives. This means that only 8% had no stated objectives in the convention program.

FINDING: Of the 72 program sessions evaluated, only one session had no objectives upon which to be evaluated. This means that 5 speakers were able to AD LIB objectives at the opening of the session. Unfortunately, these AD LIB objectives were not recorded for inclusion in the evaluation.

RECOMMENDATIONS: Whenever a speaker ad libs, changes, deletes, or adds to the objectives printed in the program, this should be recorded by the room chairman.


FINDING: It seems obvious that evaluation by objectives was accepted by the individual speakers at each session.

RECOMMENDATIONS: The 1975 evaluation be conducted in the same format, that is, evaluation by objectives.


FINDING: Of the verbs used for session objectives,

44 verbs were knowledge objectives (cognitive domain),
16 verbs were performance objectives (psychomotor domain),
14 verbs were attitude objectives (affective domain).
RECOMMENDATIONS: Each speaker for the 1975 convention should be urged to use at least one performance objective and at least one attitude objective.

DATA SOURCE: Pages 27-29.

FINDINGS: Sixty-five sessions had participant-centered behavior objectives that were observable. Seven sessions had either non-observable or speaker-centered objectives or both. This means that 10% of the sessions had objectives that were not up to quality control standards.

RECOMMENDATIONS: Before the program is printed, an analysis should be made to ascertain that all session objectives are both participant-centered and observable. Objectives that do not meet these criteria should be sent back to the speaker with suggestions for improvement.


FINDINGS: The verb "recognize" was used 34 times in various session objectives. The verb "identify" was used 9 times. The verb "recognize" was used in the sample letter sent to participants. Refer to page 33.

RECOMMENDATIONS: The sample letter sent to speakers should specify appropriate verbs for NYSECA objectives. Similarly, the letter sent to participants should specify inappropriate verbs for objectives. This letter might also mention that any session whose objectives would be strictly cognitive should be carefully reconsidered before inclusion in a media type convention which is interested in performance and attitude objectives as well as cognitive objectives.
DATA SOURCE: Pages 32-33 and page 13.

FINDINGS: Ungrouped tabulation of evaluation questionnaires reveals subtotals and totals that are misleading when used to evaluate session effectiveness in general or in individual .

RECOMMENDATIONS: The tabulators of the 1975 evaluation should be alerted to this danger as pointed out in the examples found on pages 34-35.

DATA SOURCE: Pages 34-38.

FINDINGS: At the 1% level of confidence,

Presentations with 2 or 3 objectives produced the highest ranking evaluations.

Presentations with 1 objective produced the lowest ranking evaluations.

Presentations with 4 objectives produced the largest percentage of no response from evaluators.

RECOMMENDATIONS:

1. Session speakers should be made aware of the fact that empirical results reveal most evaluators can handle two or three objectives in a 45 minute convention session.

2. Speakers should be alerted to the fact that presentations with 4 objectives tend to produce a 25% no response reaction from evaluators. This could possibly be interpreted that 4 objectives are too many for a 45 minute session.

3. Speakers should be alerted to the fact that presentations with 1 prestated objective tend to produce the largest percentage of average responses from evaluators. Since an average response to this instrument is in the inferior category, it might be hypothesized that one objective is too global and nonspecific for a 45 minute conference session.

DATA SOURCE: Pages 39-41.
FINDINGS: In order to break the above tie found between presentations with 2 and 3 objectives at the 1% level of confidence, a 5% level of confidence analysis was used. At the 5% level of confidence, presentations with 3 objectives are found to be superior to presentations with 2 objectives.

RECOMMENDATIONS: Speakers should be made aware of this finding, both as regards the suggested number of objectives and as regards the level of confidence, which is 5% open to statistical chance error.

DATA SOURCE: Page 41.

SUMMARY FINDINGS: As is obvious from reading the above findings, several overall summary findings stand out:

1. The criteria used to select and prepare the conference rooms and convention sites resulted in evaluations that were overwhelmingly positive by the vast majority at the 1% level of confidence.

2. The criteria used to select session speakers resulted in evaluations, both on general criteria and on evaluation by objective criteria, that resulted in overwhelmingly favorable evaluations at the 1% level of confidence.

RECOMMENDATIONS: Since these criteria both for convention rooms to lecture and preparation and for speaker selection are not currently available in print, the program chairmen are asked to write down these criteria in order to provide a record for the 1975 convention and future conventions.

DATA SOURCE: Pages 20, 23, and 40.
MISCELLANEOUS FINDINGS: In addition to the evaluations received on official evaluation questionnaires, the following miscellaneous evaluations were gathered from a number of other sources:

1. No provision was made for estimating the attendance at individual program sessions.
2. Some isolated comments are very critical and harsh to the speaker.
3. Individuals have made verbal inquiries about separate rooms for non-smokers.
4. Detailed analysis of the session-by-session evaluations required a long period of time.

RECOMMENDATIONS: In response to the above findings, the following recommendations are made:

1. On the envelope to be filled out by the individual room evaluation chairman, space should be provided on which to estimate attendance. For a even more detailed analysis, the attendance might be taken at 15 minute intervals such as the opening of the session, 15 minutes later, the second 15 minutes, and the end of the session. It might be interesting to notice such patterns as more people at a session at the end of the session as well as a pattern of less people at a session at the end of a session.
2. Derogatory statements should be edited out and not sent to individual speakers. In some cases, the comments should be completely deleted. At other times, the comments should be softened to correct and polite English, at least.
3. Convention chairman should be aware of the concern for separate facilities for non-smokers. Other conventions sometimes urge non-smokers to sit on the right side of any meeting room or in a specified location in order to avoid cross-ventilation by smoke.
4. Immediately after the convention, the overall convention evaluations should be totaled.

The next priority would be to tally and total the evaluation comments for each individual session. These could be immediately sent to the evaluator within six weeks after the convention.

The next priority would be to come up with a detailed analysis of the session-by-session results within three months after the convention.

FINDINGS: The preceding evaluation summary analysis has been given in great detail with very specific explanations. This has been an attempt to provide a guide that can be followed by a non-specialized evaluator.

RECOMMENDATIONS: The 1975 evaluation report should be simplified to a listing of findings, recommendations, and data sources. The data sources should be limited to appropriate tables numbered and cross-referenced in the data sources.

The actual tabulation and analysis should be handled by a special subcommittee of the NYSECA convention chairman.

Obviously, this implies the recommendation that the same format of analysis be used for the 1975 evaluation.

DATA SOURCE: Opinion of the BOER evaluator who developed this format for evaluation by objectives.
SECTION I

CONFERENCE EVALUATION

Conference evaluation normally involves three different areas of concern:

1. Session by session evaluation
2. Overall conference evaluation
3. Facilities and services evaluation

The approach to conference evaluation herein stressed is intended to organize and simplify the evaluation process. This organization and simplification will center around a few small changes in the conference program that result in increased evaluation potential.
SESSION BY SESSION EVALUATION

Session by session evaluation is under the aegis of the room chairman who handles the explanation, distribution, and collection of evaluation scales.

A set of common evaluation forms is provided to the room chairman. The room chairman explains to each participant the objectives for the session under evaluation.

A maximum of four objectives is listed in the program under the title and summary provided by the author. These objectives are stated in active verbs, the subject of which is the participant. The objectives for each session specify the competency or competencies to be acquired by participants as a result of listening to the presenter. The objectives tell what the participants will achieve as a result of this session. The objectives to be evaluated do not describe what the presenter does.

At the end of these sessions, each participant or a selected sample of participants receive the common evaluation forms. Each evaluator writes in the session number. These evaluation forms are presented in the form of a scale. The evaluators rate the achievement of all session objectives by using the scales provided on the common evaluation form. The room chairman collects the session by session evaluation forms before the evaluators leave the session.

The following letter was used to explain this evaluation procedure to participants.
Your presentation for the New York State Educational Communication Convocation in November has been received. To assist us in preparing an evaluation procedure for the conference, we ask your help by writing objectives for your presentation. These objectives will be printed in the final program along with the abstract of your presentation.

To help you in preparing the objectives, here is an example of the format we would like to use:

Title: The Director of Educational Communications

Presented by: Kay Bailey

Objectives:
1. Recognize the areas of responsibility of a director in the educational programs.
2. Evaluate your position using the guidelines presented.

Note:
- Prepare one to four objectives.
- In writing objectives, the subject of the verb is the participant.
- The objectives specify the competencies the participant will take away from the presentation.
- The objective is not what the presenter will do, but what the participant will gain from what you do.

The Program Committee meets the first weekend in June. You will then receive the time and room assignment for your program. Please return the information requested as soon as possible to:

Kay Bailey
12 Michigan Avenue
Troy, New York 12180

Sincerely yours,

Kay Bailey

Edward Moy and
Catherine M. Bailey
Program Chairman
EVALUATION DIRECTIONS
FOR ROOM CHAIRMAN

Each room chairman will receive evaluation forms for 10 attendees at each session and one evaluation form for the room chairman.

Before the presenter starts at each session, the room chairman will read to all participants the objectives upon which the session will be evaluated.

The room chairman will collect the evaluation forms following each session and return the evaluation forms at the completion of his duties in the envelope provided to J.V. Cowan at the registration desk.
CONFERENCE EVALUATION

OUTLINE OF PROCEDURES FOR PHASE I

A. Each room chairman receives an envelope with 10 evaluation forms for each session.

B. Each room chairman distributes 10 evaluation forms to 10 participants.

C. Each room chairman collects all evaluation forms from the participant evaluators at the end of the session.

D. The individual evaluation forms for each session are kept together.

E. All individual evaluation forms are turned into the conference evaluation committee.

F. A total tally is made for each evaluation item for each session.

G. The comments for each session are typed up.

H. For each session, the following is prepared:

1. The speaker's name and address
2. A presentation summary specifying
   (a) date
   (b) time
   (c) room
   (d) title
   (e) presentors
   (f) presentation summary
   (g) participant objectives
3. A summary of comments made by participating evaluators
   When no comments have been made, notation will be made of this.
4. A statistical summary of evaluation reactions of each item of the evaluation form

I. Two photocopies will be made of the results of phase I as outlined above.
   One copy is for the presentor to be sent along with the "Thank You" letter.
   The other copy is for the files of the conference committee.
EVALUATION FORM:
INDIVIDUAL PRESENTATION

DIRECTIONS: 1. Please fill in the following:

Date ____________________________

Meeting room ____________________________

Title of presentation ____________________________

Presenter's name ____________________________

2. Evaluate how well each program objective was achieved by circling the rating. (Comments may be added.)

<table>
<thead>
<tr>
<th>OBJECTIVE 1</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJECTIVE 2</td>
<td>Poor</td>
<td>Average</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>OBJECTIVE 3</td>
<td>Poor</td>
<td>Average</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>OBJECTIVE 4</td>
<td>Poor</td>
<td>Average</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

3. Circle YES, NO, or NA (not applicable) for each of the following. (Comments may be added.)

A. Topic was of practical value
   YES NO NA
B. Audience interest and reaction was positive
   YES NO NA
C. Presentation was well organized
   YES NO NA
D. Use of media was well integrated
   YES NO NA
E. Program schedule was maintained
   YES NO NA
F. Session offered stimulating or new material
   YES NO NA
G. Audience questions were well answered
   YES NO NA
H. Meeting room was adequate
   YES NO NA
I. Meeting room should be used again next year
   YES NO NA

4. Please evaluate the following by checking under excellent, satisfactory, or unsatisfactory. Leave an item blank where not applicable.

<table>
<thead>
<tr>
<th>CONFERENCE ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating capacity</td>
</tr>
<tr>
<td>Temperature control</td>
</tr>
<tr>
<td>Ventilation</td>
</tr>
<tr>
<td>Sound</td>
</tr>
<tr>
<td>Room layout</td>
</tr>
<tr>
<td>Lighting</td>
</tr>
<tr>
<td>Other:</td>
</tr>
</tbody>
</table>
OVERALL CONFERENCE EVALUATION and FACILITIES AND SERVICES EVALUATION

The overall conference evaluation and the facilities and services evaluation is included in the conference program. The place might be the last page or pages that could be removed from the program.

Evaluation directions are included with these two evaluation forms. It might well be that side one would include overall conference evaluation while side two would include facilities and services evaluation.

There are a number of ways to collect this material. Each participant might return the evaluation forms before leaving the conference. It might be possible to mail in the evaluation forms with a self-addressed return envelope.

Placing these evaluation forms in the program itself gives each evaluator a chance to reflect thoughtfully before filling out the form. Similarly, each evaluator will be able to choose the time and place most appropriate for a thorough evaluation.

NOTE: Because some participants are present for only one day or part of a day at the conference, reminders should appear on every program page to fill in the overall and facilities evaluations.

In order to facilitate return through the mail, it is suggested that a pre-addressed business reply format be employed.

If the evaluation form is on the last page or two pages, it is possible to fold, staple and place the evaluation in the mail.
EVALUATION FORM:
OVERALL CONFERENCE
and
FACILITIES AND SERVICE

DIRECTIONS: Please answer the following questions:

OBJECTIVES: What did you expect to get out of this conference?

Has the conference lived up to your expectations?  YES  NO

EVALUATIONS: What did you get out of this conference?

RESOURCES: For you, personally, what was the best part of this conference?

How do you rate the following?  (Circle your rating.)

General sessions: Poor Average Very Good Excellent
Program: Poor Average Very Good Excellent
Exhibits: Poor Average Very Good Excellent
Exchange of ideas: Poor Average Very Good Excellent
DINING FACILITIES
Food Poor Average Very Good Excellent
Seating Poor Average Very Good Excellent
Service Poor Average Very Good Excellent
Other: ____________ Poor Average Very Good Excellent

LODGING ROOMS
Cleanliness Poor Average Very Good Excellent
Housekeeping Poor Average Very Good Excellent
Temperature Control Poor Average Very Good Excellent
Beds Poor Average Very Good Excellent
Sound Poor Average Very Good Excellent
Light Control Poor Average Very Good Excellent
Lavatory Poor Average Very Good Excellent
Other: ____________ Poor Average Very Good Excellent
SESSION BY SESSION EVALUATION

CONFERENCE ROOMS

The chart on the following page, COUNT TABULATION OF EVALUATION QUESTIONS ON CONFERENCE ROOMS, summarizes 563 questionnaires. This chart summarizes the conference room evaluation section of the session-by-session evaluation form.

Analysis has been made of this data by lumping together excellent and satisfactory and comparing this with unsatisfactory. After statistical analysis by formulas used to test the significance of a difference, both in a count and in a percentage, no statistically significant difference has been detected among the data at either the five percent or the ten percent level of confidence.

Since the small count and small percentage finding the conference rooms unsatisfactory is not statistically significant, it can be confidently said that the vast majority of conference attendees found the conference rooms satisfactory or excellent.

For next year, a suggestion might be made: since a large amount of tabulation was necessary to come up with this statistically insignificant result, the questions about conference rooms might either be deleted or changed in format in order to come up with evaluation findings that can be used to improve the program for the next year.

A case in point is the large number of NR, or no response, under other. It was felt that this would encourage many participants to add significant comments. As a matter of fact, only 29 evaluators out of a possible 563 made any comment. This might point up the need to devise a questionnaire that would be more effective in eliciting a greater percentage of response from evaluators.
Count Tabulation of Evaluation Questions on Conference Rooms

<table>
<thead>
<tr>
<th>Category</th>
<th>Excellent</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Subtotal</th>
<th>NR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating</td>
<td>307</td>
<td>202</td>
<td>29</td>
<td>538</td>
<td>25</td>
<td>563</td>
</tr>
<tr>
<td>Temperature Control</td>
<td>220</td>
<td>256</td>
<td>66</td>
<td>542</td>
<td>21</td>
<td>563</td>
</tr>
<tr>
<td>Ventilation</td>
<td>230</td>
<td>255</td>
<td>45</td>
<td>530</td>
<td>33</td>
<td>563</td>
</tr>
<tr>
<td>Sound</td>
<td>209</td>
<td>218</td>
<td>75</td>
<td>502</td>
<td>61</td>
<td>563</td>
</tr>
<tr>
<td>Room Layout</td>
<td>205</td>
<td>273</td>
<td>50</td>
<td>528</td>
<td>35</td>
<td>563</td>
</tr>
<tr>
<td>Light</td>
<td>230</td>
<td>270</td>
<td>16</td>
<td>516</td>
<td>47</td>
<td>563</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>4</td>
<td>16</td>
<td>29</td>
<td></td>
<td>534</td>
</tr>
</tbody>
</table>
SESSION BY SESSION EVALUATION

The chart on the following page, COUNT TABULATION OF EVALUATION QUESTIONS A THROUGH I, summarizes the count of responses to evaluation questions A through I.

These evaluation questions give the evaluator a chance to respond with yes, no, or not applicable to questions such as:

- Topic was of practical interest
- Audience interest and reaction was positive
- Presentation was well organized
- Use of media was well integrated
- Program schedule was maintained
- Session offered stimulating or new material
- Audience questions were well answered
- Meeting room was adequate
- Meeting room should be used again next year

As is obvious from a casual glance at these questions, these evaluation items reflect typical concerns found on most conference evaluation forms. From this point of view, questions A through I were well designed.

On the other hand, questions A through I do not appear to be very discriminating when compared with the results of an objective-by-objective evaluation of individual speakers.
For example, some speakers and presenters who were evaluated poor by the majority of evaluators were evaluated yes on questions A through I by a majority of evaluators.

A casual glance at the count tabulation for questions A through I reveals the fact that almost all of the evaluators responded with yes to almost all of the questions. This raises a question as to how valuable these questions are as discriminating items.

Statistical analysis performed on this data both as a count and as a percentage analysis reveals that all of these questions were statistically significant at the 1% level of confidence. This confirms statistically the impression that the vast majority of evaluators responded to these questions with yes.

In fact, the only place where the analysis was not statistically significant for all the items appearing in the NR or no response column. For question 3G (audience questions were well answered), the NR response was statistically significant at the 5% level of confidence. This simply means that for some reason or other a statistically significant number of people did not respond to this question. The other no response questions were what might be expected by chance.

This again raises the question, "Why use such questions A through I when the responses are going to be one sided and when the responses did not discriminate poor speakers from excellent speakers?"

As will be explained in the next section, discrimination was possible between poor speakers and excellent speakers on the basis of an evaluation by objectives. This conclusion might imply that more significant evaluation results would be obtained by focusing on objectives rather than on speaker and presenter variables represented by questions A through I.
Count Tabulation of Evaluation Questions A through I

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
<th>Subtotal</th>
<th>NR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3A</td>
<td>525</td>
<td>13</td>
<td>14</td>
<td>552</td>
<td>11</td>
<td>563</td>
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<td>3B</td>
<td>476</td>
<td>31</td>
<td>13</td>
<td>520</td>
<td>43</td>
<td>563</td>
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<tr>
<td>3C</td>
<td>481</td>
<td>45</td>
<td>3</td>
<td>529</td>
<td>44</td>
<td>563</td>
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<td>3D</td>
<td>449</td>
<td>51</td>
<td>24</td>
<td>524</td>
<td>39</td>
<td>563</td>
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<tr>
<td>3E</td>
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<td>53</td>
<td>1</td>
<td>505</td>
<td>58</td>
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<td>3F</td>
<td>442</td>
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<td>8</td>
<td>512</td>
<td>51</td>
<td>563</td>
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<tr>
<td>3G</td>
<td>440</td>
<td>16</td>
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<td>484</td>
<td>79</td>
<td>563</td>
</tr>
<tr>
<td>3H</td>
<td>462</td>
<td>66</td>
<td>3</td>
<td>531</td>
<td>32</td>
<td>563</td>
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<tr>
<td>3I</td>
<td>420</td>
<td>73</td>
<td>16</td>
<td>509</td>
<td>54</td>
<td>563</td>
</tr>
</tbody>
</table>
SESSION BY SESSION EVALUATION
EVALUATION BY OBJECTIVES

ANSWERS TO THE QUESTION, "HOW MANY OBJECTIVES DID DIFFERENT PRESENTORS USE?"

In answer to the question, "How many objectives did different presentors use?" the chart on the following page, COUNT AND PERCENTAGE ANALYSIS OF TYPES OF PRESENTATIONS CLASSIFIED BY NUMBER OF OBJECTIVES, is presented.

In brief, according to the 78 speakers and presentations evaluated, 36% used three objectives, 29% used two objectives, 21% used four objectives, 13% used one objective, and 1% used zero objectives.

This means that most presentors used 3 or 2 objectives.

It is interesting to note, that as will be pointed out in the following section, only one session and presentation, that is, only one presenter, did not have objectives upon which to be evaluated. In the original program, six sessions, that is, six presentors, had no stated objectives. This means that of the six presentors who submitted no objectives for the program, five developed, "ad lib" objectives at the opening of the session.

This phenomenon is interpreted as an acceptance of objectives on the part of speakers.
One of the following charts, ALPHABETICAL LIST OF VERBS USED IN NYSECA OBJECTIVES, presents all of the verbs used. These verbs are subdivided into three categories: knowledge objectives, performance objectives, and attitude objectives.

Statistically, 44 verbs were knowledge objectives; 16 verbs were performance objectives; and 14 verbs were attitude objectives.
Count and Percentage Analysis of Types of Presentations Classified by Number of Objectives

<table>
<thead>
<tr>
<th>Type</th>
<th>Count of How Many</th>
<th>Percentage (Based on Total of 78 Presentations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations with 4 objectives</td>
<td>16</td>
<td>21%</td>
</tr>
<tr>
<td>Presentations with 3 objectives</td>
<td>28</td>
<td>36%</td>
</tr>
<tr>
<td>Presentations with 2 objectives</td>
<td>23</td>
<td>29%</td>
</tr>
<tr>
<td>Presentations with 1 objective</td>
<td>10</td>
<td>13%</td>
</tr>
<tr>
<td>Presentations with 1 objective</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

Total = 78
<table>
<thead>
<tr>
<th>Alphabetical List of Verbs Used in NYSECA Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K</strong></td>
</tr>
<tr>
<td>Acquaint administrators</td>
</tr>
<tr>
<td>Acquire information</td>
</tr>
<tr>
<td>Apply</td>
</tr>
<tr>
<td>Be(come) aware</td>
</tr>
<tr>
<td>Be cognizant</td>
</tr>
<tr>
<td>Classify</td>
</tr>
<tr>
<td>Compare</td>
</tr>
<tr>
<td>Correlate</td>
</tr>
<tr>
<td>Define</td>
</tr>
<tr>
<td>Describe</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Designate</td>
</tr>
<tr>
<td>Determine</td>
</tr>
<tr>
<td>Discover</td>
</tr>
<tr>
<td>Discuss</td>
</tr>
<tr>
<td>Examine</td>
</tr>
<tr>
<td>Explore</td>
</tr>
<tr>
<td>Formulate</td>
</tr>
<tr>
<td>Gain a conception</td>
</tr>
<tr>
<td>Gather ideas</td>
</tr>
<tr>
<td>Heighten consciousness</td>
</tr>
<tr>
<td>Identify</td>
</tr>
<tr>
<td>Know</td>
</tr>
<tr>
<td>Learn</td>
</tr>
<tr>
<td>Make aware</td>
</tr>
</tbody>
</table>
K
Name (list)
Observe
Organize
Perceive
Plan
Present information
Promote insight
Realize
Receive suggestions
Recognize
Review
See
Show
State
Survey
Trace
Understand
Update
Visualize
DOMAIN ANALYSIS

44 verbs are knowledge objectives (cognitive domain)
16 verbs are performance objectives (psychomotor domain)
14 verbs are attitude objectives (affective domain)
ANSWERS TO THE QUESTION, "HOW GOOD WERE THE SPEAKER-DEVELOPED PRESENTATION OBJECTIVES?"

In answer to the question, "How good were the speaker-developed presentation objectives?", the chart of the following page, AN ANALYSIS OF NYSECA PROGRAM OBJECTIVES BY CONTENT, is presented.

In brief, several questions were posed to analyze the quality of the speaker-developed presentation objectives. Each individual objective was analyzed by asking the following questions:

Is this objectives SPEAKER-CENTERED or PARTICIPANT-CENTERED?

Is the activity of this objective OBSERVABLE or NON-OBSERVABLE?

Is this objective PRESPECIFIED in the convention program or AD LIB sometime during the presentation?

Those objectives which were rated as PARTICIPANT-CENTERED, OBSERVABLE, and PRESPECIFIED were given the highest quality evaluation.

There are obviously many other quality controls for objectives that can be introduced. In order to avoid contamination by subjective opinion, it is felt necessary to be objective here rather than subjective. Objective here means stating the exact word or words used by the speakers in order to allow readers of this evaluation report to judge the quality and appropriateness of each individual verb for each individual presentation.
An Analysis of NYSECA Program Objectives by Content

1 Program Objectives:

78 program sessions were given, of which,

6 (8%) had no stated objectives and
72 (92%) had stated objectives

2 Quality of Objectives:

Of the 72 program sessions with objectives

65 sessions (90%) had participant-centered behavioral objectives and
7 sessions (10%) had either non-observable or speaker-centered objectives, or both

3 Session Objectives:

Of the 6 presenters who submitted no objectives for the program, 5 developed "ad lib" objectives at the opening of the session.

4 Evaluation Objectives:

This means that

77 sessions (99%) had objectives upon which to be evaluated and
1 session (1%) had no objectives upon which to be evaluated.
ANSWERS TO THE QUESTION, "WHICH VERBS WERE USED MOST FREQUENTLY IN NYSECA SPEAKER-DEVELOPED OBJECTIVES?"

The answer to this question is summarized on the following page in the chart, VERB FREQUENCY ANALYSIS IN NYSECA OBJECTIVES.

In brief, the verb "recognize" was used 34 times. The verb identify was used 14 times. The verb "acquire information" was used 9 times. The two verbs "become aware" and "know" were used 8 times. It should be noted that the verb "recognize" was used in the letter sent to speakers by the program chairman. Perhaps, several speakers took this as a quasi official endorsement.

The implication here would be that the NYSECA program chairman should come up with a list of observable, participant-centered verbs that can be used by potential speakers in developing objectives for each presentation.

Such a list of suggested verbs will not hamstring original thinkers. However, such a list will help out speakers who are not quite certain what is meant by an acceptable participant-centered objective.

Similarly, it might be helpful for the NYSECA program chairman to specify a list of verbs that are not considered acceptable.
## VERB FREQUENCY ANALYSIS

in NYSECA Objectives

<table>
<thead>
<tr>
<th>Times Used</th>
<th>Number of Verbs</th>
<th>Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>1</td>
<td>Recognize</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>Identify</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>Acquire information</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>Ad lib</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Become aware</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Know</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>Examine</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>See</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Utilize</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>Develop procedure</td>
</tr>
<tr>
<td>1</td>
<td>44</td>
<td>Understand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organize</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acquire techniques</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Appreciate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classify</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Define</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Describe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discuss</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gather ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>44 remaining verbs</td>
</tr>
</tbody>
</table>

Total 74 verbs
SESSION BY SESSION EVALUATION
A STATISTICAL TABULATION DANGER TO AVOID

Look at the following chart, OVERALL TABULATION COUNT OF EVALUATIONS FOR INDIVIDUAL OBJECTIVES.

This chart is easy to read and understand. For each questionnaire, the responses have been counted for objectives 1, 2, 3, and 4. In addition, a count has been made for NR or no response. These counts have been totaled up into the subtotal of completed evaluation and into the grand total of forms submitted by evaluators.

This simplified count gives the mistaken impression that very few presentations had four objectives.

A casual look at the next chart, OVERALL PERCENTAGE ANALYSIS (BASED UPON 563 TOTAL FORMS) OF EVALUATIONS FOR INDIVIDUAL OBJECTIVES, gives the misleading impression that the fewer the objectives, the better the evaluations.

In order to compensate for the number of no response evaluation forms for specific objectives, the next chart, OVERALL PERCENTAGE ANALYSIS (BASED UPON SUBTOTALS OF COMPLETED EVALUATION) OF EVALUATIONS OF INDIVIDUAL OBJECTIVES, was developed.

This chart gives the misleading impression that all objectives from 1 to 4 were rated equally well when one compares the excellent, very good, average, or poor column.

In brief, the misleading impression from this tabulation is the fact that more than 80% of the presentations were either very good or excellent.
The above observations were made in order to prepare for the next section which will point up a discriminating method of tabulating the results of an evaluation by objectives. As will become obvious, evaluation by objectives requires a simplified but individualized approach to tabulating the overall results in order to avoid errors based upon false assumptions about group averages.
### OVERALL TABULATION COUNT

OF EVALUATIONS FOR INDIVIDUAL OBJECTIVES

<table>
<thead>
<tr>
<th>COUNT PER CATEGORY</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
<th>NR</th>
<th>Subtotal of Completed Evaluations</th>
<th>Grand Total of Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1</td>
<td>10</td>
<td>77</td>
<td>194</td>
<td>203</td>
<td>80</td>
<td>483</td>
<td>563</td>
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<tr>
<td>Objective 2</td>
<td>12</td>
<td>66</td>
<td>163</td>
<td>156</td>
<td>166</td>
<td>397</td>
<td>563</td>
</tr>
<tr>
<td>Objective 3</td>
<td>9</td>
<td>43</td>
<td>109</td>
<td>119</td>
<td>283</td>
<td>280</td>
<td>563</td>
</tr>
<tr>
<td>Objective 4</td>
<td>4</td>
<td>23</td>
<td>58</td>
<td>76</td>
<td>402</td>
<td>161</td>
<td>563</td>
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</table>
Overall Percentage Analysis
(Based Upon 563 Total Forms)
of Evaluations for Individual Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1</td>
<td>2%</td>
<td>13%</td>
<td>35%</td>
<td>36%</td>
<td>14%</td>
</tr>
<tr>
<td>Objective 2</td>
<td>2</td>
<td>12</td>
<td>29</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Objective 3</td>
<td>2</td>
<td>8</td>
<td>19</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>Objective 4</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>13</td>
<td>71</td>
</tr>
</tbody>
</table>
## Overall Percentage Analysis
(Based Upon Subtotals of Completed Evaluations)
of Evaluations for Individual Objectives

<table>
<thead>
<tr>
<th>PERCENTAGES PER CATEGORY</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1</td>
<td>2%</td>
<td>17%</td>
<td>40%</td>
<td>41%</td>
</tr>
<tr>
<td>Objective 2</td>
<td>3</td>
<td>17</td>
<td>41</td>
<td>39</td>
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<tr>
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<td>3</td>
<td>15</td>
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<td>43</td>
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<tr>
<td>Objective 4</td>
<td>2</td>
<td>14</td>
<td>36</td>
<td>47</td>
</tr>
</tbody>
</table>
ANSWERS TO THE QUESTION, "HOW MANY OBJECTIVES SHOULD A PRESENTATION HAVE?"

Look at the following chart, COUNT PERCENTAGE ANALYSIS, CATEGORY BY CATEGORY OF EVALUATIONS FOR INDIVIDUAL OBJECTIVES. This chart provides a count per category and a percentage per category.

The categories have been chosen as follows:

- Presentations with four objectives
- Presentations with three objectives
- Presentations with two objectives
- Presentations with one objective

This type of a count and percentage analysis allows each individual speaker to compare evaluation ratings with speakers making similar presentations. From a statistical point of view, the most risky number of presentation objectives is one. If the speaker has one objective, there is a 40% chance of getting an average rating. An average rating for this conference is in the inferior category since most get much higher.
<table>
<thead>
<tr>
<th>Presentations with</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
<th>NR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 objectives</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>3 objectives</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>15</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>2 objectives</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>1 objective</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentations with</th>
<th>0%</th>
<th>0%</th>
<th>50%</th>
<th>25%</th>
<th>25%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 objectives</td>
<td>3</td>
<td>3</td>
<td>29</td>
<td>54</td>
<td>11</td>
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<td>2 objectives</td>
<td>0</td>
<td>13</td>
<td>39</td>
<td>39</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>1 objective</td>
<td>0</td>
<td>40</td>
<td>10</td>
<td>40</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
The following conclusions can best be understood after a careful examination of the preceding chart, COUNT PERCENTAGE ANALYSIS, CATEGORY BY CATEGORY OF EVALUATIONS FOR INDIVIDUAL OBJECTIVES.

On the one percent level of confidence, presentations with either two or three objectives produce the highest ranking evaluations. Presentations with one objective produced the lowest ranking evaluations. Presentations with four objectives produced the largest percentage of no response from evaluators.

On the five percent level of confidence, presentations with three objectives produced the highest evaluations. In other words, the preeminence of presentations with either three or two objectives resulted in a tie on the one percent level of confidence. The slight edge of presentations with three objectives over presentations with two objectives is only at the five percent level of confidence.