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## ABSTRACT

With certifying end-of-program achievement as their goal, a group of educators conducted a pilot assessment program at Northeast Missouri State University in 1992. The program called for the videotaping of each student's third speech to be assessed by outside judges. The present study attempted to determine if videotaping and self-evaluation exercises earlier in the course would affect the outcome of the final assessment; the study, in other words, viewed assessment itself as an organic part of the learning process. Specifically, the study looked at three variables: would student performance increase if (1) he or she viewed an "excellent" student speech on video early in the semester? (2) if he or she viewed him- or herself on video earlier in the semester and was encouraged to critique him- or herself? (3) and if he or she were evaluated throughout the semester on the same form that would be used for the end-of-the-semester assessment? Three educators, each teaching two sections of the basic course, participated in the study. The above variables were implemented in one course section of each of the educators and not in the other. Results showed no significant difference between the two groups in the outcome of the final assessment. While the results of this study cast serious doubts on the effectiveness of the three teaching strategies above, it suggests that the process of formulating assessment methods is also a process of researching the learning process. (Contains 17 references and three tables of data.) (TB)

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Assessment is Epistemic and Heuristic:  
The Role of Video Tape in the Public Speaking Course

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Assessment Is Epistemic and Heuristic:  
The Role of Videotape in the Public Speaking Course

Interest in educational assessment of higher education outcomes corresponds with and, in some instances, is a reaction to growing public demand for a higher degree of accountability. With this perspective, assessment efforts have focused primarily on measuring skills and competencies for the purpose of certifying end-of-program achievement.

With certifying end-of-program achievement as our goal, during the fall of 1992 the authors conducted a pilot assessment program at Northeast Missouri State University. We reported on that pilot at SCA's 1993 convention in Miami, Florida. The design of the assessment pilot called for videotaping the third of four speeches of each student enrolled in the basic public speaking course. The videotaped speech was then evaluated by outside judges using the SCA Competent Speaker Form (Morreale, et al.). However, the potential use of this data, produced by videotaping each student delivering a speech and having each speech evaluated by outside judges using a standardized form, began to attract our attention and is the focus of this paper.

As educational professionals, our task has always been to explore and increase our understanding of the learning process. However, it often seems futile to develop and modify content and strategies used in the classroom with only intuition telling us whether those efforts have been successful. An overlooked characteristic of assessment is its heuristic and epistemic nature. Once an assessment program reliably measuring educational outcomes is in place, the potential data inspires a multitude of meaningful questions specific to how students learn certain skills, what teaching strategies are effective and what characteristics impact learning.

Viewed in this context, assessment is not just an extra test to purchase, administer or take but also is essential as students, faculty and institutions carry out their work. Assessment is an organic part of learning. It can be an important means of providing information about the teaching and learning processes and in turn can be a means of improving their effectiveness.

In the fall of 1993 the authors undertook a quasi-experimental study using data collecting procedures developed for the earlier pilot project. Since our assessment project relied on videotaping it is not surprising that our first research questions had to do with the effects of our assessment methodologies on student outcomes as measured by the evaluations of videotaped speeches. Specifically, we wondered whether speaking performance would improve if a student first viewed a videotaped model of an "excellent" student speech. We wondered whether speaking performance would improve if a student viewed him/herself giving a speech on videotape prior to the assessed speech. Finally, we wondered whether speaking performance would

improve if a student were trained on an evaluation form, rated on the same form and rated others on that form for all speeches prior to and including the assessed speech. The literature review revealed a number of studies relating to these three questions.

In a comprehensive survey of how public speaking teachers use model speeches in the classroom, Ronald Matlon delineates the following seven-pronged rationale: 1) to demonstrate the abilities of great speakers, 2) to increase the student's knowledge of the humanities, 3) to understand the strategic role speaking played in shaping history, 4) to teach students to be effective critics, 5) to increase interest in speech, 6) to encourage confidence and 7) to illustrate principles of public speaking (50-57). Behavioral scientists have long realized the impact of observation of others on behavior. "Modeling" studies suggest a plausible relationship between Matlon's last two rationale, confidence level and understanding principles of public speaking, and a student's eventual speaking success.

Carkoff suggests that "modeling," observational learning, is the most significant source of learning (cited in Hosford 46) Bandura (Principles;" "Self-efficacy;" "Social Learning") demonstrated that mere exposure to appropriate models promotes many kinds of human behavior, and behaviors already learned can be strengthened or extinguished by the same process. Through modeling, a variety of skills and knowledge such as those present in quite difficult or complex behaviors often can be transmitted simultaneously instead of gradually shaping the desired behavior. On the other hand, studies (cited in Hosford) indicate that models perceived as prestigious, attractive, high in status, powerful and ethnically similar promote greater imitative learning than those presented as opposite or less accomplished in these dimensions (47). Other studies suggest that personality characteristics may be significantly related to a person's predisposition to imitate or not imitate particular kinds of behavior (47). Generally, the more perceptive and confident a person is, the more readily he/she will emulate both idealized models and those whose behavior is highly useful, (Bandura, "Social Learning"). A number of studies support the hypothesis that imitative learning is enhanced when the observer's perceived similarity to the model increases (cited in Hosford 47).

One form of observational learning which should promote identification with the model, both affectively and cognitively, is that of self-observation, i.e. having an individual observe instances of his/her own behavior. The literature is mixed relating to our second research question: do performance outcomes improve if a student views him/herself giving a speech on videotape prior to the assessed speech? Mulac summarized that videotaped feedback caused a meaningful increase in student acquisition of speech skill. "Students receiving videotape replay demonstrated significantly greater skill in oral communication at the end of the course than students receiving audiotape or no electronic replay" (214). Miles concluded that using video

replay for student self-critique is of benefit primarily in assisting the student to identify and improve in language and delivery (283).

Bradley, on the other hand, found that speaking ability is not affected during a basic speech course by using the video-recorder to view speaking assignments in the classroom. Waggoner and Scheid (cited in Quigley and Nyquist) found that students did not improve their skills by simply viewing and rating videotapes of their past performances.

However, according to Deihl, Breen and Larson "television playback seems to be a valuable aid to the instructor when he employs some type of criticism and comment with it" (188). This qualified use of videotaped self-observation, accompanied with verbal evaluation, seems to be a point of agreement among researchers (Quigley and Nyquist 325).

From a psychological perspective, Hosford summarized studies showing self-observation experiences resulting in increased self-acceptance, more realistic self-appraisal, more openness to feedback from others and increased feelings of responsibility. Individuals who already feel confident about their behavior in a particular area experience less negative arousal from self-observation than do those having low self-esteem in that area (52).

Finally, Dicker, Crane and Brown found students who repeatedly observed themselves speaking increased their self ratings significantly less than comparable students using the same assignments without self-viewing. Self-viewing students did, however, show more correspondence to instructor ratings than did students without self-viewing (140).

Providing feedback as a form of speech evaluation for the purpose of improving future performance was an accepted teaching strategy long before the utility of videotape technology. However, the literature is sparse relating to our third research question: will performance outcomes improve if a student is trained on an evaluation form, rated on the same form and rated others on that form for all speeches prior to and including the assessed speech? Studies of the influence of written comments and/or ratings on subsequent performance show inconsistent results (cited in Booth-Butterfield). Some studies find only weak and inconsistent effects with the use of written feedback. Others report increases in interest, motivation and achievement. Some studies noted that the effects of comments depend upon the initial performance level of the student (120). Sorenson and Pickett found that rating others' behavior seems to be an effective way to develop interview skills (18).

In discussing the effects of trait anxiety on written feedback, Booth-Butterfield suggests that "if clear critiques are provided, anxiety does not appear to negatively influence perceptions. It is the combination which tends to facilitate individuals taking responsibility for their performances and undertaking appropriate change" (129).

We found no research relating to the impact of specific

evaluation forms or formats on future performance. Indeed, it was a lack of standardized and psychometrically tested evaluation forms that prompted the SCA Committee for Assessment and Testing to develop The Competent Speaker Speech Form, a standardized and tested instrument for evaluating public speaking competency at the higher education level (Morreale, et al). It is designed to serve a number of purposes including evaluating informative and persuasive speeches in class and as a tool for instructing and advising students (3). The form calls for rating eight distinct competencies and allows for written comments.

Based on this review we developed three hypotheses relating to three specific teaching strategies:

1. Individuals who view a videotaped model of an "excellent" student speech will improve speaking performance more than those who do not view a model speech.
2. Individuals who view a videotaped speech of self accompanied by instructor evaluation will improve speaking performance more than those who do not view a videotaped speech of self accompanied by instructor evaluation.
3. Individuals using the same evaluation form, including ratings and written comments, for all speeches throughout a semester will improve speaking performance more than those who use multiple evaluation forms.

#### Procedure

Six sections ( $N = 122$ ) of the basic speech course taught by three instructors (two sections per instructor) at Northeast Missouri State University were utilized for this experiment. Enrollment in these sections was predominantly freshman and sophomore students. All six sections used a public speaking text, and all students were required to give four speeches which were graded by the instructor.

One section of each instructor was assigned to a treatment group and one to a comparison group. The treatment and comparison groups for each instructor were given the same specific speech assignments in the same sequence. All content was held constant for the two groups taught by the same instructor. Although classrooms and times differed between the groups for each instructor, all were typical patterns to which students on the campus were accustomed.

In treatment group 1, prior to having their own speech videotaped, students viewed a videotaped speech of student delivering a speech. This speech had been previously rated as excellent by four speech communication faculty on the SCA Competent Speaker Form. Students were told that the speaker had won a university oratorical contest and were given an outline of the speech. Following the viewing, students and instructor critiqued the speech in an open class discussion.

In treatment group 2, each student was videotaped while delivering an informative speech (second of four speeches).

Within a week of his/her speech the student met privately with the instructor to view and critique his/her own videotaped speech. All conferences were concluded prior to the assessed videotaped speech.

In treatment group 3, all students were introduced to the SCA Competent Speaker Form and trained in its use prior to their first speech. Throughout the semester each student was both a critic using the instrument to evaluate others and a receiver of evaluation based on that form for all four speeches. This contrasted with the comparison group in which a different critique form was used for each of the four speeches.

In all six sections the third of four speeches was videotaped. Three student workers were trained in the use of the camcorder and videotaped all students in the six sections. Camera angle, lens opening and camera distance were held constant for all speeches. Students in all sections were identified by a uniform numbering system on the videotape eliminating the possibility of student name and instructor recognition by judges.

Later, each of the videotaped speeches was evaluated by three outside judges, two professionals with doctorates in communication and one lay person, over 18 years of age. A total of sixteen judges were trained on the SCA Competent Speaker Form. Training consisted of reviewing the standards and criteria for the eight competences. Review was based on materials provided by Morreale, et al. The videotape of exemplary speeches which accompanies the training material was not used. The final assessment rating for each student in all groups was determined by averaging scores of the three outside judges.

The dependent variable as indicated by the hypotheses was students' assessment rating of a speech as determined by SCA Competent Speaker Form. "Initial testing of The Competent Speaker Form indicated that the instrument is psychometrically sound in terms of reliability and validity." (Morreale, et al. 33).

The t test was selected as the appropriate statistic model to apply to the data comparing the mean of the treatment group with the mean of the concomitant comparison group for each hypothesis (Hays 327). The .01 level was required for significance of all tests of hypotheses.

### Results

Table 1 presents the results of the t test of differences between treatment and comparison groups mean assessment scores for hypothesis one.

Table 1  
Comparison of Assessment Scores  
Treatment 1: - Model Speech

	<u>N</u>	<u>X</u>	<u>SD</u>	<u>t</u>
Treatment Group: Model Speech	20	44.99	5.57	2.36*
Comparison Group: No Model Speech	19	61.67	3.99	

\* p=.02

The mean assessment score for students viewing the model speech was 44.99; the comparison group was 61.67. The difference between the two means was not significant, thus hypothesis one was not supported.

Table 2 presents the results of the t test of differences between treatment and comparison groups mean assessment scores for hypothesis two.

Table 2  
Comparison of Assessment Scores  
Treatment 2: - Self-Observation

	<u>N</u>	<u>X</u>	<u>SD</u>	<u>t</u>
Treatment Group: Self-Observation	22	44.90	4.53	.0014*
Comparison Group: No Self-Observation	22	44.89	4.37	

\* p=.99

The mean assessment score for students who viewed themselves on videotape was 44.90; the comparison group was 44.89. The difference between the two means was not significant, thus hypothesis two was not supported.

Table 3 presents the results of the t test of differences between treatment and comparison groups mean assessment scores for hypothesis three.

Table 3  
Comparison of Assessment Scores  
Treatment 3: - Same Evaluation Form

	<u>N</u>	<u>X</u>	<u>SD</u>	<u>t</u>
Treatment Group: Same Evaluation Form	18	47.31	4.34	
Comparison Group: Multiple Evaluation Forms	21	47.77	4.03	.331*

p=.74

The mean assessment score for students using the same evaluation form for all speeches was 47.31; the comparison group was 47.77. The difference between the two means was not significant, thus hypothesis three was not supported.

#### Discussion

The purpose of this study was to determine whether three teaching strategies: using an "excellent" model, self-observation and using the same evaluation form, affect students speech performance as measured by SCA Competent Speaker Form.

Individuals who viewed a videotaped model of an "excellent" student speech did not do better on subsequent speech performance than those who did not view a model speech. However, it should be noted that the comparison group's mean assessment score was actually higher than the treatment group at a .02 level of significance. This indicates that there were differences between the two groups that can not be attributed to chance nor to the treatment. This effect may be due to a lack of homogeneity of the samples. The effect of viewing a "model" speech on speaking performance should be studied further.

Individuals who viewed a videotaped speech of self, accompanied by instructor evaluation, did not do better on subsequent speaking performances than those who did not experience self-observation. This result tends to support prior studies which suggest that the benefits of videotaped self-observation lie in the affective domain (Goldhaber and Kline; McCroskey and Lashbrook). On the other hand, very few researchers have focused on the effects of self-observation on actual speaking performance. As more standardized measures of public speaking performance are developed this line of inquiry should continue.

Individuals who used the same evaluation form throughout the semester did no better on subsequent public speaking performance than did those who used multiple evaluation forms.

In addition to the implications for future research already

mentioned, an analysis of each of the eight competencies rated on the SCA Competent Speaker Form might reveal significant differences for these treatments at more specific levels of speaking performance. For example, Miles found videotaped play back was useful for improving language and delivery only (382).

While the results of this study cast serious doubts on the efficacy of these three strategies for improving public speaking performance, the results provide important evidence that as we go about the business of developing instruments which accurately assess educational outcomes, including speaking performance, we are also developing a means for researching the learning process. Indeed, assessment is epistemic and heuristic.

WORKS CITED

- Bandura, A. Principles of Behavior Modification. New York: Holt Rinehart and Winston, 1969.
- Bandura, A. "Self-efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review 84 (1977): 191-215.
- Bandura, A. Social Learning Theory. Englewood Cliffs, N.J.: Prentice-Hall, 1977.
- Booth-Butterfield, M. "The Interpretation of Classroom Performance Feedback: An Attributional Approach." Communication Education 38 (1989): 119-132.
- Bradley, B. "An Experimental Study of the Effectiveness of the Video-Recorder in Teaching a Basic Speech Course." Speech Teacher 19 (1970): 161-167.
- Dieker, R.J., L. Crane, and C.T. Brown. "Repeated Self-Viewings on Closed-circuit Television as it Affects Changes in the Self-concept and Personality Needs of Student Speakers." Communication Education 20 (1971): 131-142.
- Deihl, E.R., M.P. Breen, C.V. Larson. "The Effects of Teacher Comment and Television Video Tape Playback on the Frequency of Nonfluency in Beginning Speech Students." Speech Teacher 19 (1970): 185-189.
- Hays, W.L. Statistics (5th edition). Fort Worth: Harcourt Brace College Publishers, 1994.
- Hosford, R.E. "Self-as-a-Model: A Cognitive Social Learning Technique." The Counseling Psychologist 9 (1981): 45-62.
- Goldhaher, G.M., J.A. Kline. "The Effects of Videotape on Attendance and Attitude in the Fundamentals of Speech Communication Course." Speech Teacher 21 (1972): 93-98.
- Matlon, R.J. "Model Speeches in the Basic Speech Course." Communication Education 17 (1968): 50-57.
- McCroskey, J.C., W.B. Lashbrook. "The Effects of Various Methods of Employing Video-Taped Television Playback in a Course in Public Speaking." Speech Teacher 19 (1970):
- Miles, P.L. "Student Video Self-Critiques." Communication Education 30 (1981): 280-283.
- Morreale, P., M. Moore, K.P. Taylor, D. Surges-Tatum, and R. Hulbert-Johnson (eds.). The Competent Speaker Speech Evaluation Form, Speech Communication Association (1993).

Mulac, A. "Effects of Three Feedback Conditions on Employing Videotape and Audiotape on Acquired Speech Skill." Communication Monographs 41 (1974): 205-214.

Craigley, B.L., J.D. Nyquist. "Using Video Technology to Provide Feedback to Students in Performance Courses." Communication Education 41 (1992): 324-335.

Sorenson, R.L., T.A. Pickett. "A Test of Two Teaching Strategies Designed to Improve Interview Effectiveness: Rating Behavior and Videotaped Feedback." Communication Education 35 (1986): 13-22.