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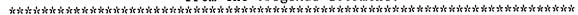   Students
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ABSTRACT
                A study determined the viability and effectiveness of
the Computerized Competent Speaker Evaluation System. A total of 659
comments made by undergraduate students about the paper version of
the Competent Speaker Speech Evaluation Form were subjected to two Q
sorts. The 635 comments that emerged were incorporated into the
evaluation system during its development. Subjects were taken from
four recitation sections (each with 15 to 20 students) of an
introductory public speaking course. Speeches made by the students in
two control groups were evaluated with the traditional handwritten
method using the printed version of the speech evaluation form.
Speeches of students in the two experimental groups were evaluated
with the computerized version of the form. Graduate teaching
assistants evaluated the speeches. Results were invalid since raters
scored speeches considerably differently. Results of a posttest
questionnaire of students indicated that they perceived the system to
be viable and efficacious. Analyses of a journal kept during the test
period and of posttest interviews with the graduate teaching
assistants using the system provided additional insights into the
computerized evaluation system. Findings suggest that the system is
viable, but the system's effectiveness is not yet established due to
problems of low interrater reliability. (Contains 23 references and 5
tales of data. Evaluation forms, criteria for use of forms, sample
screens from the computerized systems, a sample printout, and cost
estimates for the computerized systems are attached. (RS)

Immediate Computerized Feedback in the Evaluation of

Undergraduate Public Speaking:

Development of the Computerized Competent Speaker

Evaluation System and Testing of its

Viability and Efficacy

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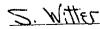
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Running head: IMMEDIATE COMPUTERIZED FEEDBACK OF

PUBLIC SPEAKING

Abstract

This study concerns the development and a quasi-experimental test of the Computerized Competent Speaker Evaluation System. The rationale for developing such a system is provided. Then the paper explains how a database of comments was collected, Q-sorted, and analyzed. Also, the construction of the computer software for the system is described. A quasi-experimental test of the system, examining its viability and efficacy as compared to traditional handwritten feedback, is described. The scores of students in a test group on speeches are compared with the scores of students in a control group using t tests. These results are shown to be invalid since the raters in both groups scored speeches considerably differently. The results of a posttest questionnaire of students involved in this study indicate that they perceived the system to be viable and efficacious. Analyses of a journal kept during the test period and of posttest interviews with the graduate teaching assistants using the system provided additional insights into the computerized evaluation system.

Immediate Computerized Feedback in the Evaluation of

Undergraduate Public Speaking:

Development of the Computerized Competent Speaker

Evaluation System and Testing of its

Viability and Efficacy

It is safe to assert that the majority of teachers
of public speaking desires to provide effective
feedback to their students. In his classic question,
Holtzman (1960) states it best: "The instructor of
speech has one primary question to answer: What can I
say (or write or do) that will result in this student's
improving his communication ability?" (p. 1). Also,
Book (1985), in an article analyzing effective feedback
on speeches, asserts that experienced speech teachers
have written a great deal about what comprises
effective feedback.

The type of feedback referred to in the study
reported in this paper is consistent with Clement and
Frandsen's (1976) definition of "action-reaction,"
(pp.11-28) in other words, metacommunication:
deliberate suggestions about a speech given subsequent
to the speech. It is these deliberate comments

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following the speech that Dedmon (1967) asserts should

be given directly after the students speak or right

before the class period ends. Dedmon cites Byers

(1963), who suggests that students learn the best when

they are given "immediate and valid knowledge" of their

failure or success (p. 139). Although Byres (1963) is

arguing for immediate oral feedback, a similar

argument can be made for the value of immediate written

feedback. However, effective immediate written

feedback is more difficult to provide than delayed

written feedback.

The desire to provide effective written feedback,

that is also immediate, to public speaking students

presents speech instructors with a dilemma. Often,

when providing written feedback, speech instructors

keep the evaluation sheets and give them to the

students on some following day. Of course, the obvious

problem with this option is that it diminishes the

impact of feedback given to students (Leubitz &

Hamilton, 1990). Another option is that the evaluator

will provide handwritten comments at the end of the

students' speeches, thus often supplying insufficient

feedback and frustrating both themselves and their

students. Behnke and King (1984) point out that terse

comments may be perceived as worthless by both students

and instructor.

Therefore, the question this study seeks to answer

is as follows: "How can instructors of public speaking

provide effective immediate written feedback?"

It is an undisputed fact that microcomputers

process data in a matter of minutes and often seconds

(Fletcher, 1992). Buxton and Henry (1982) assert that

the microcomputer is the most significant new tool man

has designed in centuries.[1] They suggest that among

its many desirable features is its capability to

provide immediate feedback and that all of its features

can be used to develop basic skills, listing

communication as one of the basic skills. Because of

these desirable features, educators have sought to

incorporate the use of the computer into their

respective academic disciplines in order to educate

students more effectively. For instance, a program in

a Chicago elementary school used computers to provide

immediate feedback to students on their math problems.

That study demonstrated significant gains in the students' scores (Swarm, 1991).

So, since public speaking evaluators have struggled with wanting to provide adequate immediate feedback to their students and since microcomputers are very capable of providing immediate feedback, one would ask, "Can computers be used to provide effective immediate written feedback to public speaking students?" This study will examine the viability and efficacy of providing immediate computerized feedback to public speakers. Simply put, viability is operationalized as whether or not the computerized system is perceived to work. Efficacy refers to whether or not the computerized system enables students to improve in public speaking skills and/or grades earned for speeches.

Method

This project examined two hypotheses. Hypothesis One stated the following: If based on an appropriate model of speech evaluation and a scientific devel-opmental method, a viable computerized speech evaluation system can be developed. This hypothesis

was explored by an examination of the following: (a)
the documented experience of two raters using the pilot
Computerized Competent Speaker Evaluation System as
they provided feedback throughout a test period, (b)
specific items on a questionnaire given to students in
a control and test group at the end of a test period,
and (c) specific responses in an interview at the end
of a test period of the two raters who used the
Computerized Competent Speaker Evaluation System.

Hypothesis Two stated the following: That if used
by evaluators who have undergone training on the
Computerized Competent Speaker Evaluation System, the
system may prove to be efficacious when subjected to a
quasi-experimental test. This hypothesis was
investigated by an examination of the following: (a)
more significant improvement in the grades of students
who received immediate computerized feedback in
comparison to students who received traditional
handwritten feedback and (b) the feedback of students
in both groups on certain questions on the
questionnaire given to them at the end of the test
period.

Summarily, this project involved the formation of a database of speech evaluation comments for the Computerized Competent Speaker Evaluation System, the development of the computerized form, and the quasi-experimental testing of this form.

Development of the Computerized Competent Speaker

Evaluation System

Decision on prototype. Much consideration was given to which public speaking form should be used as the prototype of the computerized evaluation system. It was decided that this form should be as comprehensive as possible and based on current literature on competent public speaking. It also needed to have been tested and found valid, reliable, and free from biases. The form chosen for the prototype was "The Competent Speaker" Speech Evaluation Form (Morreale, Moore, Taylor, Surges-Tatum, & Hulbert-Johnson, 1994).

"The Competent Speaker" Speech Evaluation Form (Morreale et al., 1994) (see Appendixes A and B for form and criteria) assesses public speaking behavior, focusing on communication skills. Eight skills,

referred to as individual competencies, were determined as necessary in order for a student to exhibit competency in public speaking. An assessment of the students' preparation skills can be provided by examining the first four competencies. Also, an assessment of the students' delivery skills, both nonverbal and verbal behaviors, can be obtained by examining the last four competencies. Further, a holistic/aggregate assessment can be obtained by a total of the individual scores on these eight competencies. Degrees of assessment (unsatisfactory, satisfactory, or excellent) within each of the eight competencies are allowed for (Morreale et al, 1994).

For a 2-year period "The Competent Speaker" Speech Evaluation Form (Morreale et al., 1994) was tested for reliability, validity, and cultural biases. The traditional testing indicated that the speech evaluation form is reliable and valid (Morreale et al., 1994). The Rasch Analysis (Rasch, 1960) was used to analyze the speech evaluation form for cultural biases. It was found to be free from cultural biases (Tatum, 1991). Thus, as a result of the testing, the

evaluation form was found to be reliable, valid, and free from cultural biases.

Data collection. The paper version of "The Competent Speaker" Speech Evaluation Form was used in the sophomore level public speaking course (COMM 210) at the University of Colorado at Colorado Springs. For the fall of 1990 and the spring of 1991, as the graduate teaching assistants used "The Competent Speaker," their comments were stored in a database. In addition to these, approximately 200 comments were borrowed from a dissertation on public speaking (McMahan, 1988).

This resultant pool of comments was compared with the fragmented elements of the definitions of the eight competencies in "The Competent Speaker" Speech Evaluation Form (See appendixes A and B for form and criteria). If a minimum of three comments was not found for each fragmented element of each of the definitions, additional comments were developed from the criteria. Many irrelevant comments were discarded for redundancy or ambiguity. The final pool of

comments submitted to a first Q sort numbered 659 com-
ments.

Data sorting. It was decided that through two Q
sorts these 659 comments would be placed in the proper
competencies and levels of these competencies. The Q-
Sort technique was developed independently by
Stephenson (1935) and Thomson (1935). The Q-Sort
procedure calls for the participants to select sets of
objects or comments relative to the concept being
studied and to categorize these objects or comments.
Brooks suggests that the purpose of a Q sort is to
obtain a conceptual illustration of the sorters'
perspectives on the concept being evaluated (1970).

According to Brooks (1970), the Q sets used in
both sorts in this project were of the structured
nature. They were established to represent the eight
competencies of "The Competent Speaker" Speech
Evaluation Form. The 659 comments were placed in
random order for the start of the first Q sort. The
evaluators were asked to sort these comments into
competencies one through eight, with number nine
representing a discard category. The result was that

635 comments of the original 659 comments were

determined to have content validity in this first Q

sort.

Then in a second Q sort, evaluators were asked to

sort these 635 comments into levels of unsatisfactory,

satisfactory, or excellent. Again, they were given a

discard category. As a result of this Q sort 10

comments were discarded. Thus, 625 comments of the 635

comments were determined to have content validity in

the second Q sort.

Statistical analysis of data. In both Q sorts,

the interrater reliability of these four raters was

determined with the Krippendorff K formula

(Krippendorff, 1980). Further analysis, involving the

identification of the modal score for each comment and

the most deviant rater out of the four, shed light on

which comments had to be rejected. Any comments that

drew less than .50 agreement of the four raters were

removed from the database. The number of comments

remaining at the end of these two Q sorts was 625.

Construction of computer software program. While

the database of comments was being constructed and

refined, available literature on the structural de-
velopment of similar public speaking computerized
feedback systems was evaluated. Based on interviews
with Ralph Behnke (Zautke, 1991a) and Chris Sawyer
(Zautke, 1991b), who had experimented with computerized
speech feedback, the decision was made to use the
software package, HyperCard[tm], on the Macintosh[tm]
computer system (see Appendix E for sample costs).
Doris Carey (Witter, 1992), of the School of Education
University of Colorado at Colorado Springs, an expert
on the use of computers in the classroom, was consulted
about the system's conceptual layout in relation to
Macintosh[tm] screens (see appendix C for sample
screens). The 625 comments that emerged from the two Q
sorts were incorporated into the Computerized Competent
Speaker Evaluation System during its development.

Procedure Followed for The Quasi-Experimental Test
of Computerized Competent Speaker Evaluation System

Project variables. The independent variable in
this study is the type of feedback that the student
speakers receive, that is, computerized or handwritten
feedback. Dependent, quantitative variables are the

scores that students earned on their speeches and their

attitudes toward the type of feedback they received, as

reported on the posttest questionnaire. Qualitative

outcome variables are the analysis of the results of

posttest interviews with raters of the experimental

group and analysis of the journal of observations kept

during the training period.

Sample population. The sample was taken from the

introductory public speaking class (COMM 210) at the

University of Colorado at Colorado Springs during

spring semester, 1993. Four recitation sections were

used, each containing approximately 15-20 students.

Thus, the total sample size was approximately 60-80

students. Two recitation sections were designated as a

test group, and two sections were designated as a

control group.

Training of evaluators. All four evaluators were

trained in the use of "The Competent Speaker" Speech

Evaluation Form. The two evaluators of the test group

were trained additionally in the use of Computerized

Competent Speaker Evaluation System. Successive weekly

training was held as often as possible on "The

Competent Speaker" Speech Evaluation Form and on the
Computerized Competent Speaker Evaluation System.
After the four evaluators would critique a speech, they
would compare their ratings on each of the eight
competencies and their total scores, thus, endeavoring
to normalize their grading tendencies.

Testing. The 15-20 students in both groups
presented the four major required speeches of COMM 210
at assigned times during the semester of testing,
spring, 1993. All students were videotaped as standard
procedure in the COMM 210 course. The students in the
control group were evaluated with the traditional
handwritten method, using "The Competent Speaker"
Speech Evaluation Form. On a day subsequent to their
presentations, these students would examine the
handwritten feedback and view the videotapes of their
speeches in an oral communication laboratory.

The students in the experimental group were
evaluated with the Computerized Competent Speaker
Evaluation System. The graduate teaching assistants
printed the evaluation forms after evaluating the
students. Immediately following their presentations,

the students took their videotapes to an oral
communication lab where the students picked up the
computer printouts of the evaluations of their
speeches, read them, and viewed their speeches (see
appendix D for a sample printout).

Instrumentation. After the test period elapsed
and all of the speeches had been evaluated, a
questionnaire focusing primarily on viability and
efficacy was given to the students in both the test
group and the experimental group. This questionnaire
had been developed to examine four underlying
constructs that seemed relevant to providing feedback
with the use of the computer in a public speaking
classroom: (a) the time factor, (b) the personableness
of the computerized system, (c) rater capability, and
(d) impact on students' skills and grades. It was
reasoned that the students' perceptions in these areas
would reveal a lot about how viable and efficacious the
computerized system was to the students. This
questionnaire was examined for face validity (Carmines
& Zeller, 1979).

A second evaluation that was made subsequent to
the test period was separate interviews with the two
graduate teaching assistants who used the Computerized
Competent Speaker Evaluation System on the Macintosh[tm]
computers. Just as the students' questionnaire had
focused on viability and efficacy, so too this
interview form was designed to focus on these aspects
of competent speech evaluation. Since the interview
form was patterned after the questionnaire and the
questionnaire had been evaluated for face validity
(Carmines & Zeller, 1979), it was assumed that the
interview form would also have face validity.

Statistical analysis of data. The difference
between the mean scores of students in the two sections
comprising the experimental group on their last speech,
as compared to the mean scores of the students in the
two sections comprising the test group on their last
speech in the control group was analyzed using t tests.
It was thought that the improvement or lack of
improvement in the scores earned on speeches given by
the experimental group, when respectively compared with
the scores earned on speeches given by the control

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group, would indicate the efficacy of the computerized
system.

Another series of t tests was run on the scores of
the students' speeches, so that the grading tendencies
of the evaluators could be investigated. The mean
scores of each of the four raters were compared
statistically so that the mean score of the students'
speech scores awarded by each rater was compared with
the mean score of the students' speech scores awarded
by each of the other raters. Also, the tendencies of
the two raters in the test group collectively, as
compared to the tendencies of the two raters in the
control group collectively, were examined
statistically.

In addition to the t tests that were used to
analyze the data collected from the students' speeches,
a MANCOVA was used to analyze the data collected in the
posttest questionnaire and to factor in a confounding
variable. That confounding variable was the students'
perceptions of their grades for the course as reflected
in question 15 on the questionnaire. These tests were
used to examine the difference in the amount of

perceived like or dislike for computerized or
handwritten feedback (viability) and the students'
perceptions as to which type of feedback most impacted
ability and grades the between the control group and
the test group (efficacy). Multiple analyses of
variance were run so that the mean scores could be
adjusted to account for the confounding variance caused
by the students' perceptions of their grades for the
course.

Thematic analysis of data. The data collected
from observations made during the test period were
recorded in a journal. These data were examined for
subordinate themes, constructs that were significant to
all four raters and the students involved in this
experiment. Following this, the subordinate themes
were synthesized into major themes or fundamental
constructs.

A second qualitative informal thematic analysis of
the data gleaned from the interviews of the two raters
who used the Computerized Competent Speaker Evaluation
System was used to examine the raters' perceptions of
the viability and efficacy of system. The data that

were collected from the interviews were examined for

subordinate themes, constructs that were important to

the raters who used the system.

Results

Quantifiable Data

Interrater reliability in the first Q sort was

.83. The total number of comments entering the first Q

sort was 659, and the total number of comments

remaining was 635. These 635 comments went into the

second Q sort in which the interrater reliability was

.60.

The differences between the means of the scores

earned on the final speeches of the test group as

compared to the means of the scores earned on the final

speeches of the control group were examined with t

tests. The difference of the mean score between both

groups of students is 7.6 points, or .068 of the 112

possible points. The t value on the *final speech* was

statistically significant ($p < .004$).

_____

Insert Table 1 about here.

_____

However, Table 2 suggests a confounding of this
finding.   It shows an analysis of the four evaluators
in terms of their mean scores on each of the four
speeches of the test period.   Raters 1 and 2 are the
test group raters.   Raters 3 and 4 are the control
group raters.

_____

Insert Table 2 about here.

_____

On the final speech, Rater 1, in the test group,
rated an average of 14.5 points above Rater 4, in the
control group.   These 14 points equate to .125 of the
112 total points possible.   Both of the raters in the
test group individually rated more leniently than those
in the control group.   Also, the mean of the test group
as compared to the mean of the control group, which was
was statistically significant, shows that the raters in
the test group collectively rated 7.6 points higher
than the collective rating of the control group raters.

In order to examine the students' attitudes about
the viability and efficacy of the Computerized
Competent Speaker Evaluation System, a questionnaire
was developed and administered. The investigation of
the findings of this questionnaire are presented in
Tables 3-5.

Insert Table 3 about here.

Item 1 shows a very significant statistical
finding, and items 5, 8, 13, and 14 show statistically
significant findings ($p<.05$ and $p<.001$). The students'
responses to items 1 and 13 indicate that they felt
that the time frame in which feedback was given to them
impacted both their grades and abilities. Their
responses to items 5, 8, and 14 indicate that (a) the
use of the computer in the classroom did not bother
them, (b) they felt neutral about the database, and (c)
they felt that computerized feedback provides more
objective and fairer feedback than handwritten
feedback.

In order to look for constructs, a correlational
statistic was run on the questionnaire data. Four
clusters of items on the questionnaire exhibited
significant statistical correlational validity and
correlational face validity. To factor out how
students' perceptions of their grades in the class
affected their responses, a multivariate analysis was
run on these four clusters. The item on the
questionnaire that contained the confounding variable
was item 15, which asked students what they perceived
their grades would be in the public speaking course.

Table 4 shows the "Observed Means" and the
"Adjusted Means" for the four clusters of items that
correlated in the data from the posttest questionnaire
of students involved in the experiment.

Insert Table 4 about here.

Only a few chose a grade other than "A" for the
public speaking course in response to item 15 on the
questionnaire. The adjusted means of the clusters
above indicate that the students' responses to the

items comprising these clusters were only minimally affected by their perceived grades.

Table 5 shows that the only cluster of items from the questionnaire to manifest statistical significance is the cluster of items 1, 9, 12, and 13. Two of the items comprising this cluster probed the viability, and two items probed the efficacy of the computerized system. When these four items are combined, the resultant cluster is, "Rater/Feedback/Time Frame = Improvement" or "The time frame in which the rater provided feedback to me and the type of feedback provided to me caused my public speaking ability to improve and were pleasing to me." The F value for this cluster of items on the questionnaire indicates that the difference between the adjusted mean answer of the test group (4.63) and the adjusted mean of the control group (3.55) is significant (p<.024).

Insert Table 5 about here.

Qualitative Data

The journal of observations made during the test
period seemed to synthesize into these five categories:
(a) Not enough training and norming occurred, (b) the
computerized system was not being used for a large
portion of the speeches presented in the test group,
(c) various complaints about the functioning of the
system were voiced by the test group raters, (d) a
primary concern was that the computerized system was
taking too long to use, and (e) logistical and practical
considerations were recorded in the journal.

Interviews were conducted at the end of the test
period with the graduate teaching assistants who rated
speeches in the test group. The results of these
interviews clustered into the following groups:
general comments about the experiment, the viability of
the computerized system, and efficacy of the system.
General comments about the computerized evaluation
system include comments about the variety and
understandibility of the comments and the benefit of
immediate feedback. A number of other issues were
addressed by the test raters. Both raters of the test

group answered affirmatively that they would use the Computerized Competent Speaker Evaluation System again.

Other questions in the interview examined the viability, or work-ability, of the computerized evaluation system. Although one test group rater did not like the impersonableness of the system, the other was not bothered by this. Both raters liked the database but said that it contained too many comments. Even though one rater said that his grading was not affected by the use of the system, the other rater said that her grading was fairer and more objective.

The efficacy, the impact on skills and grades, of the computerized evaluation system was also examined by the questionnaire. The two test group raters agreed that the immediate computerized feedback helped their students develop into better public speakers than if they had provided handwritten feedback. However, one restricted this by saying that the assistance was not significant. One rater said that his students did receive better grades because they received immediate computerized feedback.

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Discussion

This discussion is organized into three parts:
First, the quantifiable data are discussed, including
results of the two Q sorts, results of t tests run on
students' grades on speeches given during the test
period, results of t tests run to compare the scores
awarded by the raters, and results of analyses of the
student questionnaire. Second, the qualitative data
are discussed, including observations made during the
test period and responses given during posttest
interviews with the two graduate teaching assistants
rating the test group. Third, conclusions are drawn
from these discussions about the viability and efficacy
of the computerized evaluation system.

Quantitative Data

The results of the first Q sort indicate that the
raters rated reliably between themselves. They rated
with .83 reliability. Krippendorf (1980), citing
Brouwer, Clark, Gerbner, and Krippendorff (1969),
writes that a reliability finding over .80 should be
reported. The results of the second Q sort indicate
that the raters sorted the comments with a .60
reliability. However, Krippendorf (1980) writes that

even tentative conclusions cannot be drawn from results

below .63.

The large degree of interrater disagreement that

Rater 4 had with the other three raters and the lack of

interrater agreement in, especially, the second Q sort

call attention to the need for training in "The

Competent Speaker" Speech Evaluation Form. This

training would need to emphasize the criteria of "The

Competent Speaker" Speech Evaluation Form and relative

semantic distinctions. The result of such training

would be a more accurate database. If the present

study is replicated, both Q sorts should be conducted

again after this improved training of the raters would

be conducted. If both are not conducted again, at

least the second level Q sort should be repeated.

The comparison of means and t test scores revealed

that those students in the test group out-performed the

students in the control group (see Table 1). The t

value for the final speech is statistically significant

(.004). In other words, these results indicate that

test-group students' grades on speeches did improve

and, thus, their public speaking skills also improved.

These results seem to support the hypothesis of this study that suggests that a computerized evaluation system may prove to be efficacious for students when used by evaluators who have undergone training on that system.

These results, however, were confounded by the actual design of the experiment. Since the number of available speech recitation sections was limited, different graduate teaching assistants taught the test and the control sections. This confounding variable was examined with an analysis of the means scores on students' speeches as awarded by each rater on the *final speech* (see Table 2). These data call into question the data presented in Table 1. Thus, the efficacy of the computerized system was not fully demonstrated in this project. Therefore, since the test group raters scored significantly higher than the control group raters on the final speech, the findings in Table 1, which suggest that the computerized system may have aided students in the test group to score higher, are shown to be invalid.

Although no quantitative measures were run and no
records have been kept that would show multiple
semester means for these raters prior to the test
period, Rater 1 consistently exhibited a tendency to
award higher scores for the speeches of students in her
sections as compared to how other graduate teaching
assistants rated their students' speeches. On the
other hand, Rater 4 exhibited tendencies in the
opposite direction. Such rater error was evident in
the discussions during the norming sessions. Also, the
raters in the control group may have been trying to
compensate for the relatively slow printing of the
computerized evaluation system or their lack of
proficiency with the system.

On the t tests (see Table 3) that were run on
individual items on the posttest questionnaire, five
individual items on the questionnaire showed
statistical significance (1, 5, 8, 13, and 14). The
test group students' responses to items 1 and 13
indicate that they felt that the computerized system
was efficacious. On items 5, 8, and 14 they indicated

that they perceived the computerized feedback system as
viable.

Since the differences between the observed mean
and the adjusted mean (see Table 4) for both groups in
this study were only minimally affected by the
students' perceived grades for the course, one can
assume that their responses on the questionnaire
accurately reflected their perceptions.

Of the four clusters of items from the
questionnaire that formed after the correlational
statistic was run, one cluster manifested a statistical
significant difference (see Table 5). Since students
in the test group perceived the rater, method of
feedback, and time frame in which feedback was provided
to them as all correlating to contribute to improvement
in their public speaking skills, the viability and
efficacy of the computerized evaluation system are both
supported.

Qualitative Data

The data from the journal observations indicate
that more training on the Computerized Competent
Speaker Evaluation System and more norming among the

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raters are needed than was accomplished in this

project. A more thorough knowledge of the criteria

contained in "The Competent Speaker" Speech Evaluation

Form is needed. Additionally, journal observations

documented that only the *final speech* could be examined

for statistical significance. The number of times that

the computerized system was used to rate speeches in

the test group on the first three speeches was

insufficient for test purposes. Another issue

suggested that too much time was being consumed as

raters concluded their comments and as the system

printed the evaluations. It was noted that a faster

printer was needed.

The answers to the general questions in the

posttest interviews support journal observations that

the system needs to be quicker and the raters needed

more training. It is important that the raters

commented that they liked the ability to make

particular comments to students. Also, the raters

provided suggestions for various changes in the system,

itself. The journal observations and interview

suggestions about increasing the speed of the system

and about additional training need to be researched in another study.

The answers to the questions devoted to the viability of the computerized system also suggest that additional training may be needed to eliminate the feeling of impersonableness created by the system. The raters' responses to an item dealing with the potential increased objectivity and fairness are split. In general, the responses of the graduate teaching assistants about the viability of the computerized evaluation system suggest that they are ambivalent about it. However, both raters did say that they would use the computerized system again.

The test raters' responses to the questions in the interviews that probed the efficacy of the computerized evaluation system indicate they both felt that their students' abilities improved because the students received immediate feedback. Furthermore, one said that his students earned better grades because of immediate feedback. In general, the responses of the graduate teaching assistants indicate they felt that the system is efficacious.

Conclusion

The results of this study, which endeavored to

answer the question about how instructors of public

speaking can provide effective immediate written

feedback to their students after their speeches,

indicate the following:

1. The first hypothesis, which asks if a viable

computerized system can be developed, seems to have

been supported. The journal observations indicate

that, although the system had difficulties, it is

viable. The students' responses on the posttest

questionnaire reveal that they perceived it as viable.

Also, the responses given in the posttest interview

show that the test group raters perceived the system as

viable.

2. The second hypothesis, which asks if the

system will prove to be efficacious, was not fully

supported. The students' grades on speeches do not

indicate that the system aided in better grades and

increased skill. However, the students' responses on

the posttest questionnaire reveal that the test group

students perceived that their grades and skills

improved because they were given immediate computerized
feedback.

The use of the Computerized Competent Speaker
Evaluation System is, therefore, determined to be a
promising instructional strategy for improving public
speaking instruction.

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Appendix A

Copy of "The Competent Speaker" Speech Evaluation Form

THE COMPETENT SPEAKER
SPEECH PERFORMANCE EVALUATION FORM

SPEAKER'S NAME:_____ ASSIGNMENT:_____
EVALUATOR'S NAME:_____ DATE:___/___/___

EIGHT PUBLIC SPEAKING COMPETENCIES	SPEAKING PERFORMANCE RATINGS			
	System for Scoring	Unsatisfactory	Satisfactory	Excellent
Competency One CHOOSES AND NARROWS A TOPIC APPROPRIATELY FOR THE AUDIENCE AND OCCASION Comments:				
Competency Two COMMUNICATES THE THESIS/SPECIFIC PURPOSE IN A MANNER APPROPRIATE FOR AUDIENCE AND OCCASION Comments:				
Competency Three PROVIDES APPROPRIATE SUPPORTING MATERIAL BASED ON THE AUDIENCE AND OCCASION Comments				
Competency Four USES AN ORGANIZATIONAL PATTERN APPROPRIATE TO TOPIC, AUDIENCE, OCCASION, & PURPOSE Comments				
Competency Five USES LANGUAGE THAT IS APPROPRIATE TO THE AUDIENCE AND OCCASION Comments:				
Competency Six USES VOCAL VARIETY IN RATE, PITCH, & INTENSITY, TO HEIGHTEN AND MAINTAIN INTEREST Comments:				
Competency Seven USES PRONUNCIATION, GRAMMAR, & ARTICULATION APPROPRIATE TO THE DESIGNATED AUDIENCE Comments:				
Competency Eight USES PHYSICAL BEHAVIORS THAT SUPPORT THE VERBAL MESSAGE Comments.				

General Comments.   Summative Score of Competencies:_____

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APPENDIX B

Criteria for Use of "The Competent Speaker" Speech

Evaluation Form

"The Competent Speaker" Speech Evaluation Form

Eight Public Speaking Competencies and Criteria for
Assessment

Competency One
CHOOSES AND NARROWS A TOPIC APPROPRIATE TO THE AUDIENCE
AND OCCASION.

EXCELLENT = The speaker presents a topic and a focus
that are exceptionally appropriate for the purpose,
time constraints, and audience.
    [That is, the speaker's choice of topic is clearly
consistent with the purpose, is totally amenable to the
time limitations of the speech, and reflects unusually
insightful audience analysis.]

SATISFACTORY = The speaker presents a topic and a focus
that are appropriate for the purpose, time constraints,
and audience.
    [That is, the speaker's choice of topic is
generally consistent with the purpose, is a reasonable
choice for the time limitations of the speech, and
reflects appropriate analysis of a majority of the
audience.]

UNSATISFACTORY = The speaker presents a topic and a
focus that are not appropriate for either the purpose,
time constraints, or audience.
    [That is, the speaker's choice of topic is
inconsistent with the purpose, the topic cannot be
adequately treated in the time limitations of the
speech, and there is little or no evidence of
successful audience analysis.]

(Appendix B continues)

(Appendix B continued)

Competency Two
COMMUNICATES THE THESIS/SPECIFIC PURPOSE IN A MANNER
APPROPRIATE FOR THE AUDIENCE AND OCCASION.

EXCELLENT = The speaker communicates a thesis/specific
purpose that is exceptionally clear and identifiable.
     [That is, there is no question that all of the
audience members should understand clearly, within the
opening few sentences of the speech, precisely what the
specific purpose/thesis of the speech is.]

SATISFACTORY = The speaker communicates a
thesis/specific purpose that is adequately clear and
identifiable.
     [That is, at least a majority of the audience
should understand clearly, within the opening few
sentences of the speech, precisely what the specific
purpose/thesis of the speech is.]

UNSATISFACTORY = The speaker does not communicate a
clear and identifiable thesis/specific purpose.
     [That is, a majority of the audience may have
difficulty understanding, within the opening few
sentences of the speech, precisely what the specific
purpose/thesis of the speech is.]

(Appendix B continues)

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Competency Three
PROVIDES SUPPORTING MATERIAL APPROPRIATE TO THE
AUDIENCE AND OCCASION.

EXCELLENT = The speaker uses supporting material that
is exceptional in quality and variety.
    [That is, supporting material is unarguably linked
to the thesis of the speech, and further is of such
quality that it decidedly enhances the credibility of
the speaker and the clarity of the topic.]

SATISFACTORY = The speaker uses supporting material
that is appropriate in quality and variety.
    [That is, supporting material is logically linked
to the thesis of the speech, and is of such quality
that it adds a measurable level of interest to the
speech.]

UNSATISFACTORY = The speaker uses supporting material
that is inappropriate in quality and variety.
    [That is, supporting material is only vaguely
related to the thesis of the speech, and variety is
either too great or too little to do anything but
detract from the effectiveness of the speech.]

(Appendix B continues)

.(Appendix B continued)

Competency Four
USES AN ORGANIZATIONAL PATTERN APPROPRIATE TO THE
TOPIC, AUDIENCE, OCCASION, AND PURPOSE.

EXCELLENT = The speaker uses an exceptional
introduction and conclusion and provides an
exceptionally clear and logical progression within and
between ideas.
        [That is, the introduction clearly engages the
audience in an appropriate and creative manner, the
body of the speech reflects superior clarity in
organization, and the conclusion clearly reflects the
content of the speech and leaves the audience with an
undeniable message or call to action.]

SATISFACTORY = The speaker uses an appropriate
introduction and conclusion and provides a reasonably
clear and logical progression within and between ideas.
        [That is, the introduction clearly engages a
majority of the audience in an appropriate manner, the
body of the speech reflects adequate clarity in
organization, and the conclusion reflects adequately
the content of the speech and leaves a majority of the
audience with a clear message or call to action.]

UNSATISFACTORY = The speaker fails to use an
introduction or conclusion and fails to provide a
reasonably clear and logical progression within and
between ideas.
        [That is, the introduction fails to engage even a
majority of the audience in an appropriate manner, the
body of the speech reflects lack of clarity in
organization, and the conclusion fails to reflect
adequately the content of the speech and fails to leave
even a majority of the audience with a clear message or
call to action.]

(Appendix B continues)

(Appendix B continued)

<u>Competency Five</u>
USES LANGUAGE APPROPRIATE TO THE AUDIENCE AND OCCASION.

EXCELLENT = *The speaker uses language that is
exceptionally clear, vivid, and appropriate.*
[That is, the speaker chooses language that
enhances the audience's comprehension and enthusiasm
for the speech, while adding a measure of creativity
that displays exceptional sensitivity by the speaker
for the nuances and poetry of meaning.]

SATISFACTORY = *The speaker uses language that is
reasonably clear, vivid, and appropriate.*
[That is, the speaker chooses language that is
free of inappropriate jargon, is nonsexist, is non
racist, etc.]

UNSATISFACTORY = *The speaker uses unclear or
inappropriate language.*
[That is, the speaker chooses inappropriate jargon
or language which is sexist, racist, etc.]

(Appendix B continues)

(Appendix B continued)

Competency Six
USES VOCAL VARIETY IN RATE, PITCH, AND INTENSITY
(VOLUME) TO HEIGHTEN AND MAINTAIN INTEREST APPROPRIATE
TO THE AUDIENCE AND OCCASION.

EXCELLENT = The speaker makes exceptional use of vocal
variety in a conversational mode.
    [That is, vocalics are exceptionally and
appropriately well-paced, easily heard by all audience
members, and varied in pitch to enhance the message.]

SATISFACTORY = The speaker makes acceptable use of
vocal variety in a conversational mode.
    [That is, the speaker shows only occasional
weakness in pace, volume, pitch, etc., thereby not
detracting significantly from the overall quality or
impact of the speech.]

UNSATISFACTORY = The speaker fails to use vocal variety
and fails to speak in a conversational mode.
    [That is, the speaker shows frequent weakness in
controlling and adapting pace, volume, pitch, etc.,
resulting in an overall detraction from the quality or
impact of the speech.]

(Appendix B continued)

Competency Seven
USES PRONUNCIATION, GRAMMAR, AND ARTICULATION
APPROPRIATE TO THE AUDIENCE AND OCCASION.

EXCELLENT = The speaker has exceptional articulation,
pronunciation, and grammar.
        [That is, the speaker exhibits exceptional
fluency, properly formed sounds which enhance the
message, and no pronunciation or grammatical errors.]

SATISFACTORY = The speaker has acceptable articulation,
with few pronunciation or grammatical errors.
        [That is, most sounds are properly formed, there
are only minor vocalized disfluencies, and a few (1Ã2)
minor errors in pronunciation and grammar.]

UNSATISFACTORY = The speaker fails to use acceptable
articulation, pronunciation, and grammar.
        [That is, nonfluencies and disfluencies interfere
with the message, and frequent errors in pronunciation
and grammar make it difficult for the audience to
understand the message.]

(Appendix B continued)

Competency Eight
USES PHYSICAL BEHAVIORS THAT SUPPORT THE VERBAL
MESSAGE.

EXCELLENT = The speaker demonstrates exceptional
posture, gestures, bodily movement, facial expressions,
eye contact and use of dress.
        [That is, kinesic (posture, gesture, facial
expressions, eye contact) and proxemic (interpersonal
distance and spatial arrangement) behaviors and dress
consistently support the verbal message and thereby
enhance the speaker's credibility throughout the
audience.]

SATISFACTORY = The speaker demonstrates acceptable
posture, gestures, facial expressions, eye contact and
use of dress.
        [That is, kinesic (posture, gesture, facial
expressions, eye contact) and proxemic (interpersonal
distance and spatial arrangement) behaviors and dress
generally support the message, with minor
inconsistencies that neither significantly distract
from the speaker's credibility with the audience nor
interfere with the message.]

UNSATISFACTORY = The speaker fails to use acceptable
posture, gestures, facial expressions, eye contact and
dress.
        [That is kinesic (posture, gesture, facial
expressions, eye contact) and proxemic (interpersonal
distance and spatial arrangement) behaviors and dress
are incongruent with the verbal intent and detract from
the speaker's credibility with the audience as well as
distracting the audience from the speaker's message.]

10/91

Appendix C

Copies of Sample Screens from the

Computerized Competent Speaker Evaluation System

"THE COMPETENT SPEAKER"
COMPUTERIZED EVALUATION FORM

Version Option:

○ Short Uersion (fewer comments)   ○ Long Uersion (many comments)

Scoring Option:

○ Normatiue Driuen Scoring   ○ Criteria Driuen Scoring

Directions: Move the mouse and place the index finger of the hand symbol inside the circle next to the name of 1) the length of   the form desired and click the mouse once; 2) then do the same for the scoring option desired.

(Appendix C continues)

(Appendix C continued)

THE COMPETENT SPEAKER SPEECH PERFORMANCE EVALUATION

SPEAKER'S NAME _____   ASSIGNMENT _____

SPEAKER'S SID _____   DATE __Wed, Oct 5, 1994_____

EVALUATOR'S NAME _____   TIME _____

EIGHT PUBLIC SPEAKING COMPETENCIES

PERFORMANCE RATING

	UNSAT	SAT	EXCELL
COMPETENCY ONE: Topic Chosen and Narrowed app. for Audience & Occasion COMMENTS: 0	0	0	0
COMPETENCY TWO: Thesis/Specific Purpose app. for Audience & Occasion COMMENTS: 0	0	0	0
COMPETENCY THREE: Supporting Material app. for Audience & Occasion COMMENTS: 0	0	0	0
COMPETENCY FOUR: Organization app. for Topic, Audience, Occ. & Purpose COMMENTS: 0	0	0	0
COMPETENCY FIVE: Language appropriate for Audience & Occasion COMMENTS: 0	0	0	0
COMPETENCY SIX: Variety in Rate, Pitch, and Intensity app. for Aud. & Occ. COMMENTS: 0	0	0	0
COMPETENCY SEVEN: Pronunciation, Grammar, and Art. app. for Aud. & Occ. COMMENTS: 0	0	0	0
COMPETENCY EIGHT: Physical Behaviors that Support the Verbal Message COMMENTS: 0	0	0	0

GENERAL COMMENTS: **TOTAL SCORE OF COMPETENCIES   0**

(Start/Stop Time) (Save) (Print) (New Sheet) (Quit)

(Appendix C continues)

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(Appendix C continued)

COMPETENCY ONE: CHOOSES AND NARROWS A TOPIC APPROPRIATE TO THE AUDIENCE AND OCCASION.					
UNSATISFACTORY = The speaker presents a topic and a focus that are not appropriate for either the purpose, time constraints, or audience.		SATISFACTORY = The speaker presents a topic and a focus that are appropriate for the purpose, time constraints, and audience.		EXCELLENT = The speaker presents a topic and a focus that are exceptionally appropriate for the purpose, time constraints, and audience.	
Topic	⇧	**Topic**	⇧	**Topic**	⇧
Fasinating topic, but not sure how it relates to topic requirements		That's an interesting topic. Thank you for sharing it.		You have a good understanding of issues that relate to your fellow man.	
Valuable topic, but this topic needed to be off the topic list		Topic is mundane		Creative approach to topic	
		Thought provoking topic		You bring up worthwhile topics and discuss them intelligently.	
		Significant topic		Fascinating topic	
		Good topic for persuasion		Timely topic selection	
		A challenging topic		Great topic selection	
		Interesting topic		That was a difficult topic, and you covered all the major points well.	
				Excellent original development of your topic	
				Difficult but important topic-handled discreetly	
				Excellent topic selection	
Focus		**Focus**		**Focus**	
Too much material		Good narrowing of topic		Topic well selected and narrowed	
Topic needs more focus		Thoughtful topic-need a tighter focus		Novel approach to a familiar	
I'm glad you get involved in your topics, but you need to	⇩	Good focus for very broad	⇩	topic	⇩

(Appendix C continues)

(Appendix C continued)

COMPETENCY TWO: COMMUNICATES THE THESIS/SPECIFIC PURPOSE IN A MANNER APPROPRIATE FOR THE AUDIENCE AND OCCASION.		
UNSATISFACTORY = The speaker does not communicate a clear and identifiable thesis/specific purpose.	SATISFACTORY = The speaker communicates a thesis/specific purpose that is adequately clear and identifiable.	EXCELLENT = The speaker communicates a thesis/specific purpose that is exceptionally clear and identifiable.
Thesis Good introduction-not sure which focus point was thesis I don't understand what point you're trying to get across Although the thesis is included on your outline, it wasn't specifically included in presentation. I wasn't clear on your thesis Need to state thesis early and with emphasis	**Thesis** Good thesis Emphasize thesis statement	**Thesis** Clear statement of thesis Concise thesis statement Speech purpose was clear and specific. Very clear thesis Your thesis was presented exceptionally clearly Very clear thesis statement
Specific Purpose Establish purpose earlier in presentation Your exact purpose is unclear The perceived purpose of speech not consistent with topic Purpose was confusing Purpose was different than assignment	**Specific Purpose** Interesting approach to topic Interesting purpose Speech purpose was accomplished. Purpose of your speech is consistent with topic	**Specific Purpose** The purpose of your speech is very appropriate for audience Your purpose was extraordinarily appropriate for audience Your purpose was conveyed extremely well

(Appendix C continues)

(Appendix C continued)

COMPETENCY THREE: PROVIDES SUPPORTING MATERIAL APPROPRIATE TO THE AUDIENCE AND OCCASION.		
UNSATISFACTORY = The speaker uses supporting material that is inappropriate in quality and variety.	SATISFACTORY = The speaker uses supporting material that is appropriate in quality and variety.	EXCELLENT = The speaker uses supporting material that is exceptional in quality and variety.

Supporting Material
  Most information in the presentation is common knowledge.
  Need to define complex terms.
  Avoid passing pictures and objects around your audience while speaking.
  Use more authoritative and current evidence.
  Need to go beyond personal opinion-find expert support
  Remember the 30/70 rule
  Specific examples would have helped greatly to tighten focus
  Supporting material a bit disjointed
  Speech aids would have helped
  Too many examples-choose "best of the best"
  Sources need to be cited
  Cite more examples to support the assertions.
	Supporting Material
	  Concrete examples of personal examples
	  Good selection of supporting material
	  Make visual aids larger.
	  Facts and figures could have been more meaningfully displayed in a chart.
	  Good information; you really know your material.
	  Good comparison of different graphs
	  Good use of narration
	  Cite the source of your statistics.
	  Effective handouts
	  Good explanations of complex material
	  Informative operational definition
	  Need more specific examples
	  Good variety of evidence used to support the thesis statement
	  Good use of credible sources
		Supporting Material
		  Clever use of cartoones
		  Thought-provoking information.
		  Visual aid was well constructed.
		  Slides were very helpful
		  Speech aid simple and effective-documentation done well
		  You have obviously researched your topic well.
		  Fascinating information
		  Excellent examples and research
		  Purpose exceptionally supported and extended your topic
		  Strong supporting material
		  Dramatic use of data
		  Excellent support and variety of support
		  Outstanding visual aids
		  Excellent supporting ma ...

(Appendix C continues)

(Appendix C continued)

COMPTENCY FOUR: USES AN ORGANIZATIONAL PATTERN APPROPRIATE TO THE TOPIC, AUDIENCE, OCCASION, AND PURPOSE.		
UNSATISFACTORY = The speaker falls to use an Introduction or conclusion and falls to provide a ressonalby clear and logical progression within and between Ideas.	SATISFACTORY = The speaker uses an appropriate Introduction and conclusion and provides a resonalby clear and logical progression within and between Ideas.	EXCELLENT = The speaker uses an exceptional Introduction and conclusion and provides an exceptionally clear and logical progression within and between Ideas.
Organizational Pattern Need work on strong introduction and transitions The conclusion specifically to main points Lacked organization Development not totally logical You need to put more effort into planning your speeches because I can't see much improvement. Organizational logic was not clear-see me and we will work through this Transitions a little bumpy disjointed Transitions would have helped to establish flow between main points You need to study the correct form to use in outlining	Organizational Pattern Interesting introduction Don't say "Thank you" at the end of the presentation. Conclusion a little abrupt Preview needs to be more direct. Paraphrase and restate the complex concepts in the presentation. Your ideas make sense and indicate careful preparation. Nice energetic introduction Good use of internal summaries A stronger preview would have reinforced the concepts of past and present The satisfaction step could use more development Clear call to action Make the call for action more	Organizational Pattern Effective use of motivated sequence Effective introduction and organization and conclusion Super job at providing information! Smooth transitions between ideas I understand. Your points are well proven. Strong arguments Your points came across well. Effective call to action Your organizational skills are a great strength for you Creative introduction Exellent attention getting device and organization Excellent introduction Astute selection of points of

(Appendix C continues)

(Appendix C continued)

COMPETENCY FIVE: USES LANGUAGE APPROPRIATE TO THE AUDIENCE AND OCCASION		
UNSATISFACTORY = The speaker uses unclear or inappropriate language.	**SATISFACTORY = The speaker uses language that is reasonably clear, vivid, and appropriate.**	**EXCELLENT = The speaker uses language that is exceptionally clear, vivid, and appropriate.**
Language The language you chose clouded your message Your language was unclear in meaning and was not vivid	**Language** You explained the material well. You are very knowledgeable of relevant terms and demonstrate a wide vocabulary. Good word choices You used some words too many times Good use of comparison Your language was reasonably vivid in conveying meaning Your language lacked any poetical expression Your language was reasonably clear in conveying meaning. The language you chose lacked creativity	**Language** Relevant use of analogy The language you chose showed a measure of creativity. Your language (word choice) made a stab at poetic expression. Effective use of repetition You drew excellent pictures with words--great metaphors The language you chose added an excellent measure of creativity The words you chose to describe things painted vivid pictures for me Your language was exceptionally clear and sensitive to nuances of meaning. The language you chose was exceptionally poetical.
Audience "You guys" is sexist and exclusionary	**Audience** Your ideas could be easily understood.	**Audience** Your terminology was well-thought out and very

(Appendix C continues)

(Appendix C continued)

COMPETENCY SIX: USES VOCAL VARIETY IN RATE, PITCH, AND INTENSITY (VOLUME) TO HEIGHTEN AND MAINTAIN INTEREST APPROPRIATE TO THE AUDIENCE AND OCCASION.		
UNSATISFACTORY = The speaker falls to use vocal variety and falls to speak in a conversational mode.	SATISFACTORY = The speaker makes acceptable use of vocal variety in a conversational mode.	EXCELLENT = The speaker makes exceptional use of vocal variety in a conversational mode.
Vocal Variety You need to work on your vocalics as a whole Your voice does not sound converstional The lack of a good pace, volume, and pitch detracted from your speech.	**Vocal Variety** Your use of good pace, volume and pitch helped your speech. You have a good conversational delivery and are easy to listen to. Good employment of vocal variety Try to use variety in your voice You have a pleasant voice	**Vocal Variety** The excellent conversational quality of your voice was very pleasing. Your extraordinary use of pace, volume, and pitch greatly impacted your speech. Your voice is very dynamic Your use of vocal variety had a superb impact on your speech.
Rate Try to slow down your rate of delivery. Slower rate of utterance needed Your fast speaking makes your listeners tense and nervous. Long pauses at the wrong places are ineffective	**Rate** Good pauses between major ideas Good use of silent pauses. Pause between major sections of the speech. Good speaking rate.	**Rate** Your vocalics were appropriately well-paced Your rate of speaking greatly enhanced the delivery of your speech. The pace of your vocalics strongly bolstered your speech The noticeable pause after your main points was effective. Your vocalics are exceptionally and appropriately

(Appendix C continued)

COMPETENCY SEVEN: USES PRONUNCIATION, GRAMMAR, AND ARTICULATION APPROPRIATE TO THE AUDIENCE AND OCCASION.		
UNSATISFACTORY = The speaker falls to use acceptable articulation, pronunciation, and grammar.	SATISFACTORY = The speaker has acceptable articulation, with few pronunciation or grammatical errors.	EXCELLENT = The speaker has exceptionally articulation, pronunciation, and grammar.

Pronunciation
  Work on pronouncing each word so that words don't run together.
  Your regional pronunciations of certain words distracted from your message.
  Your pronunciation of many words sounded incorrect.
	Pronunciation
	  Your enunciation of many words needs to be sharpened.
	  Pronounce your words clearly.
	  Good enunciation
	  Watch ending sounds of words.
	  Be secure in pronunciation of names before using them.
	  The pronunciation of most of your words was clear.
	  Your pronunciation of one or two words sounded incorrect.
		Pronunciation
		  Your pronunciation for all of the words you used sounded correct.
		  Your enunciation of words was very clear.
		  Your pronunciation of words enhanced your message.

Grammar
  Pronoun/antecede. disagreement is a flagrant error.
  Your improper grammar makes your speech confusing.
  Subject/verb disagreement is a blatant error
  Your grammatical errors made understanding your speech difficult
	Grammar
	  Do not end sentences with prepositions.
	  Your grammatical errors made understanding your speech slightly difficult.
	  Awkward sentence structure
	  Your grammar needed a little bit of cleaning up.
	  You use good grammar when you speak.
		Grammar
		  Your use of grammar was extraordinary.
		  I noticed no grammar errors in your speech
		  Grammatically speaking, your speech was extremely clear

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(Appendix C continues)

(Appendix C continued)

COMPETENCY EIGHT: USES PHYSICAL BEHAVIORS THAT SUPPORT THE VERBAL MESSAGE.		
UNSATISFACTORY = The speaker fails to use acceptable posture, gestures, facial expressions, eye contact and dress.	SATISFACTORY = The speaker demonstrates acceptable posture, gestures, facial expressions, eye contact and use of dress.	EXCELLENT = The speaker demonstrates exceptional posture, gestures, bodily movement, facial expressions, eye contact and use of dress.
Physical Behavior Don't distribute handouts until one is ready to use them. Your physical behaviors do not support your verbal message The non-verbal communication you exhibited contradicted your verbal message. Your use of supporting physical behaviors needs a lot of work	**Physical Behaviors** Good interaction with audience Place hands on lecturn Leave pencil/pen at your desk Your non-verbal communication strengthened your verbal message to some extent. Try to keep papers quiet Keep papers flat Work for a more dynamic delivery. Your use of supporting physical behaviors needs a little work Your physical behaviors supported your verbal message adequately	**Physical Behaviors** Your exceptional physical behaviors enhanced your credibility. Excellent use of nonverbal cues Your noteworthy non-verbal behaviors consistently supported your message very well.
Posture Watch posture-leaning on lecturn Avoid one-legged posture Your poor posture detracted a great deal from your speech	**Posture** Don't start speaking before assuming a speaker's position. Your posture was fine; it did not distract from your credibility as a speaker	**Posture** Your exceptional posture consistently supported your verbal message Your noteworthy posture enhanced your credibility as a

Appendix D

Copy of Sample Printout from the

Computerized Competent Speaker Evaluation System

THE COMPETENT SPEAKER SPEECH PERFORMANCE EVALUATION FORM

SPEAKER'S NAME: Chris Student
EVALUATOR'S NAME: Steve Witter

ASSIGNMENT: Sample Speech
DATE: Tue, Jul 5, 1994

EIGHT PUBLIC SPEAKING COMPETENCIES

SPEAKING PERFORMANCE RATING

	UNSAT	SAT	EXCELL
COMPETENCY ONE: Chooses and narrows a topic appropriate to the audience and occasion	0	0	9

COMMENTS:
  Excellent topic selection E
  Timely topic selection E

Chris, your topic about the use of the computer in the classroom is fantastic for this project. Where did you come up with the idea? E

	UNSAT	SAT	EXCELL
COMPETENCY TWO: Communicates the thesis/specific purpose in a manner appropriate for the audience and occasion	0	6	0

COMMENTS:
  Your audience liked your specific purpose S
  Interesting tie-in of thesis/specific purpose with the occasion S

	UNSAT	SAT	EXCELL
COMPETENCY THREE: Provides appropriate supporting material based on the audience and occasion	0	0	7

COMMENTS:
  Outstanding visual aids E
  Good use of credible sources S
  The supporting material you chose fit the occasion well. S

The visual aids of your computer screens really enhanced your speech, but they needed to be larger for everyone to see. S

	UNSAT	SAT	EXCELL
COMPETENCY FOUR: Uses an organizational pattern appropriate to topic, audience, occasion, and purpose	0	0	8

COMMENTS:
  I understand. Your points are well proven. E
  Forceful conclusion E
  The body of your speech clearly communicates your message to audience E
  The organizational development was extremely appropriate for the occasion E

(Appendix D continues)

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(Appendix D continued)

COMPETENCY FIVE: Uses language that is appropriate   0   0   9
                    to the audience and occasion

COMMENTS:
   Your terminology was well-thought out and very appropriate for this audience   E
   Your use of jargon was exceptionally tasteful for this occasion.   E
   Your language was exceptionally clear and sensitive to nuances of meaning.   E

You had a very good balance between terms that were discipline specific to your speech and terms that your
audience could understand, Chris. E

COMPETENCY SIX: Uses vocal variety in rate, pitch, and intensity   2   0   0
                 to heighten and maintain interest

COMMENTS:
   Your voice does not sound conversational.   U
   Try to slow down your rate of delivery.   U
   Your pitch sounds too high--work on a lower pitch.   U
   Speak louder and try to vary your intensity to emphasize points.   U

Chris, can you come to see me some time soon so that we can talk about some exercises that you can do to work on
the pitch of your voice? I would like to suggest some breathing exercises. You are not alone in this. I had a
student a few semesters ago who really worked on pitch and made great improvements! U

COMPETENCY SEVEN: Uses pronunciatio n, grammar, and articulation   0   5   0
                   appropriate to the designated audience

COMMENTS:
   Your grammatical errors made understanding your speech slightly difficult.   S
   Your pronunciation for all of the words you used sounded correct.   E
   Pronoun/antecedent disagreement is a flagrant error.   U
   Your misuse of grammar slightly detracted from your speech and the occasion.   S

COMPETENCY EIGHT: Uses physical behaviors that support   3   0   0
                   the verbal message

COMMENTS:
   Your physical behaviors do not support your verbal message.   U
   Don't start speaking before assuming a speaker's position.   S
   Your delivery is stiff and jerky.   U
   Try moving away from lecturn   S
   Your unacceptable facial expressions are incongruent with your verbal intent   U
   I really appreciate your effort to dress well for your speech.   E

GENERAL COMMENTS: **TOTAL SCORE OF COMPETENCIES 49**
Chris, I appreciate the increased effort that you are putting into each speech.

Appendix E

Sample Costs of Hardware Components of the

Computerized Competent Speaker Evaluation System

A very basic package for any communication

department considering the use of the Computerized

Competent Speaker Evaluation System is listed below.

Since computer hardware goes through so many

developments so quickly, the hardware that was

purchased for this experiment in 1991 has already been

outdated.   Therefore, a computer analyst at the

University of Colorado at Colorado was consulted

(Witter, 1994a). He indicated that the hardware used

in this experiment was the middle-of-the-line

Macintosh^{tm} hardware at the time that it was purched.

He suggested contemporary replacement hardware.   An

electrical engineer at the Univerisity of Colorado at

Colorado Springs was consulted about the cost of

installation (Witter, 1994b).   Approximate 1994 are

provided:

> One Macintosh Quadra 650^{tm} 8MB Hard Disk 230 CPU
> (model M2107LL/A) =

> app. $1,700.00 x 2 CPUs = $3,400.00

> (Appendix E continues)

(Appendix E continued)

One Apple^{tm} Extended Keyboard
     (model M0312) =

          app. $140.00 x 2 keyboards = $280.00

One Macintosh^{tm} Color Display
     (model M1198LL/B) =

          app. $360.00   x   2 monitors = $720.00

One Macintosh^{tm} LaserWriter Pro 630 (8MB)
     (model M5858LL/B) =

          app. $1,645.00   x 1 printer = $1,645.00

Installation of the two Macintosh^{tm}
     computers with monitors and keyboards
     and the hardware for the network
     connections =

          app. $60.00   x   1 inst. chg.= $60.00

Training of one person at $8.00/hour
     for 2 work days (16 hours) =

          app. $128.00   x   2   raters = $256.00

                    Total $6,361.00

An optional and less expensive hardware package

would consist of the following. The costs for the CPU,

(Appendix E continued)

keyboard, monitor, installation, and training would be
the same. A less expensive, but adequate printer
would complete the package.

CPU, keyboard, monitor, installation,
    and training =   app. $4,716.00

DeskWriter^{tm} 520
    (Part #CZ1718) =   app. $365.00
                                  Total $5,081.00

Note: Costs have not been established for the purchase
of the Computerized Competent Speaker Evaluation
System.

References

Witter, S. D. (1994a, August). [Interview with Michael
    Belding, computer analyst at the University of
    Colorado at Colorado Springs].

Witter, S. D. (1994b, August). [Interview with Scott
    Carter, electrical engineer at the University of
    Colorado at Colorado Springs].

Author's Note

The primary researcher of this project would like
to thank other individuals who contributed to the
development of the Computerized Competent Speaker
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Colorado to Texas to conduct those interviews. For
several hours, Kathy Ellis, Josie Mares-Dean, and Lori
Pinello-Tegtmeier sorted the comments in both of the Q
sorts. Colleen McCormick and Marcel Hunter offered
helpful suggestions as they evaluated students'
speeches in the test group with the Computerized
Competent Speaker Evaluation System. Laura Austin and
Hazel Lowe rated students' speeches in the control
group.

End Note

[1]The terminology that refers to the microcomputer as a "tool" of mankind often alludes to the prevalent assumption in academia today that mankind has evolved from the primates. The primary researcher in this study categorically disagrees with this assumption. Reason, itself, points to a blatant discrepancy evident in the comparison of the development of the microcomputer systems of the later part of the twentieth century to the evolution of the world as it is known today. This so-called "tool" of humankind, a technological wonder of this century, has been developed by intelligent and purposeful engineers. Furthermore, the Computerized Competent Speaker Evaluation System was developed by a purposeful researcher. This experimenter disagrees with the notion that the computer is a "tool" that has been developed by humankind as he/she has evolved from the primates into humankind.

Table 1

t tests of Differences in Mean Scores on Speeches for

Students Receiving Computerized Feedback as Compared to

Students Receiving Handwritten Feedback

Speech	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Final				3.0	53.6*	.004
Comp Fdbk	29	99.3	10.4			
Hdwtn Fdbk	28	91.7	8.5			

* p<.01

Table 2

t tests of Differences in Mean Scores of the Raters on
the *Final Speech* for Students Receiving Computerized
Feedback as Compared to Students Receiving Handwritten
Feedback

Racers	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Raters 1 & 2				1.8	17.5	.095
Rater 1	13	102.6	3.4			
Rater 2	16	96.6	13.2			
Raters 1 & 3				3.8	20.5**	.001
Rater 1	13	102.6	3.4			
Rater 3	14	95.4	6.3			
Raters 1 & 4				5.6	16.9***	.000
Rater 1	13	102.6	3.4			
Rater 4	14	88.1	9.1			

(Table 2 continues)

Table 2, continued

Raters	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Raters 2 & 3				.33	22.05	.747
Rater 2	16	96.6	13.2			
Rater 3	14	95.4	6.3			

Raters	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Raters 2 & 4				2.1	26.6*	.047
Rater 2	16	96.6	13.2			
Rater 4	14	88.1	9.1			
Raters 3 & 4				2.5	23.1*	.021
Rater 3	14	95.4	6.3			
Rater 4	14	88.1	9.1			
Raters 1,2 & 3,4				3.0	53.6**	.004
Raters 1,2	29	99.3	10.4			
Raters 3,4	28	91.7	8.5			

*   p<.05
**   p<.01
***   p<.001

Table 3

t Tests of Differences in Items on Posttest

Questionnaire for Students Receiving Computerized

Feedback and Students Receiving Handwritten Feedback

Questionnaire Item	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Lapsed Time (1)				4.3	46.55***	.000
Comp Fdbk	27	5.8	1.3			
Hdwtn Fdbk	27	4.0	1.8			
Evaluation by Computer Bothersome (5)				2.6	51.0*	.012
Comp Fdbk	27	2.5	1.7			
Hdwtn Fdbk	27	3.9	1.4			
Database of Comments (8)				-2.1	47.6*	.044
Comp Fdbk	27	3.7	1.7			
Hdwtn Fdbk	27	2.9	1.2			

(Table 3 continues)

Table 3, continued

Time Frame in which Feedback Given was Good (13)			-2.7	45.2*	.011
Comp Fdbk 27	5.7	1.0			
Hdwtn Fdbk 27	4.7	1.6			

Questionnaire Item	N	Mean	Std. Dev.	t value	d.f.	2-tail Prob.
Stan./Non-Stan. Comments Allow Obj./Subj. Grading (14)				-2.7	51.9**	.009
Comp Fdbk 27		4.7	1.3			
Hdwtn Fdbk 27		3.7	1.3			

* $p < .05$
** $p < .01$
*** $p < .001$

Table 4

Observed Mean and Adjusted Mean of Underlying

Constructs in Questionnaire with Grouping of Students

by Confounding Variable

Source of Variation	Observed Mean	Adjusted Mean
Personalized Comments (Database) (Items 3,8)		
Comp Fdbk	3.60	3.60
Hdwtn Fdbk	2.96	2.96
Liking for Computerized /Handwritten Feedback (Items 4,10)		
Comp Fdbk	4.88	4.89
Hdwtn Fdbk	5.31	5.31
Type of Feedback Limited Rater (Items 6,10)		
Comp Fdbk	3.50	3.51
Hdwtn Fdbk	3.69	3.68
Rater/Feedback/Time Frame=Improvement (Items 1,9,12,13)		
Comp Fdbk	4.61	4.63
Hdwtn Fdbk	3.57	3.55

Table 5

Multivariate Analysis of Covariance of Underlying

Constructs in Questionnaire by Perceived Grade in COMM

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Source of Variation	d.f.	MS	F	Level of Significance
Personalized Comments (Database) (Items 3,8)				
	1	5.34	3.10	.084
Liking for Computerized /Handwritten Feedback (Items 4,10)				
	1	2.31	1.30	.260
Type of Feedback Limited Rater (Items 6,10)				
	1	0.38	0.19	.668
Rater/Feedback/Time Frame = Improvement (Items 1,9,12,13)				
	1	14.99	5.41*	.024

* $p < .05$
** $p < .01$
*** $p < .001$