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ABSTRACT

The large section approach to speech communication instruction can be viewed as an opportunity rather than a detriment to effective communication education. Instructional strategies should be considered and applied appropriately to this ever-increasing instructional format. A number of principles may be generated which will lead to effectiveness in the large speech communication course and to student and instructor satisfaction. The following recommendations are suggestive of a broader view of the larger section than simply treating it as a lecture: (1) use active participation in learning; (2) create a supportive climate; (3) reward positive behavior; (4) select a competent communicator as the instructor; (5) utilize multiple-channel instruction; (6) provide as many opportunities for feedback as possible; and (7) build unity and cohesiveness among members of the class. (Fifty-one references are attached.) (SR)

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**Innovative Approaches To  
Teaching A Large  
Interpersonal Communication Class**

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Communication educators, like their peers in other disciplines, are discovering the role of the large section in higher education. Fewer dollars from state legislatures, tax repeals, and, in some cases, a shift toward the communication curriculum away from other less marketable curricula have resulted in communication classes with higher enrollments. A number of authors have predicted that economic conditions will encourage the further development of large college courses (i. e., Adler, 1983; Gleason, 1986; McConnell & Sosin, 1984). While alternatives such as personalized systems of instruction (Gray, Buerkel-Rothfuss, & Yerby, 1986; Seiler, 1983; Seiler & Fuss-Reineck, 1986), computer-assisted instruction (Pace, 1987), videotapes (Rosenkoetter, 1984), the use of undergraduates as teaching assistants (i. e., Baisinger, Peterson, & Spillman, 1984), and team teaching/learning (Kramer, 1986; Magnan, 1987) have been offered to solve the economic problems, as well, such approaches have not been as widely used as the large section course.

Communication courses may be taught using a cognitive approach (i. e., Cronen, Pearce, & Harris, 1979), an experiential approach (i. e., Erickson & Erickson, 1979), or some combination of the two. These approaches to teaching can all be achieved within the large section course. The large section has been used for courses in fundamentals, public speaking, interpersonal communication, intercultural communication, mass communication, persuasion, argumentation, public relations, and even small group communication (i. e.,

Beebe & Biggers, 1986; Benoit & Follert, 1986; Hazelton, 1986; Larson, 1986; Pearson, 1986; Sendlak, 1986; Warnemunde, 1986; Weaver, 1986).

#### ARGUMENTS AGAINST THE LARGE COURSE

Our communication theory and our instructional development allow us to argue against the large course. We can contend that the lecture demonstrates a now out-moded view of communication as action rather than as transaction. Both the linearity and unidirectional flow of information represent discarded views. In addition, national studies of the basic speech communication course continue to report that speech communication departments perceive class size as the number-one problem in the basic course (i. e., Gibson, Gruner, Hanna, Smythe, & Hayes, 1980; Gibson, Hanna, & Huddleston, 1985). Furthermore, Clark and Starr (1976) have recommended that instructors present cognitive material in written form and use class time for other functions.

We can also dispute the large section on the basis of student preferences. Siegfried and Fels (1979) observed that students are happier in smaller classes. In our own field, a survey was conducted to assess student and alumni perceptions of the basic course. While 77% of the students and 93% of the alumni favored a required basic course, their preferences did not include the large section lecture. When students were asked to choose among the autonomous section, the lecture/laboratory classes, and lectures only for the basic course, an overwhelming number (88%) selected the small, autonomous class. A few (19%)

preferred the lecture/laboratory, but none (0%) selected the lecture only. In addition, the optimum size for the basic course was identified as fewer than twenty (41%), between twenty and twenty-five (54%), and over twenty-six (5%) (Pearson, Nelson, & Sorenson, 1981).

Students dislike the large section basic course for a variety of reasons. Students report that they feel uninvolved and that the format is impersonal. This is a particular problem at the current time. Enrollments have decreased on some college campuses and one highly related factor may be the student's perception that she or he is unimportant in the university community. For instance, one study showed that college students who were involved in student organizations were more likely to stay in school than were those who did not belong to such groups. Large sections thus may result in lower enrollments. To the extent that students do not feel involved, they are likely to drop out. Gleason (1986) writes

Today's students are used to sitting back and taking in. They are also used to changing channels whenever they get bored. They will resist attempts to get them involved. But unless the resistance is fought, your class may be the channel that is changed. (p. 24)

Second, students report dissatisfaction with the large section because they miss the interaction between themselves and other students and between themselves and the instructor. The seating in most large lecture halls discourages interaction. The students are physically distanced from the instructor and

the straight-row, permanently placed chairs do not encourage communication to the people next to them, much less the people in front of, or behind them. The limited amount of feedback that they feel they can provide coupled with a feeling of anonymity is viewed negatively.

Third, students report that the large section is boring compared to the small section. They feel that receiving 50 minutes or an hour and twenty minutes of cognitive material is not interesting or relevant. Students are accustomed to being entertained and the very format of, and seating in, the large lecture hall suggests that they will be entertained. Oftentimes the individual assigned to teach the large section course is less than entertaining. Related to this argument is the often reported complaint of graduate assistants in beginning courses.

Instructors, too, are less than satisfied with the large communication course. Instructors sometimes report that students take little responsibility toward the subject matter, toward fellow students, or toward the instructor. Because of the impersonal nature of the course, students feel free to sleep, talk, or read the campus newspaper rather than to listen or to participate. The anonymity of the large section course provides the cover they need to behave in an irresponsible, disruptive, or rude manner.

Second, instructors observe that students in a large section are less likely to respond to questions and to participate than are students in smaller sections. Indeed, some instructors use the lack of opportunity for interaction as the rationale for

retaining small sections (Warnemunde, 1986). The size of the class mitigates against the instructors answering many student questions and students soon learn to avoid asking questions altogether. Anxiety may be higher in the large section and even students who are not normally reticent may be less likely to speak.

Finally, instructors, particularly speech communication instructors, who are accustomed to interaction with students feel that they are too removed from the students. The instructor is physically removed from the students and he or she is often perceived as psychologically removed as well. Students are less likely to interact with the instructor before or after class or in the instructor's office than are students in the small section. The large section instructor simply becomes an authority figure rather than a person with whom the student can talk.

#### LIMITATIONS OR WEAKNESSES IN THE ARGUMENTS

Arguments can be amassed from the student, the instructor, learning theory, and communication theory. Nonetheless, small sections may soon be little more than an historical recollection. In many universities, the large section is today's reality. Osterman (1982) reports that 88% of college and university classes are taught in the large section. Instead, we must learn how to cope with the large section and to make it work for us; to overcome the inherent problems that exist. As Erickson and Erickson (1979) observe, "The large lecture class, utilizing contemporary teaching materials adapted

to the expectancies of today's student, constitutes a potential learning arena where interaction, active participation, and student motivation can occur" (p. 225).

We may take some comfort in the notion that different teachers prefer different contexts and, more importantly, that different students prefer different formats (Adams & Britton, 1984; Lundstrom & Martin, 1986). McCroskey (1977), for instance, determined that high communication apprehensive students prefer large courses over small individual sections and over individualized instructional formats. In addition, while high communication apprehension correlates with lower grades in the small individual sections and poorer performance in the individualized format, no such relationship between performance and communication apprehension occurs in the large course.

Similarly, Pearson and Yoder (1980) investigated the perceptions and preferences of the high communication apprehensive student. They found that high communication apprehensive students avoided the public speaking course when an alternative interpersonal communication was available; they further perceived the public speaking course to be more threatening than the interpersonal communication course. To the extent that our real concern is the student we can be comforted in the knowledge that some students learn better in large courses (i.e., Hurt, Scott, McCroskey, 1978).

Other specific characteristics of the students, teachers, and situation impact upon student preferences. Large classes are viewed more favorably when they are taught by instructors



whom students consider to be "good" (McConnell & Sosin, 1984). Students rate the class higher when they are allowed more talk time in response to instructor's questions and when they are tested at higher cognitive levels (Lewis & Woodward, 1984). The large section is viewed more favorably when students receive higher, rather than lower, grades within them. Large classes are viewed less favorably if the subject matter was within the student's major, if the student's overall grade point average is higher, and if the student is female (McConnell & Sosin, 1984). The gender of the instructor and perceived sexism may affect student ratings (Rosenfeld & Jarrard, 1985; Rosenfeld & Jarrard, 1986). Students' previous attitudes toward large classes are generally reinforced; that is, if students had a positive attitude toward large classes in general before the term, the specific large class was seen positively while if they had negative attitudes, the class was viewed negatively (McConnell & Sosin, 1984).

In general, we have no clear conclusions about student performance as measured by our typical examination techniques. Although some studies suggest that students in small classes have higher achievement goals, others studies have showed the superiority of achievement in large sections (e.g., Adams & Britton, 1984; Berghel, 1986). McKeachie (1978) suggests that large classes are not as effective as small classes in the areas of information retention, critical thinking, and attitude change, but Siegfried and Felson showed that "performance on standardized tests is independent of class size" (p. 939).

One of the limitations that has constrained the large section course is our perception of it as a lecture-only method. Lecturing is a traditional instructional strategy which has the benefits of efficiency, of providing synthesized information, and for transmitting low-level cognitive information. On the other hand, the lecture is limited in some of the ways suggested above. The large section course can include other traditional strategies, as well, including the recitation and the small group. The recitation method would include students answering questions and responding to highly specific information. The small group would allow decision-making and problem-solving. The large section may also include more contemporary strategies. A variety of educational media now exist which are well suited for the large section. In addition, experience-based learning may be adapted for the large section (Erickson & Erickson, 1979).

#### SOLUTIONS TO THE PROBLEMS OF THE LARGE COURSE

A number of principles may be generated which will lead to effectiveness in the large speech communication course and student and instructor satisfaction. These recommendations are suggestive of a broader view of the large section than simply treating it as a lecture.

1. Use active participation in learning. People appear to learn better when they are actively involved than when they simply hear about information. (Bloom, 1976; Zayas-Baya, 1977-1978). Ask students questions. Determine how many of them know about a particular concept at the beginning of a lecture on

it to build information hunger. Ask how many of them are familiar with an example that you use to illustrate a point.

To the extent that it is possible, we need to treat the large section like the small one (Gleason, 1986). In the small section, students participate in experiential activities and written assignments. Allow students in the large section the same opportunities to participate in games, exercises, experiential work, and writing. Erickson and Erickson (1979) demonstrated that most students prefer simulation and game exercises within the large section. Have students engage in dyadic and small group work in class. Have students give speeches to small groups of peers. You may wish to have assistants help you to process such activities. Critical bibliographies and essays can be as useful in the large section as they are in the smaller section (Berquist, Tiefel, & Waggenspack, 1986).

The simple act of taking attendance causes students to feel more involved in the class. Students report that they feel more obligated to go to class when the instructor knows if they are present. Taking the attendance of a large class is difficult, however. Creative methods may be instituted to take the roll of 1000 people. Use a seating chart and have an assistant take the roll while you are lecturing; have students sign "attendance cards" and have someone take roll after class. Alternatively, individual assistants or students can take the roll of a particular section of people. If your large section includes smaller lab sections, ask the lab instructors to sit with their particular students, take roll, and interact with them.

Seating charts have other benefits, too. The less secure instructor may feel it is a benefit because it allows him or her to maintain control of the class. A more important function of the seating chart is that it allows the instructor to interact with the students. A seating chart allows you to quickly and easily call upon at least some of the students by name. When you demonstrate that you know a few of the names of people in the class, the students will generalize and believe you know all or most.

The use of quality control circles can be adopted to the large section course. Ask students to volunteer, or appoint a group of students to meet regularly with the instructor to discuss the positive and negative features of the course. The students can provide the instructor with valuable information on how to improve the course. In addition, the instructor gains more personal contact with some of the students in the class. Finally, the students feel that the instructor cares both about the content of the course and the relationships with the students.

Nelson (1986) encourages teachers of the large section to consider covert student activity as well as overt behavior. He writes,

Covert behavior is behavior that cannot be observed or seen but is nonetheless a form of active involvement. . . .It is possible that a student who appears passive may in fact be actively involved because he or she is intensely thinking about and mentally absorbing the information presented. (p. 316)

He recommends that instructors ask more questions, allow sufficient time after asking a question to allow an overt response, and to use stimulus words or phrases such as "think about," "consider," "remember," "recall," "picture in your mind," "visualize," "mentally list," "what if," and "summarize to yourself" within the lecture. These techniques encourage covert activity.

2. Create a supportive climate. Gleason (1986) offers this recommendation and provides some specific suggestions. To the extent that is possible, learn the names of some of the students in the class. Whenever you do learn a student's name, use it. Announce the names of those students who did particularly well on an assignment or on an examination. You may ask them to stand when you read their name. If a student has asked you a question outside of class, bring it up in the next class period as an example of an excellent question, name the student who posed the question, and then answer the question for the entire class. The large section course does not have to be an impersonal entity. In a variety of ways, demonstrate that you are accessible to the students and that you encourage their questions and comments.

3. Reward positive behavior. Identify the best speakers one term and encourage them to become the model speakers next term. Provide extra credit or some other form of reward for students who are selected. Insure that attendance correlates with scores on exams: determine validity and reliability of exams and

continually modify the exams, as necessary. Also run relational indices between attendance and exam score and report to the students the relationship between the two.

Not all students may benefit from the suggestions above, but everyone can receive positive reinforcement if you use the "fill in the blank" lecture outline. Distribute outlines of the lecture with missing words, phrases, percentages, etc. As you lecture, students can complete the lectures. Students gain a sense of satisfaction as they correctly complete such handouts.

4. Select a competent communicator as the instructor. The instructor in the large speech communication course should be knowledgeable, credible, and highly dynamic. The level of dynamism, forcefulness, and energy is critical to effective instruction in this context. The large section is most frequently used in the beginning course and sometimes junior faculty or graduate assistants are given the assignment. This trend has been even more pronounced in recent times (Gibson, Gruner, Hanna, Smyth, & Hayes, 1980). The large section is one place to put proven instructors rather than novices. The public speaking skills of the instructor become increasingly important as the audience becomes larger. Furthermore, it is essential that large numbers of students are provided with models of effective communication in communication courses if our courses are to maintain credibility.

The instructor should also be someone who is distinctively human. He or she should be viewed as a person, one of Mann's (1970) six relational dimensions possible for instructors.

Although highly personal disclosures are inappropriate in the classroom, some revelations of a personal nature encourage the students to see the instructor as human (e.g., Gleason, 1986; Rosenkoetter, 1984). Self-denigration and humor are also helpful. Problems occur in the most highly planned class; when they do, laugh at them. The use of the "double-take" can be especially humorous.

5. Utilize multiple-channel instruction. Individuals learn more when they can both see and hear about a concept than when they only hear about it or when they can only see it. Further, they are likely to retain more information when they are both shown and told something than when they are simply told about it or shown it (Zayas-Baya, 1977-1978). In general, people recall more information when they are exposed to two stimuli rather than to one, when the messages do not distract from each other (i.e., Gadzella and Whitehead, 1975).

In addition, different people learn best in different modes. Using multiple-channels increases the opportunity of teaching a greater number of students. Use the written "fill in the blank" for those who learn best in the written mode; television clips, movies, photographs, overheads, and other visual aids for those who learn best in the visual mode; and use a dynamic, organized oral presentation for those who listen best. Mediated forms of instruction can be highly useful; consider how technological advancements can be incorporated into your large section.

6. Provide as many opportunities for feedback as possible. Use microphones and "walk the aisles." Ask students questions

and allow them to ask you about the material. Biology professors at the University of Nebraska creatively installed automatic telephone answering machines which allowed students to ask questions at any time (Pardy & Mortensen, 1984). Although you may not have this technological sophistication, you can ask students to write down questions on the back of attendance forms in one class period and answer them at the beginning of the next period. Recall questions that students have asked in previous terms to help students think of questions. Create "participation areas" and tell students that you will only call on people in that area. Students who wish to participate can choose a seat within that area (Gleason, 1986). Hand out a limited number of evaluation forms of the lecture each time to different individuals. Use systematic evaluation at the end of the term.

7. Build unity and cohesiveness among members of the class.

Negative feelings about large courses sometimes result, particularly if the class is difficult. You may be able to offset some of this negative reaction by making the students feel involved and by building group cohesiveness. For instance, the problem that instructors in the large section format frequently experience is that they know so few students, yet so many know them. When the students and the instructors see each other on the street, the student does not know if she or he should initiate. The faculty member does not recognize the student. An agreed upon greeting like, "Speech 75" or "InCo 101" can solve the uncomfortable feelings that are created and also cause a feeling of solidarity between the two.



Other methods of creating good will in the course and positive feelings are to allow the students to entertain each other before classes begin. If the university includes people in the performing arts, invite students from the class who are in these fields to dance, sing, do a reading, portray a character, play a scene, or play an instrument in the time between classes. Alternatively, you can have a phonograph or cassette player available so students can bring their favorite music to share before class. Having excellent students from previous quarters model effective speaking in a variety of contexts--the public speech, an interview, a small group--also builds continuity and adds esprit d'corps.

The large section approach may become increasingly common in speech communication departments. Future research must continue to assess this delivery system. We acknowledge the importance of a supportive communication climate, perceptions of the teacher as immediate, homophilous, and credible, and students who are motivated to learn (i. e., Hurt, Scott, & McCroskey, 1978; Rosenfeld, 1983). We do not know to what extent such essential features of the teaching-learning process can be incorporated into the large section course.

The large section approach to speech communication can be viewed as an opportunity rather than as a detriment to effective communication education. We need to consider our instructional strategies and apply them appropriately to this ever increasing format. To the extent that we can accurately assess the variables in this particular communication context, we can effectively improve the understanding of communicative behavior and the actual interactions among our students.

## REFERENCES

- Adams, C. H. & Britton, C. R. (1984, March). Large vs. small lectures in the principles course: The dilemma of the small department. Paper presented at the meeting of the Southwestern Economics Association, Fort Worth, TX.
- Adler, K. (1983). Coping with administrative overload in large classes. Communication Education, 32, 339-341.
- Bachman, J. E. (1984). Research on class size: Implications for independent schools. Independent School Bulletin, 44, 53-58.
- Baisinger, W. H., Peterson, G. L. & Spillman, B. (1984, January). Undergraduates as colleagues: Using undergraduates as teaching assistants in the basic course. Association for Communication Administration Bulletin, 47, 60-63.
- Berghel, H. (1986, February). Computer literacy programs: The effects of the large-class setting on student performance. Collegiate Microcomputer, 4 (1), 69-81.
- Bergquist, G., Tiefel, V. & Waggenspack, B. (1986). Coping with the critical essay in a large lecture course. Communication Education, 35, 396-399.
- Bloom, B. S. (1976). Human characteristics and school learning. New York: McGraw-Hill.
- Bloom, B. S. (1984). The search for methods of group instruction as effective as one-to-one tutoring. Educational Leadership, 41, 4-17.

- Check, J. F. (1985). Communication skills in the classroom. Physical Education, 2, 76-81.
- Clark, L. B., & Starr, I. S. (1976). Secondary school teaching methods. New York: Macmillan.
- Cronen, V. E., Pearce, W. B., & Harris, L. M. (1979). The logic of the coordinated management of meaning: A rules-based approach to the first course in interpersonal communication. Communication Education, 28, 23-38.
- Ellis, L., & Mathis, D. (1985). College student learning from televised versus conventional classroom lectures: A controlled experiment. Higher Education, 14, 165-173.
- Erickson, K. V., & Erickson, M. T. (1979). Simulation and game exercises in large lecture classes. Communication Education, 28, 224-229.
- Gadzella, B. M., & Whitehead, D. A. (1975, February). Effects of auditory and visual modalities in recall of words. Perceptual and Motor Skills, 40, 255-260.
- Gibson, J. W., Gruner, C. R., Hanna, M. S., Smythe, M-J., & Hayes, M. T. (1980). The basic course in speech at U. S. colleges and universities: III. Communication Education, 29, 1-9.
- Gibson, J. W., Hanna, M. S., & Huddleston, B. M. (1985). The basic speech course at U. S. colleges and universities: IV. Communication Education, 34, 281-291.
- Gleason, M. (1986). Better communication in large courses. College Teaching, 34(1), 20-24.

- Gray, P. L., Buerkel-Rothfuss, N. L., & Yerby, J. (1986). A comparison between PSI-based and lecture-recitation formats of instruction in the introductory speech communication course. Communication Education, 35, 111-125.
- Hazelton, V. (1986, November). Teaching a large lecture public relations course. Paper presented to the Speech Communication Association, Chicago, IL.
- Hurt, H. T., Scott, M. D., & McCroskey, J. C. (1978). Communication in the classroom. Reading, MA: Addison-Wesley.
- Klein, K. (1985). The research on class size. Phi Delta Kappan, 66, 578-580.
- Krayer, K. J. (1986). Implementing team learning through participative methods in the classroom. College Student Journal, 20, 157-161.
- Larson, C. U. (1986, November). Teaching a large lecture persuasion course. Paper presented to the Speech Communication Association, Chicago, IL.
- Lewis, K. G. & Woodward, P. J. (1984, April). What really happens in large university classes? Paper presented to the meeting of the American Educational Research Association, New Orleans, LA.
- Lundstrom, K. V. & Martin, R. E. (1986). Matching college instruction to student learning style. College Student Journal, 20, 27-274.
- Magnan, S. S. (1987). Teaming teachers and modifying class size: An experiment in first-year French. The French Review, 60, 454-465.

- Mann, R. D. (1970). The college classroom. New York: John Wiley.
- McConnell, C. R. & Sosin, K. (1984). Some determinants of student attitudes toward large classes. The Journal of Economic Education, 15, 181-190.
- McCroskey, J. C. (1977). Classroom consequences of communication apprehension. Communication Education, 26, 27-33.
- McKeachie, W. J. (1978). Teaching tips (7th ed.). Lexington, MA: D. C. Heath.
- Nelson, J. (1986). Improving the lecture through active participation. College Student Journal, 20, 315-320.
- Osterman, D. N. (1982). Classroom lecture management: Increasing individual involvement and learning in the lecture style. Journal of College Science Teaching, 12 (1), 22-23.
- Pace, R. G. (1987). A commentary on computer-assisted instruction in speech communication. Western Journal of Speech Communication, 51, 136-141.
- Pardy, R. L. & Mortensen, L. (1984). The biology hot line: Use of a telephone answering device in large classes. Improving College and University Teaching, 32, 188-190.
- Pearson, J. C. (1986, November). Teaching a large lecture interpersonal communication course. Paper presented to the Speech Communication Association, Chicago, IL.
- Pearson, J. C., Nelson, P. E. & Sorenson, R. L. (1980). How students and alumni perceive the basic course. Communication Education, 1980, 29, 296-299.

- Pearson, J. C. & Yoder, D. D. (1980, Spring). Preferences and perceptions of the high communication apprehensive student toward public speaking and interpersonal communication. Iowa Journal of Speech Communication, 12, 16-24.
- Rosenfeld, L. B. (1983). Communication climate and coping mechanisms in the college classroom. Communication Education, 32, 167-174.
- Rosenfeld, L. B. & Jarrard, M. W. (1985). The effects of perceived sexism in female and male college professors on students' descriptions of classroom climate. Communication Education, 34, 205-213.
- Rosenfeld, L. B. & Jarrard, M. W. (1986). Student coping mechanisms in sexist and nonsexist professors' classes. Communication Education, 35, 157-162.
- Rosenkoetter, J. S. (1984). Teaching psychology to large classes: Videotapes, PSI and lecturing. Teaching of Psychology, 11, 85-87.
- Seiler, W. J. (1983). PSI: An attractive alternative for the basic speech communication course. Communication Education, 32, 15-25.
- Seiler, W. J. (1986). Developing the personalized system of instruction for the basic speech communication course. Communication Education, 35, 126-133.
- Semlak, W. D. (1986, November). Teaching a large lecture mass communication course. Paper presented to the Speech Communication Association, Chicago, IL.

- Siegfried, J. J. & Fels, R. (1979). Research on teaching college economics: A survey. Journal of Economic Literature, 17, 923-969.
- Warnemunde, D. E. (1986). The status of the introductory small group communication course. Communication Education, 35, 389-396.
- Weaver, II, R. L. (1986, November). Teaching a large lecture introductory speech course. Paper presented to the Speech Communication Association, Chicago, IL.
- Weaver, II, R. L., & Cotrell, H. W. (1985). Imaging can increase self concept and lecturing effectiveness. Education, 105, 264-270.
- Webb, N. W. (1980). Process outcome analysis of learning in group and individual settings. Educational Psychologist, 15, 69-83.
- Wheeler, C. (1980). Lectures don't have to be boring. Voc Ed: Journal of the American Vocational Association, 55, 31-32.
- Zayas-Baya, E. P. (1977-1978). Instructional media in the total language picture. International Journal of Instructional Media, 5, 145-150.

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