

DOCUMENT RESUME

ED 068 996

CS 500 033

AUTHOR Brooks, William D.
TITLE Innovative Instructional Strategies for Speech Communication.
PUB DATE 72
NOTE 18p.; Paper presented at the Convention of the Speech Assn. of the Eastern States (Boston, Mass., 1972)

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS College Instruction; *Communication (Thought Transfer); Course Organization; *Educational Games; *Individualized Instruction; Instructional Innovation; *Open Education; Secondary Grades; *Short Courses; Teaching Techniques
IDENTIFIERS *Speech Communication Education

ABSTRACT

The author discusses three instructional strategies--mini-courses, games and simulations, and learning environments outside the classroom--which are currently being employed in speech communication education. The three strategies embody the well established learning principles that students learn better when they: (1) know what it is they are trying to learn; (2) value the objectives toward which they are striving; (3) are actively involved rather than being passive; and (4) receive feedback and confirmation of learning. After outlining the strengths and weaknesses of the three strategies, the author emphasizes that these methods are not panaceas but require greater teacher efforts than what might be required for traditional teaching. The article concludes with a bibliography of materials available for study and implementation of these strategies. (Author/RN)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

Innovative Instructional Strategies
for Speech Communication

William D. Brooks

Professor of Communication

and

Director of Communication Education

Address:

Department of Communication

Purdue University

West Lafayette, Indiana 47907

PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED
BY William D. Brooks

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE U.S. OFFICE
OF EDUCATION. FURTHER REPRODUCTION
OUTSIDE THE ERIC SYSTEM REQUIRES PER-
MISSION OF THE COPYRIGHT OWNER

ED 068996

540 053

ERIC
Full Text Provided by ERIC

The number of critics of American education increases daily; and weekly another best-seller, attacking schools and teaching, appears in the book stores. Paul Goodman, John Holt, Herbert Kohl, James Herndon, Irving Kozal, Judson Jerome, Alvin Toffler, and others have called attention to the failure of schools, the disenchantment of teachers, and the stifling impact of school on vast numbers of young people. Too much of the literature of the past half dozen years has been bitterly critical rather than constructive. Many critics have written off American schools, entirely and have proposed that education be built anew with innovative procedures that replace traditional education. Too often, the proposed innovations are considerably less effective than the "glowing" claims indicate, and, consequently, some of us who are daily about the job of teaching have become a little "gun-shy" of innovations and alternative approaches to instruction. Therefore, let me state clearly that it is not the purpose of this article to indite traditional instruction in speech communication as a failure, or to propose alternative instructional strategies that are "foolproof" panaceas. Rather, it is the purpose of this article to present three selected innovative instructional strategies that speech communication teachers may want to add to their repertory of available strategies. These three alternative instructional strategies are selected because they constitute strong new trends in speech communication education as evidenced by their widespread use in secondary schools and colleges. These three rapidly growing innovative instructional strategies in communication are: (1) mini-courses, (2) games and simulation, and (3) the utilization of learning environments outside the classroom. All three represent recent major thrusts in education generally, but they have been especially adaptable to communication

education.

During the 1971-1972 school year more than thirty high schools in Indiana used mini-courses, modules, or learning activity packages in communication. I have received copies of mini-courses or information about existant mini-courses from high schools in Washington, New Jersey, California, Oklahoma, Illinois, Florida and Indiana; and I have talked with a number of high school and college speech teachers in the seven states in which I conducted workshops and seminars or delivered papers during the past year, who are using modules or mini-courses in their speech classes. An even greater number of teachers have asked for information on mini-courses because they wanted to consider using them. The same situation exists for games and simulation and, to a lesser extent, for learning activities outside the classroom. Today hundreds of students from coast to coast in high schools and junior colleges are using these strategies to learn about speech communication and to acquire new skills and understandings. Why are students responding favorably to these strategies in the study of communication?

The Strengths of These Alternative Strategies for Learning

Four reasonably well-established principles of learning seem to be embodied in these instructional strategies: (1) Students learn better when they know what it is they are trying to learn; (2) Students learn better when they value the objectives toward which they are striving; (3) Students learn better when they are actively involved rather than being passive; and (4) Students learn better when there is feedback and confirmation of learning.

1. Students learn better when they know what they are trying to learn.

What a difference it made in the attitudes of our son and his classmates in a high school English class when a new, young teacher began the practice of handing out, each Monday morning, the objectives for that week and the activities

that would be used in order to achieve those objectives. It was the first time in four years of English that our son and his classmates had known with specificity where they were headed each week. The change in student attitude and achievement came as no surprise to those familiar with the literature, for there is an abundance of reported research verifying the principle.¹ Whether the objectives are performance, criterion-referenced, 2-part, 3-part, 5-part, or just reasonably clear general objectives, if they communicate clearly to the student what is to be learned, other factors being equal, learning will be enhanced.

2. Students learn better when they value highly what is to be learned.

When students are excited about the objectives and learning activities of the communication unit they are studying, when they perceive the objectives as important to their lives, when they place a high value on the expected outcomes and desire to achieve them, then learning is facilitated. It is not unusual that students having a strong desire to learn do learn despite poor teaching,² poor facilities, and any number of other handicaps. Teachers, by being exemplary models with respect to the communication objectives of the course or unit, can exert an attractive and compelling persuasion as regards the worth of objectives. As teachers freely and openly reveal their enthusiasm, attitudes and valuing of the objectives through their verbal and nonverbal behavior students more easily come to value the objectives, also.

Beyond what the teacher can do directly and indirectly, there is the inherent value of the objective simply because of what it is--a value perceived immediately by students as critically important to their lives. When objectives are valued easily and quickly by students, learning is facilitated.

3. Students learn better when they are actively involved in the learning process.³ Learners need to be active, not passive, They need to

participate rather than being outside the process. We see this principle coming into its own more and more as the old model of lecture-recite-test gives way to student-centered learning, to multiple strategies, to a variety of experiences, to creative and unique activities for learning. Discovery learning, indirect teaching, student-selected objectives and student-designed instructional strategies are practices that utilize the principle of active involvement.

4. Students learn better when there is adequate feedback and confirmation of learning. ⁴ Educators agree that prompt feedback is a valuable reinforcement of learning. A learner needs to know where he is with reference to where he wants to be. Understanding and skills, once acquired, need to be confirmed by the learner. Students need to know that they really do understand, that they really can perform in an exemplary manner, that they have acquired a new ability or behavior. Such confirmation is necessary to efficient retention and successful practical application of the knowledge and skills obtained. Hence, an area of major concern and high priority in speech communication today, as in all education, is evaluation and feedback. The concern is with evaluation for valid assessment of learning and for reliable feedback and confirmation to the learner rather than just for administrative decisions.

Let us now consider each of the three alternative instructional strategies in terms of the four principles just discussed.

Mini-Courses. Mini-courses in speech communication, sometimes called Learning Activity Packages, Modules, and Unipacs are in use in several high schools across the nation. With few exceptions, the evaluation of mini-courses by students and teachers has been high. Those mini-courses with which I am familiar, that have been judged to be successful by students and teachers,

have some common characteristics. Similarly, those mini-courses that have been disappointing to students and teachers have some other characteristics in common.

The mini-courses used so effectively in Danville, Indiana; Harrison High School, West Lafayette, Indiana; Sarmamish High School, Bellview, Washington; Nova High School, Ft. Lauderdale, Florida; Evanston High School, Evanston, Illinois; the Duluth Schools; San Carlos, California; and Tulsa, Oklahoma, Schools; as well as the modules piloted by Purdue student-teachers in several Indiana high schools, have the following characteristics in common: (1) clearly stated objectives (usually behavioral objectives); (2) objectives written by a professional (teacher, mini-course author, or instructional team), rather than by students; (3) use of the mini-courses as individualized learning packages rather than as a group strategy in which all students are on the same mini-course at the same time; (4) utilization of a variety of instructional strategies and learning tasks with 90% or more of the activities having been developed by (teacher, course author, or instructional team), rather than by students; (5) requirement of the completion of certain specified learning activities while allowing the student to select from the remaining activities those he wishes to use to fulfill the total number of activities to be completed for the course; and (6) clearly specified evaluation procedures.

Mini-courses with these characteristics seem to possess strengths that enhance learning. The strengths are the learning principles identified earlier. These mini-courses have clearly stated objectives (often criterion-referenced objectives); they are student-centered in that the student selects the mini-course he wishes to study as well as some of the strategies or activities he wants to use; each mini-course utilizes a variety of instructional strategies, all of which require the learner to be actively involved; and finally evaluation

procedures are clearly identified and feedback provided to the learner. These are the strengths of effective mini-courses.

The ineffective mini-courses, with which I am familiar, seem to be characterized by an absence of one or all of the strengths just identified. For example, the approach to mini-course instruction in which each student is given the last two or three weeks of the semester to "study whatever he or she wants to study", to construct his own reading list, or to "do his own thing", has not worked well. A few students may have the necessary skills to construct their own mini-courses, but most students do not have these skills. When teachers use mini-courses as a way to abrogate their teaching responsibilities, achievement and learning suffer accordingly. Teachers cannot escape from teaching by using mini-courses. Rather, they must be prepared to engage in even more professional teaching and to work even harder than they might in the traditional lecture-recite-test situation.

Another type of mini-course that has not received favorably response in those cases with which I am familiar is the module that relies almost entirely on reading and then filling in blanks. These semi-programmed packages do not make use of the variety of materials and media that are activity-oriented instructional strategies and they are short on meaningful performance and skill development.

At the opposite end of the theory-application continuum are those mini-courses that are shallow in their teaching of concepts, principles and understanding. These mini-courses have given rise to criticism such as Heidelberg's.⁷ Not only does Heidelberg make the point that high school students are unable to construct their own courses, but they are also unable to select cafeteria-style those modules, or projects within modules that they need in order to have a good grasp of the course in which they are enrolled.



Heidelberg states: "Educators, in their frustration and confusion about how to prepare youth for our frustrating and confusing world, are releasing too much of their guidance into hands too young to know in which way they want to steer...many school systems are dropping some required secondary school subjects in an effort to provide a cafeteria table of relevant delectables guaranteed to tickle the mental palates of even the most apathetic attenders." ⁸ In the two high schools with which I am familiar in which mini-courses were used for the entire year and in which no specific mini-courses were required, the same criticism was made by both teachers--namely, that certain basic units and fundamental skills were ignored by too many students. If mini-courses are to be used for the entire semester or for the entire communication course, then certain basic or foundation modules ought to be required. Similarly, within any given mini-course certain projects may need to be required.

Games and Simulation. As with mini-courses, games and simulation are used in communication classrooms in high schools and junior colleges with increasing frequency. Again, as with mini-courses, the learning principles previously identified are in operation in games and simulation.

Games are goal-directed, and simulations have as their reason for being a correspondence to the real world. Not only are games and simulation strategies goal-directed, but they require active participation. Students are the cause of events, rather than passive acted-upon creatures. As Gordon has emphasized: "People usually wish to act, to participate, to make things happen--in preference to being spectators." ⁹ It is not difficult to understand how students in our complex and fast-paced world come to view themselves as powerless and incapable of affecting their environment. Little wonder, too, that this sense of powerlessness leads to apathy, defensiveness, and to defeatist attitudes. Simulation and games can break this pattern. Students see in their causing of events in the hypothetical

game or simulation situation how influence can be exerted. Through these strategies students gain a sense of participatory influence. They are actively engaged in the process rather than being out of it.

In addition to being goal-directed, and to relying on student participation, games and simulation utilize prompt feedback and clear evaluation. For each of his decisions, the student fares well or poorly. He knows immediately whether his decision or action has been effective or ineffective, whether he is winning or losing. It is not necessary for him to wait until next week, next month, until the end of the course, or until the final examination to receive an evaluation of his behavior. Rather, the feedback and subsequent confirmation or nonconfirmation is immediate. In too many classroom activities, students find that feedback is slow or perhaps unavailable, incomplete, or artificial. Artificial feedback is rarely explained, but in a game the feedback is real, natural, and judged along the same lines as were the student's actions and decisions.

The chief weaknesses in games have been identified as: (1) overuse, (2) emotional arousal beyond what the student can handle, (3) the necessity for some students to take roles society does not condone, and (4) the inability of students to translate learning outcomes from the game to real-life application. 10

Overuse of games, just as overuse of almost any instructional strategy, turns the strategy into a fad and reduces its effectiveness. Moreover, games and role-playing accomplish some objectives and tasks (objectives concerned with affect and process, for example) better than other objectives and tasks (factual learning, for example). Consequently, teachers need to discriminate wisely when selecting objectives to be achieved through the use of games and simulation. Gordon has written to this point specifically and has identified those objectives in speech for which games might be used.

11

Some role-playing situations and some games may create intense involvement and it is possible that for a given student involvement and emotional arousal can become too intense. Ordinarily, students understand that "its only a game" and the protection afforded in the hypothetical situation operates well; but when the anger, frustration, or other emotional arousal over-rides the "game" or "role-playing", then the strategy has become too motivating.

A third possible problem associated with some games is that a student may be required by the rules of the game(or in the role-playing situations by the prescribed role) to engage in behavior that society does not condone. Is it ethical to require a person to engage in behavior explicitly discouraged and condemned by society? Does a game requiring such behavior teach that behavior? Proponents of games claim the answer to both questions is no, ¹² and little or no evidence of these harms has been reported in our literature. Nevertheless, the teacher utilizing games and simulation needs to answer the question to his own satisfaction.

Finally, a possible weakness in the use of games is failure to translate the learning into behavior in the real world. The effective teacher, as manager of the learning situation, will move freely from game to discussion of theory, from game to observation and analysis of the real-world counterpart, and from game to application by the student in other situations as seems necessary. When the teacher abdicates his role, however, and allows the class to "just play games" without attention to expected outcomes, then achievement may suffer accordingly.

The communication teacher in high school or college who desires to know more about games and simulation has a wealth of material available. The literature on games has been reviewed by Cherryholmes, Boocock and Schild, Gordon, and Gordon. ¹³ The sociological and psychological dimensions of games as real-life phenomena have been discussed by Rapoport and Berne. ¹⁴ For relatively



thorough treatments of game theory, one could read Chapman or Kahn and Mann.¹⁵
 Games as applied to education generally have been discussed by Boocock and
 Schild, Beck, Bogdanoff, and Klietsch and Dodge.¹⁶ For discussions of games
 in communication one can read Bostrum, Kline, and Gordon.¹⁷ Games identified
 as appropriate for communication by one or more of the above writers include:
Password, Word Power, Propaganda, Democracy, Verdict II, Wff 'N Proof, Quad,
The Cities Game, Public Opinion, Nine Men Plus, Insight, Prediction, In-quest,
Cubic and Hang-up.¹⁸

Learning Outside the Classroom. Today there is a considerable trend
 toward making the community and its institutions a part of the educational
 process in a direct way. Rather than limiting instruction to fact-centered,
 classroom-centered, and teacher-centered approaches, we are seeing a shift
 toward student-centered, experience-centered, and problem-centered instruction.
 As teachers seek to provide valid experiences and to make learning problem-
 centered, instruction tends to occur both inside and outside of classrooms.
 Increasingly, schools are accepting the strategy of going into the real world
 to learn about the real world. Margaret Mead has stated: "One of the most
 important aspects of education today is the need for an open system--one that
 lets people go out to do other things and come back in again."¹⁹ Although
 she was not referring to secondary school speech communication classrooms,
 the principle applies to communication instruction as well as to all instruction
 at any level.

It is unfortunate that many teachers and even more administrators
 seem to believe that for students to learn they must be in the classroom,
 seated in rows, and quietly listening. Students, however, often learn more
 efficiently when they actively engage in real actions involving people and
 tangible objects. Thanks to Piaget, we know that a learner's actions on
 things are what facilitate his mental activity or thinking; and, thus,

11

a combination of in-class and out-of-class learning activities may well be the most efficient strategy for learning. Apparently, this procedure is widely practiced in elementary schools, secondary schools, and schools of higher education in China. Whitehead has written: "At every level of Chinese education heavy emphasis is placed on the application of knowledge on the farm and in the workshop, the laboratory, and the factory... In Chen Hsien Primary school, for example, the most innovative procedure is its workshops--beginning at age 11, children spend a half day a week producing items such as bus steps, oil filters, carburetors, and radio sets. They run machine presses, electroplate, etc...Nearby factories send workmen to the schools to teach students. Students leave the schools periodically to build houses, dig fish ponds, and sink wells. The combination of classroom and outside-the-classroom learning is characteristic of all elementary and secondary schools in China." 20

21

At Purdue University, as well as at several other universities, credit for work experience can be given and new proposals for expanding out-of-school credit are being considered. Provost Robinson recently stated: "There is a strong possibility that college attendance in the future is going to be less a matter of going to a specific institution on a fulltime basis for four consecutive years, and more a process of mixing some years of such attendance with work experience, part-time study, evening study, television and radio course offerings, and the like. This may be a very desirable trend, as it will make education more of a lifelong process. It is incumbent upon universities to develop programs and alternatives which will make it possible for students to pursue these less traditional paths to learning." 22

Recent impetus for outside-of-classroom learning has come also from the Carnegie Corporation and the Ford Foundation who have made grants to spark American versions of the "lighthouse effort" in England, the Open University. 23

A number of examples of learning activities outside classrooms and even entire learning programs outside classrooms, are already underway in several American school systems.²⁴ High schools in Philadelphia, Seattle, and Nankato, for example, are making use of various learning sites and activities²⁵ in the community.

In speech communication, teachers in high schools and colleges are utilizing outside-the-classroom instruction as a part of their credit courses. Jean Chamber's outstanding persuasion unit in her speech classes at Roosevelt High School in Gary, Indiana made use of persons and organizations in the community. Students observed, analyzed, and participated in "real persuasion" in the city of Gary. Mayor Hatcher and others in leadership positions in city government and various organizations in the community were most cooperative and supportive of the students' study of the process of persuasion in a real setting.

In any number of speech classrooms in high schools and colleges, students have studied problem-solving discussion by visiting real groups outside the classroom and observing them in action or they have participated directly with outside groups; and, frequently, classes have selected real problems in their school or community and have proposed specific solutions and won acceptance and implementation of their plans for solving the problems. In persuasion, interpersonal communication, radio and television, public address, and other courses, imaginative teachers have taken advantage of learning opportunities outside the classroom.

As with learning modules and games and simulation, the principles identified early in this article are very much in operation in these outside-the-classroom activities. The objective of the activity in the real world is quite clear; the learning in these situations is problem-centered and, usually, easily seen by students as valid and important. Students are actively involved; and,

feedback and confirmation of successful decisions and actions are obvious natural consequents. Considerable time and effort on the part of teachers are required for the effective use of learning opportunities outside the classroom. As Martha Ellison has pointed out, open education is not for the timid or lazy teacher. ²⁶ Open education requires the teacher to use prudence in the selection of activities, to make good pedagogical decisions as to ways of integrating outside-of-classroom activities with in-class instruction, and to operate effectively as an administrator and human relations expert as he wins support and cooperation from those persons in the organizations and in the community with whom students need to work.

Mini-courses, games or simulation, and outside-the-classroom learning activities---all require time, energy, understanding, and ability on the part of the teacher beyond what might be required for traditional teaching. These alternative strategies are not panaceas, nor is any one of them an "easy way" to teach, but they are rapidly growing trends because when they are managed well, they are effective alternative instructional strategies.

William D. Brooks

Purdue University

Notes

1

For example, see W. James Popham, "The Instructional Objective Exchange: New Support for Criterion-Referenced Instruction," Phi Delta Kappan, LIII (November, 1970), pp. 174-175; John C. Flanagan, Robert F. Mager, and William M. Shanner, Behavioral Objectives: A Guide to Individualized Learning, (Palo Alto, California, 1971); Arthur M. Cohen, Objectives for College Courses, (Beverly Hills, California, 1970); Eva L. Baker, "Effects on Student Achievement of Behavioral or Nonbehavioral Objectives," The Journal of Experimental Education, XXXVII (Summer, 1969), pp.5-8; J.R. Jenkins and S.L. Deno, "Influence of Knowledge and Type of Objectives on Subject Matter Learning," Journal of Educational Psychology, LXII (February, 1971), pp. 67-70; George L. Geis, Behavioral Objectives: A Selected Bibliography and Brief Review (Stanford, California, 1972); J.P. Blaney and D. McKie, "Knowledge of Conference Objectives and Effect on Learning," Adult Education Journal XIX (1969), pp.98-105; Gus T. Dalis, "Effect of Precise Objectives Upon Student Achievement in Health Education", The Journal of Experimental Education, XXXIX (Winter, 1970), pp.20-23; and John D. McNeil, "Concomitants of Using Behavioral Objectives in the Assessment of Teacher Effectiveness," The Journal of Experimental Education, XXXVI (Fall, 1967), pp. 69-74.

2

For a thorough discussion of achievement motivation, see David O. McClelland, J.W. Atkinson, and R.A. Clark, The Achievement Motive, (New York, 1953); Robert F. Biehler, Psychology Applied to Teaching, (Boston, 1971); or Ernest R. Hilgard, "Motivation in Learning Theory", in Psychology: A Study of a Science (Vol. V), edited by S. Koch, (New York, 1963), pp. 253-283.

3

For a discussion of the benefits of student participation strategies, see John P. De Cecco, The Psychology of Learning and Instruction: Educational Psychology, (Englewood Cliffs, New Jersey, 1968). Robert M. Gagné and William J. Gephart, Learning Research and School Subjects, (Itasca, Illinois, 1968);

or Jerome S. Bruner, Toward a Theory of Instruction, (Cambridge, Massachusetts, 1966).

⁴ For example, see: Alice K. Gordon, Games for Growth, (Palo Alto, California, 1970), p. 21.

⁵ See, for example: Patricia A. Macklin, "Ohio State's Media Lab", Audiovisual Instruction, XII (May, 1967), pp. 484-487; and David H. Curl, "Western Michigan University Audio-Tutorial", Audiovisual Instruction, XII (May, 1967), p.480.

⁶ Others who have stressed the necessity of these elements in self-instructional packages include: Weisgerber, op. cit. p.7; Lila Jean York, Team Teaching, Modules 1-7, (Dallas, Texas, 1971); and John C. Flanagan, "The Educational Program in the Schools of the Seventies," Education, XC (February-March, 1970), pp.207-212.

⁷ Richard L. Heidelberg, "The Cafeteria Concept: Curricular Malnutrition", Phi Delta Kappan, LIII (November, 1971), pp. 174-175.

⁸ Ibid., p.174.

⁹ Gordon, op. cit., p.20.

¹⁰ Ibid., pp.32-38.

¹¹ William I. Gordon, "Academic Games in the Speech Curriculum," The Central States Speech Journal, XX (Winter, 1969), pp. 269-279.

¹² Gordon, op. cit., p.34.

¹³ Cleo H. Cherryholmes, "Some Current Research on the Effectiveness of Educational Simulation: Implications for Alternative Strategies", American Behavioral Scientist, XI (October, 1966), pp.4-8; Sarane S. Boocock and E.O. Schild, (eds.) Simulation Games in Learning, (Beverly Hills, California, 1968); William I. Gordon, "Academic Games in the Speech Curriculum", Central States Speech Journal, XX (Winter, 1969), pp.269-279; and Alice K. Gordon, Games

for Growth, (Palo Alto, California, 1970).

14

Anatol Rapoport, Fights, Games and Debates, (Ann Arbor, 1960); and Eric Forno, Games People Play, (New York, 1968).

15

Laura Hill Chapman, Preliminary Work: An Educational Theory based on Game Theory, (Columbus, Ohio); and Herman Kahn and Irwin Mann, Game Theory, (Santa Monica, California, 1957).

16

Boocock and Schildt, op. cit.: Abt Associates, Inc., Game Learning and Disadvantaged Groups, (Cambridge, Massachusetts, 1965; Isabel Beck, Simulation: Designs for Involvement, (Los Angeles, California, 1968); Bogdanoff, et al., Simulation: An Introduction to a New Technology, (Santa Monica, California, 1960); Ronald G. Klietsch and Dorothy Dodge, An Introduction to Learning Games and Instructional Simulations: Curriculum Guidelines, (Newport, Minnesota, 1968); and Western Behavioral Sciences Institute, A Study of Educational Uses of Simulation, (La Jolla, California, 1966).

17

Robert N. Eostrom, "Game Theory in Communication Research", Journal of Communication, XX (1968), pp. 369-388; John A. Kline, "Communication Games: A Plea for Isomorphism with Theory", Western Speech, XXXVI (1972), pp. 181-186; William I. Gorden, "Academic Games in the Speech Curriculum", The Central States Speech Journal, XX (1969), pp. 269-279; and William I. Gorden, "Rhetoric-Communication Concepts Illustrated by Several Academic Games: Metaphor and Mystique at Play", Today's Speech, XIX (Summer, 1971), pp. 27-33.

18

Password (Springfield, Massachusetts: Milton Bradley Co., 1963); Word Power (Baltimore, Maryland: Avalon Hill Co., 1967); Robert W. Allen and Lorne Greene, Propaganda (New Haven, Connecticut: Autotebe Instructional Materials, 1966); James S. Coleman, Democracy (Washington, D.C.: National 4-H Club Foundation, 1966); Verdict II, (Baltimore, Maryland: Avalon Hill Co., 1961); Layman E. Allen, Wff 'N Proof (Wff 'N Proof, New Haven, Connecticut);

Quad (Catonsville, Maryland: Gangler-Gentry Co.); "The Cities Game", Psychology Today, (August, 1968); "Public Opinion Game", Public Opinion Quarterly, (Summer, 1961); William I. Gordon, Nine Men Plus (Dubuque, Iowa: Wm. C. Brown Publishers, 1971); Insight (Boston: Games Research Inc.); Richard Goodman and William I. Gordon, Prediction; Robert Allen, Leo Klobber, and R. Lawrence Liss, In-quest (Fort Lauderdale: International Learning Corp.); Cubic (Catonsville, Maryland: Gangler-Gentry Co.); and Hang-up (Boston: Unitarian Universalists Association, 1969).

19

Margaret Mead, "Margaret Mead Views Education Today", The Education Digest, XXXVII (December, 1971), p.5.

20

Rhea M. Whitehead, "How the Young Are Taught in Mao's China," Saturday Review, (March 4, 1972), pp. 40-45.

21

For example, see: Robert A. Weisgerber, Trends, Issues and Activities in Individualized Learning, (Palo Alto, California, 1972).

22

H.F. Robinson, Report to the Indiana Commission for Higher Education, September 13, 1972.

23

Weisgerber, op. cit., p.9.

24

Bernadette Doran, "The External Degree Programs: Credit Without Classes," College and University Business, LI (October, 1971), pp. 58-60; and the American Council on Education, "External Degrees: An Initial Report," American Council on Education Special Report, (February 26, 1971).

25

Weisgerber, op. cit., p. 7.

26

Martha Ellison, "Open Education...Not For the Tired or the Timid", Kentucky School Journal, (February, 1972), pp. 17-20.