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An Integrated Approach to Teaching Effectiveness

This paper takes at least four basic positions which should be made explicit at the outset. First, the teacher is the key figure in a teaching-learning situation. (This may sound like a cliché.) A corollary of this position is that all other contingencies of the educational enterprise, such as para-professionals, clerical and custodial staff, administration, instructional materials and educational technology, and the like, are *peripheral* in the sense that their fundamental role is to *facilitate* the emergence of pupils' learning. The second position is that the goals of education are essentially similar, if not the same, for all of us engaged in education. To state this position broadly and bluntly, the goal of our education in the ultimate analysis is to promote the well-being of mankind through the provision of quality education. The third position is that teaching effectiveness can be identified and determined *only* on the basis of growth in pupils' knowledge, skills, and action patterns. The fourth position which is quite obvious from the title of this paper is that classroom discourse is a means for determining teaching effectiveness.

Subsequent to the identification of basic positions, it appears legitimate and appropriate for us to take a brief look at the goals of education as a point of departure, before we embark upon some of the theoretical schemes for discerning teaching effectiveness, and some of the findings, both affirmative and negative, in this crucial area.

It is almost a platitude to state that the problem of the goal(s) of education has beset us since time immemorial. It is frequently said that the basic goal of education is to create an "educated" man, "to pass on the cultural heritage," "to develop good citizens in a democracy," "to facilitate the process of self actualization," and so forth. However, it is not the intent here to compile a nomenclature of educational goals, nor is it planned to exhaust them. What is intended here is to mention some of the views recently expressed on educational goals by some of the distinguished scholars, since educational goals directly hinge upon the second position of this paper. Another pertinent point is that these broadly conceived educational goals ought to serve as a kind of guidepost

for instructional objectives which should constitute the nuclei of any classroom discourse.

Carl Rogers states:

The goal of education must be to develop individuals who are open to change, who are flexible and adaptive, who have *learned how to learn*, and are thus able to learn continuously. Only such persons can constructively meet the perplexities of a world in which problems spawn much faster than their answers. The goal of education must be to develop a society in which people can live more comfortably with *change* than with *rigidity*. In the coming world the capacity to face the new appropriately is more important than the ability to know and repeat the old.¹

John W. Gardner writes:

[These are] the great basic goals of our educational system: to foster individual fulfillment and to nurture the free rational and responsible men and women without whom our kind of society cannot endure. Our schools must prepare *all* young people, whatever their talents, for the serious business of being free men and women.²

Writing on the goals of education, Sterling McMurrin contends:

The specific task of education must be identified within the context of the primary function of education which is the achievement and dissemination of knowledge, the cultivation of the intellect, and induction into the uses of reason. Only when the schools' energies are centered on these intellectual purposes will it also contribute effectively to the artistic, moral, and spiritual life of the individual and society.³

In his widely read book, *The Process of Education*, Bruner states:

We may take as perhaps the most general objective of education that it cultivate excellence; but it should be clear in what sense this phrase is used. It here refers not only to schooling the better student but also in helping each student achieve his optimum intellectual development One thing seems clear: if all students are helped to the full utilization of their intellectual powers, we will have a better chance of surviving as a democracy in an age of enormous technological and social complexity.⁴

John Goodlad writes quite emphatically on the goals of education:

The central aim of education, then, is to develop rational men who do not sin against themselves and their kind. The rational man not only is *committed* to the rich fruits of inquiry but also is prepared to act and, indeed, acts upon insight rendered compelling by commitment. He knows, as perhaps the most vital ingredient of his rationality, that only through action following understanding and commitment does man forge the links in the claims of his own humanity and of mankind's immortality.⁵

¹Rogers, C. R., "A Plan for Self-directed Change in an Educational System." *Educational Leadership*, Vol. 24 (May, 1967), p. 717.

²Gardner, J. W., *Goals for Americans: The Report of the President's Commission on National Goals* (Englewood Cliffs, N.J.: Prentice-Hall, 1960), p. 100.

³McMurrin, S. M., Address delivered before the first general session of the Conference on the Ideals of American Freedom and International Dimensions of Education, Washington, D.C., March 1962.

⁴Bruner, J. S., *The Process of Education* (Cambridge, Mass., Harvard University Press, 1962), pp. 9-10.

⁵Goodlad, J. I., *Some Propositions in Search of Schools* (Washington, D.C.; N.E.A. Department of Elementary School Principals, 1962), pp. 8-9.

J. Maritain states the goal of education:

The primary aim of education in the broadest sense of the word is . . . to help a child of man to attain his full formation or his completeness as a man.⁶

These illustrative excerpts from writers of varied interests and preference depict a reasonable cross-section of disciplines or training, from psychotherapist, psychologist, educator, educationist, philosopher to theologian. However, they share at least three bases, although they may vary in degrees, but not in kind. First, they have faith in intelligence as the means to solving man-made problems. Second, they are confident of the rationality of mankind. Third, they have high regard for individual worth and human dignity, as echoed in their statements in unison.

Statements of this nature in terms of the relationship between men can perhaps be best summarized by Martin Buber's "I - Thou" versus "I - It" relationships. In the former, the relationship is genuine with respect; people really *meet* people as they are. In the latter, albeit the relationship is not wrong, it is not sufficient for the *meeting* between people. It is clear that the position taken here is the "I - Thou" relationship, and only through "I - Thou" relationship can teaching effectiveness as well as the improvement in classroom instruction be meaningfully discussed and worthily explored.

The problem of determining teaching effectiveness as a practical concern has besieged mankind perhaps ever since the beginning of social expectation that the young shall assume responsibilities as adults. Nonetheless, both the theoretical-deductive and the empirical-inductive approaches to this problem, in a sense, did not formally come into being until three score or so of years ago. A. S. Barr and his associates, probably one of the pioneering teams probing the problem of teaching effectiveness, stated after they had wrestled with it for four decades:

The simple fact of the matter is that, after 40 years of research on teacher effectiveness during which a vast number of studies have been carried out, one can point to few outcomes that a superintendent of schools can safely employ in hiring a teacher or granting him tenure, that an agency can employ in certifying teachers or that a teacher education faculty can employ in planning or improving education programs.⁷

That was one roughly estimated picture of studies on teaching effectiveness in the early 50's. There was little doubt that educational researchers fully realized the complexity as well as the intricacy of the instructional process. Meanwhile, they were also fully cognizant of its essentiality to mankind, which seemed to have prompted them to explore and to investigate unremittingly this area throughout the years.

⁶Maritain, J., "Thomist Views on Education," in *Modern Philosophies and Education*, 54th Yearbook of the National Society of Education, Part I (Chicago: University of Chicago Press, 1955), P. 62.

⁷Barr, A. S., et al., "Second Report on the Committee on Criteria of Teacher Effectiveness," *Journal of Educational Research* 46 (1953), p. 657.

What follows will be a brief presentation on some studies which, in the writer's judgment, have more to proffer than others, if we look at them from both practical (convenient to apply) and theoretical (internal structure of the scheme) points of view. Another relevant factor is that a choice has to be made among a myriad of schemes on the basis of two criteria just mentioned.

Anderson conceived of the idea that the classroom climate could be delineated in terms of the teacher's dominative or integrative acts. He postulated two major ideas. One was the growth circle which, according to him, means that a socially intergrative behavior in one person tends to elicit socially integrative behavior in others. The other was the "vicious" circle: domination in one person has a tendency to induce domination or resistance in others. With these two hypotheses in mind and after a good many years of research, he offered the following conclusions:

Integrative behavior in one child induced integrative behavior in the companion, domination incited domination, integration and domination were psychologically different.

The data confirmed the hypothesis that integration in the teacher induces integrative behavior in the child. Moreover, children with the more dominating teacher showed significantly high frequencies of non-conforming behavior, directly supporting the hypothesis that domination incites resistance. The behavior of the children also supported the further hypothesis that severe domination produces not only resistance but submission and atrophy.⁸

In comparison with Anderson's study which was basically concerned with the affective aspect of teaching effectiveness, Withall appeared to approach it by dealing with the cognitive aspect in terms of analyzing a teacher's classroom communication. He posited that the teacher's verbal statements could be classified into seven categories: (1) learner-supportive statements or questions, (2) acceptant or clarifying statements or questions, (3) problem-structuring statements or questions, (4) neutral statements indicating no evidence of supportive intent, (5) directive statements or questions, (6) reproving, disapproving or disparaging statements or questions, and (7) teacher-supportive statements or questions. On the basis of this scheme, he discovered that when the instructional pattern was teacher-centered, teaching was consistently disliked by pupils. Consequently, it gave rise to pupils' anxiety which tended to reduce the recall of learning materials. However, the reverse was generally true when the instructional focus was on pupils.⁹

Marie Hughes attempted to analyze the teaching acts by dealing with both the process and the content. She hypothesized that the teaching acts could be classified into four major categories: (1) *controlling*, or

⁸Anderson, H. (ed.) *Creativity and Its Cultivation* (New York: Harper and Bros., 1959), P. 132, P. 136.

⁹Withall, J., "The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms," *Journal of Experimental Education*, XVII (March, 1949).

the acts which tell children what to do, how to go about it, and who should do what, (2) *facilitating*, such as, checking, demonstrating and clarifying, (3) *content development*, such as elaborating the structure of the problem, or building up data for generalization, (4) *personal responsiveness*, which is divided into *positive* and *negative affectivity*.¹⁰

Instead of conceiving the instructional process as being possible for categorization, Ryans used a semantic differential approach to analyze both pupil and teacher behavior, which is presented below:¹¹

<i>Pupil Behavior</i>			<i>Remarks</i>
1. Apathetic	1 2 3 4 5 6 7 N	Alert	
2. Obstructive	1 2 3 4 5 6 7 N	Responsible	
3. Uncertain	1 2 3 4 5 6 7 N	Confident	
4. Dependent	1 2 3 4 5 6 7 N	Initiating	
 <i>Teacher Behavior</i>			
5. Partial	1 2 3 4 5 6 7 N	Fair	
6. Autocratic	1 2 3 4 5 6 7 N	Democratic	
7. Aloof	1 2 3 4 5 6 7 N	Responsible	
8. Restricted	1 2 3 4 5 6 7 N	Understanding	
9. Harsh	1 2 3 4 5 6 7 N	Kindly	
10. Dull	1 2 3 4 5 6 7 N	Stimulating	
11. Stereotyped	1 2 3 4 5 6 7 N	Original	
12. Apathetic	1 2 3 4 5 6 7 N	Alert	
13. Unimpressive	1 2 3 4 5 6 7 N	Attractive	
14. Evading	1 2 3 4 5 6 7 N	Responsible	
15. Erratic	1 2 3 4 5 6 7 N	Steady	
16. Excitable	1 2 3 4 5 6 7 N	Poised	
17. Uncertain	1 2 3 4 5 6 7 N	Confident	
18. Disorganized	1 2 3 4 5 6 7 N	Systematic	
19. Inflexible	1 2 3 4 5 6 7 N	Adaptable	
20. Pessimistic	1 2 3 4 5 6 7 N	Optimistic	
21. Immature	1 2 3 4 5 6 7 N	Integrated	
22. Narrow	1 2 3 4 5 6 7 N	Broad	

Flanders proposed that the instructional process could be classified into ten categories: (1) accepts feeling, (2) praises or encourages, (3) accepts or uses ideas of students, (4) asks questions of procedure, (5) lecturing, (6) giving directions, (7) criticizing or justifying authority, (8) student talk - response, (9) student talk - initiation, and (10) silence or confusion.¹²

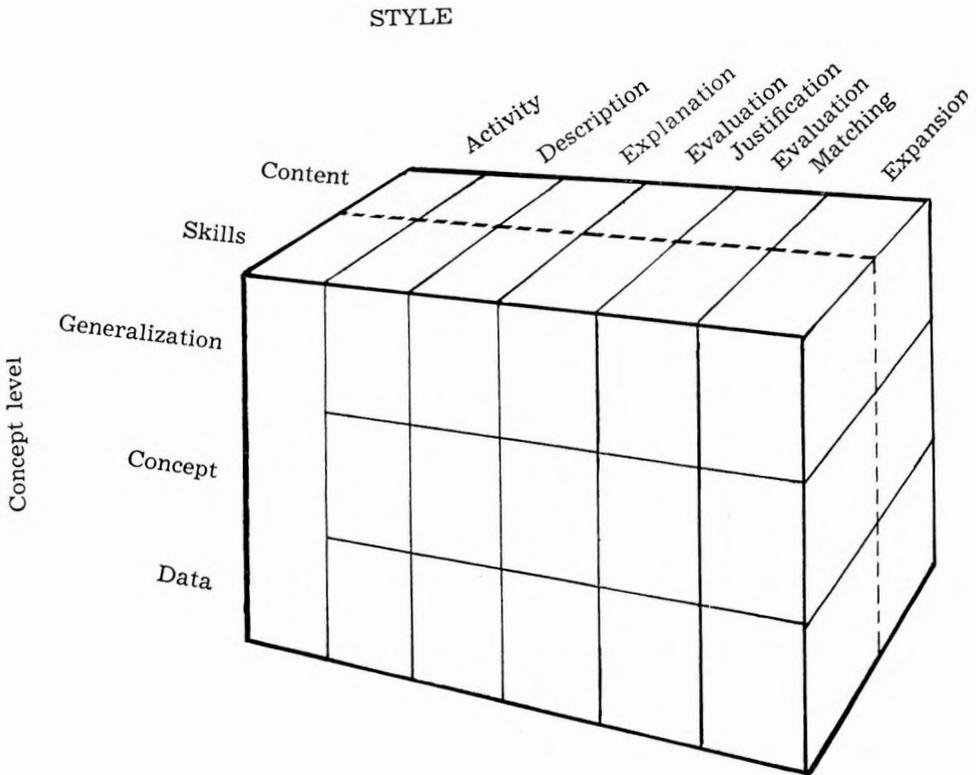
¹⁰Hughes, M., *et al.*, Development of the Means for the Assessment of the Quality of Teaching in the Elementary School, University of Utah, 1959 (*Mimeographed*).

¹¹Ryans, D. G., Characteristics of Teachers: Their Description, Comparison and Appraisal (Washington, D.C., American Council on Education, 1960), P. 87.

¹²Flanders, N. A., "Intent, Action, and Feedback: a Preparation for Teachers," *Journal of Teacher Education*, Vol. XIV (Sept., 1963), p. 225.

Smith's primary interest in analyzing a classroom discourse was the content. He developed a 13 category scheme, 12 of which are specifically related to the content analysis and the other one on classroom management. These categories are: (1) Defining, (2) Describing, (3) Designating, (4) Stating, (5) Reporting, (6) Substituting, (7) Valuating, (8) Opining, (9) Classifying, (10) Comparing and contrasting, (11) Conditional inferring, (12) Explaining, (13) Directing and managing the classroom.¹³

Gallagher, et al., attempted to analyze both the process and the content of instructional episodes by proposing a 3-dimensional model.¹⁴



It is obvious that each of the studies presented above is, in a sense, unique in theoretical orientation as well as in the strategy of attack. It is also apparent that there are some common grounds among them, however, as they are perceived by the writer. Before he attempts to pinpoint a crucial aspect underpinning all of the above cited investigations, which is essentially responsible for our pedestrian success in the

¹³Smith, B. O., et al., *A Study of the Logic of Teaching*. Grant No. 258, USOE (Urbana, Ill: University of Illinois, 1962).

¹⁴Gallagher, J., et al., *A System of Topic Classification Classroom Interaction Study*. Grant No. 3225, USOE (Urbana, Ill.: University of Illinois, 1966).

investigation in this area, this writer would like to pose two dimensions to analyze them and at the same time to write a brief critique on each of them. The two dimensions are effective-cognitive, and process-content.

Anderson's study does not get at the crux of classroom discourse; more specifically, it is not concerned with the analysis of the instructional content. It is basically, if not completely, affective-and-process oriented. It approaches the classroom climate from a psychological vantage point. In saying this, there is no implication of overlooking the affective-process aspect of teaching acts. What is intended is that Anderson's scheme is not adequate for analyzing the complete teaching-learning process (including content).

Withall's theoretical schema, at a glance, appears to be geared towards content analysis. The outcomes of his investigation are fundamentally similar to those of Anderson's in nature. That is to say, its primary emphasis is upon the affective-process dimension although the cognitive content of classroom instruction is, in some degree, its tangential concern.

Hughes' probe sets out to delve essentially into the analysis of the instructional content. However, her scheme does hinge upon the process-affective dimension. In other words, it deals with both process-content and affective-cognitive dimensions. However, her findings expressed in percentage data are more *inferred* than *actual* in nature. For example, a large percentage of teacher's controlling acts is inferred to connote a tendency to restrict pupils' intellectual activities.

Ryans' technique of using semantic differentials lends itself quite readily to psychological orientation; its focus is upon the affective-process dimension. It is clearly independent of analyzing the cognitive content. It is therefore short of our purpose to analyze the instructional content.

Flanders' scheme is basically process-affective in orientation. What it purveys is quantitative data in terms of frequencies; it does not yield the bases for making qualitative judgment on the cognitive content. If it is said that it does offer qualitative evaluation, then it seems to operate on a shaky ground of illogical inference. However, the writer does recognize the fact that Flanders' theoretical schema as a tool possesses features quite practical to administrators, supervisors, and teachers for assessment as well as for self-improvement.

Fundamentally, Smith's theoretical conception of teaching acts is predicated upon linguistic logic. There is little doubt that this scheme centers on the analysis of the cognitive-content dimension. Consequently, as it appears to the writer, the affective-process dimension becomes peripheral. However, a note of caution seems appropriate: that is, linguistic logic may not necessarily be in consonance with the manner in which the actual classroom instruction takes place.

Gallagher's theoretical schemata are intended for analyzing both the processes and the content. From one point of view, they appear to be more comprehensive than the schemes presented here. However, the affective element seems to be minimal. Besides, there appears, in the writer's judgment, a great deal of arbitrariness, pseudodichotomies and rigidities in these schemata.

This concludes the brief analysis and critique on the theoretical schemata presented here. As mentioned earlier, the writer now wishes to return to pinpointing an essential aspect neglected by most, if not all, of the studies probing teaching effectiveness. They all seem to approach this subject from a sociopsychological model, and seem to overlook this fundamental question: From what standpoint or philosophical school of thought is a teacher judged to be effective? A teacher may be rated as effective from one philosophical position, but as ineffective from another. It seems fitting to quote Scriven here:

A strong tradition in the history of psychology separates empiricism from ethics, and the average researcher feels completely insecure when he discovers that his criteria involve ethical variables. Either he does not allow himself to perceive this fact, or if he does perceive it, he says nothing about it.¹⁵

Thus being the dilemma, or at least, quasi-dilemma, what are some of the alternatives open to us for our inquiry into teaching effectiveness? The writer does not attempt to offer *the* answer to this intricate problem. What he plans to do in what follows is what he calls an integrated approach which entails a philosophical frame of reference, a quantitative scheme, and a qualitative theoretical schema. These three schemata are used in combination in discerning teaching effectiveness.

Having realized the dominant orientation in educational research, which is basically socio-psychological, Brown developed a theoretical framework for John Dewey's philosophy of experimentalism,¹⁶ on the basis of which he constructed the Experimentalism Scale (a self-report device) and the Teacher Practice Observation Record (a check-list)¹⁷ for detecting, at least, a type of teaching effectiveness. These two instruments would constitute the first scheme in the writer's proposed integrated approach.

The second theoretical schema that the writer has in mind is Flanders' which, in his judgment, is sufficient for the purpose of securing quantitative data on the teaching-learning process. However, in the light of what the writer has in mind in terms of the integrated approach, he would like to propose to divide Flanders' tenth category, namely, silence

¹⁵Scriven, M., "The Philosophy of Science in Educational Research," *Review of Educational Research* (December, 1960), pp. 422-29.

¹⁶Brown, B. B., "The Relationship of Experimentalism to Classroom Practice," Unpublished Ph.D. dissertation, The University of Wisconsin, 1962.

¹⁷Brown, B. B., *et al.*, "The Reliability of Observations of Teachers' Classroom Behavior," *Journal of Experimental Education*, Vol. 36 (Spring, 1968), pp. 1-10.

or confusion, into two categories, silence *and* confusion. Silence may be or should be expected if the teacher asks questions calling for thinking instead of immediate regurgitation of facts on specific information. Confusion, as it is used in the proposed context, is a case in which either there is no specific nucleus of discussion save a great deal of humming noise or a kind of discussion from a good many pupils which cannot be distinctly understood. Therefore, Flanders' theoretical schema, with a slight modification, is the second scheme for this integrated approach.

The third theoretical conception is concerned with the qualitative analysis of the instructional content, which the writer presents in a condensed, tentative version. He approaches it essentially from curriculum planning vantage point, specifically on the basis of works by Tyler,¹⁸ Herrick,¹⁹ and Bloom, et al.²⁰ This scheme consists of the following categories and subcategories:

I. Instructional Objectives

A. Content Objectives

1. Specific information, facts
2. Concepts, theories, principles, generalizations

There are criteria to differentiate (1) and (2) of content objectives.

B. Process Objectives

1. Lower level, such as, memorizing, recognition, recall, convergent thinking.
2. Higher level, such as, understanding, interpretation, analysis, synthesis, problem solving, divergent thinking, evaluation.

There are criteria to differentiate (1) and (2) of process objectives.

II. Organizing Centers

A. Flexible and facilitative organizing centers.

B. Rigid and restrictive organizing centers.

There are criteria to differentiate these two types of organizing centers.

¹⁸Tyler, R. W., *Basic Principles of Curriculum and Instruction* (Chicago: The University of Chicago Press, 1950).

¹⁹Herrick, V. E., et al., *The Elementary School* (Englewood Cliffs, New Jersey: Prentice Hall, 1956).

———, "Curriculum Decisions and Provision for Individual Differences," *The Elementary School Journal*, LXII (1962), pp. 313-320.

²⁰Bloom, B. S., et al. (ed.) *Taxonomy of Educational Objectives: Cognitive Domain* (New York: David McKay Co., Inc., 1956).

III. Organization of instructional activities

There are criteria to differentiate these two types of organizing centers.

A. Sequence and/or continuity

B. Scope

There are some criteria to determine (A) and (B).

IV. Evaluation

A. Open-ended or thought-provoking questions

B. Close-ended or factual questions.

There are criteria to differentiate (A) and (B).

The writer is fully cognizant that the third schema leaves much to be desired yet. It is his intent to continue to work on it so that it can become more operational in terms of objectivity, feasibility, and consistency.

During the past two years, the writer has been collecting data on the basis of this integrated approach proposed here for identifying a kind of teaching effectiveness. It is his hope that in the near future he will have something to report.

In conclusion, a remark of caution seems to be in order. In our inquiry into this crucial area of teaching effectiveness, we ought to bring in inter-disciplinary approach and multi-schemata strategy if we wish to bring forth valid, meaningful results. We are indeed far from the stage of complacency in this enterprise.