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## ABSTRACT

Current trends in exceptional child education are discussed in relationship to the need for better inservice training (IT) to upgrade the readiness of regular teachers to include exceptional children in their classes. Noted are trends such as increasing numbers of exceptional children in regular classrooms, and fewer children institutionalized or exempt from public educational programs. Listed are common complaints of educators regarding most IT programs such as that programs are uninteresting. Offered for IT implementation are three guidelines: design the program to fit the need, insure cooperation between teacher training institutions and the public schools, and develop a National Inservice Teacher Education Program. Described as a model of a cooperative program is Project CHILD (Cross-discipline Help for Individual Learning and Development), which provides inservice training to regular teachers with learning disabled children in their classrooms. (SB)

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INSERVICE TRAINING:  
A PROPOSAL TO UPGRADE TEACHER READINESS<sup>1</sup>

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Inservice Training:  
A Proposal to Upgrade Teacher Readiness  
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Never in the history of mankind have children been expected to assimilate so much knowledge during their school years. Moreover, the demands modern civilization places upon teachers go beyond the heroic to the Herculean.

Teachers not only have to keep up with the state of knowledge in their academic fields, but must keep abreast of the rapidly developing field of educational technology--technology that provides them with a tremendous array of hard and soft tools, as well as techniques to enable them to do their jobs better.

It is said a teacher's education and training must be completely updated every 10 years (Koontz, 1969). Society would be well off if all teachers were returned to the universities and colleges for intensive retraining and re-education every 10 years. However, with the current growth of knowledge a 10-year cycle for the re-educating and retraining of teachers isn't practical. If today's teachers are to be prepared to teach today's children today, and tomorrow's children tomorrow, they must be provided with continuous inservice training (Jarolimek, 1970).

Teachers are being threatened with more strenuous evaluations based upon the performance of their children in fulfilling behavioral objectives. No longer are teachers evaluated merely on their ability to fulfill an expected mean rate of growth for a class. The concern now is with how well the individual child fulfills his expected potential. It is at this

point--evaluations based upon performance in terms of behavioral objectives-- that the rub comes in.

Most classrooms have contained two, three or more "exceptional children" whose slow performance could be offset by the more gifted children in the class. Thus the mean growth of the class could be expected to average a year or more. Now, teachers are being told they not only must account for the growth of each child in their classes, but that their future classes will contain even more of these "exceptional children."

Parents of exceptional children and parent groups are becoming interested in experimental programs that appear to be helping children similar to their own. They have become vocal and powerful (the Association for Children with Learning Disabilities-ACLD is an excellent example). Parents are pressing the rights of their children of "this generation." They are demanding that their children have education and training up to their potential.

They are tired of the promises the American school system has held out for "all children," but has not and is not fulfilling for their children. They are tired of hearing that education is better than ever today because teaching provides for the needs of the individual child. However, in the evaluation session on their child's progress, the teacher tells them their child isn't learning because she/he is "different."

Parents of exceptional children are joining with parents of children who belong to minority groups, the culturally, socially, or economically different--to press the needs of their children for relevant education and the right to a place in the educational mainstream. In their frus-

tration with the denial of these rights by public school administrators, parents are turning to the courts and finding a sympathetic ear.

Current court decisions are mandating equal educational opportunities for all children--not just placement in a classroom, but provision of an adequate educational program. The case yet to be litigated, and one the professionals are dreading, is the case in which judgment will be awarded because a child has not shown educational growth due to improper placement and programming. Professional status carries professional responsibility.

Legislators are also giving parents a sympathetic ear. Mandatory legislation has been slow in arriving in most states, though the pace is picking up. If the courts continue to follow their present decision-making trends, the legislation necessary will be appropriation laws--to provide a financing formula for educational programs for all children.

Few regular classroom teachers have had training in educating the exceptional child. Both recent graduates and seasoned educators are equally frustrated by the exceptional child in their classrooms. They have been taught, and are being told to teach to the child's individual needs. But, very few have been taught how to teach the exceptional child, particularly when there are 30 to 40 other children in their classrooms.

Those teachers who have been able to squeeze a few hours of special education coursework into their elementary or secondary education programs have a better understanding of the needs of the special child. However, the pressure of a "four-year education program" allows little time in the curriculum for the practicum experience needed. Thus, today's graduates do not have the necessary skills and knowledge to

know, much less meet, the needs of the individual child, especially the exceptional child.

Teachers are beginning to resist these growing pressures put on them by parents, courts and legislators. In recent contract negotiations and teacher strikes, teachers have demanded a voice in deciding who will be in their classrooms. The teachers claim they aren't trained to work with exceptional children and, in large classes, acting out behavior by some of these children forces them to spend much of their time disciplining rather than teaching. They feel they have become babysitters. When they seek psycho-educational help with a child, they are told there is a waiting list or that these services simply do not exist. The teachers add that when they take time to develop an educational plan for a child, they are told funds do not permit the purchase of special curriculum materials or the hiring of an aide to help with the individual instruction.

A summary of this background indicates the following:

1. Teachers are not adequately prepared to deal with individual differences of the exceptional child in their classrooms.
2. Teachers have not been able to depend upon outside help for psycho-educational evaluations or educational directions for working with exceptional children in their classrooms.
3. Court rulings, mandatory laws, and parental pressures are demanding that all children be provided with proper and adequate education.
4. More exceptional children will be in the regular classrooms, with fewer children exempt from programs or institutionalized.

5. Teacher evaluations and program evaluations are beginning to be made on the basis of fulfillment of behavioral objectives for all children rather than upon a mean educational growth for a class.

6. The half-life of a teacher's professional education and training is five years. The entire cycle must be repeated at least every ten years for the teacher to stay knowledgeable in terms of academic subject matter and educational technology. Further, continuous education is the best way for this retraining and re-education to occur.

This background is helpful in introducing the topic, "Inservice Training: A Proposal to Upgrade Teacher Readiness." The reaction of most educators to this topic probably is, "I've been, I've seen, I've tried, but I have learned very little that's useful in our inservice training program!" And that is most unfortunate! While any particular inservice training program does not provide the panacea for everyone's needs, a variety of inservice training programs can be planned to meet the needs of all educators in a school system, from the Board of Education to the service personnel.

Inservice training is one of the most maligned and misused concepts in education. The following are some of the common complaints educational researchers have found educators have against inservice training programs:

1. Little consideration has been given to the actual or felt needs of the educators involved.
2. Participants have had little opportunity for planning input.
3. The program has been 'forced from above.'

4. The programs are generally held during teacher's free time without compensation. Even worse, they are usually planned for after school when energy and creativity are at their lowest level. (If any good ideas should happen to be generated, it is doubtful they would be recognized, much less scrutinized and accepted or rejected.)

5. Arrangements for academic credit are not usually provided.

6. Seldom are arrangements for feedback and real evaluation provided. Though lip service is paid to evaluation, any results obtained usually are not utilized in planning for the next session.

7. Most inservice training programs are not based on behavioral objectives.

8. Seldom is there any follow-up to see if the teacher needs further help in putting the desired principles into practice.

9. Curriculum materials, equipment, and time often are not provided for carrying out new ideas or putting to use any new skill learned.

10. Little time and money are put into planning and providing inservice training programs. Funds set aside for this purpose are usually among the first to go when the budget gets tight.

11. The most damning of all, inservice training programs for the most part are just plain "dull."

(Dillon, Heath, & Eiggs, 1970; MacIntyre, 1972; Nagle, 1972; Rauch, 1968; Turner, 1970; and Waynant, 1971).

With so many shortcomings and complaints, how can inservice training programs be expected to be the primary instrument for the continuous training and education of teachers? Here are three ideas that have promise:

1. Design the program to fit the need.
2. Insure cooperation between teacher training institutions and the public schools.
3. Develop a National Inservice Teacher Education Program.

#### Design the Program to Fit the Need

In too many school districts the inservice training program is designed around a "theme" the administration "thought up" to fit the teachers' needs," which the administration also "thought up." This program is then put into the "inservice training mold," usually consisting of a keynote speaker who speaks on the "theme" to all of the teachers who "fit the 'need' category. This might include all of the teachers of a school or of the whole district--"Can't spend the taxpayers' money for an expensive speaker without having everybody hear him!" (Cuts down on the per capita cost of the program.) Following the speaker, come the discussion groups which Nagle (1972) describes as ". . . passive departmental meetings, gripe sessions or an adult show and tell.

If inservice is to be viable, the assessed needs of all of the educators of the district become the most important element in preparing the program. Not only do needs vary between groups, i.e., teachers, supervisors, and administrators; but also within groups, i.e., beginning teachers, experienced teachers, and veteran teachers (Turner, 1970). The needs of each of these groups must further be considered in terms of their areas of responsibility, i.e., the planners must prepare different

programs for elementary teachers who want training in learning disabilities than they would prepare for the same teachers in the areas of elementary math.

After the needs have been ascertained, groups of school personnel should be formed around these needs and priorities should be established. An individual may fit into more than one group. Priorities will have to be established in terms of the person's greatest felt need. If appropriate, multidisciplinary groupings of individuals with the same need should be formed. These groups not only will deepen and broaden the discussions, but they also may carry over into more cooperative working arrangements. As teachers, school psychologists, supervisors, speech therapists and others come to understand better the strengths and weaknesses that each possesses, there tends to be more willingness to ask for, accept, and offer help.

Nagle (1972) points out that the basic priority of inservice training should be the development of a model that can be used over and over with the same group, or with different groups. Videotaping of the program, especially of the resource persons' contributions and demonstrations, is particularly helpful for other groups. Reports of highlights of small group discussions, findings, and recommendations, as well as any overall group decisions, recommendations or products, such as a proposed revision in the curriculum, make a very useful package for future programs.

MacIntyre (1972) states ". . . a critical first step is the clear statement of the objectives of the program." These objectives should be in the forms of desired behavioral outcomes. When this is done, a benchmark is established for use in selecting resource persons, for presenta-

tion planning, for discussion guides, and for evaluation.

Careful planning for evaluation will include continuous monitoring and feedback during the program, with appropriate changes being made in the format, to keep the program tuned to evolving needs of the participants. The overall evaluation will include a follow-up of the impact the program had had on the participants in their day-to-day work and, ultimately, the effect the program is having on children. If the desired behavior is not forthcoming, a part of evaluation is to determine why.

A final word about planning--those who attend inservice training will get new ideas, which often mean change. If needed changes are to be made, those people who can effect change certainly should attend the inservice program. Understandably, teachers resent administrators or supervisors who do not participate when their support is vital for needed change. Even more devastating to the program is having supervisors who do attend show they have little regard for the program by allowing themselves to be called to the phone constantly or by spending their time in private conversation.

#### Insure Cooperation Between Teacher-Training Institutions and the Public Schools

Perhaps the best way to make this point is to describe a cooperative program between a public school district and the special education program at Purdue University which developed an intensive inservice training program. Project CHILD, an acronym standing for Cross-discipline Help for Individual Learning and Development, was funded under an ESEA Title III

grant to provide programs for learning disabled children in the school district. In describing Project CHILD in their book Comprehensive Programming for Success in Learning, Dillon, Heath and Biggs (1970) state:

A major goal of Project CHILD was to demonstrate that teachers with regular elementary education training could, with in-depth, inservice training, meet the needs of children with learning disabilities. An estimated 15 to 20 percent of the children in regular school classes have learning disabilities severe enough to interfere with their education. The number of specialists trained in the area of learning disabilities each year is extremely low; therefore, if the needs of the children with learning disabilities of this generation are going to be met, teachers currently working in the elementary schools must be helped to develop competencies with these children while they are in service.

The format devised for the inservice program included summer workshops, inservice released time during the school year, curriculum planning and development sessions, and interdisciplinary staffing of the children involved. A brief description of the several stages of the inservice training program follows:

First phase:

The Project Director participated in an intensive two-week workshop at the Purdue Achievement Center for Children. Basic principles and techniques in teaching the learning disabled child were emphasized with particular attention being given to diagnosis and instructional prescriptions beginning at the motor-perceptual level. The basic principles of teaching this information to teachers currently inservice were also stressed.

Second phase:

A two-week workshop under the leadership of the Project Director was conducted for all Project staff. Consultants from Purdue presented theoretical aspects and diagnostic-instructional

procedures. District specialists were involved and the Kephart-Purdue film series provided enrichment and a theoretical base.

The participants were paid for time involved.

Third phase:

A series of one- and two-day inservice training workshops was held throughout the school year with all Project staff participating. Procedures in diagnosing and developing instructional programs for children with learning disabilities were emphasized. Released time was provided for the participants.

Fourth phase:

This phase was concurrent with Phase Three and was devoted to the inservice planning of a developmentally-based curriculum. As a systematic, developmentally-based curriculum evolved, more and more of the inservice emphasis was centered on the curriculum.

In each of the three years of the Project, more district personnel and fewer outside consultants were used in the on-going inservice training program. Many of the consultants were used as resource persons for individual classroom teachers or project members. An important objective was to help the school system foster its own organization, its own inservice training program, and its own staff resources.

Because the school district was out-of-state, a cooperative arrangement was made to provide graduate academic credit for participants in the inservice training program through the Continuing Education Program of the University of Delaware. Those participants who desired credit merely enrolled and paid the necessary fee at the University of Delaware.

Project CHILD was an overwhelming success for the 150 learning disabled children included in the program. The retention, or failure rate, dropped from the 10.8 percent of the previous year to less than 1.5 percent for the school district in the first year of the program. Only three of the 142 children remaining in the program at the end of the second year were classified as non-readers. The authors state:

. . . it is obvious that most of the children who were identified originally as high failure risks have been guided successfully into beginning academic learning. They have not had a failure experience. Today they are, in general, a healthy, confident, and increasingly competent group of children. Their experience may be termed a readiness-success program. (Dillon, Heath, & Biggs, 1970).

The inservice training program of Project CHILD was also very successful. The teachers and other members of the Project teams were very frustrated for the first few weeks of the program. However, as more training sessions were held, as the consultants and Project Director spent time with the teachers individually, and as the curriculum study teams began to develop usable materials, a feeling of self-confidence emerged. Other teachers in the schools began attending the meetings on their own. Quite often they asked the Project teachers for advice on how to deal with problem children in their classes.

At the end of the third year, the Project Director was asked to become the Delaware Supervisor of Special Education. The Purdue team of consultants was asked to continue its work on a statewide basis. Project CHILD has since been institutionalized in many of the school districts throughout the state, in a state school for the retarded, and in a school for the orthopedically handicapped.

Project CHILD is a program in which University personnel go into the school district to cooperatively develop an inservice training program. Glass and Meckler (1972) describe a different form of inservice training that brought teachers and children into the university setting. Their program was a joint project of the Indiana University Department of Special Education, the Center for Innovation in Teaching the Handicapped, a county school district, and the Indiana Division of Special Education. The major emphasis was upon the professional year of teacher training beginning with an eight-week summer workshop.

Eighteen elementary teachers participated in the workshop. Thirty-eight children, ages six to twelve years, were recruited from a local county school district to provide the practicum experiences for the teachers. The morning program for the children was "loosely divided" into an academic instruction period and a second period ". . . devoted to activities designed to enhance group participation skills and understanding of human behavior." The teachers worked directly with the children in the mornings. In the afternoons they took part in more formal learning experiences with emphasis upon the integration of theory and practice.

Two implications of this study are particularly interesting:

Perhaps the most significant implication is that specific skills relative to the instruction of mildly handicapped children can be isolated and taught to elementary teachers in a relatively short period of time.

Judging from trainee reports of the value of the workshop . . . it appears that functional preparation with its emphasis on developing and practicing specific skills in an action-oriented setting may be a more productive approach to educating elementary teachers in special education techniques than traditional university courses, which tend to remain at the abstract level. (Glass & Meckler, 1972).

Hopefully, these teachers will work for more inservice training for other teachers in their school districts. It is vital that these, and other efforts for inservice training to help today's teachers meet the needs of the growing numbers of exceptional children in their classrooms, be multiplied thousands of times.

The Center for Innovation in Teaching the Handicapped has added the dimension of modern technology to teacher observation and feedback. Drs. Melvyn Semmel, Albert Fink, William Lynch, Merrill Sitko, and others have developed and are in the process of field testing several major observation systems of teacher behavior. These systems use a computer to analyse the recorded data and a television monitor in the classroom to provide instant feedback of information to the teacher being observed.

These observation systems and the instantaneous feedback process hold great promise for the inservice training of teachers. The techniques of systematic observation and recording of data can be learned in a very short period of time. Teachers can observe each other for informal inservice training.

A more formal type inservice training program can be developed with observations recorded and analysed over a period of time for a group of teachers. Teachers can determine their effectiveness with children using varying teaching techniques or the effectiveness of different approaches with an individual child. There is much flexibility in the system to allow for creativity in its use for inservice training as well as for research purposes.

The technology is currently being refined so that public school systems could work with the center via telephone transmission of data with instantaneous feedback of information. Presently, the cost would not be prohibitive for a regional inservice training district to set up the equipment and operate such a program.

This leads to a final point, the development of a proposal.

Develop a National Inservice Teacher Education Program

In 1966, Dr. N. C. Kephart proposed the establishment of a National Inservice Training Resource Center (Dillion, Heath, & Biggs, 1970). This Center would provide a complete training program along with the needed consultants to help implement the inservice training program in the school system. The training at the Center would be primarily for the supervisory resource level person. This person would become the director of inservice training in the sponsoring school districts.

The functions of the Center would be to provide comprehensive courses and workshops for teachers, to conduct the advanced instructor workshops, to conduct workshops in diagnosis and educational planning, to develop of hard and soft instructional materials, to provide consultants for the school districts, and to carry out research and development.

The heart of the proposed Inservice Training program would be the use of a local coordinator in inservice training. He would be given intensive training in the area of learning disabilities at the Center. Then, with films, books and materials he would return to his system to train other teachers.

The consultants would be the vital link in the program. They would help with the teaching of theory, as well as with the practical application in the classrooms. The consultants would help with the development of curriculum appropriate to the local needs. They would participate in the evaluation of the program; serving as the connecting link between the school system and the Center. (Dillon, Heath, & Biggs, 1970).

The basic problem with this proposal is that the need for trained personnel to institute and coordinate inservice training programs within the school districts is too great for a single center to meet.

Elizabeth Koontz in a 1969 address on inservice training suggested a National Inservice Training Program using the land grant colleges as a model. This proposal incorporates both Dr. Kephart's and Mrs. Koontz's ideas.

The author proposes a National Inservice Teacher Education Program to be funded through the Office of Education as a joint program of the Bureaus of Education for the Handicapped, Elementary Education, and Secondary Education. Funds would be provided to one or more teacher-training institutions in each state for the development of inservice training centers within their schools of education. These centers would be jointly staffed and operated by the departments of special education, elementary education, secondary education, school psychology, counseling, and educational psychology. These centers would be responsible for all of the things Dr. Kephart proposed for his National Inservice Training Resource Center.

The responsibility for teacher education in the future must be shared even more between the teacher-training institutions and the public schools. Perhaps the proposed regional inservice training staff could be expanded to include preservice student teaching supervisors who would

supervise student teaching in the schools of their region.

The third part of this proposal would be the establishment of a scholarship program to be administered through the state departments of public instruction to encourage experienced teachers to develop expertise as inservice educators.

In summary, this paper has looked at some of the underlying reasons why teachers need inservice training; it has looked at some of the shortcomings of current inservice training programs; it has proposed some ways to improve inservice training; it has described two university-public school district cooperative programs, as well as the Indiana University's Center for Innovation in Teaching the Handicapped's experimental program for instantaneous feedback of information from teacher behavior observational systems as a means of inservice training; and, finally, it has proposed a plan for a National Inservice Teacher Education Program.

Dillon, Heath, and Biggs (1970) summarized the use of inservice training as a means of continuing education by stating:

We feel that one of the strongest results of this study was the effectiveness of the inservice training and consultation programs. The joining together of the strengths of the University personnel with the strengths of the District personnel resulted in an intensive learning experience for all involved. When the District teachers began to see the potential for enhancing their teaching, their motivation forced the intensification of the inservice training program. The inservice training program led to the development of intensive curriculum study committees and finally, to a developmentally-based readiness program geared to the needs of every child in the program. The morale of the teachers, the effectiveness of the teams, and the overall results show the success of the inservice training and consultation.

Could we ask for more for today's teachers of today's children?

## REFERENCES

- Dillon, E. J., Heath, E. J., & Biggs, C. W. Comprehensive programming for success in learning. Columbus Ohio: Charles E. Merrill, 1970.
- Fink, A. H. Teacher-pupil interaction in classes for the emotionally handicapped. Exceptional Children, 1972, 38, 469-474.
- Fink, A. H., & Semmel, M. I. Indiana behavior management system-II: Observer's training manual and booklet. Bloomington, Ind.: Center for Innovation in Teaching the Handicapped, 1971.
- Glass, R. M., & Meckler, R. S. Preparing elementary teachers to instruct mildly handicapped children in regular classrooms: A summer workshop. Exceptional Children, 1972, 39, 152-156.
- Jarolimek, J. A model for inservice teacher education. Social Education, 1970, 34, 329-332.
- Koontz, E. D. A consumer's hopes and dreams for teacher education. The Tenth Charles W. Hunt Lectures. American Association of Colleges for Teacher Education, July, 1969. ERIC ED 027 273.
- Lynch, W. W., & Ames, C. Individual cognitive demand schedule: Observer's manual and training booklet. Bloomington, Ind.: Center for Innovation in Teaching the Handicapped, 1972.
- Lynch, W. W., Ames, C., Barger, C., Frazer, W., Hillman, S., & Wisheart, S. Effects of teachers' cognitive demand styles on pupil learning. Bloomington, Ind.: Center for Innovation in Teaching the Handicapped, 1973.
- MacIntyre, R. B. Inservice training through short term conferences. Exceptional Children, 1972, 38, 412-415.
- Nagle, J. E. Staff development: Do it right. Journal of Reading, 1972, 16, 124-127.

- Rauch, S. J. Reading in the total school curriculum. Department of Health, Education and Welfare, U.S.O.E., May 7, 1968. EPIC ED 013 178.
- Semmel, M. I. Toward the development of a computer-assisted teacher training system (CATTS). In N. A. Flanders & G. Nuthall (Eds.), The classroom behavior of teachers. Hamburg: The International Review of Education XVIII, 1972, 4.
- Semmel, M. I., & Myers, K. Indiana pupil participation schedule. Bloomington, Ind.: Center for Innovation in Teaching the Handicapped, 1971.
- Sitko, M. C., & Coffman, M. T. Increasing observation skills through systematic observation procedures: Skills of observation. Bloomington, Ind.: Center for Innovation in Teaching the Handicapped, 1972.
- Turner, H. E. Improved in-service: A challenge for supervisors. The Clearing House, 1970, 45, 116-119.
- Waynant, L. F. Teachers strength: Basis for successful inservice experiences. Educational Leadership, 1971, 28, 710-713.