The individually guided education (IGE) program developed by the Kettering Foundation was implemented in September of 1973 at the John F. Kennedy Memorial Junior High School in Woburn, Massachusetts. The components of the program described in this speech include pupil and teacher scheduling, physical layout, pupil selection and adjustment, grading, problem areas, costs, and evaluation. (MLP)
Discussion Session on Individualizing Education
Saturday, February 8, 1975  2:00-3:15 P.M.
Monday, February 10, 1975  9:30-11:00 A.M.

Presentation by William J. Horrigan, Principal
John F. Kennedy Memorial Junior High School
Woburn, Massachusetts

I would like to raise and suggest some possible answers to questions I had and other principals may have who are considering the implementation of an individualized program. My approach will be to just "touch these bases" briefly in the limited time for this presentation and then we can get into greater depth in those areas of particular interest during the discussion session that will follow.

WHY INDIVIDUALIZE?

To provide for the varying rates at which pupils learn.
To provide for the different ways (styles) that each pupil learns most effectively.
To humanize the learning program and atmosphere.
An individualized program is more pupil centered — greater pupil involvement results in greatly increased interest, motivation, feeling of success, and positive self-worth.
An individualized program encourages pupils to learn how to learn and develops independence and self-direction.

OUR COMMUNITY AND SCHOOL

The John F. Kennedy Memorial Junior High School is located in Woburn, Massachusetts, a suburban middle income level community of approximately 40,000 residents. The Kennedy is one of two junior high schools in the community. We have 1,115 pupils in grades 7 through 9. Our building is thirteen years old. We have a professional staff of sixty-five, which includes three counselors, a librarian, and teaching department heads in the five major subject areas. I have one full time Assistant Principal and an office staff of one and a half secretaries.

HOW WE ARE INDIVIDUALIZING — THE IGE MODEL

We are using the IGE (Individually Guided Education) Program that was developed by the Kettering Foundation.

The components of the IGE Junior High Model are as follows:

1. The school is organized in Learning Communities, each involving a teaching team and approximately 115 pupils. One of the teachers (selected by the team) serves as the Learning Community Leader.

2. The learning program is interdisciplinary.

3. Pupils are mixed heterogeneously.
4. There is a precise planning and management process that includes:

(a) Development of a learning design with an instructional goal, objectives, and subobjectives that involves:
- a variety of grouping modes (independent, 1 on 1, small group, large group).
- a variety of learning activities (learning station, LAP, CPU, short course).
- a variety of learning styles in addition to pencil and paper—pupils are given choices.
(b) Pre and Post Assessment for each objective.
(c) Continuous assessment—students are assessed 1 on 1 as they complete each learning style.
(d) Careful internal monitoring of pupil progress to be certain that pupils remain "on task" and are progressing at a rate that is suitable to their ability.
(e) Skill development and reinforcement is built into each learning design.
(f) IGE is a structured, non-permissive program.

5. The Adviser-Advisee relationship is used. Each pupil has one of the teachers on the team as an adviser.

6. Human development activities are used to cultivate strong, positive peer relationships.

7. The staff strives for continuous improvement. A peer observation cycle is used. Teachers observe each other and feedback suggestions to help each other improve.

8. There is a Program Improvement Council (PIC) where the Principal and the Learning Community Leaders share the decision making role in matters concerning program improvement.

9. There is parent involvement.

None of these components of the IGE Program is that "new." Many of them have been used in education for a long time. The basic concept of individualizing is as "new" as the one room schoolhouse. Well, how is the IGE Model different and more effective? The IGE change program for individualized education is a management process. It combines these components in an organized way and providing a structure within which they can function effectively and with direction, resulting in a managed learning program that is truly individualized.

IGE is a process, not a curriculum. IGE-Kettering does not publish curriculum guides or textbooks. Each school determines its own curriculum and curriculum materials (textbooks, resources, etc.). It's how these are used that's different.
EXTENT OF OUR IMPLEMENTATION

The program is not being implemented in our entire school. Teachers become involved on a voluntary basis. It is our strong feeling that in individualized program cannot be forced on teachers who would not feel comfortable with it because they can't accept the concept philosophically or because they are "traditional" teachers, accustomed to working with their class in their subject in their room and are apprehensive about working with a team in an interdisciplinary program using different and unfamiliar strategies.

Also, individualizing requires considerably more teacher time in planning and developing learning activities. If the program was forced on all teachers rather than having them become involved voluntarily based on commitment, we would have a program in name but not in fact, not to mention the morale problems that would develop.

We implemented the program in September of 1973. At the present time, we have two Learning Communities in Grade 7, one in Grade 8, and one in Grade 9. This involves approximately 2/3 of the pupils in Grade 7, and 1/3 of the pupils in Grades 8 and 9. Each of the Learning Communities includes a team of three teachers and an instructional aide who work with the same 115 pupils in a fully individualized interdisciplinary learning program in the areas of English, Social Studies, and Science. Additionally, there is partial implementation and linking with the Learning Communities in the areas of Mathematics, Foreign Languages, Art, Music, Home Economics, Industrial Arts, and Physical Education. Some of the teachers in these subject areas are individualizing (to varying degrees) within their own classes but are not fully involved on a team interdisciplinary basis.

PUPIL AND TEACHER SCHEDULING

All pupils in each Learning Community are scheduled with their teaching team for three class periods each day. The teaching team (three teachers and an instructional aide) never works with more than 3/5 of their 115 pupils at one time. The remaining pupils are scheduled out of the Learning Community at that time for their other subjects. During various periods each day, only 2/5 or 1/5 of the pupils are with the team so each of the teachers can be free for one planning period - a requirement of our teachers' contract. Also, during two additional periods each week, all the pupils are scheduled out so the entire team can be free at the same time for common planning.

PHYSICAL LAYOUT

Each Learning Community is located in a three-room cluster consisting of a double-size room and a third room nearby equipped for Science.
PUPIL SELECTION

A proportional number of pupils of all ability levels is selected for each Learning Community. Teachers and counselors provide input concerning pupils with special needs who could gain particularly from participation. Beyond this, pupils are chosen at random. Since all pupils can't be included in the program because of partial implementation, this method of selection seems to be the fairest and best for our situation and is accepted. Naturally, if a parent doesn't want his child to be in the program, their wish is respected.

PUPIL ADJUSTMENT

Our elementary schools and our high school do not have individualized programs. However, pupils haven't had any difficulties adjusting when they come from the elementary schools or enter the high school. Nor have pupils had any problems making the adjustment into or out of the program from grade to grade within our school (which some have to do because of the random selection process). As a matter of fact, pupils in the program are adjusting daily when they leave the Learning Community and regroup by ability for Mathematics which, though individualised to some extent, is basically teacher-centered because the Department feels that this approach is more effective in their subject.

GRADING

Pupils in the IGE Program are graded A, B, C, etc., but their grades are based on their achievement in relation to their individual abilities rather than in comparison with others. Less able pupils can and do get A's. To avoid misinterpretation of grades, the staff developed a checklist supplement to our report card which indicates strengths and weaknesses in skills and the understanding of concepts.

PROBLEM AREAS

In a school where only part of the staff is involved in an individualized program, the Principal must be very sensitive to the reactions of all staff members. He must be sincere in his reassurance to those involved and those not involved that what they are doing is important and is respected. This is essential to preserve high staff morale, to avoid divisiveness, odious comparisons and petty jealousy and to maintain a non-threatening atmosphere where the individualized and non-individualized approaches can function harmoniously. This is a very touchy area.

An individualized interdisciplinary program requires considerably greater teacher preparation time.

A pupil-teacher ratio of greater than 20:1 makes it very difficult to truly individualize.
There are additional stresses on teachers working closely together on an interdisciplinary team. Team members have to be compatible.

Complete openness is necessary to encourage non-involved teachers to become involved so implementation can expand.

**COSTS INVOLVED IN IMPLEMENTATION**

Generally, the costs involved in implementing an individualized program are quite modest. They will vary depending on present staffing, funding for in-service training, equipment, physical plant, etc.

Costs would include:

- **Staff training** - a MUST (IGE Program requires two-week intensive clinical training workshop for Principal and teacher provided through regional facilitating agency).
- **Instructional Aides** - if needed to reduce pupil/teacher ratio.
- **Expendable materials** - (construction paper, paste, etc).
- **AV equipment** - if what school already has is not sufficient.

The following are helpful but not necessary:

- **Floor carpeting**.
- **Furniture suitable for flexible-sized groups** - trapezoidal tables, stacking chairs, etc.
- **Double-size rooms to better accommodate pupils working on a variety of learning activities in groups of varying sizes** - this can be done very inexpensively in "egg-crate" type buildings by removing non-bearing partition walls.

**EVALUATION**

**Affective:**
House-developed pupil attitude surveys done at the beginning, middle, and end of the year indicate that almost all the pupils in the program like school better, have a greater feeling of success and self-worth, have stronger positive feelings toward each other and their teachers, are more self-directed and involved in their learning, feel they are learning more, etc.

**Pupils have assumed responsibility as members of their Learning Community.**

The involvement of our Bilingual (Spanish speaking) pupils in the program with the English speaking pupils for part of each day has been a very positive and rewarding experience for all.
Cognitive:
The analysis of limited data indicates that most pupils in the program are achieving at least as well and many are doing much better than they did previously.

Less able pupils are experiencing much greater success.

High ability pupils are doing much more and much higher quality work because of the open-endedness of the individualized program.

Discipline problems with pupils in the program are practically non-existent.

CONCLUSIONS

Naturally, we are enthusiastic about the IGE change process for individualizing because it has worked for us. But IGE is just one way to individualize. There are many others. And there are different ways of implementing the IGE Program. Each school knows its own situation best.

I'll end by suggesting a book by Dr. William Bechtol, entitled, "How to Individualize and Keep Your Sanity."
SUPPLEMENTARY

STEPS TOWARD CHANGE

The Principal and staff together examine their educational philosophy and goals to determine if an individualized program would better meet the needs of their pupils.

If there is substantial staff agreement and school board endorsement that this is the direction in which the school should move, the Principal as educational leader and change agent would involve the staff in investigating, selecting, and planning for the implementation of an individualized program.

Preparation for implementation would include school board approval of the plan, Principal and staff training, parent involvement, formation of teaching teams, pupil selection, space preparation, and scheduling.

The ICE change process is termed DDAE.

D  Dialogue
D  Decision-making
A  Action
E  Evaluation

ICE-KETTERING LINKING

All ICE schools are members of an area League that meets regularly to provide mutual assistance. The League is coordinated by a regional facilitating agency affiliated with ICE-Kettering. The agency conducts the clinical training workshops, monitors implementation, etc., to maintain quality control and integrity of the ICE process.