

# SIGNIFICANT GAPS IN EDUCATION AND TRAINING

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I hope to indicate, and ultimately give you a few illustrations of, the need for adding another phrase to an expression that has been used throughout my lifetime. The expression is "equality of educational opportunity," and the phrase to be added is "as to need," in other words, "equality of educational opportunity as to need." I think this has been running through what has been said this morning.

The United States owes much to land-grant colleges, in my opinion, and to the approach taken by land-grant colleges in close collaboration with farmers and others. In flying for miles, as I did yesterday afternoon, I find it difficult to believe that the traditional dominance of rural life and character has given way to a dominance of urban living. The broad stretches of land and the waterways are as definitive as ever, yet they have been dwarfed by the industrial and financial growth of our country because industry now absorbs the major part of the labor of the people. The complete reversal between urban and rural populations in contrast with 75 or more years ago is startling.

Sometimes I think we might well pay more attention to what we learned in the days when we had CCC camps and other similar groups. You will also recall we had a depression, a second World War. We have lived through periods when we had a shortage of teachers, when we lacked modernization of the educational plan, when we had 10,000,000 or more of our people scattered over the world. We should have known conditions could not continue as they were after so much experience on the part of so many. We were warned of a bulge in enrollment that would come through the years like a wave coming to the shore line.

Some of us can remember other changes such as the walking plow which gave way to gang plows, planting by hand which gave way to planting by machinery and by airplane, the tremendous mobility of people, the increasing urbanization and technological change, and the growing tensions. These factors all affect our way of life and all of them are related.

We look a little closer at hand, and we see that in the city of Chicago we have something over 200,000 more children in day

school than we had eleven or twelve years ago. Most of these children are new to the city. Many school buildings are old and inadequate, and we have a shortage of teachers. The explosion of knowledge, the change in job requirements because of technological advances have resulted in new and different demands.

The growth of urban centers is surely a significant phenomenon of this century, reflecting as it does our technological advances and our population explosion. Nor is this only an American phenomenon. The largest cities of the world are Japanese and English. Everywhere in the world, whether in Asia, the Far East, or Europe, the people are moving cityward.

As we look at a strange city, we see miles of concrete, and tall buildings of steel and glass. We hear the roar of traffic, and smell the fumes of exhaust pipes. The strong impressions are physical impressions, yet a city is human first of all. Its buildings, streets, buses, and cars are designed by people, made by people, used by people. Within a city we can be as isolated as on a Texas farm or ranch. Indeed, the communication methods are similar—transportation, newspapers, television, and radio. I am sure we would rarely find a young person living on a farm today who has never been to town or never traveled more than ten miles from home. Yet for many of today's urban children such travel is rare. Some of the children in Chicago live five or six miles west of Lake Michigan, but have never seen the lake. Some of our young people who live in Chicago at a distance of ten or fifteen miles from the center of the city have never been downtown.

To some children milk comes from a carton. The cow is unknown as a real life experience. Some children have never seen a wheat field. On the other hand, some of our new urban residents have never before been away from the land, the openness of the fields, the silent woods. The garbage pail is strange, to say nothing of the garbage disposal. Elevators are oddities, playthings in some cases.

Vast numbers of urban citizens spend much time in passage from home to work and from work to home again. For the most part their employment is far from their homes, unlike the rancher or farmer. The urban child seldom observes his parent at work and frequently has never seen his father's place of business. Indeed, many of them have no concept of what the father does for a living. Economic level has no bearing on this situation.

Large cities are complicated, contradictory, and confounding places. They remain the centers of great wealth even though they have lost valuable industries and the most highly educated class to

the suburbs. The children in these cities often have virtually no intellectual stimulation and, feeling no lack, frequently feel no need.

Several significant gaps in education and training are to be inferred from what I have already sketched as a generalized picture of the contrast in our present way of life.

While the college age rural youth may have less college opportunities close to his home than does the urban youth, his early life experiences are no longer inadequate. Radio, television, and the automobile have made distant worlds accessible to him. In addition, he grows up in the center of a work community. Farm boys and girls still do chores, observe adult work tasks, and thanks to home agents, the FFA, and 4-H Clubs, have the opportunity to undertake some work responsibilities themselves, such as raising a flock of chickens, or a sow, or a heifer.

The urban child really has no comparable opportunity. The lucky boys are those with newspaper routes, despite our sentimental sympathy because of their early rising hour. Obviously, I am not advocating a return to child labor and sweatshops; I am merely pointing out that lack of opportunity for suitable, supportable work experience is a significant gap in the education and training of the modern urban child.

The modern urban child also has little opportunity to follow the growth cycle in nature. The experience of many an urban child with planting is limited to the flower boxes in the classroom. His knowledge of the habits of animals is confined to what he can learn from the hamster in the classroom.

The school makes an effort to close these gaps but it cannot do the whole job. As a corollary, some persons lack understanding of the burden the situation places upon the school.

Originally the school supplemented the teaching of the home by providing academic studies beyond what the home could provide. Today the home needs more supplementation than in the days when the home created more of its own goods and required more labor for upkeep. Thus, the responsibility of the school has been increased not alone by the explosion of knowledge but also by the change in the way of American life.

I doubt if the school can or should attempt to close this gap by itself. The situation has been created by circumstances in the community at large. The community at large must aid the schools in closing the gap.

Unfortunately, too, the new social problems now characterizing

our major cities are not well understood. Our political structure was established in a day when rural areas held the balance of population and economics. I have no intention of discussing the issue of "one man, one vote." The issue has arisen because a gap in interchange or communication or understanding has developed. I get a little weary of the thought that all problems stem from lack of communication, as though no clear contrasts in goals or philosophy existed.

More words are not the answer. Perhaps what is needed is more will to hear, more desire to understand, more effort at reconciliation. We are truly all in the same boat. The city cannot survive without the farm, and today the farm cannot survive without the city.

This willingness to respect others, to accord them dignity, and to encourage rather than to oppose growth and development of others hides under the phrase "human relations" today, and human relations is often given a restricted meaning. Yet the need is not restricted; and indeed must be met on a broad front to be truly meaningful.

Everyone here recognizes that education is not confined to the school segment. Everyone will recognize that all of my remarks so far have been directed toward gaps in the total educational process, or in the outcomes we have anticipated from it, and not solely toward the imperfections of the institution of education.

That the institution of education is imperfect we can all agree. I should hope that we could also agree that the imperfections result from honest shortcomings, not from intentional manipulation. Perhaps we should also agree that the institution of education will ever remain imperfect, for as Browning said, "Man's reach should exceed his grasp, or what's a heaven for?" It is all very well to know that no matter how much we have tried we could yet have done better, but man also needs to find satisfaction in his achievements. Thus, before turning to a discussion of certain significant gaps in our present educational structure let us review for a moment what we have presently achieved, or at least attempted.

For the better part of one hundred years this country has tried to provide formal education through high school for every child capable of doing the work. Indeed, at the high school level we have broadened that work, added many areas of study to an original narrow list of subject fields to be studied, for the purpose of accommodating a wide range of capabilities (and interests) in children. Despite the image of a school as a place where students must conform as well as perform, the school has actually been an extremely malleable institution.

The public school has also increased its success at the elementary

school level by experimenting with curricular approaches and pupil personnel methods. One example is a program of continuous development or a non-graded grouping of pupils, particularly in the primary grades. Another is the utilization of ancillary programs such as guidance, psychological services, and social work approaches. All of these and other additions to a traditional program have the single purpose of enhancing the child's total development.

Gaps remain today in the educational program in the elementary school. We are not able to do sufficient diagnosis in the early grades to prevent loss, maladjustment, and failure later. These gaps are not, however, the sole responsibility of the school. The lack of efficient coordination of all agency services is itself a gap, usually resulting from a shortage of personnel.

In this connection I mention the need in urban centers for some program similar to the county agent program in rural areas, and the land-grant college approach to aiding the rural resident. Residence in a city is no more guarantee of competent use of city resources than residence on a farm or ranch is a guarantee of good crop rotation.

More visible gaps are to be found in the educational program at the high school age level, beginning normally at fourteen. The boy begins to grow more rapidly at this age and needs more adult activity. At this point the range of interests as well as ability becomes more apparent. The youngster of high school age is ready to test his capabilities in the world of work. Not only appropriate work experience is needed but adequate opportunity to test vocational skills and interests.

One of the greatest needs is more diverse educational programs and wider availability of them. Programs should be available for some young people at ages fourteen and fifteen, and for others at ages sixteen and seventeen so they will leave school with a salable skill. I believe the same principle applies to junior and senior college programs. The principle is that every person should have the opportunity in his final year of formal education to take those courses which will provide him with a vocational skill for employment at the end of that year.

Let us make no mistake; teacher education is vocational education, as are animal husbandry, pediatrics, or theology. We have far to go in both our concepts of vocational education and our provisions for adequate and sufficient programs.

Closely related to this is the growing need for programs for the training of adults. Various estimates are given of the number of times

that an individual will be forced to change his occupation during his working life. The estimates underscore the shifts in employment that derive from technological advances and various social changes. Whole industries rise and others decline. We take the entire complex of aviation industries for granted today, yet sixty years ago it did not even exist. Today it is one of the pillars of our economy. Preventive medicine, school psychological service, the telephone industry, city planning—which today are comparatively new and vigorous, necessary, and significant fields of both endeavor and return—are but examples of the development and growth of our complex economic and professional life. They suggest that growth and development will continue. Because our industrial life is never static, retraining and increasing depth of training will be required generally. This concept is not new to land-grant colleges or to agriculture; the concept needs to be applied to urban ways of life as well.

In connection with technology, another, slightly different part of the gap becomes apparent. This is the gap—or perhaps lag—found in the utilization by schools of technological creations. Let us take one small example to illustrate my point. The teletypewriter is a common instrument in business offices where rapid communication with branch offices or agency members is important. It is unheard of in the business of education. It would revolutionize and simplify communication in a school system such as mine, where we have over five hundred branch offices in our five hundred schools.

But one overpowering, controlling gap remains to be cited. This is the gap between our professional capability and our financial limitations. Every community knows how to do better than it is able to do with its limited funds. The limit of school financing operates everywhere. However, the most serious financial gaps are found in the major cities, simply because in our major cities are concentrated thousands of persons, drawn as to Mecca, to the big industrial centers for employment but insufficiently educated for the new way of life.

Some figures are startling. A little more than 10 percent of the public school children of Chicago live in public housing. Public housing represents public subsidy for those unable to compete economically. In a study of elementary school students who were over-age for the eighth grade, we found that over one-third came from one state in the United States and over half from it and its surrounding states. We have schools in which the mobility rate is 100 percent turnover in one year. Children, under these circumstances, require more of everything, and I would underscore the more. Compensatory education is expensive education but it is as necessary an

expense for national defense as are bombers or nuclear submarines.

I should like to refer to a few items I would put under the heading of compensatory education. Many people in Chicago wonder what we have been doing, why our budget has doubled. Ted Schultz suggested that the real estate tax should be up in regard to the rural school. It is already up in the city.

We have added 260 facilities, 160 of them brand new schools. We have added 8,000 teachers to the teaching staff, plus other staff. In 1957, before sputnik, we revamped the high school graduation requirements. In 1957, we began to require three years of study in the field of social studies. We moved on such matters as annual admission so children would stay with the same teachers a year instead of a half year. We organized our school districts as a state is organized in terms of counties. And in this period of time the beginning teacher's salary was \$400 more than the ending teacher's salary was in 1953.

I recall the time in 1956 or 1957, when I met with NAM representatives in Virginia and talked to about 200 or 300 of their people from across the country. I suggested that they should take the lead in this country in seeing that no teacher with a college degree would be paid less than \$5,000 a year for a ten-month school year. They decided this was of sufficient importance to revamp their report which was almost completed at that time. A few people said it would ruin America to pay teachers like that in some parts of the country. We may be ruined because we did not do it soon enough.

We have a new population in many of these great cities. The other day when I was in Omaha I was reminded of something that occurred in 1954, when I heard the superintendent say that one teacher out of five was new to teaching this September, and one out of two, I think, was new to teaching in the last five years. In 1954 we said wherever ten teachers, or multiples of ten, were new to teaching we will clear everything to work with these ten. Enrollment is going to grow so fast we must undergird the teaching staff. If we do not have room we will put the teachers in anyway at whatever level we can. They can take one child, two children, they can help the classroom teacher, let one off for a cup of coffee or a brief respite. This is done in most business places.

We started "beginning" reading tests. We started after school classes in fundamentals. In the past two or three years we have had 20,000 or so children enrolled in small groups of ten or less.

Five years ago we started special summer schools. This time I sort of had my tongue in my cheek. I did not fool anybody, and said

exactly what was happening but most people did not listen. I said we will staff these schools for grades one through six exactly as they do in the suburban school areas, where people are close enough to schools to know what is going on and really care about the program in the schools.

We had class sizes of 25, limited the grades to 100, limited the schools to 600 with a teaching staff of 24, and then added five more professionals in the building. We then supplemented that staff with an equivalent of four other professionals from curriculum, guidance, etc. We very blithely spent \$50,000 on each of these schools for eight weeks.

You might be interested to know that this summer we had 112,000 in summer school, all on a volunteer basis, and that nearly 10,000 of them were people on relief roles. These persons are now finishing elementary school and high school and going on to employment.

To refer again to the summer schools, we decided that we would enroll three-eighths of these children at or above standard achievement and five-eighths below standard achievement. One-fourth of the latter group were defined as two, three, or four years below standard achievement. The first year the reports came in I could not believe the results myself because they indicated so dramatically what would happen if we improved the teaching-learning situation.

The second year we ran five special summer schools. When the results came in I was afraid to release them. I was sure people in the colleges would not believe them.

The third year the results came in the same, and I decided we would take a little longer and document the results in written form. Nearly a year was required to do this. In any event, the results indicated that 40 percent of the children attending the special summer schools grew more than a half year in the fundamentals. They spent an hour less in the classrooms with the teachers, but the teachers ate and shared lunch with them, traded back and forth. They forgot the idea that you have to have an hour and fifteen minutes for lunch, cannot start to work before time, etc. They were more like people in vocational agriculture as I knew them a few years ago.

This summer we had twenty of these special summer schools. A million dollars has been spent on this one program, paid for by the property tax in Chicago.

On another political problem, about eight years were required to persuade the members of the public and some of the members of the state legislature that summer school was a time for something other

than making up what was not learned during the previous school year. We now have a small sum coming back from the state. Judging from what happened in the other states, we will probably get back about \$700,000 out of \$3,600,000.

Someone asked me the other day, "How much do you spend on research and development?" I hesitate to figure it out and let anyone know what it is. The first time we had a few pages in the budget it totaled a million and a half dollars. In response to questions from board members and others I indicated we would not spend a dollar of the million and a half until I had received a dollar from a foundation to match. We now have \$750,000 in the account from foundations. We have done what I said; we are going on with the program. I have not had a question in the last four or five years about those pages and they have been growing.

We put the major emphasis on curriculum, on guidance, on teaching procedures. In my own mind I have a determination that in the great cities where the schools were lighthouse school systems, probably to the first World War, they will return to their place of pre-eminence. Following the first World War the lighthouse school systems moved out of the cities to suburban areas along with people, and to areas that could be classified almost as rural areas. With a little bit of determination on my part, I hope some way or other to return to the city and the city's schools the principle involved in the lighthouse.

About eight years ago, and again with a foundation grant, we brought people together from ten large cities and began to work at problems. We spent the eight years dealing mostly with four areas. Eight years ago the study dealt with a world of work; the results have been written into the federal law as an adjunct in place of the Smith-Hughes Law. Six years ago, the focus was on the culturally deprived, long before I ever heard of civil rights as such. This experiment was paid for with \$5,000,000 from one foundation alone assisting in relation to this latter point. The third project was the question of fiscal policy, that is, the up-state versus the down-state situation. The fourth area we began to study two years ago was the question of the education of the teacher of 1975.

I wish we could get the story across in the large cities and other places of what has been going on in a number of the cities. In my professional lifetime I have seen school news move from the obituary page to the lead article on the front page with two-inch headlines, not alone in Chicago either. I have seen teaching move from the wings to center stage. No day goes by that the shortcomings of

our educational program are not criticized or explored by someone. This is all to the good. No one advances without attention.

Now let us give attention to our achievements, to our professional skills, and to the tools still needed to get on with our job. Let us in the profession lead the public at large to attain that which they demand, that which they can provide. Let us advance upon the gaps, let us close them, let us strive as if we were trying to work ourselves out of a job.

Much remains to be done in education. Much remains to be done through education, so let us strive truly to effect eternity.