THE SPEECH RECOUNTS THE NEW DIRECTION IN THE FLEXIBLE DESIGN OF FUTURE PUBLIC SCHOOLS. IT IS PREDICTED THAT WITHIN THE NEXT SEVERAL DECADES A MULTITUDE OF NEW SCHOOL BUILDINGS WILL BE CONSTRUCTED IN ADDITION TO THE REPLACEMENT OF EXISTING SCHOOL PLANTS AS THEY BECOME OUTDATED AND INADEQUATE FOR NEW INSTRUCTIONAL PROGRAMS. THE NEW INSTRUCTIONAL PROGRAMS WILL BE DESIGNED TO FOSTER INDIVIDUALIZED INSTRUCTION AS TEACHER TECHNIQUES AND INSTRUCTIONAL EXPERIENCES ARE REDUCED TO COMPUTER LANGUAGE FOR EASY RETRIEVAL IN TEACHING MACHINES. THE EMPHASIS IN BUILDING DESIGN IN THE FUTURE WILL BE ON LEARNING ENVIRONMENT, AND WILL REFLECT CONCERN FOR WHAT THE BUILDING DOES RATHER THAN WHAT IT LOOKS LIKE. SECONDARILY, THE WRITER PREDICTS THE ABANDONMENT OF THE "CLASS A" HOT LUNCH PROGRAM IN THE NEAR FUTURE AS SCHOOL PARKS ARE DEVELOPED AND AS INDIVIDUALIZED INSTRUCTION BECOMES THE MODE OF PUPIL LEARNING. THE LUNCH HOUR WILL CEASE TO DOMINATE THE DAILY SCHEDULE AND WILL BE DISPLACED BY THE AUTOMAT APPROACH TO PUPIL FEEDING PROGRAMS. PUPIL NUTRITION WILL BE ASSURED AS BETTER INSTRUCTION IN NUTRITIONAL NEEDS IS THE PRODUCT OF TEACHING. LUNCHES WILL NOT BE RESTRICTED TO ONE MENU, THEY WILL BE SENSITIVE TO THE DIFFERENT CULTURES OF OUR SOCIETY, AND WILL PROVIDE THE PUPIL THE OPPORTUNITY TO EXERCISE CHOICE IN HIS EATING HABITS. (JZ)
1st Annual
School Administrators Seminar

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Vail Village
Colorado
his own firm and is working on schools all the time. Eighty per-
cent of his business is building schools.

Mr. Burr spent many hours living with children in the
classrooms at all levels to learn their needs as well as that
of the administration. Perhaps we all need to sit in our lunch-
rooms more with the children and learn their needs.

I am sure he is going to give us a great deal of prac-
tical help and advice in his presentation. I am happy to pre-
sent to you Mr. Burr. (Applause)

MR. DONALD F. BURR, American Institute of Architects,
Tacoma, Washington; Member of the A.I.A. Committee on School
and College Architecture: Thank you, Miss Griffin. Dr.
Perryman and Ladies and Gentlemen:

I consider the subject I am going to discuss with you
today to be as important a topic as any in which an American
could become involved. We are all fully aware of the concern
most of us feel as we see, hear and read about the problems that
confront us as a nation. By necessity, I must involve some of
these problems in the subject I am going to discuss because in
the future, education, what it is, and what it will be, is go-
ing to share a major responsibility in providing a means for
the solutions to some of the greatest needs of our present-day
society. The most important commodity produced in our great na-
tion is produced by our school system. No other single product,
including the most sophisticated space vehicle, is as signifi-
cant and important in the long run as an outstanding young man
or woman as a product of an outstanding educational system.

I am a professional architect and will speak to you
from this vantage point. It seems wise to mention this because
I must involve myself in educational concepts in order to dis-
cuss school buildings of tomorrow and, in doing so, I do not want
you to construe that I am a prophet concerning educational con-
cepts. It is, however, a very clear fact that a school building
is a result of an educational philosophy or program. Therefore,
I must discuss these educational concepts that appear to be
ahead for us. It is interesting to note the change that is tak-
ing place as educators and architects join together to under-
stand, conceive, design, and build new educational structures.
Not many years past, the educator was pretty much on one side of
the fence with his philosophies and the architect was on the
other with this T-square, bricks and mortar. They essentially
separately performed their tasks. Today, the process is so im-
portant and so involved that as the architect and educator join
together for the purpose of constructing a new school building,
it is often difficult to tell who is who. The depth of knowledge each must have about what the other does must be extensive and the interchange of information and interaction between them must be constant and complete if a great school building is to result.

We are amidst the biggest building program this nation or any nation has ever experienced. Within the next thirty-three years we are going to essentially duplicate every single school building in the United States—in effect, build a second set of school buildings—to house the children of our expanding population, replace obsolescent buildings and to solve problems of communities and society. We are all deeply concerned that this job be done correctly. We do obviously have choices to make and it behooves us to understand those choices in the greatest depth possible in order to make the correct decisions. We must not abdicate our responsibility to government or to a few. The basic decisions do and must remain in the hands of all of us involved in education.

I feel that I would be very much amiss and naive if I came before you as an individual today and expressed only my personal thoughts concerning school buildings of tomorrow. To prepare for this presentation and projection of thoughts and ideas, I have spent a number of weeks corresponding and talking personally with architects and educators scattered geographically throughout our country. These men and women are educators and architects who are recognized as leaders in their geographical areas in the field of education and school architecture. Their thoughts and ideas, along with mine, have been combined and I will present for your consideration only those that were essentially repeated by everyone. I am not going to discuss "way-out" things of fantastic shapes. In fact, the ideas on the surface may appear commonplace, but I can assure you they are not. There will be those among you and other educators and architects who will not agree with me in part or in whole, and I believe this is good. We all must attempt to project ourselves into the future as best we can. This is a responsibility and by exercising this responsibility, hopefully we can get on the right road. School buildings result from the total understanding of an educational concept and, thus, school buildings will change as educational programs change. It is therefore necessary as a first step to establish the educational change and from this the school building of tomorrow will emerge. The following predictions for the future first establish the educational change and then discuss the implications they have upon buildings of tomorrow.

**INDIVIDUAL INSTRUCTION**

Some call this a new concept. I do not think that it
I have heard it discussed as a desired goal for many years, but it appears that it is now understood sufficiently and that methods and educational materials have been developed to bring it into reality. John W. Gardner of the Department of Health, Education and Welfare has stated that, in his opinion, within twenty-five years virtually all instruction in the schools will be individualized instruction. The distinct change to this method is now under way and this changeover will be constant until essentially all schools follow this method. Individualized instruction will require vast quantities of materials for teachers to draw upon to fulfill the various learning needs of individual students. Some of these materials will involve the school building. We have talked about the rows of square boxes called classrooms marching out of our buildings and the column in the very near future will disappear entirely over the distant horizon. The restrictive nature of classrooms and walls will finally leave our school buildings almost completely and the long envisioned complete flexibility and adaptability will be a reality. School buildings serving the needs of individualized instruction will, in many cases, have vast, open, carpeted spaces broken only by furniture and partial, movable, screening devices. As a school building of tomorrow uses its floor, exterior walls and roof to enclose a controlled physical environment, it literally will become a gigantic, single, resource center filled with students pursuing their education individually. The classroom as a unit for thirty students and a teacher will not be there. In its place will be space totally flexible and adaptable. When a group teaching space is required, it will be a highly sophisticated area designed for a given number of students and equipped with every device to make it an elite teaching space.

COMPUTER

The computer and related teaching machines will find massive use in American elementary and secondary schools in a very few years. Computer use is now fairly common for administrative purposes and for teaching data processing and computer techniques to students. It appears it will soon be ready for use in teaching a wide array of subject matters. I do not see the computer or machines replacing the teacher. I do foresee, however, a new role for the teacher. The principal role of a teacher in the future will no longer be to present subject matter. The teacher will be freed from the conventional classroom role. Quoting Mr. R. Lewis Bright, Associate Commissioner for the U.S. Office of Education, Bureau of Research: "The teacher will be an individual counselor to diagnose learning difficulties; he will develop creative communicative abilities and skills; he will help the pupil develop concepts and logic; he
will conduct small discussion groups; and he will play an inspirational role as an adult model." What does the computer mean in relation to buildings? It means they must be electronically flexible as well as flexible in space concept. The buildings of the future will require free, horizontal slices of space either above ceilings or below floors. Such space must be planned to be accessible so it can provide movement area for the electronic flexibility required. In addition, electrical systems planning must be handled in smaller units so quick adaptation in any given section of a building is possible. The basic computer service will probably come from large computer centers with each center capable of handling many educational institutions with a total student enrollment of upward to 100,000 students.

EXTENDED DAY AND EXTENDED YEAR

With individualized instruction, computers, modular scheduling, and continuous growth programs, combined with the fantastic need for new buildings and the shortage of dollars available, school buildings will be used for many more hours each day and basically for twelve months a year. This affects buildings of the future in a number of ways. Due to year-round use, school buildings in the future will be air-conditioned as standard equipment. Food service needs will be vastly different than the requirements of the average school of today. I will discuss this implication on food service in greater detail later. The administrative core of the buildings will become larger and more sophisticated to meet the demands of this extended use. Along with the extended day and year will be an increased number of adult students. The realization is now established that education begins at preschool and continues throughout the entire breadth of one's life. It is possible in the future in secondary schools that the majority of students enrolled will be adults. With this emphasis on continuing education for adults, schools of the future will need to consider vehicle movement to and from school, both by private means and public transportation, more so than is done today.

SCHOOLS AND EDUCATION WILL BECOME A VITAL LIVING PART OF A COMMUNITY. In doing this, education will come forward to fill many needs of society. The problems of de facto segregation, ghettos, the underprivileged, and other related problems may very well find their permanent long-range solutions through education. The word "community" here is used in the broadest sense and changes in meaning as it moves from the most dense part of our cities through the suburbs to our rural areas. Education, as it assumes these responsibilities, will find the school a vital, living part of the area which it occupies. It will fill greater needs of society than it does today. It will interest itself in
What does all this mean in relation to the school buildings of tomorrow? Its possible ramifications cannot be described by any other word than fantastic. We have heard about educational parks or plazas. The reasons given for building parks or plazas are as an answer to segregation problems and rising land costs. In interpreting the concept of a school as a vital living part of a community, it would appear that in lieu of the individual school building concept of today, the future will see groups of buildings together. The isolated elementary school serving a small area or an isolated junior high or high school does not seem to fit the needs of this new educational concept. As this concept is fulfilled, it is possible that within this educational facility you will find offices for such groups as welfare agencies, employment agencies and other similar community functions now being conducted on a separate basis. We are aware, from the recreational standpoint, that schools have been assuming a community role more and more in the past several years. Thus, this projection begins to eliminate the isolated school plant and projects a grouping of facilities serving students of all ages from preschool to the most senior citizen, operating perhaps ten to twelve hours per day and twelve months per year and containing within its walls the needs of a society or a community that can be assisted by education. Within the confines of this concept, as we lose the image of the isolated elementary or junior high or high school building, the future will see the physical space of the school in different places and taking different forms. You may find it being floors 30 to 35 in a sixty-story building, or you may find it as the civic heart in the center of a suburban area, or it may be in the heart of a business area. The point here is that the concept or image of a school building we hold today is infinitesimally small in scope and must be dropped if the buildings of tomorrow meet this new dramatic educational concept.

GREATER SENSITIVITY TO BUSINESS AND INDUSTRY

Business and industry represent the broad category in which most individuals will find gainful employment. Business and industry are the biggest customers of the products of the schools. Education, in the future, will accept this as a concept and will establish more constructive lines of communication so that the research and development activities of industry will be focused on some of the pressing needs of education. Such a line of communication and mutual understanding will become a potent force affecting curriculum development and change as we gain greater insight into what the future demands in marketable skills. These marketable skills will be taught at a much earlier age.
28.

What does this mean concerning buildings of tomorrow? It means equipment and techniques that industry now uses to teach its employees will find their places in schools. It probably means there will be office spaces for representatives of industry and business within the confines of the school. An example, as it relates to food service, is that the entire process involved in food purchase, food preparation, food serving, and accounting will become a learning process done by students, thus giving them a marketable skill. You will probably say this is being done, and this is correct, but where is it generally being done today? Usually in a vocational school. It would seem that the schools of the future will find this type of activity certainly at the high school level, particularly as we begin to totally grasp this new school facility as a vital, living part of a community.

GREATER CONSIDERATION OF A STUDENT'S STABILITY, ATTITUDE AND PHYSICAL HEALTH

This involves the educational concept that to learn to the fullest extent, a student should be stable, his attitude should be correct and his physical health should be good. In the past, schools certainly have been aware of this and to some extent have involved themselves with these points. This new concept involves a great broadening of the school's involvement and making it a fixed goal of education to be fully equipped to understand, work with and do something about a student's stability, attitude and physical health. In building needs, as a result of this, food service plays a great role. In the future, food service will become a real part of the curriculum. It will not be treated as a bothersome fringe activity as it is by a lot of people today. All of you realize better than anyone else the importance of proper eating habits if a person is to be alert, well and receptive to learn.

At this point, I am going beyond consideration of this single concept and discuss food service in relation to all the previous points as it pertains to school buildings of tomorrow. Food service will be considered an experience in learning and a part of the curriculum. The future sees the concept of the education of a whole person and that involves proper food. As we think about extended uses of school buildings each day and throughout the year, the future indicates that school lunch facilities will be serving all meals, including breakfast, morning brunch, lunch, mid-afternoon food, evening meal, and late evening food. As the school building of the future involves itself, solving the great needs of society as outlined, and as it becomes a vital, living part of a community, school lunch programs will take into consideration such things as the cultural
background of students in the types of food offered. Eating spaces will be developed with environmental characteristics not unlike those found in fine restaurants. Familiarity with such places is certainly not offered to many of the students in our schools through their private lives, yet to fulfill their needs and to be a part of our society they need to experience these sorts of things within their educational development. The complex of facilities we have described could find a restaurant type operation in the center of it. It will also find many isolated sources of food service scattered throughout its complex. As I have said, food service will be a continuous thing. Standardized lunch hours could well be extinct. Modular scheduling and individualized study will pretty much take care of this. If a student is intensely pursuing something on an individual basis, he or she may wish to quickly stop for a readily accessible snack and not drop everything just because the bell rings and he or she is supposed to go to the cafeteria. Within this concept, all types of food service devices and methods of serving will be utilized. Food service will be sensitive to the different cultures in our society.

Time necessitates that I confine myself more to naming the remaining concepts and less development of them. Others are the CONTINUOUS GROWTH CONCEPT which envisions work units rather than a grade structure, MODULAR SCHEDULING and EDUCATION OUTSIDE THE CONFINES OF THE BUILDING.

There are also some significant developments that do relate primarily to the school buildings of tomorrow and do not embody in themselves an educational concept. One of these is the utilization of a systems approach or component approach to construction. The buildings of the future will utilize fewer small pieces and will be constructed to a great extent by a systems approach or a component approach. It will also appear that school buildings will be more compact with better internal circulation and greater efficiency. School buildings will show an emphasis on environment. They will not look or smell like most school buildings tragically do today. They will lose many of their institutional qualities and, through the medium of good interiors planning, will become exciting, warm, human spaces related more to the rest of architecture in our society. In the future, there will be less concern on the part of most people with the utilization of known forms or shapes. The scientific developments, which have literally given most of us the feeling that anything is possible, have in turn released the holds on the minds of many people as to what something should look like. The result will find a real concern in what the building does and how it works rather than what it looks like.
I doubt that I need to say that the Class A lunch concept, as we now know it and as it almost controls the food service in schools today, seems to be out in the future. Federal subsidies as now known may well not exist in the future or at least, if they exist, they will probably be in a different form. The present concept, which is basically a noon lunch hour based on a Class A lunch, simply does not fit what seems to be the school buildings of tomorrow. In saying this, we realize that there are vast differences in educational districts throughout our country. I trust you realize that I am generalizing and I am well aware of the fact that you can't say these things about everyone. But I think you will agree with me that, as a whole, we are pivoting around a Class A lunch and a noon lunch hour.

You have a tremendous challenge before you to broaden your outlook and your solutions for food service in schools. I think that your role in the future as a part of schools will be much more than you ever dreamed it would be. This should fulfill your hopes in this area, but this will require of you to come forth with a much broader base of thinking than now exists. You must seek the best advice you can find and you must open your minds to all new concepts such as preprepared foods, vending machines, private contractors, and others if they apply, and to every technique within your grasp to meet the food service demands of the schools of the future. You must realize that there is more to food than a good Class A lunch. You should also realize that within the confines of the school building you are running a service type business. In some respects, it is not any different than a private business. A student today does not get many choices when it comes to education, but he does have a complete choice as to whether or not he wants to buy and eat your food. This requires you to run your business in a manner that is attractive, considerate of customer needs, and inviting so that your customers will participate. You are currently behind many other aspects of education as they pertain to the development of new concepts and methods.

I think that the top-level school administrators and architects in many cases have been amiss by considering food service as a fringe activity and not giving it the same measure of consideration as the rest of the school building. Your role in the future is great. You have much to do and a tremendous challenge before you to provide the inspiration for doing it.

It is my hope today that I have arranged this presentation adequately to give you a glimpse of the future for school buildings as I see them. I wish that they were explicitly clear and that I could show you pictures of what I am talking about. Unfortunately, educational concepts are not that simple nor that clear. They require of all of us the utmost effort to understand
them and to interpret them. The degree of correctness in our interpretations could well contain the very future of our great country. (Applause)

CHAIRMAN GRIFFIN: Don't we all wish that we might start school again with these schools of the future?

MRS. MARY SHERWOOD, Director of Food Service, New Orleans Parish School Board, New Orleans, Louisiana: I would like to ask two questions. No. 1, do you have any concrete suggestions as to ways to inspire our architects and others with whom we work?

MR. BURR: I say the best thing to do is either fire him or don't hire him again. It's a very good question. I included ourselves in this business of not involving our interest greatly in food service. I think it has been given the heel of the boot for a long time.

MRS. SHERWOOD: We can't fire our architect. That is not our answer. The other thing I wanted to ask you is: As we convert our processing to computerized controls, what is going to happen in the state department levels when they don't convert to computers?

MR. BURR: Well, you are assuming they won't convert. I think they will have to convert. I really don't see any other way it would work. I think that these people at the state levels should be leaders in these sorts of things and their responsibilities are very great. Dr. Ellena covered that this morning in saying that the state offices will not give up their control. It will be increased and they should be the leaders. They should install it right along with you. I don't know what to tell you to do if they don't. I guess you'll have to convince them they should.

MR. DALLAS ATOR, Assistant Superintendent, Business Services, Corvallis Schools, Oregon: In your presentation regarding most of your resume of buildings for the future as they are related to food services, I didn't have much difficulty in applying what you said to the level of secondary and above. What do you see primarily at the elementary grades as changes for the future?

MR. BURR: Well, first, I see the elimination of the isolated elementary school building and junior high building. I see complexes of structures where the educational process all happens at one site for all levels from preschool through the most senior students. Food service then performs its role
within the confines of this complex through a centralized service perhaps. Over and above that, we see many isolated areas, because with individualized instruction, which, as we see it, the elementary students will be having, the school operates so differently that it will not relate. Perhaps they will be brought to an area and served a lunch. I don't know. But down the elementary level, I think, for instance, if your little girl is in the third grade and working individually and needs to stop momentarily for a snack rather than go to the lunch hall, I think she will be able to do this. This is what we do. We just did it this morning and I think the students will do the same thing. In a general way, this is how I would answer your question on elementary children.

MISS CRONAN: I would like to ask you a couple questions that you could clarify a little bit from what you commented. You mentioned that probably the A lunch would be out in the school of the future. What do you see that will take the place of the A lunch if it is out in the school of the future? And how do you reconcile your comment on the fact that the school lunch should be more educational with that of stating also that the concept of food is a service area? I am a little bit confused. If they are going to have free choice, then how is the education on the nutritional need of the child going to be met?

MR. BURR: First, the Class A lunch simply doesn't fit. Actually, your questions are related really. Perhaps if 'it the second one, it might help with the first one. I talked about the fact that the students have free choice. I think probably with food they will still have free choice. But I did state that I believe that the subject of health and the concern for proper health will really become a part of the curriculum of our schools and it will be taught. It really isn't today. It is talked about and it is covered in a very small way, but not enough so as to start out with a preschool youngster and have him understand fully and deeply what is involved in proper foods and how they can affect him physically. If children are given this kind of knowledge, then I would trust them with free choice. I think you have to have free choice because of the very way these things are going to be. I think Class A lunches will go out just simply because they don't fit, not because there is anything wrong with them. They just don't relate. Does that answer your question?

MISS CRONAN: Well, if you say that the child should have free choice, and hopefully he will have been educated to make the correct choice, how do you reconcile this with the fact that you do not give the child free choice and that you
give choice within limitations in other educational areas? For example, you don't say to the child, "Now, Shakespeare's a great man and you should read him," and then let him bring into school some books of questionable value. How can you reconcile then saying to the child, "You should eat a nutritious lunch" and not provide it? I believe that we must give choice within limits to children and that there should be several choices of lunch, call it A or what you like, which would each meet the nutritional needs. I think until the child has reached adulthood, he probably isn't any better equipped to make a nutritional choice than he is perhaps a literary choice. But he has to learn along the way.

MR. BURR: Well, I concede I am trapped. This is exactly what I meant--freedom of choice within limitations. I assumed this fact. I simply meant that there wouldn't only be one thing. The serving would have restrictive things about it and it would vary in degree from an elementary level on up to the high school. I am not talking about loading up with vending machines full of candy and Coke because we know the problems there.

DR. McALLISTER: Mr. Burr, I was wondering with these innovations in the food service, how can we bring in all of the things you mentioned from the standpoint of choice and still try to keep the price of the meals within what the students can afford or what they feel is realistic. It seems to me we would increase the prices and it may be a problem. Maybe you are saying that this would increase participation and you'd be able to beat the price.

MR. BURR: Well, that's a tough question too. Of course, financially I think that much of food service today is related to the federal subsidy program and much of what is done pivots from that standpoint. Again, the Class A lunch doesn't fit what is ahead in the future. The schools are going to run eight to twelve hours a day and twelve months a year. They are going to be handling students from preschool to the most senior citizens. A majority of the students by number in secondary schools could be adults. The needs of food service are going to be so vastly different. In our opinion, you are going to start with breakfast and go right on through the whole day with a constant food service operation.

Financially, I would rather think it would take care of itself. It is a business run within the confines of the school and there shouldn't be any reason why it could not be run profitably the same as anything else. You are probably going to ask me about the price that kids pay. I am not so sure that
this is altogether a big factor. There are those children who certainly should be given the food and this should never be overlooked and they should be helped in different ways. I feel certain that this would always be there. But there are other children who could and would pay more. Again, they do have this element of choice when they get there. They can turn down your food or take it. The way in which it is served, I think is a major factor of the participation on the part of the students.

MR. TUTT: Your concept of the future, in my interpretation, is basically more or less a cultural growth of the child, the family and so on, as far as food service is interpreted.

MR. BURR: This is correct.

MR. TUTT: And you have mentioned the restaurant type of food service. This confuses me. Tomorrow many of the other people in the room may be designing the school. What type of food service do we design? Do we think possibly of the scramble type system which eliminates our Type A and puts them into the choice circumstance, or do we consider a waitress or waiter type of restaurant service or snack bar service? I foresee, pretty much from what you have said, a scramble type of service with a nice eating area. Am I wrong or am I talking of the correct concept if I were to build schools that would be constructed three to five years hence?

MR. BURR: Well, knowing what to do with the schools that are right before us nearly drives us out of our minds, trying to keep them ready for it. If what we presented this morning is true, you can see the trouble that we are all in. You mentioned waitresses. Yes, we do see waitresses as a source of marketable skill at the high school level. I think that any one of these things could apply in what you do. I think that the environment of the spaces should be different from what it is in many of them today. I don't know the schools in your area, but I do know what a lot of them look like, and I think it is time that we thought about the place in which these students are going to eat and what it looks like and how they get their food. This is the stumbling block. This can be done today.

I think you are probably going to find that these complexes may grow by starting with something that is already there—a junior high or a high school—and bringing to it another school building. At the base of this thing is the word "society," and the needs of our society today are great. Also involved in that is the fact that education is going to provide the source of many of the permanent solutions to the problems of our society today. Some of the educators I talked with go so
far as to actually think that the world is going to come to an end by the year 2000 if education doesn't. They feel very deeply about this.

I think environment characteristics are very important and you should be ready to expand that facility. Don't box it in. Don't get yourself trapped in the middle of it. Get yourself some running room on the edge of the plant or somewhere for your kitchen and your eating areas, so that you could add some of these things if this complex grows. And your kitchens should also be ready to work as a place for marketable skills to be taught.

MR. TUTT: I would like to put you a little more on the spot. If you were to design a secondary school today and we would have to foresee using this facility for the next twenty to thirty years (which we mostly do), what type of a food service system would you put in, disregarding the eating area? We know that you would like to have a nice atmosphere. I am speaking of the straight-line service, the modified scramble service which offers snack shop or break areas. What would you do in that area if you had to do it today for one of us?

MR. BURR: I would have a type of food service that has not only a centralized point of service, but also has isolated points of service. I presume on secondary school you are talking of a high school of maybe 1,000 or 1,500 students. I would have secondary points. I would have the kitchen so planned that it would work as a teaching station for a marketable skill. I would have the concept involved that everything that took place in food service can teach a high school boy or girl a marketable skill they can use, and I would incorporate these things into the design. This wouldn't mean a lot of change, but there would be some change.

I would set it up so that the young people involved had the best way possible to get this food. I would break those lines. Whether that would require a belt system or a scramble system, or whatever would be involved, I would have some type of concept that would break up the long lines. I think food service should be far more casual.

I would probably try to keep to the fringe area of the building so that it could grow and spread out and I could handle the other structures that could well come out on this site. It could probably be a forty-acre site which can't be afforded in a few years hence.

These are some of the things I would do if I had
personal choices.

MISS ELIZABETH GOODMAN, Director of School Lunchrooms, Minneapolis Public Schools, Minnesota: I think our discussion here indicates that Mr. Burr has brought out what is perhaps quite shocking to some of the people in this group, because it seems to me that he is undermining the two concepts of our school lunch program which probably are good nutrition for children at the lowest possible cost. However, I think that we must recognize that there are truths in his presentation. One of the reasons that I feel so concerned about this is that I observe that my administrators are coming back to their offices with some of the very concepts that Mr. Burr has presented, and I feel that we school food service people are being bypassed, that discussions are being carried on about our department in which we have not been able to participate. I think that is a very serious thing.

Another thing that shocked me recently was when my health coordinator came into my office and she said, "Did you know that in the new textbooks that are being considered that nutrition is being down-played?" If nutrition in the textbooks for health administrators is not being emphasized, where is nutrition teaching and the values of nutrition going to be incorporated into our curriculum?

MR. BURR: Either I didn't make myself clear or you misunderstood me. Let's get the record straight. I certainly am not implying an undermining of the good nutritional programs, that concept, and the lowest possible cost. This is the farthest thing from my thought. In fact, the very opposite is true. I have said that the inclusion in the concept of education of things necessary to understand good health will increase more than you dreamed it ever would be in the future—the thing you have been talking about and wishing for. I am with you completely and did not intend to say that at all. I think it should be the best possible food and certainly at the lowest cost. But your students are only kids. Remember this.

MISS GOODMAN: I did not mean to be critical of what you had said. I think it is presented to us as a challenge that we as school food service people must participate more actively. In some way or other, we must find the opportunity or make the opportunity to participate more closely in the development of our school as it relates to this very important subject of the proper nutrition of children. It occurs to me that maybe we will not apply the same formula to our preschoolers, to our elementary children, to our secondary children, and to adults. What I would like to plead for is involvement of people who are
interested in nutrition and in food service in the development of some of the concepts that you have been presenting to us here today.

MR. BURR: I certainly hope they are there and they must be there. You might be interested in this. I am taking my colleagues to task in one of our leading magazines on this business of getting deeply involved in food service and thinking about it the same way we do about any other piece or part of a building, and not hand it out to some outsider to handle and hope that all the details are taken care of. It is not a pleasant thing for an architect to get into because you get very confused. I don't think that architects have to know everything down to the nuts and bolts, but they must accept this. I am criticizing our colleagues and trying to get us aboard with an interest. The committee I am working on now is vitally concerned in food service. I think architects can help by coming forth spontaneously to you and showing this interest and join in trying to understand these things and find a way out.

MR. GIBBS: My question has broader implications. We have planners at the city level, the county level, a larger combination of county levels, the state level, the federal level, and also the level of the school district. The concept of the park that you just put forth seems to be a little contrary to the kinds of things that are in the minds of some of these other people who may have more control over the situation than the school people. For instance, concerning your educational park going down to the three-year level, presently in our area the optimum planning for elementary schools is a neighborhood concept with the elementary school being the focal point of that neighborhood community. The county is proceeding on this basis. They are laying out the arterials and the streets so that on the periphery of this are the arterials and the streets leading into the residential streets; the businesses are on the corners of these larger arterials, the services, the apartment houses, finally the residences, and the core of it is the elementary school. This concept is not at all in tune with what is going on in the school architectural field, if I understand what is going to happen in the future. Some place along the line, it appears to me that we need some coordination in our planning. Everybody is planning, but they are trying things in different directions.

MR. BURR: You are correct, of course. Now, of course, everyone would not agree with what I said in part and some not at all. But I think there must be some truth in it. As in Dr. Ellena's comment, I think, again, this is adjusting to the needs of society, and the part that the school will play will be so
much greater. Just like anything else, they become obsolete. What you say is true. Something has to be done to coordinate these other agencies.

In attacking this thing, there are, too, differences in communities. As you get deep into this subject of how the school fulfills these goals, there is quite a variance between the densely populated areas of a city and the suburbs and rural areas. How these things will come to be, I am sure will differ, but they are going to be involved in the needs of society. This seems to be the main point.

MR. GIBBS: Is the park concept more applicable to a densely populated area rather than to a suburban or rural area?

MR. BURR: No, I wouldn't say that at all. I live in a suburban area myself and I think it applies very specifically to our area. I think that schools will contain community service type offices, welfare agencies, employment agencies, representative business and industry. I think there will be complexes in our community that will take care of preschool children to the most senior students. I think it will happen there. I don't know about the completely rural areas. But I see these things happening and I live in a suburban area ten miles south of Tacoma which is I am sure like most suburban areas all over our country. I think it will happen and it will become a strong, vital, living center for our community or a unit to our society. I think we are going to see elementary schools built on forty-acre sites with the high schools and the junior highs and they will be tied together and to different kinds of things.

DR. McALLISTER: In regard to the park type of complex, won't they be creating a terrific problem that would be hard to solve from the standpoint of traffic if they are transporting and moving children from preschool up to and including and beyond high school age? We have difficulties even with our present high schools, let alone trying to put the whole spectrum of the educational personnel in these complexes. What is your thinking in regard to the transportation, the traffic and so on?

MR. BURR: There is no question but what it would be a very severe problem. If you were to do a new one, you would have to give a far greater amount of consideration to all means of transportation, including public, even in suburban areas, to get to and from this thing. It is a very great problem and one that would be very difficult to solve in many areas. I would hate to think of it in our own.
MISS MARTIN: Mr. Burr, I would like to make a statement just so that there won't be a misunderstanding of what you have just said and see if this is what you have said. I think you have given us a lot to think about. It has been a challenge. But this is what I understood you to say:

That school food service of the future will be expanded and that we might interpret school food service as having two components: one for the children that we normally have in the schools--these preschoolers through secondary schools--and then the adult food service component. It might be necessary for us to treat each of these separately, because the school food service for the pupils we normally think of should be operated in such a way that we would safeguard the nutritional needs of these students and teach them food habits. This component of the school food service program would need to be operated efficiently not only from the financial point of view but also from an educational point of view in light of the new concepts of education. The adult component would be to provide a service to the adults in school.

One other thing that I gathered you said about our pupil component of food service is that we would not only be teaching nutrition but we would be using the food service as a laboratory for training. Now if this is true, rather than talking about teaching health and nutrition, could we call this School Food and Nutrition Education and not separate them, so that people wouldn't get the idea that we were just going to have a food service program down here and a nutrition education program somewhere else?

Did I understand you correctly?

MR. BURR: Yes, with perhaps one comment. I think it is a little dangerous when you talk about the separation. Certainly there is a difference between feeding young children and adults. I am not sure exactly what you had in mind. We might be apart there a little bit. I don't see it being completely and totally separated. I think it is under one broad concept. In other words, you don't have to have separate places for them to eat or keep them apart. But I do think that the educators are going to move in and do this for you.

CHAIRMAN GRIFFIN: We can tell that by all your questions Mr. Burr, too, has challenged us.

...The meeting was then recessed at 12:30 o'clock,