Inadequate educational techniques and systems are the root causes of student dissent; because television has shown them the realities of the outside world students are not willing to accept the insular, isolationist, esoteric irrelevance that is rampant in formal education. Throughout the world, the value of electronic communications is being recognized; it is viewed as a way to reach children and adults in underdeveloped countries and to show them what possibilities exist in the outside world. Communications must be used in terms of its most critical potential: to directly solve social, economic, and political problems of mankind. There should be no question that television can provide learning experiences for the child not otherwise available, and it must be a critical factor in changing education. We are allowing our children to be manipulated and tested and standardized and shut out from meaningful, free-choice, relevant, life-oriented learning because we still permit education to function as if television and communications were peripheral. American education must be reorganized using communications as a base for reaching the youth both in school and at home. (RH)
HOW'RE YOU GOING TO KEEP THEM DOWN ON THE FARM AFTER THEY'VE SEEN TV?

An address to the American Management Association
Sixth Annual Conference on Education and Training
August 3, 1970 at the Americana Hotel, New York City

by

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U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION

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It seems to me we are wasting our time.

We talk about early learning centers. The early learning center is the four square feet in front of the television set.

We talk about case histories. The case history is that by the time the child enters kindergarten he or she has already spent more hours learning about the world in front of the television set than the hours he will spend in a college classroom getting a bachelor's and master's degree.

The child, at any age, no longer enters the iron suit of formal education—if he ever did—as a blank piece of paper to be written on by a teacher.

The college student of today is of the television generation. He has seen war, assassination and the moon. Does anyone really think they're going to teach him history out of a book?

I have had the privilege of speaking at these conferences for five years now. Each succeeding year I have more and more cause to wonder whether all conferences are merely sops for consciences, that make procrastinators of us all.

Four years ago I spoke about television and early childhood education. I urged full and careful utilization of this medium that children at the earliest age are most tuned in to, as the primary means for motivating and educating children. So here I am, four years later, invited back to speak about the same thing. Sad to say, I could give exactly the same speech again because although the realization and urgency have grown, there is still virtually no meaningful action on the part of educators and industry to meet the real needs of the children and of society through television.

Talk about a generation gap! What a tragic waste of time, what a revealing picture of why some of the brightest, most capable students are dropping out, turning on, or burning down, for us to talk here about early childhood education, about any education and not realize where its really at. Its right there in the living room, and until you know that you are completely out of what's happening in this world today.

It has taken a ten-week education and communications lecture-consulting-study tour of Asia and the Soviet Union, from which I have just recently returned, to clear away any reservations I may have had on the failures and successes, the inadequacies and potentials of education and communications in this country and throughout the world.
Those of you who have travelled in Asia know that you don't truly begin to understand what educational communications mean to this world until you go through the streets of Calcutta and see that it is only the very lucky ones of the more than half-million people who are born, exist and die on the streets who have a sewer pipe to crawl into at night.

Only after your insides and heart and head are torn apart by the bestial poverty virtually everyplace you turn in southeast Asia, after you witness the daily bloody revolutions of individuals and groups who have nothing to lose by dying because a bullet or a bayonet is less painful than their slow diseased starvation, can you really understand how tragically serious is the seemingly flip comment, "How're You Going To Keep Them Down On The Farm After They've Seen TV?"

In our super-sophistication of economic security (man, the times-are-a-changin') we still, every day, conduct our educational institutions as if sitting on one's rear end within the confines of four walls for three hours a week for fifteen weeks had anything to do with learning. (Pity the poor elementary and secondary school child, who is trapped for five hours every day in such a situation. I suppose there are just three places in our society where human beings are held irrevocably against their will: jails, insane asylums and schools.)

The tragedy is that even after the classroom gets burned down most administrators and teachers still don't get the hint and they make speeches and testify before Congressional committees placing the blame on virtually everyone and everything, but forgetting to include the most compelling factors of all—the inadequate educational techniques and systems. I am not discounting the public issues raised by the students. I do say, however, that the root cause of the problem is the educational system and practice which forces students to go out of the school if they want to deal with the critical issues of society. (I will tell you later about a new university that could be the salvation of American education—its whole orientation is practical concern and action in regard to the critical needs of the day which will focus the students energies on positive communications projects to solve the problems.)

Blame it on television. Our students today are not going to stay down on the figurative farm. They have grown up with television, spending about 50% more time in front of the television set than in the classroom by the time they graduate from high school. They have seen the realities of the outside world and they are not willing to accept the insular, isolationist, esoteric irrelevance rampant in formal education as those of us did who didn't have the advantage of TV to know any better.

Despite the potential incitement of TV to progress and change—not welcomed in every country in the world—everywhere I went in Asia in Japan, Hong Kong, Taiwan, Thailand, Cambodia, Burma, Nepal, India, Pakistan, and in Asian and European Republics of the Soviet Union, I got the same message from almost all government officials, educators, parents, children, professionals, blue collar workers and, especially, from business and industry executives.

And the message was, simply and directly, that they want communications and need communications to create a contributing, viable population in a world that has closed in on and made every country an integrated part of that world.
Even in countries where there is in part or in whole political isolationism, businessmen told me privately that they hoped television could be developed as an effective link to other countries and eventually provide an understanding and opening for increased trade. In countries where official announcements have proclaimed no interest in educational television, industry executives have made efforts to promote ETV in order to provide bases for greater mutual understanding with other countries through program exchange and cooperative program production. Even in the poorest countries the gleam of a communications future includes computers, lasers and even holography.

And where does it start? It starts with the children. For the children on the streets and in the jungles and on the deserts and on the canals who will grow up in a society unchanged from that of their parents and grandparents and great-grandparents because they don't know what is possible or probable in the world beyond their immediate world. The children in the cities and villages who are dying of disease and starvation in front of our eyes because their parents either do not know what is possible for them or who do not have the education or training to do more than they are doing. The children who will not live beyond infancy or if they do will not contribute to but drain from society as mentally or physically deformed victims of their environment, because their entire village or city or region has hardly even fleeting glimpses of anything but their own dark-ages existence.

How do we reach the children? With a little love, to start. Enough love to be willing to give up some of cherished status quo's. In education. In school financing. In industry-school relationships. In educational philosophy, method and technique. In the use of communications. In all those ways that have continued to keep millions of children throughout the world with distended bellies and shrivelled brains. By being willing to educate ourselves, the adults, to use communications not only to train more efficient workers, not only to provide quality entertainment, not only to sell products, but to use communications in terms of its most critical potential: to directly solve social, economic and political problems of mankind.

Last year, at this conference, I briefly mentioned The International University of Communications, which has been chartered in Washington, D. C. as the first institution to use communications to meet critical human needs. Project-oriented learning, combining multi-media learning carrels and the tutorial approach, with objective research and practical implementation of projects to demonstrate knowledge and competence. No classes, courses, curriculum, examinations or lectures which are irrelevant to practical learning and inapplicable to the real demands of society. (How many of you hire someone for middle management on the basis of how many questions they get right on a true-false and information-completion exam? See how ludicrous it sounds! And yet virtually every school uses information testing as a basis for evaluating a student's ability.) The International University of Communications will be the first University to provide personnel and services to meet any need
of any organization in the communications industry, as well as providing similar direct practical services to every other profession and business in the world, based on the concept that successful communications is an essential part of any successful operation in any field of endeavor. This University has received enthusiastic support all over Asia and Europe. A branch has already been set up in Japan, and the Japanese communications industry is contributing to the development of the University. They see this University as the only educational institution whose goals and products will directly contribute to the growth and success of the communications industry. And what's wrong, at long last, with a quid pro quo between industry and education? Special national advisory boards for the University, in addition to its existing international board, are being set up in a number of countries. If I am enthusiastic about this University it is because it is the first and only opportunity we have had to demonstrate not only the real use and impact of communications in education, but to educate people to use communications in a direct, practical way to solve concrete problems in many areas. It may be our first truly effective opportunity to provide the resources and personnel to reach the child in a way the child has to be reached.

One of the things we have in common with Japan is a love for statistics. I found great interest in the charts and graphs I used in my lectures in Japan. I have not directed myself to statistics here today. Not for "Sesame Street." Or Wilbur Schramm's research. Or Hagerstown. Or examples of learning on the part of my children. Or my neighbor's children. Or Ford foundation research on the use of television in the schools. First of all, you have heard them many times. If we still have to prove to ourselves that television works in education, then we have learned nothing in the last 20 years. Except for the PTA minimum of educational research who knows somebody in South Junction whose children didn't like television in their school and therefore it is of no value, there should be no question that television can provide learning experiences for the child not otherwise available. And that refers to television incorrectly and inadequately used— as it is now used throughout the United States, as reinforcement to the classroom. Reinforcement of outdated, outmoded, 19th century education. Imagine how magnificent television could be if correctly used, to capitalize on the visual-set for learning of all children, on the medium-orientation of some 4,000 television hours that children take into the first grade formal learning situation with them, on the visual-real life motivating factor. (This is one of the purposes of the International University of Communications, incidentally: to help people learn to apply television in terms of its and the child's real potential.)

(In this regard it is interesting to note that teacher training institutions in the Soviet Union require at least six months of education in the use of technology, including television, in the school. Yet, not a single state in the United States requires any education in the use of instructional television for teacher certification. Use that tidbit next time some superintendent of education wonders why the kids aren't learning or tries to tell you that his school system is part of the twentieth century!)
For those people who feel they haven't had their money's worth without a bunch of numbers and dotted lines, I have attached to copies of this presentation, which are being distributed by A.M.A., an Appendix with some data and a copy of my paper of four years ago on the same subject. But even as this extra material was being put together, I couldn't help but think of the group of black children in one of the elementary schools in New York whose IQ scores went up 20 points shortly after they began getting hot breakfasts before school every morning where they previously had had nothing to eat before school at all. That indicates how valuable standardized tests are as a measure of ability."

When I talk about the children of Asia I do not leave out the children of America, and when I talk about the children of America I include the children of Asia. The revolutions of energy, transportation and communications have made all children necessarily interdependent. It is a practice in some places in Asia--and in America for that matter--to close one's eyes to existence. Virtually everyone I saw with decent clothes on their backs and a roof to go under and food to eat seemed to walk down the streets of Calcutta and other cities pretending that what is in front of them doesn't exist. It is like the people at the bus stop in Eugene O'Neill's "The Hairy Ape," oblivious to a frantic Yank trying to penetrate and bouncing off their closed society.

"When are we going to stop walking down the streets of the Calcuttas of the world as if death and degradation are not there? How effectively can we learn about and solve the problems of our society by sitting and talking to each other in plush air-conditioned hotels? We came to find out about education and training. Don't we care who needs that education, what kind of education they want, what problems that education is going to solve?"

We ought to get up off our own rear ends in the ivory towered four-walled teacher and blackboard lecture classrooms--whether we call them schools or offices or conference halls. If we are really concerned with the children, we ought to get out to where they are and see how inadequate and literally destructive the present systems of education are for them in the elementary, secondary and higher levels. We ought to get out of here and onto the subway and go look at P.S. 118 in Bay Ridge, and Dewey Junior High School in Sunset-Red Hook, and Boys High School in Bedford-Stuyvesant. And they aren't the worst ones. They just happen to be the ones where I went to school.

And you don't even have to do something so dramatic as taking a subway to Brooklyn. What about your own communities? Are you part of the scene?

I mean, are you trying to actively better society or do you retreat to the inner sanctuaries of your barbecue pits and swimming pools of suburbia and shut out the outside world from your suburbia-family cocktail parties?
What is interesting is that these suburban pillars usually complain the loudest about hippie cop-outs who retreat to the inner sanctuaries of their railroad flats of urbania and shut out the outside world from their hippie-family pot parties. What hypocritical gall. The primary difference between the suburban and urban cop-outs is the length of their hair.

If we are willing to acknowledge that the streets of the Calcuttas and Bedford-Suuyvesants do exist, then we have no business wasting our time discussing such inane questions as will television be of value and should we use it. We have no choice.

Television is--must be--a critical factor today in changing education. And you--the businessmen--are and must be another critical factor. If we assume that one of the stereotypes about business is true--that you are pragmatic, practical men and women--then you know something must be done and done quickly. There is a generation gap between the child and the school administrator. The student does not trust the bureaucratic, curricular-oriented establishment. But there is no generation gap between you and the educational establishment. You have the knowledge, the ability and the prestige locally and nationally to ensure a responsive bureaucracy in our educational system, to use your communications abilities to see that education uses communications to meet the needs of the child and of society.

We have let cities burn because we were unwilling to use communications to meet inner-city needs.

We allow countries to murder each other because we are not using communications to bring understanding to people of other people's needs and desires.

We permit pollution to stink through too many endeavors and professions because we do not uncover them with the fresh light of communications.

And we are allowing our children to be manipulated and tested and standardized and robotized and shut out from meaningful, free-choice, relevant, life-oriented learning because we still permit education to function as if television and communications were peripheral.

Let me state categorically my message for this year.

Students are bringing down our educational system because it is outmoded and irrelevant, because it is oriented to teaching and not learning, because it uses 19th century methods of communication when students are part of 20th century communications, and because it remains largely unresponsive to the needs and cries of those who it is supposed to serve.

Teachers and educational administrators are bringing our educational system down because they continue to pretend that education takes place in a classroom from a teacher and they do not recognize the degree to which education has already taken place and is taking place through television, or that education is a process of learning, not teaching.
You, more than any other group of individuals, can change that.

The most important task during the next twelve months, before we meet again for intellectual back-patting, is to reorganize as completely as possible the American educational system, using communications, particularly television, as a base for reaching, turning on and tuning in our youth, in the home and in the outside artificially imposed learning center. (I deliberately avoid that outmoded term, classroom.) At the same time we must begin to provide the kind of education needed by all segments of society to be able to use communications to meet the critical social, political and economic problems of mankind.

This summer I have in my office in Washington an intern. One of thousands of people from all over the country who are learning about the operations of the federal government and, hopefully, from whom we bureaucrats are learning. This man looked at a draft of this paper and wrote some notes on it. I want to quote him.

"I liked it, but I fear that we hear these calls so often that they tend to be merely accepted and largely ignored. But, I hope, if calls are made often enough there may be an eventual impact. Hope there is time."

I hope there is time, too. That is entirely up to each of you.

If we are willing to devote time, energy, conviction and money to this now--today--this moment, then maybe a few years from now we won't have to pretend that the Calcuttas of the world do not exist in front of our very eyes.
APPENDIX

Television may serve as a device for early childhood education in the home and in a structured classroom situation. Woefully inadequate data have been compiled on the impact of television as an educational factor in either of these roles. J. Reid Christopher and Donald W. MacLennan cite a study, for example, in which some 250 comparisons between televised instruction and direct instruction were carefully examined. Of the 250 comparisons, 217 were considered "uninterpretable," 23 "partially interpretable," and only 10 studies were considered "interpretable." From these ten studies the authors concluded that there was no significant difference between televised and direct instruction.

Extensive analysis is currently being conducted on data collected by Children's Television Workshop and Educational Testing Service. These data, concerning the impact of the program "Sesame Street," should constitute the first significant survey of the impact of television as an educational device in the home setting.

Some observations concerning the role of television in the home are in order at this time even though the impact cannot be statistically measured. There are about 24 million preschool age children not in school. Only some 250,000 are enrolled in Head Start and fewer than 50,000 in programs under Title I of the Elementary and Secondary Education Act on a full year basis. A vast majority of preschool children have no access to organized educational opportunities. Nearly all of these children do, however, have access to television. Thus there is an opportunity for television to serve a functional role in early childhood education.


3Dr. Edward L. Palmer estimates that television is in 90% of homes with incomes under $5,000. See his article, "Can Television Really Teach?" American Education, August-September, 1969, page 6.
Godwin Chu and Wilbur Schramm's significant analysis of the research which has been conducted on television as a classroom educational device includes a review of the Hagerstown, Maryland, Junior High School study. Tables 4 and 5 of that study are included here. The indication is rather clear that television did contribute to educational achievement.

Table 4. Effects of televised learning.

<table>
<thead>
<tr>
<th></th>
<th>Gr. 3</th>
<th>Gr. 4</th>
<th>Gr. 5</th>
<th>Gr. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nat'l norm in May</td>
<td>3.90</td>
<td>4.90</td>
<td>5.90</td>
<td>6.90</td>
</tr>
<tr>
<td>1958 (before TV)</td>
<td>3.59</td>
<td>4.43</td>
<td>5.26</td>
<td>6.49</td>
</tr>
<tr>
<td>1959 (1st yr. of TV)</td>
<td>4.06</td>
<td>4.97</td>
<td>5.77</td>
<td>6.83</td>
</tr>
<tr>
<td>1960</td>
<td>4.18</td>
<td>5.01</td>
<td>6.13</td>
<td>7.17</td>
</tr>
<tr>
<td>1961</td>
<td>4.30</td>
<td>5.08</td>
<td>6.19</td>
<td>7.28</td>
</tr>
</tbody>
</table>

Table 5. Comparison of growth with pupils taught conventionally and by television.

<table>
<thead>
<tr>
<th>Ability Level (Grade 6 Science)</th>
<th>Taught Conv.</th>
<th>Taught by TV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Av. I.Q.</td>
<td>Av. I.Q.</td>
</tr>
<tr>
<td>111-140</td>
<td>117 12 mo.</td>
<td>116 15 mo.</td>
</tr>
<tr>
<td>90-110</td>
<td>100 12 mo.</td>
<td>100 14 mo.</td>
</tr>
<tr>
<td>57-89</td>
<td>83  6 mo.</td>
<td>83 13 mo.</td>
</tr>
</tbody>
</table>

Other studies are cited by Chu and Schramm which indicate that there is no significant difference between learning from television and conventional methods. However, though a large majority of the children show no significant difference, there are more who show significant improvement in learning through television than those who do better under conventional methods. The authors contend that the data indicate that


5Ibid.


7Chu and Schramm, page 5.
"there are a number of cases in which televised instruction has brought about more learning than the existing level of classroom teaching."\(^8\)

Consideration of these statistics should be tempered with the realization that there is serious question as to whether television has been used at all effectively, and to what degree it can be successful even with good program materials when very few teachers using it have adequate training for its effective utilization.

**TEACHER TRAINING IN THE UTILIZATION OF CLASSROOM TELEVISION**

Although coursework in the utilization of television in the classroom is required by many colleges and universities (see Table 31), Robert E. and Melissa H. de Kieffer found that in 1967 there were apparently no states which required instructional media courses for certification.\(^8\) In 1947 two states (California and Pennsylvania) had such a requirement. They were joined by 1957 by Maine and Florida. By 1967, however, no states indicated such a requirement. The authors observe that "when asked if such certification was contemplated in the near future, 13, or 26 percent, of the State departments answered affirmatively.\(^9\)

Table 31. Numbers of media courses required or elective in four-year institutions.\(^11\)

<table>
<thead>
<tr>
<th>Type</th>
<th>Required</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Year</td>
<td>130</td>
<td>399</td>
</tr>
<tr>
<td>Summer School</td>
<td>87</td>
<td>321</td>
</tr>
<tr>
<td>Extension Classes</td>
<td>15</td>
<td>49</td>
</tr>
<tr>
<td>Total:</td>
<td>252</td>
<td>769</td>
</tr>
</tbody>
</table>

A survey of such requirements is currently being conducted by Dr. William F. Grady of the Educational Media Center of Temple University. Dr. Grady has found no state requirements of television training as a requirement for certification nor has he found indications that such requirements will be instituted.

\(^8\) Ibid., page 6.


\(^10\) Ibid.

\(^11\) Ibid., page 45
Some State departments do have requirements for those who administer educational media programs. The de Kieffer study includes Table 9 which is reproduced below.

Table 9. Number of State departments requiring courses in educational media for certification of those who administer educational media programs in the schools.

<table>
<thead>
<tr>
<th>Certification</th>
<th>No. of Depts</th>
<th>Range of Sem. Hours Required</th>
<th>Mean No. of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Administrator</td>
<td>2</td>
<td>6-12</td>
<td>9</td>
</tr>
<tr>
<td>2. Supervisor</td>
<td>4</td>
<td>6-12</td>
<td>9</td>
</tr>
<tr>
<td>3. Librarian</td>
<td>6</td>
<td>2-12</td>
<td>5.2</td>
</tr>
<tr>
<td>4. Educ. Media Director</td>
<td>10</td>
<td>0-24</td>
<td>8.4</td>
</tr>
<tr>
<td>(full-time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Educ. Media Director</td>
<td>6</td>
<td>0-12</td>
<td>4.5</td>
</tr>
<tr>
<td>(part-time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Educ. Media Building Coordinator</td>
<td>7</td>
<td>0-12</td>
<td>4.4</td>
</tr>
</tbody>
</table>

(Appendix prepared by Lyle A. Green, Washington Summer Intern in Educational Broadcasting Branch, Federal Communications Commission)

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12 Ibid., page 17.