Teacher vs. the Machine: The Headline Battle of Atlantic City

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THE TEACHING MACHINE received its public baptism by fire in the press coverage of the 1961 Atlantic City National Education Association convention. Reporters covering the convention remarked afterward that the time was ripe; there had been enough public awareness, curiosity, and apprehension, they thought, to create a receptive mood. They cited federal aid, foundations "pouring large sums of money" into technological developments in education, and "teaching machines" being "peddled door-to-door" as reasons for an undercurrent of anxiety.

A study of the coverage of the convention in the daily press found that only federal aid and a resolution on desegregation attracted more newspaper space and headline attention than did the issue of communication technologies in education. The challenge of teaching machines inspired more editorials than did any other issue at the convention.[1]

It may have been more than a general mood of apprehension and receptivity, coupled with a nose for news, that made teaching machines (in the view of some reporters) "the most significant new story to come out of the convention." The NEA convention's over-all message to the nation was that broad planning and vigorous action were needed to relieve national inequalities and shortages in many areas of educational opportunity and quality. An analysis of the complete file of daily newspaper clippings (over 2,000 stories printed in a combined circulation of 127 million copies) indicated that the general pattern of press coverage precluded

[1] For a more detailed report of the technological aspects of the press coverage, see *Instructional Technology and the Press: A Case Study,* by George Gerbner. Technological Development Project, Occasional Paper No. 4. Washington, D.C.: National Education Association, 1962. Support from a Cooperative Research grant (U.S. Office of Education) and the cooperation of the NEA in making a complete file of clippings available made the analysis possible. A full report of the complete press coverage is being prepared for publication.

the clear development of such a message. Editorial reaction to the convention's support of the federal aid bill then pending in Congress was almost unanimously hostile. (Shortly afterwards the bill was defeated.) In this general climate, and on an otherwise slow news day, the chief educational officer of the host state delivered a free-swinging verbal blast against machines which sparked the battle of the headlines and caught teaching machines in a crossfire of conflicting interests.

Almost the entire teaching machine story originated in the events of the first working day of the convention, Monday, June 26, 1961. It was the day after news of President Kennedy's message to the convention in support of federal aid. Dozens of prominent national figures addressed the convention; but it was New Jersey Commissioner of Education Frederick M. Raubinger who became the most frequently cited and headlined speaker in the total press coverage.

The speech, entitled "Practices Which Tend To Increase the Lock-Step, Destroy Diversity, and Place Pupils in Molds," was not only of timely interest; it combined some proven ingredients of a warm human drama and a Frankenstein chiller.

In four brief, quotable pages Raubinger lashed out at "educational schizophrenia"; federal "centralizers"; "impersonalized, dehumanized teaching" through television, teaching machines, and other technological devices; and tampering with the organizational structure of the schools.

Other speeches delivered the same day included a talk by William Van Til, chairman of the Department of Secondary Education, New York University. Van Til explicitly disclaimed any "intention to decry or deprecate current concern for technology and organization." The burden of his speech was that the great issues of our time—nuclear and social revolutions, human relations, the uses of knowledge in democratic society—are the "genuine curriculum frontiers"; they have "priority over technology and organization."

At still another time and place during the day, Edgar Dale of Ohio State University spoke on "Training or Education—A Critique of New Teaching Materials." Dale's major point was that "programed teaching suffers from the weakness of all systematic approaches to learning"; it helps more to solve problems than to frame them, to answer questions than to raise them, to assimilate perspectives than to create them.

Other speakers were P. Kenneth Komoski, president of the Center for Programed Instruction, and James D. Finn, professor of education and director of NEA's Technological Development Project.

THE NEWS COVERAGE

A total of 193 newspaper items of nearly 15 million combined circulation featured news or comment on communication technology topics originating at the convention. Teaching machines were noted in 63 percent of these items (11,276,000 combined circulation) and headlined in 51 percent (8,680,000 combined circulation). Forty-two editorials dealt with teaching machines.

A single Associated Press story accounted for three-fourths of all teaching machine stories. It was printed in 91 papers with 7,619,000 combined circulation. The story began:

Atlantic City, N.J. (AP)—Educational gimmicks and gadgets such as teaching

machines and television are being peddled to the public like soap, cigarets, and toothpaste, New Jersey's state commissioner of education charged today.

Frederick M. Raubinger, speaking out at the annual convention of the National Education Assn., loosed a blistering attack on what he called "impersonalized, dehumanized teaching."

"We are not only moving toward lockstep and conformity," he said, "but I suspect that we may be on the road to doing actual damage to children and young people."

After establishing the charge, the story pinpointed the issue and broadened the base of the attack: "Raubinger's charge that all classroom devices must be used as tools by the teacher rather than substitutes for him was echoed by other convention speakers."

Other convention speakers allegedly "echoing" Raubinger's "charge" were Van Til, Dale, and Komoski.

Ignoring Van Til's disclaimers (including his remark that "of teaching machines I am as yet innocent . . .") and omitting mention of the major burden of the speech, the story picked up those passages from the text and from his extemporaneous remarks which fit the major theme:

"In our schools [Van Til said], students are often treated as though they were identical members of a vast anonymous mass. Individuals are drowned in the tide of humanity. Personality is lost in the academic lockstep."

Van Til also told convention delegates that improper use of teaching machines and television is really not progress but a step backward. Those who would substitute machines for teachers, he said, threaten a return to the 18th century industrial revolution when "children were enslaved to machines."

Many newspapers carrying the AP story ended on the colorful note of children "enslaved to machines." The story, however, went on to cite Edgar Dale and Kenneth Komoski in a way that made them appear to bring up the rear of Raubinger's light brigade off to battle "the machine."

Most other stories followed the AP line. The United Press International cited the same speakers, used the same quotes, and came to the same synthetic conclusions. Only the lead was different:

Atlantic City (UPI)—It washes your dishes and it tabulates your inventory—but should a machine teach your child?

The increasing use of mechanical devices in overcrowded classrooms to aid understaffed schools was the subject of a severely critical attack by leading educators at the annual convention of the National Education Association.

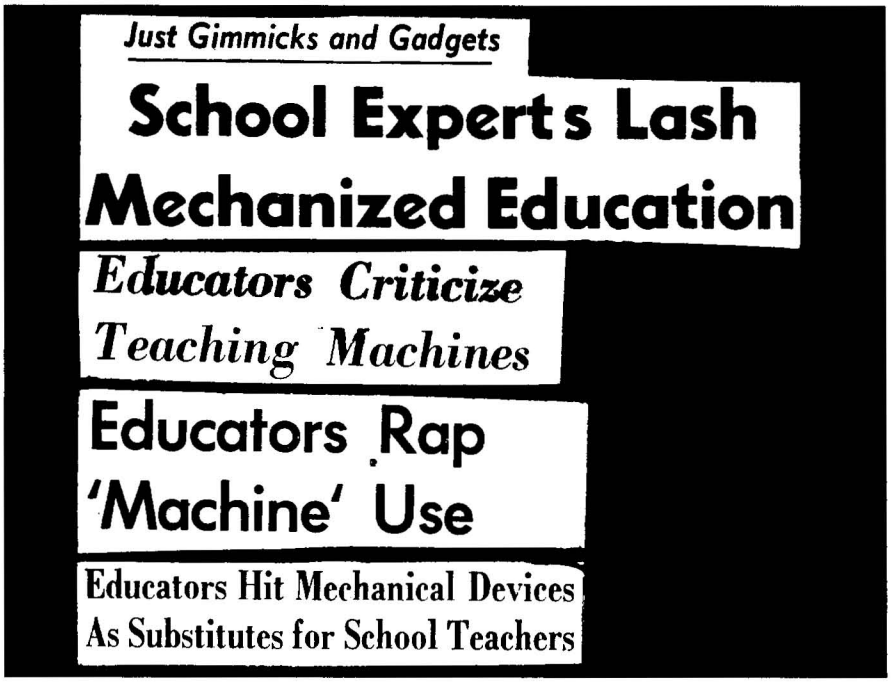
The third major source of coverage was a story written for the *New York Herald Tribune* and syndicated through its news service. The story began:

Atlantic City, N.J. — Teaching machines, television, and other educational "gadgetry" were soundly rapped by educators here yesterday as destructive of pupil individuality and as symptoms of "educational schizophrenia."

Several speakers told sessions of the convention of the National Education Association that machines were threatening to "place pupils in molds" and increase educational conformity rather than individuality.

The story contrasted commercial exhibitors' "endless demonstrations of the teaching devices in the basement" with speakers upstairs depicting education "through shadows on the silver screen, lights flashing and bells ringing to proclaim 'tilt' on academic pinball machines, and ghostly voices whispering persuasively over headphones."

One significantly different twist was a story written by Georgie Anne Geyer and distributed through the *Chicago Daily News* syndicate. The story reported Van Til's major point that "the greatest challenge of the '60's is developing demo-



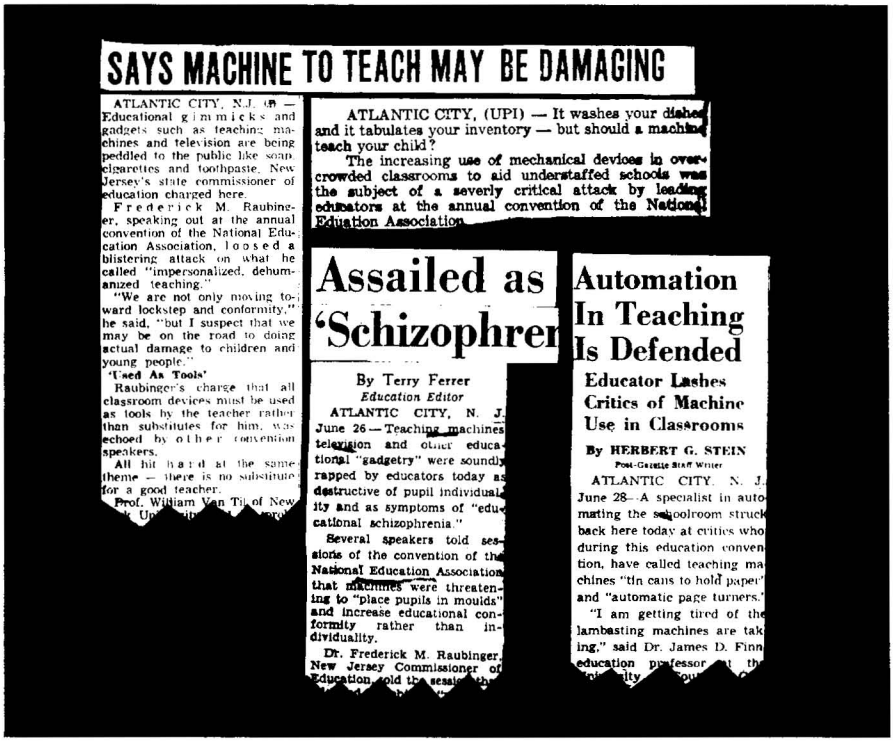
Just Gimmicks and Gadgets

School Experts Lash Mechanized Education

Educators Criticize Teaching Machines

Educators Rap 'Machine' Use

Educators Hit Mechanical Devices As Substitutes for School Teachers



SAYS MACHINE TO TEACH MAY BE DAMAGING

ATLANTIC CITY, N.J. (AP) — Educational gimmicks and gadgets such as teaching machines and television are being peddled to the public like soap, cigarettes and toothpaste, New Jersey's state commissioner of education charged here.

Frederick M. Raubinger, speaking out at the annual convention of the National Education Association, loosed a blistering attack on what he called "impersonalized, dehumanized teaching."

"We are not only moving toward lockstep and conformity," he said, "but I suspect that we may be on the road to doing actual damage to children and young people."

'Used As Tools'

Raubinger's charge that all classroom devices must be used as tools by the teacher rather than substitutes for him, was echoed by other convention speakers.

All hit hard at the same theme — there is no substitute for a good teacher.

Prof. William Van Til of New

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Assailed as 'Schizophren

By Terry Ferrer
Education Editor

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Dr. Frederick M. Raubinger, New Jersey Commissioner of Education, told the sessio

Automation In Teaching Is Defended

Educator Lashes Critics of Machine Use in Classrooms

By HERBERT G. STEIN
Post-Gazette Staff Writer

ATLANTIC CITY, N. J. June 28—A specialist in automating the schoolroom struck back here today at critics who during this education convention, have called teaching machines "tin cans to hold paper" and "automatic page turners."

"I am getting tired of the lambasting machines are taking," said Dr. James D. Finn, education professor at th

★ ★ ★ EDITORIAL ★ ★ ★

Resisting Change

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Teaching Resists Change

Despite preoccupation in academic circles with gadgetry—the art of mechanical instruction—the recent convention of the National Education Association demonstrat-

any instruction method which leads the student to mastery of the subject with minimal error, but which requires frequent testing of student absorption so that he may not

Teaching Resists Change Toward Machines

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Well planned and executed pre-

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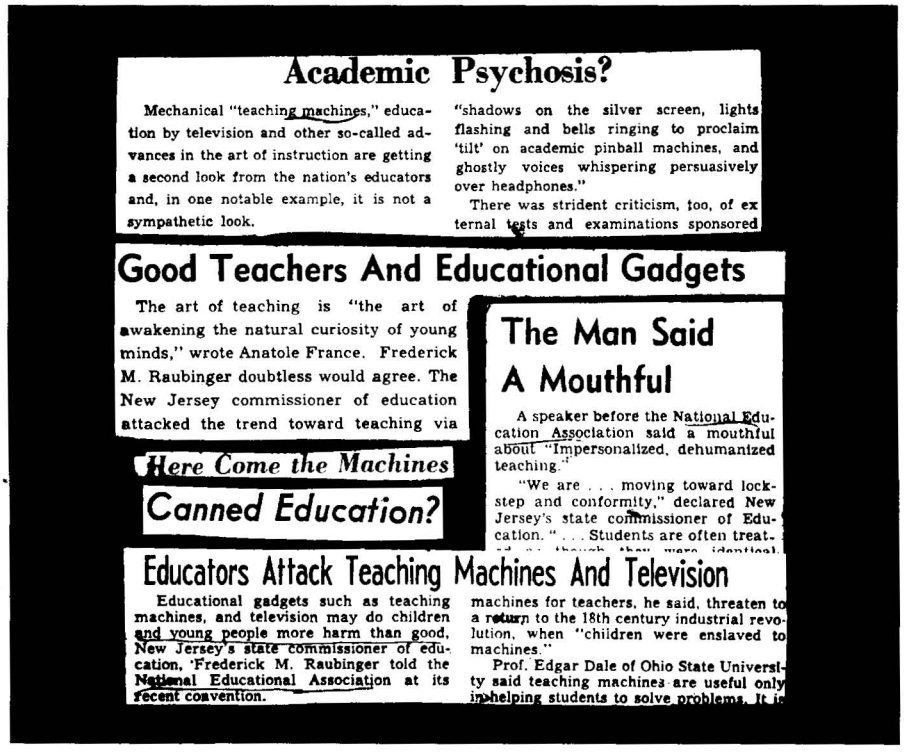

Academic Psychosis?

Mechanical "teaching machines," education by television and other so-called advances in the art of instruction are getting a second look from the nation's educators and, in one notable example, it is not a sympathetic look.

"shadows on the silver screen, lights flashing and bells ringing to proclaim 'tilt' on academic pinball machines, and ghostly voices whispering persuasively over headphones."

There was strident criticism, too, of external tests and examinations sponsored

Good Teachers And Educational Gadgets

The art of teaching is "the art of awakening the natural curiosity of young minds," wrote Anatole France. Frederick M. Raubinger doubtless would agree. The New Jersey commissioner of education attacked the trend toward teaching via

Here Come the Machines

Canned Education?

The Man Said A Mouthful

A speaker before the National Education Association said a mouthful about "Impersonalized, dehumanized teaching."

"We are . . . moving toward lockstep and conformity," declared New Jersey's state commissioner of Education. ". . . Students are often treat-

Educators Attack Teaching Machines And Television

Educational gadgets such as teaching machines, and television may do children and young people more harm than good, New Jersey's state commissioner of education, Frederick M. Raubinger told the National Educational Association at its recent convention.

machines for teachers, he said, threaten to a return to the 18th century industrial revolution, when "children were enslaved to machines."

Prof. Edgar Dale of Ohio State University said teaching machines are useful only in helping students to solve problems. It is

cratic human relationships among young people of varied races, religions and social classes and helping people to understand and come to grips with the international social realities of their time."

This deviation from the general line of reporting indicated that when reported in a context of their own, some of the speeches pointed to issues and considerations quite different from those presented to the vast majority of readers.

One reaction piece to the major line of news coverage appeared in the *Pittsburgh* (Pennsylvania) *Post-Gazette & Sun-Telegraph,* and was later noted in one editorial. "AUTOMATION IN TEACHING IS DEFENDED," stated the news story headline. "EDUCATOR LASHES CRITICS OF MACHINE USE IN CLASSROOMS," declared the deck. The story began:

> Atlantic City, N.J., June 28—A specialist in automating the schoolroom struck back here today at critics who, during this education convention, have called teaching machines "tin cans to hold paper" and "automatic page turners."
>
> "I am getting tired of the lambasting machines are taking," said Dr. James D. Finn, education professor at the University of Southern California, Los Angeles.
>
> "Now the typewriter is considered a pretty handy gadget, and no one here would argue against the flush toilet, and no housewife would oppose the washing machine," he said. "One doesn't have to be criticized as 'machine oriented' just because he appreciates machines."

Finn declared, according to the story, that "I have never seen a classroom teacher who had her hands on this stuff who was afraid of it . . . but the teachers don't make speeches."

On the whole, convention speakers were cited on the subject of teaching machines in direct relation to the extent to which they could be presented as supporting the revolt of "teachers vs. the machine" and in apparent inverse relation to their familiarity with or role in the study or practice of communication technologies in education. The number of items citing speakers on the subject of teaching machines and communication technologies, with the aggregate circulation of stories in parentheses, was as follows: Frederick M. Raubinger, 134 (9,749,000); William Van Til, 118 (9,607,000); Edgar Dale, 86 (7,298,000); Kenneth Komoski, 44 (3,894,000); James D. Finn, 2 (317,000).

The catchy news leads and provocative slant of the stories were well suited to the requirements of flashy headlining. A count of headline verbs used to indicate what teachers did with machines showed "HIT," "RAP," "LASH," "BLAST," "ATTACK," "CRITICIZE," and "ASSAIL" in the lead, with frequencies ranging from 14 to five. These were followed by "DEPLORE," "RIP," "FLAY," "SCORE," "LAMBAST," and "DECRY."

EDITORIALS

The news coverage gave the subject the dramatic twist of a great human battle. Editorial writers rose to the occasion in greater numbers, and in larger combined circulation, than they did to the challenges presented in any other convention issue.

Most editorials rushed to the defense of the embattled teacher in his fight with the implacable education machine. Some defiantly jumped on the bandwagon of "progress" against "diehard" educators not sufficiently concerned with "teacher productivity." A few declared plague on both sides in the headline battle of Atlantic City.

Only one in five editorials on the subject attempted to lift the discussion out of the battle of the headlines and to examine the premises implicit in the

news coverage. None was very successful. One syndicated editorial published in six small papers comforted readers with the thought, expressed with minor variations in all the headlines, that "TEACHING RESISTS CHANGE." The NEA convention demonstrated, said the editorial, that "despite preoccupation in academic circles with gadgetry," there is neither haste nor direction in the education profession. Then the editorial went on to say that the controversy "produced the feeling that what everybody is talking about is 'the machine.'" Actually, the editorial explained, " 'Teaching machine' is a term rapidly being accepted as descriptive of programmed education, even though no mechanical or electronic aids may be employed."

Another editorial, published in the *Albuquerque* (New Mexico) *Journal,* also began with the major theme of the news coverage: "The warfare of some diehard educators against machines, as old as the use of school movie projectors, broke out with new heat at the recent National Education Assn. convention in Atlantic City."

The editorial went on to cite James D. Finn's comments (reported in a special dispatch to the *Pittsburgh Post-Gazette & Sun-Telegraph*) and to conclude on its own: "It is clear that the educational processes in America are in revolution. This goes deeper than sputnik fever. The problem is, as the population soars, how can all students be given the advantages of the most complete education."

The final voice for the defense appeared in the *Cedar Rapids* (Iowa) *Gazette.* The editorial reviewed the positions taken in the "battle," and went on to comment:

> Instead of viewing the machine as a natural foe of individuality, knowing observers reserve most of their concern for the "programs" that go into it. These are the sequential information-and-response items that lead a student through his subject matter. At the real core of the problem, they far outweigh the mechanical gadgetry in significance.

Four out of five editorials, however, merely echoed the terms of the news coverage or spelled out assumptions implicit in these terms as a springboard to their own editorial conclusions.

The major source of editorial opinion was a syndicated piece appearing in 25 newspapers. "The art of teaching," it began, is " 'the art of awakening the natural curiosity of young people,' wrote Anatole France. Frederick M. Raubinger doubtless would agree." The editorial went on to observe that Raubinger (and by implication Anatole France!) "attacked the trend toward teaching via machine and television" at the NEA convention. "He and other speakers agreed that . . . students too often are treated as though 'they were identical members of a vast, anonymous mass.' To these conclusions we offer a strong amen."

In addition to the 25 newspapers running the piece verbatim, several others used it as basic text and added their own comments. These included key phrases of the news coverage: "impersonalized, dehumanized teaching," "moving toward lockstep and conformity," "individuals drowned in a tide of humanity," "personality lost in the academic lockstep," "academic pinball machines," "ghostly voices whispering persuasively over headphones." Typical headlines over the canned editorial were "CANNED EDUCATION?" "ACADEMIC PSYCHOSIS?" "HERE COME THE MACHINES," and "THE MAN SAID A MOUTHFUL."

More enterprising editorial writers struck out all on their own. The vision of "Johnny and his school friends" being "identical members of a vast anonymous mass" is "properly a matter of concern," declared the *Lancaster* (Pennsylvania) *Intelligencer Journal.* "America, in the international jungle of the latter half of the twentieth century, cannot afford a Johnny who is an automaton, whose thinking depends on a machine."

Some editorials were moved by home pride to make local exceptions. "Individuals are drowned in the tide of humanity," exclaimed the *Spartanburg* (South Carolina) *Herald,* but "some educators and some Boards of Education —Spartanburg's among them—are actively battling the tide of mediocrity."

In a similar gambit, the *Roanoke* (Virginia) *Times* agreed that "teaching machines" and television are "educational gadgetry . . . destructive of pupil individuality . . . symptoms of 'educational schizophrenia,' " that they "place pupils in molds" and are "causing impersonalized, dehumanized teachers" [sic.]. But then the editorial hastened to assure Roanokers that "the NEA speakers were leveling their guns at machines, not the programed type of instruction used in Roanoke." Finally the editorial struck the theme of ulterior motives causing all this furor:

> But we can't escape the suspicion that, since the NEA membership is made up of teachers, any new idea, good or bad, which might result in fewer teachers, would automatically bring down the wrath of those who make their living by teaching.

The suspicion of economic motive was noted in other editorials and embellished in some. Thus the *Montgomery* (Alabama) *Advertiser* commented:

> Teachers who merely parrot their lectures, who fail to inspire and encourage, are merely human machines. And they are neither as efficient nor as cheap as some of the "gadgets" replacing them.
>
> The NEA bleats are thus undeserving of much public sympathy. The arguments against mechanization, in a profession already mechanized by tired dogma and time serving teachers, are essentially the same as organized labor's attacks on new machines to do the job better.

The *Bangor* (Maine) *News* coupled Raubinger's remarks with those of Maine's Commissioner of Education Warren G. Hill at the convention to make the point: "Surely teachers such as Commissioner Hill describes are not being underpaid; they are being overpaid." Alluding to the "union-style package deal" pay for teachers and noting "actual damage to children and young people" done by "teaching machines and television," the editorial concluded: "These are rather alarming words for parents and taxpayers. It makes the layman wonder if all the additional money being spent for education these days is being spent sensibly."

CONCLUSIONS

The teaching machine story is likely to be one of the big and potentially explosive stories of American education in the coming decade. Only time will tell how significant the opening chapter will be; in other contexts, in a local setting, and in the classrooms of the nation, the story is told in different ways.

The headline battle of Atlantic City found machines an attractive target for a variety of pent-up emotions. This may be a sobering reminder that national press and public debates of educational ideas and innovations are never conducted purely on the technical or pedagogical merits of the case.

Education editor Terry Ferrer, writing in the *New York Herald Tribune* after the convention, pointed out that Raubinger "inveighed against proposals which advocate 'in one guise or another a national curriculum.'" In attacking "educational schizophrenia" and in blasting educational "machines" of all but the locally prevalent kinds, the Raubinger story had the fortuitous quality of aiming at one target but hitting another. Press coverage built this double-edged charge into a national crusade of teacher vs. the machine with unmistakable undertones of educational politics. On a deeper level, the headline battle of Atlantic City was more likely to arouse and exploit than to clarify apprehensions about national public support to education in a technological age.