The purpose of the study described here was to 1) investigate teacher attitude toward the present state of closed circuit instructional television as revealed through a questionnaire administered in the Fremont Union High School District; and 2) to make recommendations that would encourage greater utilization of this medium. Responses to the 23-item questionnaire were obtained from 79 percent of the 150 teachers sampled. Highly favorable statements were: 1) a function of TV in the classroom is the improvement of instruction; 2) there are some courses being taught that would be more effective if some units were supplemented by TV; 3) TV teaching guides explaining content, suggested uses, etc., should be available on all video taped programs and telelessons. Highly unfavorable statements were: 1) TV utilization limits and reduces the curriculum; 2) we should have one TV studio at the district rather than one at each school; 3) TV in our school impairs the normal teacher-student relationship. Most other statements fell into an "uncertain" category. Significant differences between sexes, ages, schools, and teaching experiences were observed for some statements. On the basis of the results, 11 specific recommendations were made. (CH)
AN INVESTIGATION OF
TEACHER ATTITUDES TOWARD CLOSED CIRCUIT TELEVISION
IN THE FREMONT UNION HIGH SCHOOL DISTRICT
SUNNYVALE, CALIFORNIA

by

Donald G. Kirkorian

Evanston, Illinois

March 1971
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CHAPTER I

THE PROBLEM, DEFINITIONS OF TERMS USED,
AND REVIEW OF THE LITERATURE

In the 1950's the Texas department of education and 18 commercial television stations provided teacher training for more than 1000 college graduates interested in completing teacher credential requirements. Pennsylvania State University was one of the first institutions of higher education to use television for credit courses on campus. Television enrollment reached a peak of 20,000 in 1962. Midwest Program on Airborne Television Instruction in 1961 provided in-school programming to classrooms over a radius of 150-200 miles over Montpelier, Indiana. In 1958 Continental Classroom went on the air over more than 150 NBC outlets with a course in atomic age physics. The special hookup was designed to make the courses available to any college in the United States; 300 of them picked it up that first year. The above projects have ceased or continue to operate at low gear.¹ Why? Why have educators

across the country installed instructional television systems and in some cases subsequently phased them out? Perhaps negative student and faculty attitudes have been partially the cause of the general decline in ITV's expansion.

After more than fifteen years of intensive effort and the expenditure of hundreds of millions of dollars, has television made a real impact on America's schools and colleges? Has it made a worthwhile contribution to education?

The short answer to such a sweeping question would probably have to be "no". ITV's potential impact on the learner has apparently not been felt. Whether measured by numbers of students affected, or by the quality of the product, or by the advancement of learning, televised teaching is still in a rudimentary stage of development.²

I. THE PROBLEM

Statement of the Problem. It is the purpose of this empirical study (1) to investigate teacher attitude toward the present state of closed circuit instructional television

²Tbid., p. 9.
as revealed through a questionnaire administered in the Fremont Un.

High School District; and (2) to make recommendations based on this investigation which will encourage greater teacher utilization of this medium.

**Importance of the study.** Attitude studies conducted by Handleman (1960), Westley and Jacobson (1962), Hardaway (1963), and International Research Associated (1967) are concerned with attitudes of teachers where instructional television is used to teach a major portion of the course work in a particular subject. Whereas this study focuses on investigating attitudes of teachers who have had the opportunity to utilize closed circuit television to supplement and enrich the curriculum within five secondary schools in a large high school district. This study will attempt to identify usage behavior and attitudes of teachers, which may indicate changes which need to be made to increase teacher utilization of this medium. The results of this study may be of possible significance regionally and nationally to school districts considering similar installations and utilization.
II. DEFINITIONS OF TERMS USED

Closed Circuit Television (CCTV). The use of television, transmitted from cameras or video tape recorder to receivers over cable, permitting private reception of programs only by those receivers included in circuit.

Self-Contained Closed Circuit Television. The use of closed circuit television within the confines of a particular building or a cluster of buildings which comprise a single school. For the purpose of this study CCTV will imply self-contained.

Instructional Television (ITV). Television used within the formal classroom context on any educational level.

III. THE REVIEW OF THE LITERATURE

Researchers have indicated a concern for attitudes toward instructional television. Westley and Jacobson (1962) reported they found a sample of fourth-grade teachers in Wisconsin more favorable toward ITV than a sample of ninth-grade teachers in the same school.3 Hardaway (1963)

studied 104 teachers in Illinois and Indiana who had been using Airborn television broadcasts. He reported that, while elementary teachers showed no significant change in attitude toward instructional television between a pre- and posttest, secondary teachers were significantly less favorable on the posttest.  

The Hagerstown (1967) results are especially revealing. This is a school system in which television had been in use for nine years at the time of the survey, and where there was abundant evidence of acceptance and effective use. Yet even in this situation there proved to be an inverse relation between favorable attitudes and grade level. Even in the least favorable group, the senior high school teachers, were still quite favorable. Three-fourths of the teachers felt that television provides a richer experience and enriches and expands the curriculum, two-thirds felt that it improves curriculum planning. Never the less teachers in lower grades were distinctly more favorable.

---


Thus there are few absolute guides in research on attitudes toward instructional television, and none for self-contained closed circuit ITV used to supplement and enrich the curriculum.

IV. A STATEMENT CONCERNING ITV IN THE FREMONT UNION HIGH SCHOOL DISTRICT

The Fremont Union High School District in Sunnyvale, California, has been developing its instructional television system since 1961, when a pilot project at Cupertino High School was initiated. During 1963 Fremont, Homestead, and Sunnyvale High Schools were also equipped with autonomous television program origination and distribution systems. Lynbrook High School started its operation in the fall of 1966.

The District has subordinated the role of its TV to that of a teaching tool from the beginning, and put the wielding of it into the hands of those performing the educational function -- the teacher. The purpose of television is to supplement and enrich the curriculum.

Each of these schools directs and controls the operation of its own program origination and distribution system. With exception of applications involving special
school-wide functions, the operational stimulus for the system at each school originates with the individual teacher. Under no duress to use television at all, the teacher has it available whenever he needs it and is free to apply it in whatever manner it most appropriate to his own instructional methods and goals.
CHAPTER II

METHOD, AND RESULTS AND DISCUSSION

What is the general attitude toward television utilization in the learning situation? What are the teachers' attitudes toward television as it exists in the Fremont Union High School District? How are the attitudes of teachers reflected in statements concerning future change? To explore this area of attitude toward closed circuit instructional television the investigator carried out a questionnaire study with the faculty at five of the seven high schools in the Fremont Union High School District, each of which is equipped with self-contained closed circuit instructional television center.

I. METHOD

A 23 item questionnaire was devised to measure teacher attitudes toward the closed circuit instructional television medium. In addition to the 23 attitude statements, there were 5 statistical questions at the upper portion of the questionnaire.
The investigator travelled to California and distributed a total of 150 questionnaires to the 5 schools involved in this study. A random sample of teachers was assigned through the district faculty directory. 30 questionnaires were distributed to faculty through their mailboxes at each school. Accompanying each questionnaire was a letter with the teacher's name typed in the appropriate location, requesting teachers to "please take a few minutes and complete the attached two page survey, and return it...today via the district mail in the envelope provided." A copy of the letter and questionnaire can be found in the Appendix.

The attitude measure was administered under specific instructions: Read the following statements carefully, and in the blank beside each question indicate the number which best represents your degree of agreement or disagreement. Please use only whole numbers (no fractions).

1 2 3 4 5
strongly disagree disagree uncertain agree strongly agree
II. RESULTS AND DISCUSSION

Returns were received from 119 teachers, a completion rate of 70 per cent. All items were answered by nearly all subjects.\footnote{There were 30 instances of non-response out of a total of 2750 possible responses (23 items X 119 subjects), a non-response rate of .01.} Sampling statistics on number of years taught, sex, age, and number of courses taken in radio, TV, and film can be found in Table I. All of the data was key-punched by the investigator on computer cards. The data was then programmed on two library programs at the Vogelback Computing Center. The NUCORR 1 program yielded mean scores, standard deviations, correlation matrix, and one-way analysis of variance. Data was also programmed on the Statistical Package for Social Sciences (SPSS), which yielded crosstabulations of all variables. Table II lists all of the attitude statements on the questionnaire, together with means and standard deviations for each statement. The data are for all 5 schools using instructional television. A mean of 3.6 to 4.5 indicates that the average teacher in the sample agreed with the statement.

What is the general attitude toward television utilization in the learning situation? Statements 1, 5, 11.
TABLE I

SAMPLING STATISTICS

<table>
<thead>
<tr>
<th>District</th>
<th>Average Years Taught</th>
<th>Sex*</th>
<th>Average Age</th>
<th>Average # of Radio-TV-Film Courses Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire District</td>
<td>7.5</td>
<td>M 63</td>
<td>34</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cupertino</td>
<td>6.5</td>
<td>M 14</td>
<td>31</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fremont</td>
<td>8.5</td>
<td>M 13</td>
<td>36</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homestead</td>
<td>6.5</td>
<td>M 12</td>
<td>33</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynbrook</td>
<td>7</td>
<td>M 12</td>
<td>35</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>8.5</td>
<td>M 12</td>
<td>38</td>
<td>Less than 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F 12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Number of missing observations = 1
### TABLE II

MEANS AND STANDARD DEVIATIONS FOR 23 ATTITUDE STATEMENTS

<table>
<thead>
<tr>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.76</td>
<td>.833</td>
<td>(1) TV utilization in our school provides a richer experience for students.</td>
</tr>
<tr>
<td>2.60</td>
<td>1.074</td>
<td>(2) Television is being used effectively by the counseling and guidance department.</td>
</tr>
<tr>
<td>3.33</td>
<td>1.290</td>
<td>(3) Standardized tests (e.g., Iowas) can be efficiently administered on television with a counselor giving instructions.</td>
</tr>
<tr>
<td>3.88</td>
<td>.949</td>
<td>(4) Television should be used to disseminate vocational and occupational information.</td>
</tr>
<tr>
<td>1.80</td>
<td>.782</td>
<td>(5) TV utilization limits and reduces the curriculum.</td>
</tr>
<tr>
<td>2.58</td>
<td>.915</td>
<td>(6) Administrators use television effectively.</td>
</tr>
<tr>
<td>3.48</td>
<td>1.035</td>
<td>(7) The administration should be seen more often on television.</td>
</tr>
<tr>
<td>3.31</td>
<td>.927</td>
<td>(8) An administrator's image can be strengthened through repeated appearances on television.</td>
</tr>
<tr>
<td>3.11</td>
<td>1.165</td>
<td>(9) The administration's most effective method of communication with the entire student body is over television.</td>
</tr>
<tr>
<td>2.84</td>
<td>.909</td>
<td>(10) Administrative tasks can be more effectively explained by students on TV rather than administrators.</td>
</tr>
<tr>
<td>1.94</td>
<td>.692</td>
<td>(11) TV in our school impairs the normal teacher-student relationship.</td>
</tr>
<tr>
<td>3.89</td>
<td>.781</td>
<td>(12) Video taped materials from the district library provide help in teaching.</td>
</tr>
<tr>
<td>3.32</td>
<td>.941</td>
<td>(13) Teachers would use TV more if they knew what programs were available.</td>
</tr>
<tr>
<td>$\bar{X}$</td>
<td>$\sigma$</td>
<td>Statement</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2.68</td>
<td>.993</td>
<td>(14) Teachers are not familiar with the procedure for requesting video tapes for use in their classrooms.</td>
</tr>
<tr>
<td>3.22</td>
<td>1.001</td>
<td>(15) There never seems to be time available in the daily TV schedule to preview a video tape which might be used in my classes.</td>
</tr>
<tr>
<td>4.10</td>
<td>.824</td>
<td>(16) TV teaching guides explaining content, suggested uses, etc., should be available on all video taped programs and telelessons.</td>
</tr>
<tr>
<td>3.22</td>
<td>1.121</td>
<td>(17) I need more guidance in using TV effectively in my classes.</td>
</tr>
<tr>
<td>4.22</td>
<td>.807</td>
<td>(18) A function of TV in the classroom is the improvement of instruction.</td>
</tr>
<tr>
<td>3.50</td>
<td>.991</td>
<td>(19) I would use TV more often if the programs more closely followed the curriculum.</td>
</tr>
<tr>
<td>3.23</td>
<td>1.114</td>
<td>(20) I would produce a TV lesson for my students if I had the know how.</td>
</tr>
<tr>
<td>4.05</td>
<td>.754</td>
<td>(21) There are some courses being taught that would be more effective if some units were supplemented by television.</td>
</tr>
<tr>
<td>2.83</td>
<td>1.002</td>
<td>(22) On the whole, TV is being used effectively at my school.</td>
</tr>
<tr>
<td>2.14</td>
<td>1.212</td>
<td>(23) We should have one TV studio at the district rather than one at each school.</td>
</tr>
</tbody>
</table>
and 18 attempted to determine the general feeling of teachers in this area. Statements 1 and 18 were weighted positively and yielded a combined mean of 3.99, indicating that teachers agreed that (1) television utilization in our schools provide a richer experience for students, and (18) a function of TV in the classroom is the improvement of instruction. Statements 5 and 11 were weighted negatively and yielded a combined mean of 1.87, indicating that teachers disagreed that (5) TV utilization limits and reduces the curriculum, and (11) TV in our schools impairs the normal teacher-student relationship. The mean on this latter question would indicate that teachers rejected the idea that television threatens their position in the classroom.

The next area of investigation dealt with ITV as it presently exists in the Fremont Union High School District. Statements 2, 3, and 4 were specifically concerned with the counseling and guidance department. Statement 2, television is being used effectively by the counseling and guidance department, had a mean score of 2.6. But when subjected to a one-way analysis of variance, the respondents indicated a significant difference between the 5 schools in the district.
(F=6.3043, p<.01). Fremont High School tended to agree with this statement, and all other schools disagreed. Mean scores for all schools as they responded to this statement appear in Table III. Since the inception of TV at Fremont High School, the counseling department has made use of the medium for administering standardized tests, presenting course elective information, assisting students to complete preliminary registration forms, and providing information concerning summer employment opportunities.

Statement 3, standardized tests (e.g. Iowas) can be efficiently administered on television with the counselor giving the instructions, had a district mean score of 3.33. A significant difference between the 5 schools in the district was indicated by the one-way analysis of variance (F=3.1770, p<.05). Once again Fremont High School teachers agreed to this statement with a mean score of 4.04.2 Mean scores for all schools are listed in Table III.

Statements 6-10 were concerned with the administrator's use of television. Generally all schools responded neutrally.

2Fremont High School has pioneered the use of this medium for administering standardized tests. See Donald O. Kirkorian, "Administering the Iowas via TV," The Newsletter of the California Counseling and Guidance Association, February, 1967.
### Table III

**RESULTS OF ONE-WAY ANALYSES OF VARIANCE BETWEEN SCHOOLS***

<table>
<thead>
<tr>
<th></th>
<th>S #2</th>
<th></th>
<th>S #3</th>
<th></th>
<th>S #19</th>
<th></th>
<th>S #22</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>σ</td>
<td>X</td>
<td>σ</td>
<td>X</td>
<td>σ</td>
<td>X</td>
<td>σ</td>
</tr>
<tr>
<td>Cupertino</td>
<td>2.20</td>
<td>.763</td>
<td>2.96</td>
<td>1.206</td>
<td>3.08</td>
<td>1.040</td>
<td>2.96</td>
<td>.883</td>
</tr>
<tr>
<td>Fremont</td>
<td>3.47</td>
<td>1.030</td>
<td>4.04</td>
<td>1.071</td>
<td>3.28</td>
<td>1.101</td>
<td>3.14</td>
<td>.953</td>
</tr>
<tr>
<td>Homestead</td>
<td>2.56</td>
<td>1.079</td>
<td>1.45</td>
<td>.509</td>
<td>2.78</td>
<td>.951</td>
<td>3.04</td>
<td>.877</td>
</tr>
<tr>
<td>Lynbrook</td>
<td>2.48</td>
<td>1.045</td>
<td>3.00</td>
<td>1.095</td>
<td>3.73</td>
<td>.961</td>
<td>2.73</td>
<td>.919</td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>2.21</td>
<td>.850</td>
<td>3.62</td>
<td>1.279</td>
<td>3.43</td>
<td>.895</td>
<td>2.33</td>
<td>1.203</td>
</tr>
</tbody>
</table>

*(F=6.3043, p<.01)(F=3.1770, p<.05)(F=2.7815, p<.05)(F=2.5382, p<)*

*No significant difference between the other 19 statements not listed.*
to these statements. However, there was a positive correlation between statement 6 and years taught \((r=0.2659, p<0.05)\), and statement 6 and age bracket \((r=0.2796, p<0.05)\). In other words, teachers who are younger and have taught fewer years tended to agree that the administration was using television effectively. See Table IV.

Statement 7 had a mean score of 3.48 which indicates teachers slightly agreed that the administrators should be seen more often on television. Teachers apparently feel that the principal and other school level administrators need to be seen by the students. Administrators should be encouraged to utilize this medium to communicate with the large student enrollments of 2300 to 2700 housed at district schools.

Statement 12, video taped materials from the district library provides help in teaching, was agreed upon by district teachers. It is interesting to note that 3.4 per cent disagreed; 25.6 per cent were uncertain; 48.7 per cent agreed; and 22.2 per cent strongly agreed. But there was a negative correlation between statement 12 and years taught \((r=-0.5239, p<0.05)\), and statement 12 and age bracket \((r=-0.4412)\).
TABLE IV

RESULTS OF CORRELATIONS BETWEEN YEARS TAUGHT AND STATEMENTS 6 & 13; AND AGE AND STATEMENTS 6, 12, & 17*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Years Taught</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.2659</td>
<td>.2796</td>
</tr>
<tr>
<td>12</td>
<td>-.5239</td>
<td>-.4412</td>
</tr>
<tr>
<td>17</td>
<td>---</td>
<td>-.2892</td>
</tr>
</tbody>
</table>

All the above correlations significant at the .05 level.

* No significant correlations for other 20 statements.
This negative correlation reveals that older teachers with more years of experience did not believe that video taped materials from the district library provide help in teaching. See Table IV. However, the district response to this statement would indicate that the majority of teachers (70.9 per cent) in agreement would use the materials in the video tape library, or would perceive the video tape library as a possible resource center at a future date.

Although not reflected by the mean score of 3.32, 46.6 per cent of the district teachers agreed that (13) they would use TV more if they knew what programs were available. The high percentage of teachers unaware of the programs available would indicate some sort of regular announcements must emanate from the District AV Center advising all faculty of video tapes presently in the library, plus new acquisitions as they become available. The present system of making catalogues available to teachers through their departmental offices appears to be ineffective.

Statement 14, teachers are not familiar with the procedure for requesting video tapes for use in their classrooms, was generally rejected by the respondents as a group.
However, it is interesting to note that there was a significant difference in the response between men and women on statement 14 ($\chi^2=9.579$, $p<.05$). 33.8 per cent men agreed that there are teachers not familiar with the procedure for requesting video tapes, while only 14.5 per cent women agreed with the statement. The percentage distribution for all responses is presented in Table V.

Statement 15, there never seems to be time available in the daily TV schedule to preview a video tape which might be used in my class, had a mean score of 3.22. This would tend to indicate that the CCTV center at each school could accommodate teachers who wanted to preview video taped materials.

Statement 17 yielded a mean score of 3.22, and a negative correlation with age ($r=.2892$, $p<.05$). Older teachers disagreed that they "need more guidance in using TV effectively." See Table IV. However, 50 per cent of the district teachers indicated they need more guidance in using television effectively in their classes. In addition to the course work in instructional television offered to the district teachers through San Jose State
### TABLE V

**RESULTS OF SEX DISTRIBUTION ON STATEMENT 14**

<table>
<thead>
<tr>
<th></th>
<th>Sex</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.8</td>
<td>32.3</td>
<td>29.0</td>
<td>30.6</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>16.4</td>
<td>41.8</td>
<td>27.3</td>
<td>14.5</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

\( (x^2 = 9.579, p < .05) \)

*No significant difference for other 22 statements.*
College and the University of California, additional short workshops should be held at the school level to encourage those teachers who do not have the time to be committed an entire quarter or semester of work at the university.

On statement 20, the mean was 3.23. Perhaps more significant was that 44.8 per cent of the respondents indicated they would produce a TV lesson for their students if they had the know how. Of all those responding, 9.5 per cent felt compelled to write on the questionnaire that additional "time" must be provided for the teacher if he is to become involved in the producing of telelessons. Although the percentage was low for those who wrote unsolicited responses, it is believed by the investigator that had comments been requested, many more teachers would have similarly responded. District officials who charge that teachers are not producing original materials for use at their schools, surely realize that teachers are already preparing and teaching 5 classes, and will not usually become involved in this time consuming activity without a reduction in their teaching load.
A significant positive correlation was found between statements 17 and 20 \((r=0.19, p<0.01)\). Teachers who indicated they needed guidance in using TV effectively, also said they would produce a TV lesson if they had the know how. This correlation might prove advantageous for the television coordinator who offers utilization workshop sessions with follow-up consultations for the teachers who wish to produce a telelesson for their students.

57.7 per cent of the sample agreed and 18.1 per cent disagreed with statement 19, I would use TV more often if programs more closely followed the curriculum. A significant difference in the response between the 5 schools was evident when subjected to a one-way analysis of variance \((F=2.7815, p<0.05)\). Lynbrook teachers strongly agreed and Homestead teachers were uncertain. See Table III. This response would seem to indicate that a concerted effort be made to develop telelessons which follow the curriculum guide in specific subject areas. For example, Basic English Literature could be selected as an initial effort. The curriculum committee would decide which lessons in various units would be best suited for television presentation. Although English teachers
would not be required to use the telelessons, they would be available.

Statement 22, on the whole, TV is being used effectively at my school, was answered with a mean score of 2.83. The one-way analysis of variance indicated a significant difference between schools (F=2.5382, p<.05). Table III lists the mean scores for all schools. The statistics point out that the schools with the lowest means do not have TV coordinators who have had training in television. Schools with means of 3.04 or higher have TV centers under the supervision of coordinators who have had broadcasting training.

Statements 4, 16, 21, and 23 attempted to assess attitudes concerning possible future change.

In statement 4 there was agreement that television should be used to disseminate vocational and occupational information. This medium would be an effective method to present vocational information to the large student bodies of the district. Small follow-up discussions could be handled in the classrooms immediately following broadcasts, or at a later time by counselors for only those students who demonstrated additional interest.
4.10 was the mean score for statement 10. Teachers agreed that teaching guides explaining content, suggested uses, and so forth, should be available on all video taped programs and telelessons. Presently very few teaching guides accompany video tapes which are requested for use in the schools. This investigator has tried to encourage district administrators to provide the additional secretarial assistance needed to accomplish this task. Perhaps this faculty response will be the catalyst the administrators need to take action.

Statement 21 found agreement among faculty who believe that some courses being taught would be more effective if some units were supplemented by television.

Teachers rejected the idea for a district television studio. A mean score of 2.14 for statement 23 reflected that faculty want each school to operate its own instructional television facility, rather than only one television center at the district office.
CHAPTER III

SUMMARY, SUGGESTIONS FOR FURTHER RESEARCH, AND RECOMMENDATIONS

I. SUMMARY

Responses were obtained from 119 secondary school teachers on a 23 statement questionnaire designed to access their attitudes toward self-contained closed circuit instructional television in the Fremont Union High School District.

General attitude toward television utilization in the learning situation was highly favorable, with teachers rejecting the idea that television threatens their position in the classroom.

Fremont High School teachers agreed that their counseling department was making favorable use of television, other schools disagreed with these statements.

The entire sample responded neutrally to statements concerned with the administrator's use of television. Teachers agreed, except for older teachers with more years teaching experience, that the district video tape library provides assistance in teaching. District teachers generally agreed
that they would use video materials more if they knew what programs were available, but rejected the statement that teachers are not familiar with the procedure for requesting video tapes. 50 per cent of the teachers indicated they need more guidance in using TV effectively in their classes, and 44 per cent would produce a TV lesson for their students if they had the know how.

Teachers tended to agree they would use television more often if programs more closely followed the curriculum.

On the whole, teachers responded that they were uncertain if television was being used effectively at their schools. Schools which received the highest mean scores have television coordinators who have had formal course work in telecommunications.

Statements concerning possible future change all met with agreement, except one. Teachers were in agreement that television should be used to disseminate vocational and occupational information; that teaching guides should be available on all video taped programs; and some courses being taught in the traditional manner would be more effective if some units were supplemented by television. All teachers
rejected the idea that a district television studio replace
the self-contained ITV center at each school.

II. SUGGESTIONS FOR FURTHER RESEARCH

Future consideration for research in the area of
attitudes toward self-contained instructional television
might well include in-depth interviews with a portion of
the faculty in the sample. Since the learner is the
recipient of the telelesson, his attitudes toward the
medium should be accessed.

This study pointed out that younger teachers with
less teaching experience believed that the video taped
materials from the district library provided help in
teaching. It would be of interest to test the following
hypothesis: The younger teacher has a more positive
attitude toward closed circuit instructional television
than the more established faculty.

The investigator would be interested in learning if
there was a correlation between subject area taught and
frequency of utilization; between having completed course
work in radio, television, or film and producing a telelesson;
and between other forms of non-print media and ITV utilization.
The response from teachers who want to learn how to produce a simple telelesson would indicate a genuine need for a book written specifically for the classroom teacher who has simple video equipment or a self-contained CCTV facility at his disposal. This book would include: a section on what the equipment can do; basic procedures for preparing and organizing materials for television; and examples of telelessons from all disciplines within the elementary and secondary school.

III. RECOMMENDATIONS

Although this investigation reflects a favorable general attitude toward instructional television in the Fremont Union High School District, there are specific problem areas which require resolution before a greater number of teachers will become involved in ITV utilization at the district schools.

The following recommendations are based on the results of the preceding study of teacher attitudes toward instructional television:

1. Television coordinators at all schools, except
Fremont, should work with the counseling and guidance department in an attempt to solve some of their logistics problems through this medium.

2. The principal, vice-principal, and deans are rarely seen by the majority of students on the large campuses in the district. Television should be used as one means to communicate and build a bridge between the administration and the students.

3. Catalogues listing all video tapes housed in the district library are presently one year behind being up-dated, and are only available to teachers in their departmental offices, the AV Center, and the ITV Center. In an attempt to encourage greater utilization of taped materials, a personal catalogue should be given to each of the 700 teachers in the district.

4. Mini-workshops should be held in an attempt to inform teachers of the possibilities available to each of them through this medium. Although these workshops exist to some extent at various schools, they must be offered to teachers at all schools.
5. The district should continue to encourage local universities to offer instructional television courses for which teachers will receive academic credit.

6. The district must provide released time from teaching duties for those teachers who wish, or are selected by their colleagues, to develop original telelessons for use in their classes or for all schools in the district.

7. More than one-half of the respondents indicated they would use television more if programs more closely followed the curriculum. Consideration should be given to specific subject areas within the curriculum where problems could be solved by ITV programming.

8. Hiring practices concerning television coordinators should be reviewed. Schools where teachers disagree that television is being used effectively are schools which have coordinators without course work or knowledge in telecommunications.

9. An immediate effort should be made to provide the classroom teacher with teaching guides for all video materials in the district library.
10. Any consideration at this time to eliminate the school level ITV centers and create a district ITV facility should be abandoned.

11. A continuing program on vocational information and occupational trends is sorely lacking in our schools. An attempt should be made via TV to fill this void. A common cry from the student population today is that the curriculum is not relevant. Perhaps relevance can be stressed through an effort to relate curriculum to future vocational goals.
BIBLIOGRAPHY


Dear

As you may know, I am on leave this year studying at Northwestern University in Evanston, Illinois. I am presently involved in a project concerned with instructional television, and I need your assistance.

Would you please take a few minutes and complete the attached two page survey, and return it to me today via the district mail in the envelope provided. I will pick up the surveys from Fremont High School on Thursday, February 18.

The success of this study depends on the return of your survey. I know you are busy and I truly appreciate your assistance in this matter.

Sincerely,

Donald Kirkorian
Please read the following questions and check the appropriate response.

1. At which school do you teach?
   - Cupertino
   - Fremont
   - Homestead
   - Lynbrook
   - Sunnyvale

2. How many years have you taught?
   - 1 - 3
   - 4 - 6
   - 7 - 9
   - 10 - 13
   - 14 or more

3. Sex:
   - Male
   - Female

4. Age bracket:
   - 25 and under
   - 26 - 30
   - 31 - 35
   - 36 - 40
   - 41 - 45
   - 46 - 50
   - 51 and over

5. Have you had any courses in the study of TV, radio, or film?
   - None
   - 1
   - 2
   - 3
   - 4 or more

DIRECTIONS: Read the following statements carefully, and in the blank beside each question indicate the number which best represents your degree of agreement or disagreement. Please use only whole numbers (no fractions).

1 2 3 4 5
strongly disagree uncertain agree strongly agree

1. TV utilization in our school provides a richer experience for students.
2. Television is being used effectively by the counseling and guidance department.
3. Standardized tests (e.g., Iowa) can be efficiently administered on television with a counselor giving instructions.
4. Television should be used to disseminate vocational and occupational information.
5. TV utilization limits and reduces the curriculum.
6. Administrators use television effectively.

7. The administration should be seen more often on television.

8. An administrator's image can be strengthened through repeated appearances on television.

9. The administration's most effective method of communication with the entire student body is over television.

10. Administrative tasks can be more effectively explained by students on TV rather than administrators.

11. TV in our school impairs the normal teacher-student relationship.

12. Video taped materials from the district library provide help in teaching.

13. Teachers would use TV more if they knew what programs were available.

14. Teachers are not familiar with the procedure for requesting video tapes for use in their classrooms.

15. There never seems to be time available in the daily TV schedule to preview a video tape which might be used in my classes.

16. TV teaching guides explaining content, suggested uses, etc., should be available on all video taped programs and telelessons.

17. I need more guidance in using TV effectively in my classes.

18. A function of TV in the classroom is the improvement of instruction.

19. I would use TV more often if the programs more closely followed the curriculum.

20. I would produce a TV lesson for my students if I had the know how.

21. There are some courses being taught that would be more effective if some units were supplemented by television.

22. On the whole, TV is being used effectively at my school.

23. We should have one TV studio at the district rather than one at each school.

Please mail this survey TODAY in the envelope provided.
If for some reason the envelope should be misplaced, return to: Donald Kirkorian
Fremont High School