

AUDIT REPORT
NO. 71-4
APRIL 1971

AUDIT
OF THE
HAWAII
EDUCATIONAL
TELEVISION SYSTEM

A REPORT TO THE GOVERNOR
AND THE LEGISLATURE
OF THE STATE OF HAWAII

FOREWORD

This audit report is the result of our examination of the Hawaii Educational Television System. The audit examined the following: (1) the adequacy of the plans and planning processes of educational television (ETV); (2) the extent to which the purposes for which the legislature appropriated monies for the establishment of ETV are being met; (3) the adequacy of ETV management and operational performance; and (4) the adequacy of the ETV system's financial records and internal control systems.

As a result of the examination, the audit report identifies numerous deficiencies relating to basic lines of responsibility and authority, management and operational policies, and effective and efficient use of public funds in the development, acquisition and use of ETV facilities and equipment. We have formulated and included in the audit report recommendations by which the deficiencies may be corrected.

As has always been our practice, we requested the agencies affected by our examination to submit in writing their comments on our findings and recommendations and to indicate what action they have taken or intend to take on our recommendations. The responses of the agencies are appended in Part V, Responses of Affected Agencies.

I wish to acknowledge the fine cooperation and assistance extended to my staff by the departments' personnel.

Clinton T. Tanimura
Legislative Auditor

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PART I INTRODUCTION AND BACKGROUND

Chapter 1

INTRODUCTION

This is a report of our general audit of the State's educational television (ETV) system or network.¹ It was conducted pursuant to Conference Committee Report No. 3, attached to the general appropriation act for the fiscal year 1968-69 (H.B. No. 65) which directed the legislative auditor to "examine ETV both at the University and DOE levels and report his findings and recommendations." This request came as a result of the legislature's dissatisfaction with the response of the university of Hawaii to a 1967 legislative request for a "critical and thorough evaluation of the effectiveness and efficiency of the ETV program."

Objectives of the Audit

This audit examined the following:

¹The State ETV advisory council adopted the term "ETV Network" and recommended its use to describe the State's ETV projects and activities. *Minutes* of the council, December 10, 1965. In this report, the terms "ETV system" and "ETV network" are used interchangeably.

1. The adequacy of the ETV plans and planning processes.
2. The extent to which the purposes for which the legislature appropriated moneys for the establishment of ETV are being met.
3. The adequacy of the ETV management and operational performance.
4. The adequacy of the ETV system's financial records and internal control systems.

Scope of the Audit

The audit covered the educational television system in three broad areas. *First*, the audit examined the management activities of the State's ETV system with regard to its organization and hardware systems. *Second*, it appraised the educational achievements of ETV in the light of its four educational functions. These first two areas were examined for the 1968-69 fiscal year. However, as necessary, prior years were also included. Further, a reexamination was conducted in January 1971, just prior to publishing this report, and, as pertinent, data were updated and findings and conclusions verified as of December 1, 1970. *Third*, the audit examined the system's financial

records and transactions for the year July 1, 1968 to June 30, 1969. This examination was conducted in accordance with generally accepted standards as adopted by the American Institute of Certified Public Accountants and included tests of the accounting records and use of such auditing procedures as were considered necessary.

Organization of the Report

This report is presented in four parts.

Part I includes an introduction to the audit and a summary description of the Hawaii ETV system, including its program and legal bases, its organization and functions, and its hardware systems.

Part II presents our findings and recommendations regarding the management of the ETV system, including the management of ETV as a whole and the management of the transmission, reception and closed circuit facilities.

Part III presents our findings and recommendations relative to the educational role of Hawaii ETV. The effectiveness of each of the following four major categories of ETV programming was examined in the context of educational objectives: in-school ETV, in-service teacher improvement, formal adult education and public television.

Part IV reports the results of our examination of the ETV financial records and transactions, both of the university of Hawaii and the department of education.

Appendices. For the convenience and understanding of the reader, additional material is appended, including copies of basic legislative, executive and administrative documents which provide the bases for ETV operations in Hawaii.

Chapter 2

SOME BACKGROUND: THE HAWAII ETV SYSTEM

The Hawaii educational television "system" embraces several components. *First*, it includes the open circuit transmission facilities (the broadcast station, of which the UH is the official licensee, production facilities, translators and other transmission facilities). *Second*, the system includes the reception and closed circuit television facilities. *Third*, it includes the educational programs developed for transmission. The following provides a brief background relating to the formation and the organization and operations of the ETV system.

Historical and Legal Bases

Historical basis. The State's ETV system is essentially based upon a plan prepared by a governor's advisory committee in 1964 which culminated several years of preliminary studies and public reviews.¹ In brief, this plan proposed the establishment of a statewide ETV network under the joint sponsorship of the DOE and the UH with the latter designated as the official licensee of the broadcast facility; described the major functions and programming format to be undertaken; outlined the development plan for the transmission system; and provided multi-year cost estimates for the entire operation. The State ETV system as it exists today is largely patterned after this 1964 plan.²

¹Local interest in ETV was evidenced as early as 1953 when application was made to, and approved by, the federal communications commission (FCC) to set aside for local TV channels (one each on Oahu, Hawaii, Maui and Kauai) for noncommercial broadcasting purposes. However, it was not until 1961 that the first comprehensive study was made to examine the feasibility and prospective design of a statewide ETV system. Recommendations drawn from the study were reviewed by a governor's advisory panel in 1962 and legislative proposals were drafted. These proposals, introduced during the 1963 legislative session, failed enactment.

²The committee issued two related reports. One, entitled *Educational Television for Hawaii* (September 1, 1964), provided the overall rationale and operational plan for the ETV network. The other, entitled *Recommended Origination/Reception Facilities and Operating Budget, Stage I, Hawaii ETV system* (September 1, 1964), presented detailed cost data for the first two years of the proposed ETV system.

System Cost

Approximately \$4,758,200 has been expended by the university of Hawaii and the department of education from 1965 to June 1970 for the development of the Hawaii ETV system. Annual expenditures since 1965 are shown in table 2.1.

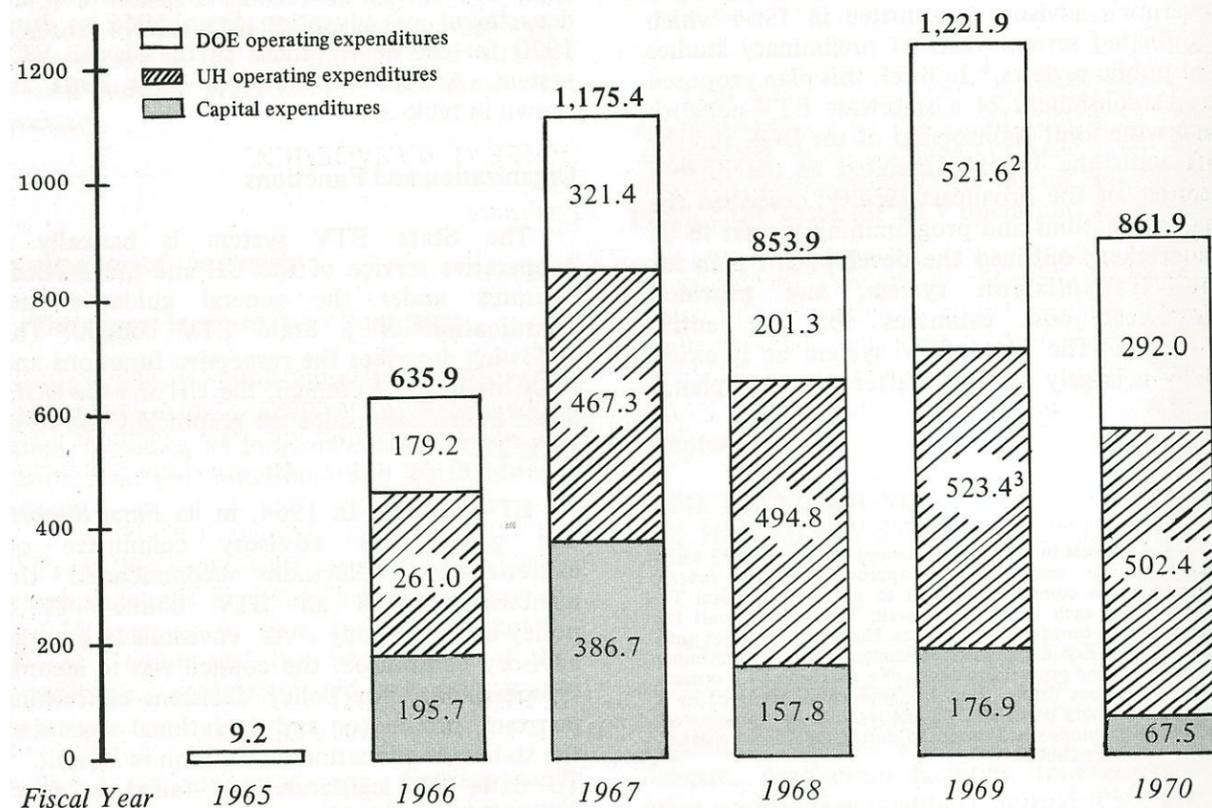
Organization and Functions

The State ETV system is basically a cooperative service of the UH and the DOE. It operates under the general guidance and coordination of a State ETV council. The following describes the respective functions and roles of the ETV council, the UH and the DOE. Their interrelationships are graphically shown in table 2.2.

ETV council. In 1964, in its *Final Report*, the governor's advisory committee on educational television recommended the establishment of an ETV council as a policy-making body. As envisioned by the advisory committee, the council was to assume "responsibility for policy decisions concerning program, production and operational aspects of the statewide educational television in Hawaii."³ To date, the legislature has failed to enact legislation establishing such a council. However,

³*Educational Television for Hawaii, Final Report of the Advisory Committee on Educational Television*, Honolulu, Hawaii, September 1, 1964 (hereinafter cited as *Final Report of the Advisory Committee*).

Table 2.1
EXPENDITURES (\$1000)¹

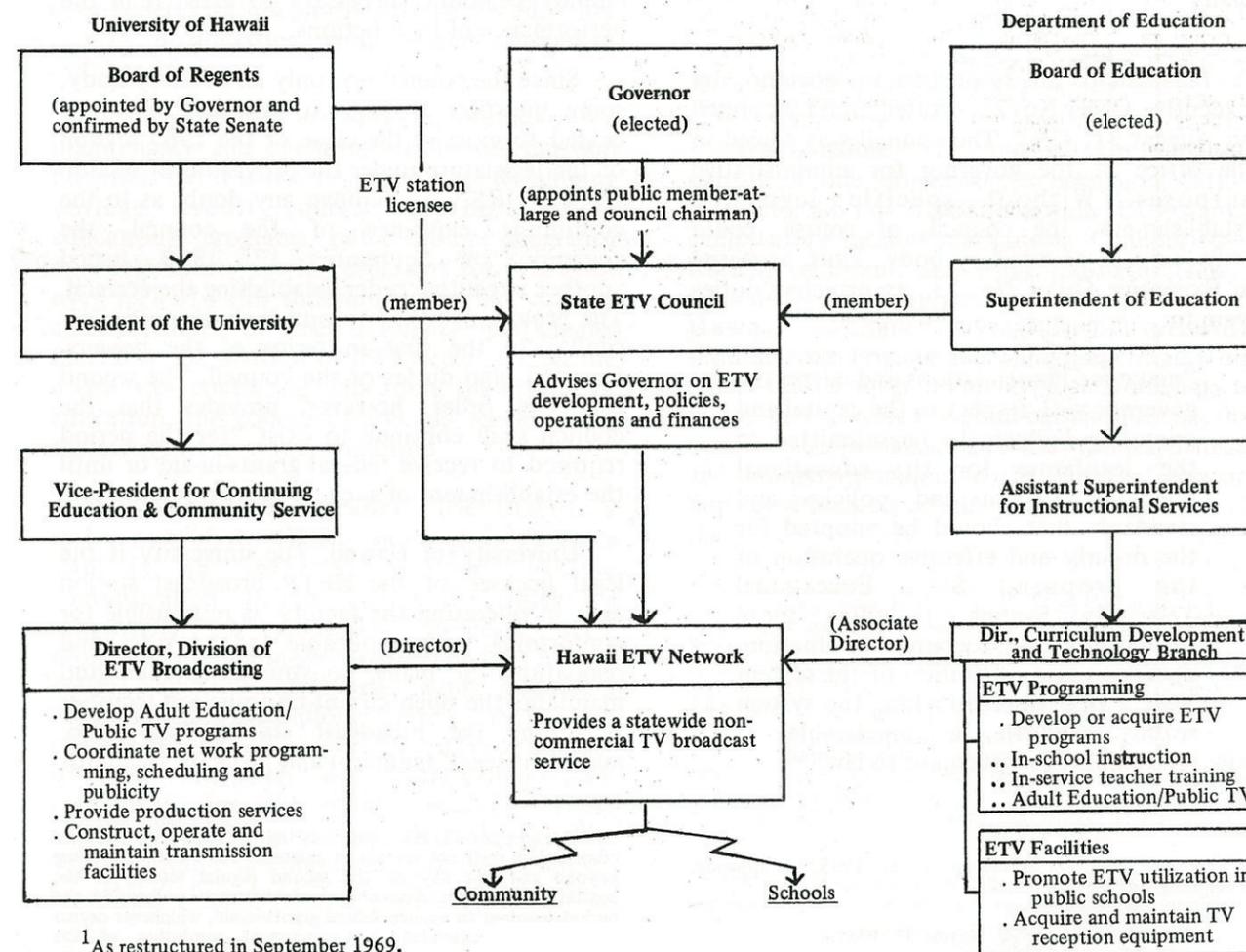


¹Expenditure figures represent costs which could be attributed directly to the development and operations of HETV. Indirect costs are not included.

²Figure includes \$14,149 budgeted and expended by other DOE branches.

³Figure includes \$21,375 and \$4,666 expended by UH ETV trust fund account and ETV special fund account, respectively.

Table 2.2
BASIC ORGANIZATIONAL RELATIONSHIPS – THE HAWAII ETV SYSTEM



¹As restructured in September 1969.

in 1965, through House Concurrent Resolution No. 84, it endorsed the concept of the council and requested the governor to create an ETV council "to set policies and approve financial plans."⁴

Pursuant to this resolution, the governor, by Executive Order No. 23, created an ETV council on August 31, 1965. The council was placed in the office of the governor for administrative purposes. Without specific legislative establishment, the council, of course, could serve only as an advisory body. Thus, as stated in Executive Order No. 23, its principal duties were to:

"make recommendations and advise the governor with respect to the capital and operating budgets to be submitted to the legislature for the educational television system and policies and standards that should be adopted for the orderly and effective operation of the proposed State Educational Television System, including those relating to program, production, operation and utilization of the system with a view toward making the system readily available, as practicable, at reasonable cost, pursuant to law."⁵

⁴House Concurrent Resolution No. 84, 1965. See appendix A for a copy of the resolution.

⁵Executive Order No. 23, August 31, 1965. See appendix B for a copy of the order.

In addition, the council was empowered to advise the governor on proposed expenditures for the educational television system and, with the prior approval of the governor, to appoint or employ personnel necessary to assist it in the performance of its functions.

Since the council was only an advisory body, some question arose as to whether or not it ceased to exist at the close of the 1967 session of the legislature under the provisions of section 26-41, HRS.⁶ To remove any doubt as to the continuing existence of the council, the governor, on September 17, 1970, issued another executive order establishing the council. The provisions of the second executive order are similar to the first in terms of the powers, functions and duties of the council. The second executive order, however, provides that the council shall continue to exist "for the period required to receive federal grants-in-aid or until the establishment of such an agency by statute."

University of Hawaii. The university is the legal licensee of the HETV broadcast station and, in operating the facility, is responsible for conforming with applicable federal rules and regulations. It plans, constructs, operates and maintains the open circuit transmission facilities (including the broadcast station) and, also, maintains legal, technical and program standards

⁶Section 26-41, HRS, provides that a "temporary board or commission shall not remain in existence for a term extending beyond the last day of the second regular session of the legislature after the date of its establishment or beyond the period required to receive federal grants-in-aid, whichever occurs later, unless extended by concurrent resolution of the legislature."

for all broadcast over the transmission facilities. In addition, it provides technical staff services and the use of facilities to produce local ETV programs for network users. It discharges these functions through the university's "division of ETV broadcasting" which was established in October 1965.

The university is not only responsible for the maintenance and operation of the transmission facilities, but it is also responsible for developing college credit courses, post-high school educational programs, public affairs programs, and community service programs for broadcast over ETV. In this function, numerous colleges and divisions of the university participate, including the division of ETV broadcasting, the division of continuing education, the college of education, the college of arts and sciences, and the college of tropical agriculture.

Department of education. The DOE is a major user of the HETV transmission facilities and is an informal "partner" in the administration thereof.⁷ The department is responsible for developing in-school ETV programs, teacher in-service programs (excluding college courses) and basic adult education programs of pre-diploma levels. It is also responsible for the acquisition and maintenance of TV reception and closed circuit TV equipment for the public schools. These functions are administered centrally by the "curriculum development and technology branch" (referred to hereinafter by its former

⁷See chapter 4.

name, "ETV branch")⁸ of the office of instructional services.

HETV Hardware

HETV hardware consists of three principal kinds: (1) transmission, (2) reception and (3) closed circuit television.

Transmission. The transmission facilities consist of one originating transmission station (Channel 11 - KHET) on the UH Manoa campus, one satellite transmitter (Channel 10 - KMEB) on Maui, and eight translator (relay) stations located strategically on Oahu, Kauai and Hawaii.⁹ These installations provide simultaneous broadcast of programs originating at the transmission station at the UH to all parts of the State, except west Kauai and Niihau, the eastern coast of Maui, and the Waimea plateau and southern portions of the island of Hawaii. Such broadcast reportedly reaches 93 percent of the State's population.¹⁰

⁸The change in organization occurred on September 4, 1969, by action of the board of education. As reorganized, the "ETV branch" became a part of the newly created "curriculum development and technology branch," and was split into two sections, "ETV Programming" and "ETV Facilities." See table 2.2.

⁹As reported in the university's *Application for Federal Matching Grant to Construct Noncommercial, Educational Television Broadcast Facilities*, submitted to the U. S. department of health, education and welfare in March 1968. Exhibit 49A, p. 1.

¹⁰Signals originating at the Manoa campus are beamed by microwave to station KGMB, a commercial facility, where they are transmitted over Channel 11. HETV has contracted with station KGMB for the use of transmitter space and part of the KGMB antenna, and for the maintenance of both.

Table 2.3 provides a brief description of each installation of the HETV transmission facilities.

Reception. Reception facilities are comprised of master antenna and distribution systems, TV receivers, TV stands, and accessories such as external speakers and light shields.

As of September 1969, there were 1,853 TV receivers serving 6,763 public classrooms in seven school districts, an average of one receiver for each 3.6 classrooms. Seventy-five percent of the receivers were situated in Oahu's four school districts where 77 percent of the classrooms are located. The balance were in the three neighbor island districts.

Closed circuit television. Both the UH and DOE have made sizeable commitments to closed circuit television (CCTV). However, this report is limited to examining CCTV in the DOE.

Districts and schools have been installing CCTV since 1966. Hawaii was the first district to purchase and install videotape recorders, cameras, monitors, and miscellaneous studio equipment in sizeable quantity and was subsequently followed by Maui, Kauai and Oahu. By June 1969, the DOE had accumulated about \$236,000 worth of CCTV equipment located at 32 high schools, 5 intermediate schools, and 3 elementary schools.

TABLE 2.3
TRANSMISSION AND TRANSLATOR FACILITIES OF THE HAWAII ETV NETWORK
(As of June 30, 1969)

Designation	Type	Location	Month Activated	General Area Coverage
Channel II (KHET)	transmitter	Station KGMB-TV, Honolulu	April 1966	Oahu (less north shore); transmit to Mt. Kaala (Ch. 63) and Maui (Ch. 10)
Channel 10 (KMEB)	satellite transmitter	Station KMAU-TV, Mt. Haleakala, Maui	September 1966	Maui County (less Hana); NE & West Hawaii; relay to Hilo (Ch. 4)
Channel 63	translator	Mt. Kaala, Oahu	September 1967	Oahu (north shore); relay to Kauai (Ch. 76)
Channel 8	translator	Kilauea, Kauai	September 1967	Kilauea-Hanalei, Kauai
Channel 12	translator	Hanalei, Kauai	September 1967	Hanalei-Haena, Kauai
Channel 72	translator	Molooaa, Kauai	September 1967	Molooaa-Kilauea, Kauai
Channel 76	translator	Mt. Kahili, Kauai	September 1967	Hanapepe-Kapaa, Kauai
Channel 80	translator	Anahola, Kauai	September 1967	Kapaa-Molooaa, Kauai
Channel 4	translator	Hilo, Hawaii	July 1968	Hilo-Puna, Hawaii
Channel 79	translator	Hakalau, Hawaii	July 1968	Hakalau-Hilo, Hawaii

PART II FINDINGS AND RECOMMENDATIONS RELATING TO THE MANAGEMENT OF THE HETV SYSTEM

Chapter 3

INTRODUCTION

Part II divides the subject of ETV management into two major areas: (1) general management and (2) hardware management. General management is concerned with the organization, staffing and policies for ETV in the State. Hardware management involves the controls exercised by the various agencies responsible for ETV over ETV facilities and equipment, particularly the planning, purchasing, distribution and utilization of the three principal kinds of hardware: transmission, reception and closed circuit television.

In both general management and hardware management, the basic plan proposed in 1964 and endorsed by legislative resolution in 1965 has experienced significant changes. Chapter 4 examines in detail the general management of ETV. Chapters 5, 6 and 7 examine the hardware management.

Our major findings include the following:

1. The ETV system is without clear lines of responsibility and authority. (Chapter 4)

2. There is a lack of validly established policies to govern the management and operations of the ETV system. (Chapter 4)

3. Deficiencies in the development, acquisition and use of ETV facilities and equipment have resulted in inefficient and ineffective use of public funds. (Chapters 5, 6, 7)

Chapter 4

GENERAL MANAGEMENT

General management responsibility for the State ETV system as a whole is shared by three agencies: the ETV council, the UH and the DOE. From its inception, the statewide ETV system has been viewed essentially as a cooperative venture or service of the university and the DOE, with the council as the coordinating agency.¹ In chapter 3, we sketchily described the manner in which responsibility for ETV is apparently assumed by the three agencies. In this chapter we discuss in greater

¹Final Report of the Advisory Committee.

detail the actual operations of the system and report our findings on the adequacy with which the system has functioned, with particular emphasis on the success with which the efforts of the various participating agencies have been coordinated and directed.

Summary of Findings

Briefly, our findings are:

1. Effective coordination and direction are lacking. Overall responsibility for ETV is obscure and the responsibility of the various agencies is not clearly defined.

2. The program and operational policies under which ETV now functions are of doubtful validity.

Lack of Coordination and Direction

The State ETV system has grown immensely since its beginning in 1966. To date, more than \$1.3 million has been invested in equipment, including transmitters, translators, antennas, TV receivers and closed circuit equipment; and the combined operating budgets of the UH and the DOE for ETV exceed \$1.0 million annually. Yet, despite this heavy expenditure of funds, the State ETV system today operates in a loose and fragmented fashion, with little overall direction and coordination of efforts of the various agencies. The extent of this fragmentation is such that it is often difficult to pinpoint responsibility. The nature of and the reasons for

this fragmentation are detailed in the sections which follow.

Under the original concept, the State ETV council was intended to coordinate the efforts of the two educational institutions, the UH and the DOE. It was to oversee and provide overall guidance in the development and operations of the statewide ETV system. It was to assume responsibility for policy decisions concerning program, production and operations. The council was expected to draw up appropriate by-laws to carry out its purpose and develop basic principles for the operation of the system. It was to have the power to name the director of educational television and to establish capital and operating budgets for the system.²

In the absence of a statute establishing a permanent council, an advisory council was created. It is composed of the president of the UH, the superintendent of the DOE, and one public member. As expressed in the executive order creating it, the council's duties consist of making recommendations and advising the governor with respect to (1) the budget for ETV, (2) the "policies and standards for the orderly and effective operation [of the system], including those relating to program, production, operation and utilization of the system," and (3) proposed expenditures for ETV. It is authorized to hire staff to assist it in carrying out its functions.

Very early in its life, the ETV council undertook the task of reviewing the annual

²*Ibid.*

budgets for ETV and it adopted policies, compiled in one document entitled, *Program and Operational Policy, Hawaii Educational Television Network*,³ to govern the operations of the system. In the *Policy*, the council attempted to describe its role and the roles of the various participating agencies. Notwithstanding these actions on the part of the council, the desired coordination has not been achieved. *First*, the council is ineffective as a coordinating body; and *second*, the various participating agencies have assumed responsibility for the various aspects of the system in a fragmented fashion. As a consequence, there is no overall direction being given to the system, and there are gaps and overlaps in its administration and operation.

Limited role of ETV council. Under the executive order creating it, the council has the following three distinct tasks: (1) formulate the ETV budget, (2) make "policies and standards for the orderly and effective operation [of the system], including those relating to program, production, operation and utilization of the system," and (3) approve or disapprove expenditure proposals. Technically, in all of these functions, the council is to "recommend to and advise" the governor.⁴ It appears, however, that actually more than an "advisory" role was envisioned for the council, since the

³Attached as appendix C to this report. *Program and Operational Policy, Hawaii Educational Television Network* is hereinafter cited as *Program and Operational Policy, HETV*.

⁴*Executive Order No. 23, August 31, 1965.*

council is authorized by the executive order to employ staff necessary to assist it in the discharge of its functions. Further, except to the extent of exercising general authority which he, as the chief executive of the State, has over all State agencies, the governor can hardly be expected to exert direct, active authority over the ETV system.

Available evidence suggests that the council has not been able to effectively discharge its functions and to provide the desired coordination.

First, the council's review of the ETV budget is perfunctory at best and has very little impact. Consider the following.

The "budget" which the council reviews is portions of the departmental budgets of the UH and the DOE which pertain to those ETV functions assigned to or assumed by each of the two departments. The ETV portions of the two agency budgets are frequently different in form, emphasis and detail. Thus, the two agency ETV budgets are reviewed separately in different contexts and not in any integrated fashion. Without an integrated budget, the council cannot secure a clear overview of the State system as a whole and cannot utilize the budget as a planning document for the overall development and operation of the State system. Records of the council indicate that there had been some discussion in the

past of the need for such integrated budget,⁵ but to date, the ETV budget remains unintegrated.

Since the ETV "budget" is parts of the departmental budgets of the UH and the DOE, upon review by the council, these portions are returned to the UH and the DOE for inclusion in their final departmental budgets for submission to the department of budget and finance and the legislature. Upon such return, both the UH and the DOE have at times deviated from the recommendations of the council and have increased or decreased amounts and added or deleted items in developing their final departmental budgets; and the department of budget and finance in its review of the departmental budgets has paid scant heed to the original recommendations of the council. The council's review, then, is never "final" and thus ineffective.

It appears that the council, due to its advisory nature and the departmental status of the UH and DOE, has little power to compel the submission of an integrated budget and to insure adherence to its budget recommendations.

Second, the council performs very little management control functions. Although the executive order calls for the council to formulate policies and standards for program,

⁵See, for example, "Agenda Item No. 5," attached to Minutes, ETV council, October 20, 1967.

production, operation and utilization of the system, *specific* policies and standards governing these aspects of the system are almost non-existent. True, the *Policy* adopted by the council in 1966 establishes some standards. However, for the most part, they are so generally stated as to be of little assistance to those who actually operate the system. Thus, for example, the *Policy* requires that the broadcast facilities and resources be "so utilized as to advance the educational purpose of the State and to serve to the fullest extent the interests and needs of the people of the State" and prescribes that "in all broadcasting, the highest standards of good taste shall prevail." Indeed, the *Policy* expressly leaves to the UH, through its ETV division, to establish workable program, production, operation and utilization standards. Thus, the *Policy* states that the university is "finally and solely responsible for all program broadcast over the Hawaii ETV Network," and that the university shall be responsible for exercising judgment "to maintain legal, technical and program standards for any broadcast over the Hawaii ETV Network."

Third, the council exerts no control over proposed expenditures. Expenditure controls are exercised by the UH and the DOE, since the ETV budget is portions of the UH and DOE departmental budgets and the UH and the DOE are ultimately responsible for their respective budgets.

Fourth, the ETV council does not have a staff solely responsible to it to assist it in the performance of its functions. The council has

appointed a director and an associate director of ETV, but the director it appointed is the director of the UH division of ETV broadcasting, and the associate director is the director of the DOE ETV branch. Thus, the director and associate director serve two masters. Since the interest of the council and that of the UH and the DOE are functionally different and at times in conflict, the locus of the director's and associate director's loyalty is placed in question. Note, however, that the director is paid solely by the UH and the associate director is paid solely by the DOE. It stands to reason, then, that each, in practice, concerns himself primarily with the discharge of those functions assigned to or assumed by the UH or the DOE and reports and accounts principally to the UH or the DOE, as the case may be. In fact, the associate director performs very little, if any, of the functions connected with the State ETV system as a whole.

Fifth, since the council is composed of only three members, two of whom are the president of the UH and the superintendent of the DOE, the council has become a forum for the advancement of the two institutions' narrow and divergent interests, with the public member often acting as a mediator between the two contending forces. Both the UH and the DOE are users of the broadcast facilities and each, understandably, is concerned with the promotion of its own sphere of interest. Under such circumstances, it is difficult for the council to focus on the broad questions of ETV, much less to resolve them.

Resultant fragmentation. In the absence of the council as a viable authority, the UH division of ETV broadcasting has assumed much of the responsibility for the management and operation of the system. But that assumption of responsibility is neither full nor complete. There are voids and duplications in administration, making it often impossible to pinpoint responsibility. Note the following.

First, although the *Policy* adopted by the council leaves the formulation of specific standards for programs, production, operation and utilization of the system to the university ETV division, it nonetheless reserves unto the council the responsibility of making "broad policy decisions," and describes the council as the agency "which exercises control over the educational service of the network."⁶ Indeed, in the various information brochures, program documents of both the UH and the DOE and the DOE handbooks, the council is widely publicized as the "policymaking body" of the ETV system. The *Policy* further provides that "program requests which in the judgment of the Director of ETV Broadcasting are not clear as to their legal, technical or educational aspects shall be referred to the State ETV Council," but that, in any event "final decision as to programs broadcast over the network stations... rests with the Board of Regents of the University."⁷

⁶Program and Operational Policy, HETV.

⁷Ibid.

These factors cause an ambivalence in the nature and extent of the authority assigned to the university and its ETV broadcasting division, and the authority reserved by the council. For example, what is "broad policy" and to what extent is "control" retained by the council? This ambivalence was clearly manifest when in 1965 the UH board of regents appointed a director for the UH division of ETV broadcasting. At the time of the appointment, the board of regents was under the general belief that "the Regents do not alone have the authority over the network, which has an overall tripartite board . . . This group must approve a General Manager for the 'network' itself."⁸ The university is the official licensee of the broadcast station, and, as such, the board of regents apparently and rightly believed that it had responsibility over the operations of the station and appointed a director for the division. At the same time, however, the regents recognized that the station is an integral and important part of the total statewide ETV system and felt that as such, they alone had no jurisdiction over the operations of the station. Yet, the respective roles of the council and the university with respect to the broadcast facilities are unclear from the statements contained in the *Policy*.

Second, although under the *Policy* the university ostensibly has the power to establish specific broadcast, production, program, and utilization standards, the extent of its authority to require compliance by the DOE and,

⁸Memorandum, secretary of the university of Hawaii to board of regents, October 20, 1965.

conversely, the extent to which it must confer with the DOE which is a principal user and participant in the total ETV system in the establishment of such standards, are not clear. If the ETV system is indeed a "cooperative venture or service" of the UH and the DOE, it would be reasonable to expect that the DOE would be consulted in the establishment of the standards. There are, however, some indications that all is not well in the relationship between the UH and the DOE in the operation of the system. For example, although the UH division of ETV broadcasting appears to be responsible for production services and the UH has been funded to provide this service, the DOE has lately begun to provide its own staff to assume some functions related to the production of local in-school ETV series. Thus, the DOE recently contracted its own producer-director to prepare a high school series on family life and sex education. Further, the DOE plans to continue similar but permanent arrangements for its future productions.⁹ In total, the DOE spent \$31,300 in 1969 to employ these producers. Under normal practice, producer-directors are allocated only to the division of ETV broadcasting to service all local productions. If this trend continues, the division of functions between the UH and the DOE as now provided would become meaningless and it could lead to

⁹In 1970, the DOE requested position action thusly, "this position (ETV Writer/Producer) will be responsible for writing and producing television series in Guidance and Health Education." It further stated that it "is currently filled . . . on a contract which expires August 31, 1970. The position should be made permanent as of September 1, 1970, so that services can be continued on an uninterrupted basis." Since then, the position has been made permanent.

the formation of another staff of producers in the DOE and the duplication of functions and equipment.

Third, the fuzziness in the authority over the ETV system is most evident in that segment of ETV known as "public television" (PTV). Public television is that aspect of ETV which deals with a wide range of programs for general audience—programs other than those formal instructional programs intended for public school students, adults seeking high school diplomas and those interested in securing college credits.¹⁰

The UH division of ETV broadcasting is not only responsible for the construction and maintenance of broadcast facilities, for providing technical, production services, for scheduling broadcast hours, and for transmission of broadcasts, but it also actively participates in the development of "public affairs" and "community services" programs to be broadcast over the facilities. "Public affairs" and "community services" programs are only portions of public television. The ETV division, however, has disclaimed any control over or responsibility for the conduct of any educational TV programs other than "public affairs" and "community services" programs. It views itself principally as a "service" agency to provide production and transmission services to the users of the ETV transmission facilities.¹¹

¹⁰See chapter 12, *infra*, for a full discussion of PTV.

¹¹Memorandum, director, educational television broadcast, to the vice-president for academic affairs, university of Hawaii, February 17, 1966.

The question, then, is who is responsible for PTV as a whole? Who sets the policies, directions and format for PTV? As provided in the *Policy*, various colleges of the UH develop various kinds of PTV programs but there appears to be no central direction given to all these efforts. Further, while the *Policy* generally leaves the development of PTV programs to the university, the DOE has nonetheless, on its own, proceeded to develop PTV programs (witness, "Pau Hana Years," and "Operation Information"). The DOE's involvement in PTV is said to stem from section 301-2, HRS, which calls on the DOE to develop adult education programs, including homemaking and parent education, civic training, naturalization training and programs designed to enrich and broaden people's cultural, recreational and social interests. The point that is being made here is not that the DOE ought not to be involved in the development of PTV programs, but that there is currently lacking an organizational unit or mechanism by which the total PTV programs might be coordinated.

Fourth, under the original concept of ETV, the total TV potential was to be encompassed within the State system. Thus, the original plans for ETV called for the installation of closed circuit television facilities as Phase II of the plans.¹² Yet, the closed circuit television capabilities of the DOE and the UH have developed independently of the total State ETV system.¹³ There is no documentation anywhere

¹²Final Report of the Advisory Committee.

¹³See chapter 7, *infra*.

that ties closed circuit television into the total State ETV system, that explains how closed circuit meshes into the overall objectives of the ETV system. Indeed, the documents that do exist in the files of the ETV council indicate that the jurisdiction of the ETV council over the closed circuit facilities of the DOE and the UH is an unresolved question.¹⁴ Such jurisdictional questions are likely to increase with continuing developments in cable television, educational videotape recorders and instructional television fixed stations.

An alternative. If ETV is to develop in a systematic fashion, there is need to clarify the responsibility and authority therefor. The following is offered as a means of bringing about that much needed coordination, direction and responsibility for the State ETV system.

The suggested alternative is based on the premise that there is need for a strong central authority on all ETV matters of statewide concern. It distinguishes the broad aspects from the narrow aspects of ETV. The broad aspects deal with facilities for general, multiple, program usage and programs for the general TV audience. The narrow aspects relate to facilities for limited program usage and programs aimed at special audiences, such as public school students, public school teachers, college students, adults pursuing high school diplomas, etc. Thus the alternative separates "public television" which is intended

¹⁴Memorandum, director, ETV branch, DOE, and director, ETV broadcasting, UH, January 8, 1969.

for the public at large from "educational television" which is primarily intended to support formal educational programs of the State, such as public education and university education.

The alternative further recognizes the increasing emphasis throughout the United States toward the use of open circuit broadcast facilities for *public* television rather than *educational* television programs. Typically, open circuit broadcasts started as media to support the formal instructional programs of the educational system. However, with the growing use of closed circuit systems, which provide greater flexibility to schools in scheduling formal instructional programs, the tendency in recent years has been toward public television broadcasts on open circuit systems.

The alternative suggested here calls for the creation of a "public broadcast authority." The authority's responsibility is as follows:

1. To plan, develop, construct, operate and maintain all facilities which are used for multiple program purposes and to reach multiple audience. All open circuit broadcast and transmission facilities, including the broadcast station, and all other TV facilities to be used in common by a variety of users would be within the responsibility of the authority. The authority would become the official licensee of the broadcast station and would set the objectives for the State transmission system and the standards governing the use of the broadcast facilities. It would be responsible for all

programs broadcast over the facilities. This means that closed circuit television facilities of the DOE and the UH, which are used exclusively for public education or formal university education programs and for reaching a special audience such as public school students and the university course-enrolled students, would be outside the jurisdiction of the authority. They would remain with the DOE and the UH, as is the case today. With respect to such new developing facilities, such as ITFS, if such facilities are intended not only for the use of public schools, but are generally to be used by a variety of users to reach a variety of audience, they would be under the jurisdiction of the authority. Being responsible for such facilities, the authority will schedule their use and "sell" open air time to the users. If the State should decide to expand public broadcasting to include radio as well as television, all radio facilities intended for general use would also fall within the responsibility of the authority.

2. To provide technical, production services to anyone who desires to "purchase" such services from the authority. This means that agencies, such as the DOE, would need to consider the cost-benefits of contracting for such services from the authority and of producing programs themselves.

3. To develop, direct and supervise public television. Responsibility for a successful PTV program rests with the authority. It may contract with other State agencies or private agencies for the actual development of specific programs, but the responsibility for setting

objectives, general directions, program standards, format and emphasis and for general management of PTV would lie in the authority. Responsibility for the development of *formal educational* programs would remain with the DOE and the UH, which are the principal agencies vested with the duty of providing formal education to the people of the State. So also the responsibility for the development of other programs specifically vested in these or other agencies would remain where it is. Open circuit would be but one means of delivering such programs. The selection of open circuit, closed circuit or other means would be dictated by cost-effectiveness and cost-benefit analysis. Should open circuit or such facilities under the authority be selected, broadcast time would be negotiated with the authority. The authority would provide such time according to the objectives and standards established for the facilities under its control and, where the program to be aired falls within the definition of PTV, then according to the objectives, directions, standards and format established by the authority for PTV in general.

Organizationally, the authority should be headed by a single executive. It should, however, have an advisory board to advise the director on the development of the State system and on PTV program policies and standards. The composition of the advisory board should be expanded from the three now sitting on the advisory council to some number between seven and 15. The president of the university and the superintendent of the DOE should be members of the board, but the rest of the membership

should be representative of the community at large so that a broad view might be brought to bear on PTV.

For administrative purposes, the authority may be lodged in the department of accounting and general services or in the office of the governor. It is desirable that the authority be separated organizationally from both the university and the DOE, the principal users of the State system. However, should it be decided, because the university is currently the official licensee of the TV broadcast station or for some other reason, that the authority should be lodged in the university, care should be exercised to insure that the placement is for administrative purposes only and that the authority does not become "lost" among the various departments at the UH.

We believe that this alternative will result in a clear delineation of authority over the statewide system. It will pinpoint responsibility and make public television a viable State program, which it is currently not.

Recommendation. We recommend that the legislature create a public broadcasting authority, in the manner set forth above, in which responsibility for the statewide ETV system and for public television is centralized.

Doubtful Validity of ETV Policies

HETV currently operates under the *Program and Operational Policy, Hawaii Education Television Network* adopted by the ETV council

on April 6, 1966. It is also governed by a rate schedule, adopted by the council, which sets forth the fees to be charged private agencies in the event they use the services or facilities of HETV. It was the council's intent that both "policies" be referred to the board of regents (BOR) of the university of Hawaii for its review and approval.¹⁵

Our examination of these policies points up certain deficiencies with respect to content and adoption processes which cast doubt on their validity. Specifically, we find that (1) both policies have not been formally adopted by the BOR; and (2) certain broadcast policies which appear to be subject to the "Administrative Procedures Act" of 1961 have been in force without undergoing the adoption processes outlined in the act. Our explanation follows.

Lack of BOR approval. Since the HETV broadcast station is licensed to and administered by the university, the BOR, in its capacity as the executive board of the institution, has some responsibility under federal laws to set policy for its operation. Recognizing this, the ETV council intended that the proposed broadcast policies and rate schedules for the HETV network should be formally adopted by the BOR. Our inquiry reveals, however, that there is no record of the BOR's having received or having acted upon the policies referred to above.

Rule-making deficiencies. Rule-making activities of public agencies are governed by the

¹⁵Minutes, ETV council, April 6, 1966.

Hawaii Administrative Procedures Act (chapter 91, HRS), hereinafter abbreviated as the *APA*. In general, the APA prescribes common administrative procedures which all State and county agencies, except the legislative and judicial branches, are required to follow when making rules and in adjudicating contested cases.

Of particular relevance to this discussion is the definition given to the term "rule" under the APA, which is as follows:

"'Rule' means each agency statement of general or particular applicability and future effect that implements, interprets, or prescribes law or policy, or describes the organization, procedure, or practice requirements of any agency. The term does not include regulations concerning only the internal management of an agency and not affecting private rights of or procedures available to the public, nor does the term include declaratory rulings issued pursuant to section 91-8, nor intra-agency memoranda."¹⁶

By this legal definition, a rule contains the following elements:

- a statement
- of general or particular applicability
- of future effect

¹⁶Section 91-1, HRS.

· that implements, interprets or prescribes law or policy

· affecting public rights of or procedures available to the public.

Whenever a declaration contains all of these elements, it can be reasonably assumed that the rule-making requirements and procedures of the APA will apply. These requirements include such steps as giving advanced public notice; holding public hearings; performing proper recordation, publication and filing of rules; and other administrative procedures as the law may prescribe.

Our review of the various policy statements contained in the *Program and Operational Policy* suggests that several are of such nature and scope that they fall within the legal definition of a "rule" and, hence, are subject to promulgation in the manner prescribed by the APA. Some examples of such policies are cited below.

"Since the Educational Television Network is operated primarily for the dissemination of information and the promotion of free and critical inquiry into problems of public concern, its services shall be used only by those parties capable of making a contribution to the public interest and welfare."

"The objectives of the Hawaii Educational Television Network are primarily educational; therefore, a

request for program time which is obviously to promote campaigns, drives, or causes, however worthy, will not be granted.”

“The Hawaii ETV Network will prohibit the appearance of any announced political candidate except as specified under Section 315 of the Communications Act of 1934 as amended.”¹⁷

It may be noted that in each of the above policies, conditions are imposed prohibiting the use of the HETV broadcast service by certain private individuals and organizations and, in that way, affects the rights of or procedures available to the public.

The lack of proper follow-through in adopting ETV policies is potentially disruptive to network operations for the following reason. These policies, which have yet to be promulgated by the BOR, have been available to and are followed by the network staff in making program decisions affecting the use of the broadcast service. Certain kinds of decisions they make would be legally protected if made pursuant to some existing federal regulations, such as those issued by the FCC to regulate TV broadcasting. However, many broadcasting policies under which HETV presently operates are strictly local and, as the situation now stands, are without legal foundation. Thus, the operating staff of HETV may be charged with

¹⁷Refers to legislation enacted by the federal government regulating broadcasting operations.

the unlawful exercise of authority should administrative decisions on broadcasting privileges affecting private persons or groups be rendered pursuant to the policies.

Recommendations. We recommend that the university review the policies adopted by the State ETV council and

1. Determine those policies which fit the definition of "Rule" under the APA and, as appropriate, institute proceedings to formalize their adoption pursuant to the APA.

2. Determine those policies which are limited to the internal administration of HETV network, including broadcast policies not required to undergo the APA rule-making procedures, and effect their adoption by the BOR.

Chapter 5

HETV TRANSMISSION FACILITIES

The open circuit transmission facilities constitute the heart of the present statewide ETV system. They serve as the communications link by which the educational services of the State, as provided via TV, are made accessible to the schools and the public-at-large. This chapter focuses on the development and management of these transmission facilities.

Summary of Findings

In general, we find that

1. While adequate ETV transmission signals are available to most Oahu public schools, signals are poor or not available to a significant number of neighbor island schools.
2. There is need for a complete review of the objectives and plans for ETV. We note particularly the apparent change in direction and emphasis, for which, however, documentation is lacking, and the heavy commitment of funds that the legislature is being asked to make in a new plan for ETV recently put together.

ETV Transmission Coverage

ETV transmission covers approximately 93.5 percent of the public schools and 96.8 percent of total student enrollment, as shown in table 5.1. Of the total 216 schools, 202 schools are receiving usable ETV signals, most of them (192 schools) by direct open circuit coverage and some (10 schools) by community antenna (CATV) systems.¹ (The percentage of the public-at-large which receives ETV signals is not exactly known, but it is estimated that it is similar to the percentage of schools receiving usable signal.²)

¹A "CATV" system is a commercial antenna reception system which receives open circuit transmission signals and relays them, by means of cable, to subscribers of this service. We understand that CATV services are provided to 10 schools of the DOE (Oahu-9, Maui-1) at no cost.

²Division of ETV broadcasting, university of Hawaii, *Program Comprehensive Plan, 1970-71 through 1976-77*, (Rev.) December, 1970.

When viewed statewide, it appears that transmission service is nearly complete. However a district-by-district review discloses some notable problems.

- *Kauai.* This district suffers from a substantial lack of effective transmission coverage although a translator system of five translators at a cost of \$36,413 was erected in September 1967 to serve this island.³ As indicated in table 5.1, only six of the district's 14 public schools can receive usable TV signals, thus covering only about 49 percent of the public school enrollment. Four schools in west Kauai and Niihau are entirely without transmission, two schools in northeast Kauai can receive signals but not of usable quality, and two schools can receive TV signals but are prevented from doing so because of the schools' defective master antenna systems.
- *Hawaii.* All four "uncovered" schools are out of transmission range. Three lie in the Volcano-Kau district, the other in the Kamuela area of the island. It is still uncertain as to when these areas will be serviced by HETV coverage.
- *Maui.* Only two schools, both located in the eastern part of the island, are without open circuit coverage.

³This project was undertaken directly by the UH division of ETV broadcasting because of unsatisfactory construction bids received. Normal contracting procedures were waived, and purchases for the most part were handled directly by purchase orders. Thus, it is uncertain whether all appropriate costs (materials, equipment, manpower) were charged to this CIP project authorization.

In view of the foregoing, it may be said that ETV signals, while generally available to all Oahu-based public schools, have not been as equally available to all neighbor island schools, particularly those on Kauai. This limitation of the open circuit ETV transmission coverage plus the current shortcomings in CCTV (which are discussed in chapter 7) have resulted in one

important expectation of ETV not being fulfilled, i.e., the expectation that ETV would make instructional services equally available to the rural or more remote parts of the State which, because of geographic constraints, have limited access to a variety of educational opportunities.

TABLE 5.1
ESTIMATED ETV TRANSMISSION COVERAGE OF THE DEPARTMENT OF EDUCATION
By School Districts and Enrollment as of September 1969

School District	School ETV Coverage			Enrollment ETV Coverage		
	No. of Schools	No. of Schools with ETV Coverage ¹	Percent of Schools with ETV Coverage	Total Enrollment	Estimated Enrollment in ETV Coverage	Percent of Enrollment Covered
Honolulu - Oahu	53	53	100.0	52,619	52,619	100.0
Central - Oahu	34	34	100.0	32,366	32,366	100.0
Leeward - Oahu	25	25	100.0	29,547	29,547	100.0
Windward - Oahu	26	26	100.0	27,640	27,640	100.0
Hawaii	31	27	87.1	16,786	15,261	90.9
Maui	23	21	91.3	11,380	11,106	97.6
Kauai	14	6	42.9	7,693	3,777	49.1
Special Schools ²	<u>10</u>	<u>10</u>	<u>100.0</u>	<u>683</u>	<u>683</u>	<u>100.0</u>
Total	<u>216</u>	<u>202</u>	<u>93.5</u>	<u>178,714</u>	<u>172,999</u>	<u>96.8</u>

Sources: (a) School and enrollment data, as of September 30, 1969, from the Office of Statistics, Department of Education.
(b) ETV coverage information provided by the ETV Branch, Department of Education.

¹Schools within range of usable TV transmission signals. Regions generally excluded: Hawaii (Volcano, Kau, Kamuela); Maui (Hana, Keanae); Kauai (Kekaha, Waimea, Kapaa, Hanalei, Kilauea, Niihau).

²All special schools are located on Oahu.

Plans for ETV Transmission Facilities

In 1965, the State legislature endorsed a plan, as proposed by the 1964 governor's advisory committee on ETV, to develop publicly-owned and operated statewide ETV transmission facilities and appropriated funds to commence their construction. Since then, there have been considerable delays in the construction of the facilities. The delays have been caused to a large extent by significant changes to the approach and plan conceived originally in 1964.

Original plan. The original facility plan called for the development of the ETV transmission network in three stages. The first stage included the development of a single channel, open circuit system consisting of three transmitter and seven translator stations (table 5.2). The second stage would have then expanded the system by adding closed circuit TV in areas not within transmission coverage of the open circuit system. The third stage called for the development of additional ETV channels as the need arises and as funds become available. The plan anticipated completion of Stage I within two years after initial authorization

TABLE 5.2
COMPARISON OF ORIGINAL, 1967, AND 1970 PLANS FOR
HETV TRANSMISSION INSTALLATIONS

Island	Original Plan		1967 Plan		1970 Plan	
	Transmitter Stations	Translator Stations	Transmitter Stations	Translator Stations	Transmitter Stations	Translator Stations
Oahu	1	1	1	4	3	0
Maui	1	-	1	1	3	0
Hawaii	1	5	-	7	3	0
Kauai	-	<u>1</u>	-	<u>7</u>	<u>2</u>	<u>3</u>
Total	<u>3</u>	<u>7</u>	<u>2</u>	<u>19</u>	<u>11</u>	<u>3</u>

which would have placed it at about July 1967.⁴ Under this schedule the three transmitters were to be constructed in the first year and the seven translators installed in the second year.

1967 plan. In September 1967, slightly over one year after implementation of the first plan had commenced and after approximately \$500,000 was spent to construct the two transmitters proposed in the original plan, four unplanned translators were built on Kauai. The construction of these four stations gave first indication that a change to the original plan was in the making. However, documentation of this second plan was not available until April 1968 when the UH filed a request for federal funds to the department of health, education and welfare. This plan called for two transmitters and 19 translators (see table 5.2). It departed from the original proposal in that (1) it sought statewide ETV coverage using open circuit television only rather than using a combination of open circuit and closed circuit systems, thereby eliminating Stage II of the original plan;⁵ (2) the number of installations was increased from the originally planned 10 to 21; and (3) the timetable for completing the revised Stage I development was extended to 1971.

⁴Final Report of the Advisory Committee.

⁵We were unable to locate documented explanation for this change of approach but, reportedly, it was based on economic reasons. According to engineering personnel of the ETV staff of the UH, it was felt that open circuit was more economical to install and maintain than CCTV.

Pursuant to this second plan, eight of the 19 translators were constructed at a cost of \$99,707, in fiscal years 1967-68 and 1968-69. Thus, at the end of the 1968-69 fiscal year, there were two transmitters and eight translators in operation. All further installation ceased as of the 1968-69 fiscal year, although the construction of the remaining 11 translators had been programmed for the 1969-70 and 1970-71 fiscal years (see table 5.3).

The reason why all construction ceased as of the end of fiscal year 1968-69 was apparently because of lack of federal funds, upon the receipt of which the development of the new translator stations was heavily contingent. In March 1968, the UH submitted an application for federal funds which included therein a request for funds for constructing the 11 remaining translator stations.⁶ Having done so, the UH expected to receive a substantial grant of 75 percent of the construction cost of these facilities.⁷ Pending notification from federal authorities on this application, action on the 11 proposed translator stations was suspended, although some of them had already been

⁶University of Hawaii, "Application for Federal Matching Grant to Construct Noncommercial, Educational Broadcast Facilities," March 1968, as submitted to the department of health, education and welfare (HEW).

⁷The "Educational Television Facilities Act of 1962" (Public Law 87-447) previously provided for matching financial grants on a 50-50 basis. In 1967, the enactment of the "Public Broadcasting Act of 1967" (Public Law 90-129) revised this formula to 75 percent federal and 25 percent State.

TABLE 5.3
HETV SYSTEM DEVELOPMENT TIMETABLE—PROPOSED AND ACTUAL
A. ORIGINAL PROPOSED INSTALLATIONS

Island	FY 1965-66	FY 1966-67	FY 1967-68	FY 1968-69	FY 1969-70	FY 1970-71
Oahu	Honolulu (Ch. 11) Mt. Kaala		N	N	N	N
Maui	Mt. Haleakala (Ch. 10)		O	O	O	O
Hawaii		Hilo (Ch. 4) Hakalau Laupahoehoe Volcano Naalehu Kamuela (Waiki)	N	N	N	N
			E	E	E	E
Kauai		Mt. Kahili				
Total	3	7	-	-	-	-

B. ACTUAL DEVELOPMENT PLAN

Island	FY 1965-66	Installations Constructed				Additional Installations Planned ¹	
		FY 1966-67	FY 1967-68	FY 1968-69	FY 1969-70	FY 1970-71	
Oahu	Honolulu (Ch. 11)		Mt. Kaala			Waianae Makaha Makua	
Maui		Mt. Haleakala (Ch. 10)			Hana		
Hawaii				Hilo (Ch. 4) Hakalau	Naalehu Kamuela Kona Pahala Pohakuloa		
Kauai			Mt. Kahili Hanalei Anahola Moloaa Kilauea			Waimea/ Kekaha Kapaa	
Total	1	2	5	2	6	5	

¹Multi-Year Program Plan, FY 1968-69 to FY 1974-75, Division of ETV Broadcasting (UH).

partially funded by State appropriations in 1966 and 1967.⁸

The expected federal funds did not materialize. In the first place, the application for funding submitted to the HEW was not officially filed by that agency because it lacked certain required documentation.⁹ In the second place, even if proper filing procedures had been met, the prospect of receiving a grant was dim because of (1) the scarcity of funds available to be allocated by HEW and (2) the relatively low priority which would have been assigned the UH application.¹⁰

1970 plan. In September 1970, after \$99,707 had been spent to construct eight of the 19 translators recommended in the second plan, the UH received a third plan, prepared by the consultant firm of Jansky and Bailey, calling for a completely different combination and configuration of transmission equipment. This third plan foresees the State system as eventually embracing all public broadcasting,

⁸ Act 38, SLH 1966, appropriated \$90,000 of an estimated \$163,000 needed to construct transmission/translator facilities on the island of Hawaii. Two installations were constructed under this authority in 1968. Act 217, SLH 1967, appropriated \$10,000 of an estimated \$20,000 needed to construct a translator station at Hana, Maui. Both projects anticipated additional funds on a 50-50 matching basis.

⁹ Evidently, UH officials were unaware of this discrepancy in their application until informed of it by HEW in April 1969.

¹⁰ As reported by ETV officials, funding requests pending before the HEW exceed by ten-fold the amount it had available to allocate. HEW priority is to assist new ETV stations become operational; therefore, the UH request, it is believed, would have been of low priority since it sought to "enrich" an already established ETV network.

including AM and FM radio as well as television. It provides for the installation of transmitters, translators, ITFS,¹¹ a wideband, multi-purpose microwave transmission system, and central and regional originating and production facilities. It relies heavily upon developing technology.

The distribution patterns for transmitters and translators are noted in table 5.2. It is estimated that the total investment cost under the new plan is \$8.0 million and the annual operating cost is \$900,000. If the microwave system is leased, the investment cost is estimated at \$7.3 million and the annual operating cost at \$1.3 million (see table 5.4). The plan calls for phasing in all capabilities over a six-year period, beginning with the 1971-73 fiscal biennium (see table 5.5). The phase-in is to proceed from "adequate" installation to "optimum" installation within the six-year period.

Pursuant to this third plan, the university has requested in its 1971-73 budgetary submission, the sum of \$998,000 for the fiscal biennium. Although this sum is \$1.4 million less than the amount projected by Jansky & Bailey for the biennium (table 5.5), the university in its submission has indicated that spending in the following two fiscal biennia is expected to be such that the total investment cost over the six-year period will match the \$8.0 million estimated by Jansky & Bailey for the installation of the entire system.

¹¹ Instructional television fixed service stations are regional and local distribution facilities, using low power transmitters and directional antennas having a service range of 8 to 15 miles.

TABLE 5.4*
1970 PLAN: COST SUMMARY

	Optimum				Adequate			
	Owned		Leased		Owned		Leased	
	Initial Capital	Operating Costs	Initial Capital	Operating Costs	Initial Capital	Operating Costs	Initial Capital	Operating Costs
I. ITFS	\$1,187,970	\$ 59,398	\$1,187,970	\$ 59,398	\$ 315,540	\$ 15,777	\$ 315,540	\$ 15,777
II. Broadcast TV	2,868,850	115,262	2,868,850	115,262	1,767,900	103,566	1,767,900	103,566
III. Origination & Production	971,960**	201,600	971,960**	201,600	728,970	178,700	728,970	178,700
IV. Broadcast FM	553,500	36,250	553,500	36,250	284,200	22,690	284,200	22,690
V. Broadcast AM	381,210	43,780	381,210	43,780	267,300	32,315	267,315	32,315
VI. Microwave	721,214	36,061	—	376,152	596,356	29,818	—	310,700
VII. Personnel	—	387,900	—	387,900	—	239,880	—	239,880
VIII. Network Center (Including: building, color, additional micro- wave)	1,308,730	65,436	1,308,730	65,436	1,144,780	57,239	1,144,780	57,239
TOTALS	\$7,993,434	\$945,681	\$7,272,220	\$1,285,778	\$5,194,906	\$679,985	\$4,508,690	\$960,867

*From Jansky & Bailey, *Educational Television and Radio System Plan* (3 vols.), September 4, 1970.

**This figure would double assuming color capability at Regional Production Centers.

Planning Inadequacy

Certain fundamental questions are raised by the 1970 plan. These questions need to be answered before the State commits itself to the heavy investment required under the third plan. These questions relate to (1) the objectives of the State system and (2) the design of the system to be implemented.

Objectives of the system. When the original plan was developed, the missions of HETV were conceived of as follows:

- enhance classroom instruction and the ability of schools to meet the growing and changing educational needs of the State;

TABLE 5.5*
1970 PLAN: IMPLEMENTATION SCHEDULE

Phase	Construction	Costs
1 (Fiscal 1971-73)	Microwave Adequate	\$ 596,336
	Broadcast TV Adequate	1,767,900
	Subtotal	\$2,364,256
2 (Fiscal 1973-75)	ITFS Optimum	\$1,187,970
	Broadcast AM Optimum	381,210
	Broadcast FM Adequate	284,200
	Subtotal	\$1,853,380
3 (Fiscal 1975-77)	Broadcast FM (Upgrade to Optimum)	\$ 269,300
	Microwave (Upgrade to Optimum)	124,858
	N.O.C. (Network Opera. Center)	1,308,730
	Regional Production Centers	971,960
	Broadcast TV (Upgrade to Optimum)	1,100,950
	Subtotal	\$3,775,798
	Grand Total	\$7,933,434

*From Appendix I, Jansky & Bailey, *Educational Television and Radio System Plan* (3 vols.), September 4, 1970.

strengthen in-service teacher education with a view toward continuously updating teacher competencies regarding new developments in methods, materials,

media, curricula and learning theories; and

provide new educational resources for adults.¹²

It was assumed that HETV would assist in alleviating the problems of teacher-shortage and growing student enrollment and in promoting equal educational opportunities to all students. The thrust of the original plan, therefore, was heavily *educational* and *instructional*.

In October 1967, the ETV council noted a national movement towards public television—"the newly proposed system for providing professionally produced, cultural, news, public affairs and entertainment programs to be shown during prime evening hours and weekends over educational television stations."¹³ Following the national trend, Hawaii stepped up its operations in the area of public television, giving rise to competition for the already scarce resources available between public television and educational television. The third plan reflects this trend and emphasizes public television over educational television.

The third plan, however, does more than simply reflect this shift in emphasis from educational television to public television. It suggests, indeed assumes, that there have been

¹²Final Report of the Advisory Committee.

¹³"Agenda Item No. 8", State ETV council meeting, October 20, 1967.

certain fundamental changes made in the objectives, directions, scope and system of HETV from what they originally were when HETV commenced in 1965. Thus, for example, the plan includes radio as well as television as a part of the State system.

It would be reasonable to expect that whenever changes as fundamental as those implied by the 1970 plan are made that they would be supported by appropriate documentation. However, none appears to exist. There is, for example, no official statement anywhere which clearly and specifically defines what it is that the State is *now* trying to achieve by ETV. There is no evidence of what options were considered in determining the new objectives, directions, scope and system of HETV. There is no demonstration of any cost-effective analysis performed in settling upon the system encompassed by the 1970 plan. Changes in objectives, directions, scope and system are basic policy questions which must ultimately be decided by the legislature. But, without proper analysis, intelligent decisions by the legislature cannot be expected. Yet, the legislature in the current session is being asked to fund the initial phase of the new plan.

System design. In any planning process, upon the selection of a system, the next logical step is usually the design of the selected system, which details the system components and configuration. The Jansky & Bailey report is, in essence, a report on the system design. We note the following regarding the consultant's system design.

First, no alternative configurations are presented in the report. One and only one configuration is described. There is, therefore, no basis for a decision-maker to determine what other configurations are possible to achieve the new objective of the ETV system, and whether or not the design proposed is the most cost-effective.

Second, the operational concepts upon which the design was determined are unclear. Neither an assessment of the workability and feasibility of the design nor the reasonableness of the six-year schedule for installation can be made without a clear identification of the manner and kind of utilization anticipated for the system. A hardware system, such as that proposed in the 1970 plan, should be supportive of the software—the programs that are to be developed and transmitted over the hardware system. Without a clear understanding of the kind, amount and frequency of the software requiring hardware support, the system cannot be adequately designed and the installation thereof meaningfully scheduled. Elsewhere in this report, we indicate that HETV as now constituted has fallen short of expectations, primarily due to the lack of adequate planning in the development of educational and public television programs. We note that the objectives of the various programs and the extent to which each requires the support of the transmission facilities of HETV are unclear. Thus, it would appear that the design of the system formulated by the consultants is based upon some vague optimum operations and usage, and the six-year installation schedule is based on hardware

desirability rather than on reasonable estimates of need.

Third, cost calculations are included in the consultant's report. We made no detailed analysis of the costs set forth therein. However, upon cursory examination, we note that the basis for estimating personnel costs is not entirely clear; the number and kinds of people needed to operate the system are vaguely stated. We further note that the cost estimates have not been subjected to sensitivity tests. In this connection, we observe that project estimations in the past for ETV have often been far off the mark. Consider, for example, the following.

Of the remaining 11 translators noted in the second 1967 plan, nine were funded, either partially or fully, with State funds. The project estimates presented at the time of funding differed considerably from the estimates contained in the application for federal funds submitted to HEW in 1968, to-wit:

In 1966, five translators for the island of Hawaii were authorized; the cost estimate then was \$115,000.¹⁴ Two years later in 1968, the estimate fell to \$78,700, for a difference of around 31 percent.

In 1967 the Hana, Maui, translator was funded on the basis of a cost estimate of \$20,000.¹⁵ This sum exceeded the 1968 estimate of \$12,389 by 37 percent.

¹⁴Act 38, SLH 1966.

¹⁵Act 217, SLH 1967.

In 1969, three Oahu projects (Waianae coast) were authorized. The estimate for these projects then was \$50,000.¹⁶ The 1968 estimate for these projects, however, was \$29,269, a difference of some 41 percent.

Whatever the reasons for the differences in estimates in the past, it would seem that more consistent and reliable estimates of financial requirements ought to be developed if policies affecting future development of the ETV system are to be soundly based. We believe that over- and underestimation of costs can be minimized if sensitivity tests are conducted while the system is being designed.

Recommendations

We recommend that:

1. *Implementation of the 1970 Jansky & Bailey plan be suspended until the public broadcasting authority, the creation of which is recommended in the preceding chapter, or, pending the creation of such authority, the university in cooperation with the ETV council review the missions of ETV and establish specific objectives, direction and scope of the State TV system and determine and design the hardware system to be installed.*

¹⁶Act 155, SLH 1969.

2. *Various, feasible alternatives be considered in determining objectives, direction, scope and the hardware system to be installed, and the system to be installed be selected on the basis of cost-effectiveness analysis.*

3. *The system design clearly describes the operational concepts and objectives, define the specific equipment and personnel needs, and subject the cost estimates to sensitivity tests.*

Chapter 6

HETV RECEPTION SYSTEM

Reception capability is reasonably a function of the degree to which schools are equipped to receive ETV broadcasts. This is largely governed by the availability of TV reception equipment such as receiver sets and appropriate antenna systems. Our review of ETV reception capabilities focuses on the TV receiver since it is the end-use equipment of the ETV broadcast service. In particular, standards and policies used to allocate and replace TV receivers are examined.

Summary of Findings

The DOE is heavily committed, financially and otherwise, to ETV development in its public

school system. At June 1969, its overall inventory of ETV related equipment was valued in excess of \$676,000 and more acquisitions are expected. Moreover, the annual operating expenditures for administration at the State central office alone (exclusive of districts and schools) have been in the neighborhood of \$200,000.

Our examination of the ETV capabilities of this department reveals the following:

1. There are intra-district distribution disparities in that some schools are less equipped and less capable of utilizing ETV information than their counterparts.

2. The DOE is without a firm, effective and consistent standard as to how it should allocate its equipment for optimum use and benefit to educational programs.

3. Some schools are unprepared and unable to integrate ETV broadcasts into their programs. As a result, approximately eight percent of the DOE's operable TV receivers valued at \$22,000 were idle during the 1968-69 school year.

4. Replacement policies are needed to eliminate duplicate refunding practices for stolen ETV equipment and to effect normal replacement requirements due to obsolescence.

ETV Reception Capabilities

We examined the distribution patterns of TV receivers in the public schools at two

levels—statewide by districts and intra-district. As our measure, we used the “ratio of TV receivers to regular classrooms” on the assumption that normal reception capability is related to the situs of the TV receiver. We do not suggest that this is the best and only standard for allocating ETV equipment. There

are many variables which this standard does not accommodate. However, for purposes of our analysis, it does provide a common basis for comparing the overall status of TV reception capabilities of one district to another. Using data reflected in table 6.1, our review indicates as follows.

Table 6.1
COMPARATIVE DISTRIBUTION OF TV RECEIVERS, BY SCHOOL DISTRICTS
(September 1968 and September 1969)

School District	As of September 1968 ¹			As of September 1969				
	No. of Regular Classrooms	State & Fed. Funds		No. of Regular Classrooms ²	State & Fed. Funds ³		Funded from All Sources ⁴	
No. of TV Receivers		Ave. No. of Classrooms Per TV Receiver	No. of TV Receivers		Ave. No. of Classrooms Per TV Receiver	No. of TV Receivers	Ave. No. of Classrooms Per TV Receiver	
Honolulu	2,019	319	6.3	2,054	486	4.2	574	3.6
Central	1,158	173	6.7	1,216	294	4.2	310	4.0
Leeward	897	142	6.3	966	226	4.3	236	4.1
Windward	954	179	5.3	968	268	3.6	277	3.5
Hawaii	704	87	8.1	715	191	3.8	192	3.8
Maui	484	96	5.0	508	170	3.0	184	2.8
Kauai	297	32	9.3	336	77	4.4	80	4.2
Total	6,585	1,028	6.4	6,763	1,712	3.9	1,853	3.6

¹Inventories of classrooms and TV receivers as reported in DOE memo to the department of budget and finance; dated November 1, 1968, in enclosures entitled “Social Living and ETV.”

²Classroom inventories as reported by physical facilities branch, DOE, per annual survey as of December 1969.

³As reported by schools in survey of October 1969.

⁴See footnote 3 above. This column represents all TV receivers acquired from public funds and non-DOE sources (donations, school activity funds, etc.).

Inter-district distribution. At September 1968, there was an average of one TV receiver for each 6.4 classrooms in the DOE. By districts, the distribution ranged from one set per 5.3 classrooms (Maui) to one set per 9.3 classrooms (Kauai). At September 1969, following two bulk purchases and distribution of 787 TV receivers to schools throughout the DOE, the overall sets to classrooms ratio was increased to one per 3.9, with a range of one per 3.0 (Maui) to one per 4.4 (Kauai). The foregoing generally represent TV receivers purchased with State and federal funds. If all sources of funds are considered, namely, the inclusion of donated equipment and others purchased with non-DOE funds, then, the overall ratio is slightly increased to one set per 3.6 classrooms with only nominal change in district ratios, except for Honolulu whose schools have received an appreciable number of donations from PTA’s, civic organizations and individuals. The overall range holds at one set per 2.8 to 4.2 classrooms.

The range between the high and low ratios has been considerably narrowed between 1968 and 1969 as a result of the additional equipment acquisitions. Note the following comparison.

Ratio: TV Set to Classrooms	1968 (State & FF)	1969 (State & FF)	1969 (All Sources)
High ratio	1:9.3	1:4.4	1:4.2
Low ratio	1:5.0	1:3.0	1:2.8
Range between high & low ratios (classrooms)	4.3	1.4	1.4

In other words, in September 1968, some districts, such as Maui and windward, enjoyed a ratio of one set per five classrooms, while other districts like Kauai and Hawaii had only an average of one set per eight or nine classrooms for a difference of 4.3 classrooms. By the end of that school year, however, the department was able to narrow the gap to within 1.4 classrooms throughout its seven school districts.

In summary, for the DOE as a whole, although absolute equality in TV receiver distribution was not attained, its district-by-district distribution has been brought within a narrow range of dispersion.

Intra-district distribution. Although the gross distribution pattern of TV receivers among districts appears fairly even, the intra-district distribution patterns show a wide dispersion range which reflects some disparities between schools. Using the equipment allocation standard as suggested by the ETV branch (one TV receiver set for every three regular classrooms), we arrive at the distribution patterns shown in table 6.2.

In brief, it appears that while two-thirds (64.5%) of the public schools are equipped with TV receivers averaging within one classroom of the ETV branch’s standard, 27.6% or 53 schools have equipment allocations at substantially less than the standard and also less than the statewide average of one per 2.8 to 4.2 classrooms noted earlier. It might be expected that this pattern reflects the lower than average

Table 6.2
INTRA-DISTRICT DISTRIBUTION PATTERNS FOR TV RECEIVER SETS
 (SEPTEMBER 1969)
 (Regular Schools Only – Based on Standard of One TV Set per Three Classrooms)

School District	Above Standard (Per 1 Classroom)		Near Standard (From 2 - 4 Classrooms)		Less than Standard (Per 5 or more Classrooms)		No. of TV Sets ¹		Tot. Schs. ²
	No. of Schs.	% of Dist. Tot.	No. of Schs.	% of Dist. Tot.	No. of Schs.	% of Dist. Tot.	No. of Schs.	% of Dist. Tot.	
Honolulu	-	-	39	73.6	14	26.4	-	-	53
Central	2	6.1	20	60.6	11	33.3	-	-	33
Leeward	1	4.2	12	50.0	11	45.8	-	-	24
Windward	1	3.9	19	73.1	6	23.0	-	-	26
Hawaii	2	6.7	16	53.3	9	30.0	3	10.0	30
Maui	1	4.4	21	91.2	1	4.4	-	-	23
Kauai	2	14.3	5	35.7	4	28.6	3	21.4	14
Statewide Distribution	9	4.4	132	64.5	56	27.6	6	3.5	203

¹Generally, elementary schools with no transmission coverage.

²Excludes three schools as follows: Red Hill (Central), Makakilo (Leeward), Kealahou (Hawaii).

distribution to secondary schools, which as a whole are not as much ETV oriented as elementary schools. However, we note that about 10 elementary schools, as well as newly-constructed schools, are similarly affected. On the other hand, there reportedly are nine schools (4.4%) which are equipped to the extent of one TV receiver for nearly every classroom. A major factor contributing to the acquisition of one receiver per classroom in these nine schools has been the availability and use of federal funds, such as Public Law 89-10,

Title I—funds which were provided to supplement educational resources in “culturally disadvantaged” areas.

In the overall, therefore, it appears that there exist some disparities in the distribution of TV receivers which cause some schools to be proportionately less equipped with ETV reception capabilities than their counterparts. To this extent, when measured by relative ratios of TV sets to classrooms, many schools have yet to achieve equal accessibility to ETV reception.

ETV Equipment Allocation Standards and Budgetary Practice

Generally. The DOE now controls a substantial inventory of ETV related equipment. As of June 1969, it reportedly had a total ETV inventory valued at about \$676,000 acquired generally as follows:¹

	Amount	%
State general funds	\$525,524	77.7
Federal funds	115,783	17.1
Non-DOE sources*	34,796	5.2
	<u>\$676,103</u>	<u>100.0</u>

*Consists primarily of donations (PTA, civic groups, etc.) but includes purchases made from individual school funds (athletic fund, etc.).

Its inventory stock, as distributed throughout the school system, includes an estimated total of 1,859 TV stands, outdoor master antenna systems as well as indoor antennae, 50 videotape recorders, 44 TV cameras, 637 videotapes (1-inch size), peripheral hardware such as modulator-amplifier systems and modified TV sets (“Jeeped”), and other accessory equipment.

Notwithstanding this extensive array of ETV equipment, we find that the DOE lacks (1) effective standards for making equipment allocations and (2) consistent budgetary practice. Both of these factors explain to a large

¹As reported by schools in a statewide survey in October 1969. It should be noted that these figures are estimates as reported by schools based on inventory records. Accessory items, such as testing equipment, camera lens, and others, are excluded.

degree the disparity which exists in the distribution of equipment among districts and schools.

Inconsistent allocation standards. Over the years, the DOE has had no consistent standards by which to allocate centrally purchased TV receivers to its schools. There have been at least five separate stated sets of “standards,” some formal and some informal, as well as unspecified working standards which seem to prevail at the present time. There is a tendency to escalate standards as more equipment is acquired. The following illustrates the extent to which various standards exist.

Budget guide. The DOE “Budget Guide” issued in March 1967 specifies budgeting standards for TV receivers as four for each elementary school and one each for secondary schools. However, a program memorandum issued in May 1967, just two months later, reiterates that the ETV program is striving “to equip every public school in the State with an average total of approximately ten receivers and stands [by September, 1967].”²

DOE policy. The board of education in June 1967 set as a basic standard for TV receivers, “one per 20 students for the maximum number of programs which would be used at any one time,” and as

²ETV branch memorandum, *Instructional Program to Achieve Purposes and Goals*, dated May 9, 1967.

an advanced standard, "one per 20 students if programs are available."³ These standards, however, have never been applied in any of the allocations made by the department.

Informal standards. Various program memoranda, never officially adopted, indicate other standards. One of these recommends that each classroom be ultimately equipped with a TV receiver, and that in the interim the standard be one set for every three classrooms.⁴ The acquisition and departmentwide distribution of TV receivers during 1968-69 sought to achieve this interim standard notwithstanding its unofficial status. Another memorandum suggests that "a good minimum is at least two sets per grade level or 14 for each school."⁵ This proposal was made in light of the DOE implementation of FLSE series in the public schools.

DOE ETV analytic document. An analytic document on ETV submitted by the DOE to the legislature in January 1971 includes as one of ETV's

³As contained in the *New Standards for School Libraries in Hawaii as Guidelines for the Department of Education*, as adopted by the board of education on June 15, 1967.

⁴ETV branch memorandum entitled, *An Outline of Planning for ETV: An Interim Statement*, dated May 22, 1969.

⁵DOE memorandum to the department of budget and finance, dated November 1, 1968, as reported in enclosure entitled, *Social Living and ETV*.

objectives, the attaining of one receiver per two classrooms. It is uncertain whether the board of education has adopted this objective.

Working standards. The ETV branch has on occasions applied operational standards in its review and adjustment of ETV equipment requests as submitted by schools. For example, for the 1969-70 departmental budget, the ETV branch adjusted the schools' request upon consideration of "purchases made during the fiscal year 1968-69...justification of requests, number of teachers using the sets, and number of sets on hand in each school."⁶ This reflects imposition of a set of standards which, while not reduced to numerical formula, has the same effect of standardization.

The inconsistency with which standards are formulated and used amounts to no standard at all. As such, the department is without firm guidelines on how it should allocate its equipment resources to achieve their best use and highest benefit to the department's educational programs.

Inconsistent budgeting. There is not only a lack of clear equipment allocation standards but also inconsistent budgeting practices which tend to result in disparities among districts and schools. The point in question here is the

⁶ETV branch memorandum entitled, *Supplemental Budget Request in ETV for 1969-70*, dated March 18, 1969.

apparent inconsistency in applying budget guidelines as they relate to videotapes used by schools equipped with CCTV capabilities.

The DOE Budget Guide of 1967, which to our knowledge has not been superseded or rescinded, expressly states that ETV materials, supplies and services are to be purchased centrally by the DOE office of business services and not by districts and schools. It appears, however, that this instruction is often disregarded. Consider the following examples:

About one-third of the 637 videotapes on inventory throughout the department at June 1969 were reportedly purchased directly by schools and districts with State funds.

Current budgeting instructions issued by at least one school district inform its schools with CCTV capabilities to budget for videotapes.⁷

These circumstances suggest that budget guidelines for ETV related equipment are not consistently followed with the result that some districts and schools are acquiring such equipment through the school budgets while others, which adhere to the established budget guidelines, are not.

⁷Per our survey, the 637 videotapes were acquired as follows: State general fund - 365 purchased and distributed by the ETV branch and 209 purchased by districts and schools; federal funds - 47; non-DOE sources - 16. The budget instructions were issued by the Hawaii district in preparing its budget for the 1970-71 and 1971-72 biennium period.

It may well be that the present budget guidelines which are geared for centralized budgeting of ETV equipment, supplies and services should be modified in view of the extensive use of CCTV in the schools. Nonetheless, present budget guidelines ought to be reexamined and the applications thereof should be made more consistent throughout the department.

Recommendation. We recommend that the DOE establish a consistent guideline and budgetary practice in the allocation of reception equipment to the districts and schools. In establishing such guidelines and budgetary practice, the DOE should take into account those concerns which are expressed next.

Underutilization of Receivers

Many TV receivers distributed to schools have been operationally unusable and idle.⁸ Based on our October 1969 survey of the operational status of ETV equipment, it is estimated that about eight percent of the TV receivers in the DOE were idle during the 1968-69 school year, not as a result of mechanical malfunction but simply because schools were unprepared or unable to integrate ETV programs into school programs.⁹

⁸An idle TV receiver is a workable set that is not used for more than four consecutive weeks in a school year.

⁹Schools were requested to report the extent to which they were unable to actually use available TV sets during the 1967-68 and 1968-69 school years.

This waste of equipment utility is found to be most pronounced at the secondary school level, and especially among intermediate schools, as indicated by the following survey results.

*Intermediate schools.*¹⁰ Of 23 intermediate schools surveyed, 11 schools reported a total of 54 TV sets being idle during the 1968-69 school year. This number constituted 32 percent of the total inventory of TV sets reportedly available to the 23 intermediate schools. In some cases, the 11 schools received additional sets during 1968-69 even though they were already experiencing difficulty in using TV sets already on hand.

High schools. Although the extent of reported equipment idleness among high schools was not as acute as that of intermediate schools, it was nonetheless significant. At least 13 of the 32 public high schools allowed operable TV sets to be left idle during the 1968-69 school year despite the fact that many of them acquired CCTV capabilities in early 1969.

By rough estimation, at least 154 TV receivers in all were idle during 1968-69. This represents approximately \$22,000 worth of

¹⁰An intermediate school, as used here is one specifically organized with grades 7-9, or grades 7 and 8. The 23 intermediate schools come from all school districts except Maui and Kauai, both of which have no such designated intermediate schools.

equipment which were not regularly used.¹¹ In view of the portability of TV receivers, each idle set actually deprives others of its use and, thus, represents loss of instructional opportunity for those schools which can use the equipment profitably in their programs.

This extensive non-use of equipment has been attributed by the schools surveyed to (1) the lack of suitable ETV programming and (2) difficulties in correlating school instructional scheduling with ETV broadcast schedules. These reasons suggest that there has been an extensive emphasis on hardware acquisition without a corresponding emphasis on instructional program planning and system design.¹² Moreover, this under-utilization has been aggravated by the ineffectual equipment allocation standards described above, for, in most cases, intermediate schools and high schools have been given TV receivers on a "blanket" basis without close examination of their actual capability to use these equipment efficiently.

Recommendations. We recommend that

1. Future acquisitions of reception equipment by the DOE be preceded by proper instructional program planning and system design for the implementation of the instructional program plans.

¹¹Inventory value based on recent bulk purchase price of \$143 per TV receiver.

¹²See chapter 9, *infra*.

2. In the deployment of reception equipment, the DOE consider (a) the ETV instructional programs to be provided, (b) alternative ETV viewing arrangements for maximum utilization of the equipment already on hand, and (c) the redistribution of those equipment from schools where they are under-utilized to schools where their utilization is better assured.

3. Develop a system for the periodic review of equipment utilization by user agencies to assure their continued and purposeful use. Systematic monitoring of ETV equipment usage is particularly desirable in view of the constantly changing nature of ETV broadcast programming and changes to school instructional programs, the results of which may alter ETV viewing patterns in specific schools.

ETV Equipment Replacement

ETV equipment, notably ETV receivers, may require replacement for several major causes. First, it may result from physical loss such as by theft or fire, in which case the loss is abrupt and usually unexpected. Second, it may result from normal mechanical deterioration of equipment over a period of time when it becomes more economical to replace rather than to repair them. With respect to equipment replacement, two aspects deserve attention. They are (1) the questionable budgetary practice which could and has resulted in duplication of funding to replace stolen ETV equipment and (2) the lack of departmental guidelines for effecting normal replacements.

Duplicate refunding of stolen property. Under regular DOE business procedures, the replacement of burglarized equipment is normally funded through supplemental allocations from the DOE business office. However, we find that in ETV operations, a second source of funding is available which has in some instances resulted in duplicate funding of the same item. The circumstances are as follows.

When a school suffers equipment losses by burglary, it is required to establish "proof of loss" by filing a burglary report with the DOE business office, via the district office. Such losses may be replaced by the district superintendent at his discretion and with funds at his disposal. However, regardless of whether replacement is made or not, each district eventually receives a supplemental allotment of funds from the DOE business office which covers all reported burglary losses over a specified period.¹³ Funds for this purpose are budgeted annually by the DOE business office for the department as a whole. Separate and apart from the foregoing, stolen ETV equipment have also been replaced "in kind" by the ETV branch. It provides this service as an extension of its ETV property acquisition function to the extent that its operating funds are available.

¹³These supplemental allotments are usually granted once each year to provide for all reported burglary losses incurred during the preceding fiscal year. These funds are made available on the presumption that districts have advanced their own operating funds to provide for replacement of burglarized items.

As shown in table 6.3, during 1966-67, the ETV branch, at an approximate cost of \$2717, purchased and distributed 19 TV receivers as replacements for stolen sets. At the same time, the sum of \$2002 was allotted to the districts by the DOE business office to cover the replacement costs of 14 of these 19 receivers. In subsequent fiscal periods, the overall incidence of duplicate refunding of stolen TV sets was sharply reduced (one in 1967-68, none in 1968-69).¹⁴ However, it appears that the ETV branch has not discontinued its practice of replacing equipment on its own initiative. In 1969-70, it again purchased a television receiver to replace a stolen one at Aiea High school.

This practice, under the present understanding of the ETV branch of its role as a central equipment purchase and replacement office, is applied to various property items handled by the branch, such as TV receivers and stands, master antenna systems, CCTV equipment, videotapes, and others. The main consideration as far as the ETV branch is concerned in exercising this power to purchase replacement for stolen equipment is the availability of its operating funds.

¹⁴ During 1968-69, TV receivers were purchased in bulk and distributed to schools throughout the department. Consequently, no positive determination could be made as to whether some sets were intended as replacements for prior burglary losses. For example, one school on Oahu was burglarized of four TV sets in 1967 for which the district received replacement funds. Although no immediate equipment replacements were provided, the school did receive four TV sets in February 1969 as a part of the statewide distribution of TV sets. No information is available to positively indicate whether these sets were intended as replacements or not.

An attempt was made in the past to curtail the replacement of stolen equipment by the ETV branch. Thus, in the departmental review of the 1968-69 budget, the request of the ETV branch for contingency funds to replace stolen TV receivers was denied on the ground that such replacements would be effected directly by the DOE business office, and the item was deleted from the budget. Recently, however, in the DOE budget request for 1970-71 as submitted to the legislature, this replacement item again appeared in the ETV portion of the DOE budget, while, at the same time, funds were being sought for a departmentwide fund which, under current business practices, would normally provide for such replacements. It appears, therefore, that there continues to be uncertainty and confusion as to which agency, the ETV branch or the DOE business office, should assume ultimate funding responsibility for effecting replacements of stolen ETV equipment.

No standard replacement policy. The DOE presently controls over one-half million dollars' worth of ETV equipment, much of it acquired in bulk purchases over the past four years, but has no definitive operating policies, standards or procedures to effect their eventual replacement. This matter is of current import. Lack of policy guidelines and standards in a statewide program such as ETV invites disparities in equipment resource allocations, inaccurate and untimely estimation of future costs, high cost of obsolescence, and other potential deficiencies in planning the future course of the ETV program. Some pertinent considerations are discussed here.

Table 6.3

DUPLICATE REFUNDING OF STOLEN TV RECEIVERS
(For Receivers Reported Stolen in FY 1966-67)

School	No. of TV Sets Stolen	Replaced in Kind by ETV Branch		Replacement Funds Provided by the Business Office	
		No. Replaced	Purchase Order Mo./Yr. No.		
Anuenue	1	1	12/66	127	1
Palolo	5	5	12/66	127	5
Pearl City Elementary	3	3	12/66	127	No proof of loss filed
Pohakea	1	1	1/67	187	No proof of loss filed
Linapuni	1	1	1/67	187	No proof of loss filed
Wilson	2	2	5/67	268	2
Stevenson	1	1	5/67	268	1
Lincoln	5	5	6/67	327	5
	19	19			14

Source: Financial records of the DOE.

1. *Fairness.* Absence of common standards invites disparities among school districts in the allocation of resources. It is widely known that district administrations play a significant role in allocating funds to their respective schools. Without central guidance, a range of standards could result with some applying strict standards and others applying fairly liberal standards on matters of equipment replacement. If the doctrine of "equalization" is to prevail for all public schools throughout the State, it follows that a central authority would need to define the limits of discretion which can be reasonably delegated to district administrators yet preserve to each school and its students equal consideration of their ETV equipment needs.

2. *Timeliness and cost.* A major portion of the TV receivers of the DOE, some 1,500 or more, was purchased in bulk over a four-year period. Thus, for planning purposes, it is reasonable to assume that functional deterioration of equipment may peak within a relatively narrow range of years. Assuming that the useful life of a TV receiver is about five years, as suggested in DOE budget guides, a massive replacement program may be required starting as early as 1971.¹⁵ If this should be the case, budgeting for this eventuality should have

¹⁵ For budgeting purposes, the DOE *Budget Guide* recommends a five-year "life expectancy" for TV receivers. However, there are no other standards by which to judge equipment serviceability.

commenced already. The DOE budgetary documents and ETV program plans make no provision for TV equipment replacement other than for stolen property. We note that the probability of this question arising is not remote in view of the fact that some schools now carry in their inventories TV receivers acquired as early as 1961 and 1962, which, under present available budgeting standards, could qualify for replacement merely on the basis of age.

The need for reliable scheduling and cost estimations of equipment needs is made even more immediate in view of a revised budget system which covers a biennium instead of an annual period. If orderly and economic programming of equipment needs is to be facilitated, then the basis upon which this planning is effected must be made more definitive.

3. *Obsolescence.* In view of the rapid pace of development in communications technology, some degree of operational control may be necessary to time-phase and integrate future acquisitions of ETV equipment with equipment already in use. There are, for example, some recently developed video recording processes which utilize a modified TV set to directly play back pre-recorded videotapes which could conceivably replace open circuit broadcasting and even closed circuit TV. There are other developments in the field of audio-visual teaching aids, generally, which may, in the not too distant future, provide the same or superior technical capabilities now afforded by television but could be more readily adaptable for individualizing student instruction. Even now,

there is considerable interest in replacing the present monochromatic (black and white) TV receivers with color TV receivers which, if allowed without administrative control, could drastically increase the cost of maintenance above present levels.

In brief, we believe that there is a clear and present need for specific departmental instructions, which are now unavailable, to direct the manner in which ETV equipment replacements within the DOE should be accomplished.

Recommendations.

1. *With respect to practices involving the replacement of stolen TV property, we recommend that the DOE clarify the respective roles of the business office and the ETV branch so as to avoid the duplicate refunding of such property.*

2. *On the matter of normal equipment replacement, we recommend that the DOE develop definitive standards to guide administrations at all levels in planning for and effecting incremental equipment replacements due to mechanical deterioration or obsolescence. These standards should consider, among other factors, the need for the equipment, its mechanical serviceability, repair costs, obsolescence, and alternative media. In this connection, as may be necessary, we recommend further that the DOE develop appropriate inspectional systems to test and verify the application of standards developed for this purpose.*

Chapter 7

CLOSED CIRCUIT TELEVISION

Closed circuit television (CCTV) has become an increasingly important adjunct to the ETV program of the DOE.¹ By June 1969, the DOE had accumulated about \$236,000 worth of CCTV equipment, exclusive of distribution systems, which could be found in all 32 public high schools, five intermediate schools, three elementary schools, three district offices and the DOE ETV branch.² Its inventory of videotape recorders (VTR), the primary hardware of CCTV systems, averaged one per every four schools at the close of the 1969 fiscal year and more acquisitions were then planned.³ In terms of the long-range prospect, the DOE is pursuing a course toward developing CCTV as an

¹Our examination of CCTV was limited to the DOE.

²Per our school survey of ETV equipment inventory of October 1969. The DOE's, *Educational Television*, an analytic document submitted to the legislature in January 1971 (hereinafter cited as, *Educational Television, an analytic document*), states that there are 49 CCTV installations "still in varying stages of development." p. 45.

³In a CCTV system, TV signals are transmitted by means of a coaxial cable which connects the originating source (either a videotape recorder or a separate playback device) to receiving equipment. Many TV receivers may be connected in this manner provided that proper amplifying equipment is used to boost the TV signals. The videotape recorder (VTR) serves two major functions in a CCTV system. First, when used in conjunction with auxiliary equipment, it is capable of recording open circuit broadcasts on videotapes. Second, it has a playback capability which allows the replay of videotapes at the convenience of the user.

"alternative to direct, classroom instruction by a teacher" and expects that "closed circuit systems will be installed at secondary schools, and elementary schools will be serviced by general telecasts."⁴

Summary of Findings

The DOE effort to implement CCTV in the public schools has generally proceeded without adequate plans and preparations to assure its effective and economical development; there has been a decided lack of program and operational planning. This general inadequacy in planning has resulted in (1) a substantial portion of the schools failing to utilize their CCTV capabilities to the fullest extent and (2) operational difficulties such as the unpreparedness of the schools to utilize CCTV and the inefficient, disparate and costly practice of amassing CCTV equipment and materials at the school level. These effects are most pronounced at the high school level where the bulk of the CCTV equipment is located.

In the following paragraphs we discuss first the underutilization of CCTV and then review the operational deficiencies. With respect to each, we comment on the relationship of the problems to planning.

⁴This policy position is expressed in written legislative testimony of the superintendent of education, entitled *The Department of Education and the Educational Television Program*, February 17, 1969.

Underutilization of CCTV Capabilities

Increasing CCTV utilization, in and of itself, is not an ultimate objective of education. As an instructional medium, CCTV is merely a supportive resource, the use of which is properly dictated by the instructional needs of schools and their respective students. However, in view of the DOE position that CCTV be developed as a major instructional resource and having thus provided this capability to schools, it is reasonable to expect that these schools should then use this capability for the benefit of their students. Unless thus used, CCTV merely remains in a wasted state.

Current utilization status. In September 1968, the DOE revealed its intention of having all high schools equipped with CCTV capabilities to allow them greater flexibility in adapting ETV in their instructional programs. Of immediate concern was its desire to broadcast an ETV series on "family life and sex education" (FLSE) for high school students in February 1969.⁵ To accomplish this end, the DOE purchased 18 portable VTR machines and auxiliary equipment to equip all high schools, not previously provided, so that by February or

⁵As cited in the minutes of the board of education, dated September 27, 1968, the superintendent of education reported that CCTV would be expanded to facilitate dissemination of the FLSE-ETV series.

March 1969, all 32 public high schools possessed CCTV capabilities.⁶

Although thus equipped with CCTV capabilities, a significant number of these high schools have failed to take advantage of CCTV. The following illustrates the extent of this underutilization.

CCTV recording. In 1968-69, of 29 high schools which were within HETV open circuit transmission coverage and therefore capable of recording (dubbing) ETV broadcasts, only 16 (55%) of them reported using their CCTV equipment for this purpose. In some cases where recordings were made, dubbing was discontinued after only a few tries because of the poor quality dubs which were being made at the schools. The 13 high schools not dubbing programs reflect \$33,533 worth of equipment not fully used.⁷

CCTV playback. All 32 high schools have playback capabilities, but these too have been used only limitedly. For instance, in 1968-69, 25 (82%) of the

⁶It had been previously recognized that ETV open circuit broadcast was not particularly suited for secondary schools in view of the incongruity between broadcast schedules and school scheduling. CCTV was intended to overcome this limitation by allowing schools to "tape" broadcasts, and use other pre-recorded ETV material, for playback at the convenience of each high school.

⁷Basic dubbing equipment assumed to include a VTR, an amplifier, a modulator, a jeep and videotapes.

high schools reportedly used CCTV in conjunction with the FLSE series, but only 14 (44%) schools extended their use of CCTV beyond this series.⁸ In other words, 18 high schools owning more than \$23,000⁹ worth of playback equipment did not provide ETV instruction except for the FLSE series, and in some cases not even the FLSE series, even though all possessed CCTV equipment capabilities to do so. We note, further, that of these 18 schools, 14 reported CCTV usage of 25 hours or less. This approximates CCTV usage at a rate of less than five percent of equipment capacity for the second semester of the 1968-69 school year, and even less for those schools which had CCTV equipment during the entire school year.¹⁰

The foregoing suggest that the use of CCTV in the high schools has not been as actively pursued as originally expected. While some schools do appear to provide a variety of instruction via CCTV, CCTV in high schools still remains untapped for its potentials and, in some respects, is woefully neglected.

⁸For the FLSE series, some schools relied entirely on open circuit broadcast and others did not participate at all.

⁹Basic playback equipment assumed to include a VTR only.

¹⁰Based on the DOE school calendar of 88 instructional days scheduled for the second semester of the 1968-69 school year.

Lack of program planning.¹¹ CCTV operations involve two basic, mutually supporting elements. One, the hardware, provides the electronic means of transmission and reception. The other, the software, consists of the educational programs which are transmitted either through open circuit broadcasting or through closed circuit via pre-recorded videotapes. A CCTV system is not optimized unless both elements are developed.

The DOE has not given adequate attention to its CCTV "software" with the result that many schools having CCTV capabilities are unable to use CCTV. The single most common reason stated by schools having CCTV for their inability to fully utilize this instructional medium is the scarcity of suitable ETV instructional materials.

This apparent lack of ETV program material is evidenced in two ways. First, a review of the ETV broadcast schedules indicates that ETV programs for secondary schools are generally lacking in number and variety.¹² This scarcity of broadcast programs thus limits the amount of "off the air" dubbing (recording) that a school can do. Second, there is virtually no organized

¹¹See chapter 9 for a further discussion of this subject.

¹²The DOE in-school ETV broadcast schedule concentrates on ETV programs for the elementary school level. Thus, for example, the 1969-70 in-school ETV broadcast schedule only provided six ETV series of varying lengths for high school viewing totaling 70 hours of original programming. Of these six series, only four were specifically shown for high school students, the other two being "ungraded" series for all grade levels.

system for supplying schools with pre-recorded instructional material for use over CCTV. While some schools have used non-broadcast material for CCTV, such as videotaped programs loaned by commercial TV stations, the number of schools doing so is small.

The problem of the non-availability of CCTV instructional material is even more acute for intermediate schools. During the entire 1968-69 school year, for instance, there was only one broadcast ETV series specifically intended for intermediate students. The 1969-70 broadcast plans included only two ETV series aimed for intermediate students, with one of these scheduled for one semester only. Generally, the five intermediate schools equipped with CCTV at June 1969 (equipped at a cost of \$20,557¹³), cited this problem as the main deterrent to their use of CCTV in their instructional programs.

All this—the expansion in the purchase of CCTV equipment and the lack of instructional programs—again point out the emphasis which has been given by the DOE to equipment acquisition without a corresponding emphasis on program planning and development. As things stand today, the CCTV equipment in the various schools represents an uneconomic investment on the part of the State. The need for planning and development of programs for CCTV is immediate in view of the constant pressure for more equipment acquisitions.¹⁴

¹³Source: Closed circuit inventory.

¹⁴For example, in *Educational Television, an analytic document*, it is represented that many of the CCTV installations require "beefing up" with cameras, switches, lights, etc.

Recommendation. We recommend that the DOE plan and develop programs on a systematic basis, taking into account the potentials of CCTV in the promotion of educational objectives.

Operational Deficiencies

The operation of CCTV is deficient in many high schools. *First*, the schools are not operationally prepared to assume CCTV on a sustained basis despite being equipped to do so and even if sufficient programs were available for use on CCTV. In this regard, two factors are particularly pertinent: (1) shortage of trained personnel to operate CCTV and (2) intra-school scheduling difficulties. Both factors, while localized in certain schools, nonetheless significantly affect realization of the full potential of CCTV. *Second*, the schools and the DOE are engaged in practices likely to result in increasing costs for CCTV. These practices include (1) disparate acquisition of CCTV equipment by the schools, (2) proliferation of videotape libraries and (3) uneconomic wiring of CCTV conduits.

Lack of trained personnel. Our survey of CCTV practices in high schools revealed that CCTV utilization is hampered somewhat by the lack of trained personnel to operate the VTR machine when needed.¹⁵ At least seven high

¹⁵Training workshop in the use of CCTV equipment was provided in each district prior to commencement of the high school FLSE series broadcasts in February 1969. However, enrollment was generally limited to school audio-visual coordinators.

schools reported this as a factor limiting their use of CCTV. Generally, this problem arises because in most schools a faculty member is assigned operational responsibility for CCTV but, due to teaching commitments, is unable to accommodate all CCTV requests generated by other teachers. As a result, personnel to operate the VTR machine, either for dubbing or playback purposes, are not always available at the time they are needed. In effect, the shortage of trained personnel tends to restrict CCTV operations and thereby curtail the availability of ETV instruction.

Scheduling difficulties. CCTV is provided to all high schools to facilitate the use of ETV instruction by enabling teachers to schedule ETV lessons at different and convenient hours of the school day. CCTV is, therefore, publicized as an efficient and flexible means of providing TV instructions to students. In examining schools with CCTV capability, however, we find that some schools have neither fully incorporated CCTV into their instructional programs nor capitalized on the so-called "flexible scheduling" advantage afforded by CCTV. For example, two high schools claimed inability to fully participate in the FLSE series because the program could not be shown during class hours. At least four other schools stated the same reason for not extending ETV instructions in other curriculum areas.

This "scheduling difficulty" resulting in the general curtailment of CCTV utilization is disturbing because it is the very same problem CCTV has the potential to eliminate.

Disparate acquisition of CCTV equipment. The various schools differ in the extent to which CCTV equipment is available. Some schools possess just the bare minimum of equipment; others own several recorders, several cameras, switches, lights, and other accessories.¹⁶ The extent to which each school has been able to acquire CCTV equipment, over and above that supplied by the State in 1969, has been the school's initiative in utilizing federal and special project funds and the school's budget.

Proliferation of videotape libraries. Videotapes are erasable and reusable. TV programs may be recorded, played back, erased, then used again for another program. This feature is expected to provide CCTV users with enough flexibility to get along with only a limited number of videotapes. It appears, however, that many schools have or are beginning to amass "permanent" videotape libraries by retaining dubbed tapes and acquiring new tapes instead. While this practice may be justifiable for schools which rely solely on pre-recorded videotapes, e.g., schools without open circuit transmission coverage and other special circumstances, if carried on departmentwide, it could result in duplicate videotape holdings in practically all CCTV user schools and an escalation of software cost.

Costly installation of conduit wires. Current DOE construction specifications for new classroom buildings normally provide for the installation of conduits to facilitate the future

¹⁶*Educational Television, an analytic document.*

use of CCTV, public address systems and other equipment requiring an electrical distribution system. The practice, however, has been to install the conduit but not the wiring at the time of construction.

In view of the declared intent of the DOE to provide CCTV usage in secondary schools, a view which was expressed publicly in September 1968, it appears that costs might be reduced if wiring were installed together with the laying of conduits for those classrooms which will be used for CCTV instruction. This possibility, though considered informally by ETV personnel, has not been pursued.

Lack of operational planning. The foregoing problems exist because there are presently no operational plans and policies for CCTV. CCTV historically developed at the school and district levels which were able to secure federal and special project funds for installing CCTV systems. The State level administration of DOE did not get actively involved until early 1969, when it equipped all high schools with CCTV capabilities. This State level involvement, however, much like the earlier school and district actions, was not preceded by adequate planning; it was precipitated by the pressure to make FLSE series available to all high school students.

The DOE has yet to formulate plans for the CCTV system. Thus, currently, the DOE has no document describing the design of the CCTV

system—that is, a plan specifying the components and configuration of the system, including an identification of the system's operational concepts and objectives, a description of the kinds and amounts of equipment, personnel, facilities and other elements required to support the system, and an identification of the full investment and operating costs of the system. It also has no plan of installation of the CCTV system in the schools—that is, a plan describing how much of the CCTV capabilities are to be installed in what time sequence, in what manner and in what schools. Further, the DOE currently has no policies to guide the schools in the acquisition and use of CCTV equipment, materials, and other paraphernalia. CCTV, in essence, still remains basically a decentralized, locally administered activity.

Specific departmental plans and policies can obviate much of the kinds of problems noted. For example, with respect to personnel, the plans would identify the kinds of people needed and provide for their systematic training. In view of the small number of educational programs currently available for CCTV and the infrequent use of CCTV, the plans could conceivably identify students, office personnel, librarians or others, as operators of CCTV equipment on a part-time basis, rather than full-time teachers. With respect to videotape libraries, the plans might provide for centralized libraries at the State or district levels, inter-school sharing, and other joint use arrangements. The point is that planning is necessary if CCTV is to be developed and utilized effectively and efficiently.

Recommendations. We recommend that the DOE

- 1. Formulate systems specifications for CCTV, specifying the components and configuration of the system, including an identification of the system's operational concepts and objectives, a description of the kinds and amounts of equipment, personnel, facilities and other elements required to support*

the system, and an identification of the full investment and operating costs of the system.

- 2. Develop plans for the installation of CCTV systems in the schools, outlining the schedule for implementation over the next six years.*

- 3. Establish policies and procedures for the acquisition and use of CCTV equipment and materials.*

**PART III
FINDINGS AND RECOMMENDATIONS
RELATING TO THE EDUCATIONAL ROLE OF HETV**

Chapter 8

INTRODUCTION

The educational television system supports four major educational programs, each of which caters to a different clientele and commands generally different purposes. This part focuses on these four major programs and reports on how well the ETV system serves each of them.

The four programs, in the order of presentation, are as follows.

- . In-school instruction (ITV): ETV instructional programs for students of the public school system as a part of the formal curriculum. It supplements and enriches classroom instruction (chapter 9).
- . In-service teacher improvement: ETV offerings designed to promote professional improvement of public school teachers. The offerings include both formal credit courses and non-credit programs of a general informational nature (chapter 10).

- . Formal adult education: ETV offerings which provide adults an opportunity to pursue formal education outside of regular educational institutions and programs (chapter 11).
- . Public television (PTV): ETV programs of informal educational content for adults and children (after school hours), including informational, cultural, vocational, avocational, public affairs, and other programs deemed appropriate for non-commercial TV broadcasting (chapter 12).

The task of evaluating how well in-school instruction, in-service training, adult education and public television programs are faring with educational television has not been an easy one, primarily because of the scarcity of data. There has been and continues to be a tendency for both the DOE and the UH to compile data along organizational lines, and not along programs, and to omit collecting that kind of information which would assist in evaluating effectiveness of programs. Despite this difficulty, we have made some assessment. Our major findings are:

1. There is a general lack of systematic planning of educational programs at both the DOE and the UH. There are no specific

objectives and standards by which to chart progress and measure effectiveness, although both the DOE and the UH are committing vast sums of money to ETV programs.

2. There is very little today to indicate that ETV is indeed contributing to the improvement and growth of education in Hawaii.

Chapter 9

IN-SCHOOL INSTRUCTION

Program Description

The establishment of ETV on a statewide basis in the public schools was premised on two primary factors. *First*, there was an expressed belief that television offered a way to cope with the pressures for expansion and updating of curriculum being caused by the "knowledge explosion" and with the strains being placed upon educational resources by growing student enrollment. *Second*, there was general expectation that television, with its unique capabilities, could help to upgrade the quality of instruction.¹

In essence, ETV was introduced in the public schools on the strength of its potential as

¹Final Report of the Advisory Committee.

an educational tool to advance the quality of education and to promote fair and equal treatment of all public school students.

Goals. In accordance with the foregoing, the in-school ETV program of the DOE (ITV) pursues three broad educational goals which, in and of themselves, are not specifically limited to ITV but are generally applicable to the DOE as a whole. They are, namely,

- . to broaden the scope of educational offerings;
- . to extend educational opportunities equally and fairly to all parts of the school system; and
- . to improve the quality of public instruction.

With respect to these goals, ITV functions in a contributory role, to-wit:

"... to develop and implement appropriate projects and activities to assure the most effective use of telecommunications media in meeting the educational needs of the Department of Education."²

Responsibility for ITV. In-school ETV instruction is primarily a DOE responsibility. It selects, designs, schedules and evaluates ITV programs. Within the DOE, ITV program

²ETV Branch (DOE), *Taxonomy of Programs*, December 15, 1967, p. 2. The "taxonomy" describes the structure, objectives and substance of the ETV program.

administration is assumed in a major part by the ETV branch but involves, also, the participation of State curriculum development staffs and operational managers at the district levels. Estimated expenditures in 1968-69 by the DOE to develop programs, purchase equipment and to carry out ETV instructions amounted to \$405,474. In support of this program, the UH spent an additional \$89,798 to provide local production and open circuit transmission services and, to a limited degree, videotape dubs (duplicates) for local school use upon request. For 1968-69, total cost for in-school ETV was \$495,272 or 47.4 percent of the total HETV operating expenses.

Programming scope. Table 9.1 details the extent of programming devoted to ITV during the 1966-67, 1967-68 and 1968-69 school years. In general, progressive increases are noted in the use of the open circuit broadcasting services during this period. ITV was initiated during the fall of 1966 on a partial-day schedule which provided 12 hours of broadcasts weekly but has since increased to a full-day scheduling and 24 hours of weekly broadcasts. The DOE now provides at least six hours of broadcasts daily, Monday through Thursday, exclusive of holidays and school vacations. On the average, 128 days of broadcasts are provided each year.

The in-school ETV schedule provides a variety of subject matters, some of which are designed for specific grade levels, while others are designed for multi-grades or are ungraded. A combination of locally-produced and mainland ITV series is used.

Table 9.1
IN-SCHOOL ETV BROADCASTING VOLUME
1966-67 TO 1968-69

School Year	No. of Scheduled Broadcast Days	No. of Broadcast Hours ¹	
		Scheduled Weekly Average	Total for Year
1966-67	129 days	12 hours	397 hours
1967-68	128 days	22 hours	704 hours
1968-69	128 days	24 hours	773 hours ²

Source: Compiled from DOE school calendar and ETV broadcast schedules.

¹Rounded to nearest whole hour.

²Includes increase in broadcast time starting February 1969 for "family life and sex education series."

Summary of Findings

1. The DOE does not systematically plan for ITV. It has no operational objectives for ITV as a whole, nor for each of the program series, and it has no standards by which to measure effectiveness of ITV programs and to guide selection and development of specific ITV programs.

2. Despite the lack of formally-stated objectives and measures of effectiveness, there are indicators to suggest that ITV is not contributing significantly to the attainment of educational objectives. Audience penetration of ITV instructions is low when considered in terms of the reception capabilities of the

schools; and there is an inefficient use of repeat broadcasts.

Lack of ITV Planning

ETV is supportive of educational programs. Simply put, it is a tool—a resource—by which education is imparted to students. Given this, it is reasonable to expect that ETV should be used selectively and purposefully to take the fullest advantage of the capabilities unique to the television medium. The following reviews in-school ETV in this context.

Lack of specific objectives for ITV. ITV is a versatile communication medium which can be used in many different ways and for varied purposes. Among all the audio-visual teaching aids in the DOE, it possesses the broadest range of capabilities as an instructional medium. Notwithstanding this, we find a decided lack of program planning which will insure the most judicious use of the TV medium. Thus, although the broad goal of ITV purports to "assure the most effective use" of ETV, there are no statements which specify the objectives to be sought by ITV in its support role to DOE educational programs, except such general statements as "equalize and upgrade instruction," "effect curriculum revisions consistent with the educational potentials of television,"³ "increase effectiveness of classroom instruction... through the (a) development and utilization of higher quality

³*Educational Television, an analytic document.*

television programs, and (b) the selection and utilization of the best programs available in libraries throughout the Nation."⁴ and "provide a comprehensive coverage of curriculum in every appropriate area where television can be utilized to effect superior instructional modes."⁵ These statements are so general that they could apply to any statewide use of ETV. In other words, the broad goal of ITV has not been adequately narrowed to define the specific missions and roles of ITV in the conduct of the instructional programs of the DOE.

Without a clear understanding of what ITV is supposed to accomplish, the DOE can hardly be expected to develop and select ITV programs in a meaningful fashion. We note particularly the present tendency of perpetuating generally the same in-school broadcasts from year to year with only slight modifications to accommodate new series. Consequently, while some program series are justified on the basis of current curriculum trends established by the DOE, such as emphasis in FLSE and lower elementary language arts, most other series are continued by reason of teacher popularity and other vague generalities.

Objectives need to be established not only for ITV as a whole, but also for each program series selected for broadcast. These latter objectives should clearly specify the nature of the deficiency to be corrected, the extent of the problem, and the gains to be sought. By defining

⁴*Ibid.*

⁵*Ibid.*

the intended purposes of ITV offerings in specific terms, the use of the statewide TV medium can be properly evaluated in light of other alternatives available to alleviate instructional problems which may arise.

Lack of effectiveness measures. As a corollary to the foregoing, we note also that the DOE currently lacks measurable standards by which to assess the effectiveness of ITV. Obviously, this deficiency stems from the inadequacy of program objectives. Unless one knows the specific objectives sought it is virtually impossible to determine whether the intended purposes have been achieved or not. We believe that this deficiency may be self-correcting if meaningful objectives are established for ITV and for the individual program series.⁶

Lack of standards. Not only are effectiveness measures lacking, but equally lacking are standards for determining priorities and otherwise to guide selection and development of specific ITV programs. Considering the multiplicity of curriculum subjects, grade levels and special instructional programs now extant in the DOE, it is apparent that priorities would need to be established in using the statewide broadcast service. At the elementary level alone (K-6), there are at least nine subject areas which under DOE policy are supposed to be

⁶In *Educational Television, an analytic document*, "the number of new series added" is stated to be the measure of effectiveness. This implies that the objectives of ITV is to increase the number of series. An increase in the number of series in and of itself says little about the contribution of ITV to educational ends.

taught. Therefore, if each subject were to be handled separately for each of the grade levels, as is the case now for many of the current program series, there would potentially be a total of 63 separate program series which might eventually evolve for elementary students.⁷ Specificity in stating objectives would in part dictate priorities. But even with specific objectives, further standards in determining priorities within the scope of the objectives are necessary. Further, standards such as output quantity and quality levels to be sought are necessary to guide specific program selection and development.

Indicators of Lack of Effectiveness

Although the DOE currently has no specific statements of objectives for ITV and the program series selected for broadcast over ETV, there are sufficient indicators to suggest that the current ITV programs are not making such substantial contributions to the improvement and growth of education as expected. These indicators are as follows.

ITV program usage. Perhaps the most significant determinant existing today which indicates success or lack of success in the use of ETV to support the educational aims of the DOE, is the extent to which instructional

⁷Note that in *Educational Television, an analytic document*, it is anticipated that "six new series will be added each year until 62 series are available for use with students" by the end of fiscal year 1976-77. The document notes that there are currently (1970-71) 26 series available.

program series are reaching students for whom intended in classrooms which have the necessary TV reception capabilities. This "in-school ETV audience penetration rating" is secured by first estimating the potential size of the target group that a given ITV series is intended to reach. The "target group" is expressed in terms of the grade level or levels for which the series is intended (grade 5, grades 1-2, etc.) and the "potential size" is expressed in terms of the total number of classes in the grade level or levels.⁸ Then, using "ETV usage" data collected annually by the ETV branch, the proportion of the target group that actually uses that particular program series is determined.⁹ Thus ".75" means 75 percent or three out of the four intended classes of students are using a given series. In essence, the assumption is, the higher the proportionate usage by target group audiences, the greater has been the benefit of the ITV instruction to the targeted students.¹⁰

⁸Data reflecting the number of classes at each elementary grade level, districtwide and statewide, as provided by the DOE office of statistics, was used to determine the potential size of target group audiences for each elementary ETV series studied.

⁹The ETV branch annually conducts a SCOPE survey (school canvass for overall project evaluation) which provides information as submitted by teachers regarding their use of different broadcast ITV series. This survey, however, reports only gross usage data and does not examine the frequency or consistency of usage. Thus, statistically, one class which uses an ITV series but only infrequently is nonetheless counted as a user of ETV.

¹⁰ITV series are often watched by students in grades other than those for which a particular series is broadcast (e.g., the science series for 5th graders may also attract 4th or 6th grade classes). For our analysis, we consider this to be a "bonus" effect, but the focus still remains on the target group for which a series is provided.

We compared the usage of TV series at the elementary level during the 1966-67 school year, the first year that in-school broadcasting was used, with the usage experienced in the 1968-69 year.¹¹ This comparison is summarized below in table 9.2.

Our observations are as follows:

The average use per series by intended audience in both fiscal years was low—30.2% in 1966-67, and 18.1% in 1968-69. Although some series attracted as much as two-thirds of the total potential audience, others, notably ungraded programs, attracted less than five percent of the target audience.

The sharp decline in average use per series from 30% in 1966-67 to 18% in 1968-69 occurred despite the fact that during the two-year period, the geographic coverage increased from five to seven districts (thus increasing the overall size of the potential audience), the number of series offered doubled from 10 to 21, the total number of classes using series increased from 3,037 to 5,295, and the number of ITV

¹¹No comparison was made for secondary school level ETV instruction for two reasons: (1) lack of programming for comparative purposes and (2) lack of consistent data from which to determine target group size. Unlike self-contained classes in elementary schools, secondary schools are much more flexible in structuring courses and classes and, therefore, specific identification of target group size could not be determined.

Table 9.2

COMPARATIVE ETV USAGE RATINGS FOR ELEMENTARY GRADES
(1966-67 and 1968-69 School Years)

	1966-67 (5 Districts)	1968-69 (7 Districts)
Generally		
Total number of series used	10	21
Total classes viewing series	3,037	5,295
Total classes of target grades viewing series	2,355	4,711
Audience Penetration Rating*		
Highest rating	67.6%	62.7%
Lowest rating	3.9	2.6
Median (midpoint)	31.1	23.2
Mean (average)	30.2	18.1

*Expressed as percentage of total classes of target grades reportedly using a given series.

instructional series used per teacher increased from 1.37 to 1.93.¹²

Of the 21 series offered in 1968-69, eight were the same ones offered in 1966-67 and 13 were new series. Percent usage of the eight old series

declined in every case in 1968-69 from what it was in 1966-67, some by as much as one-half (table 9.3). By number of classes, usage declined for six of the eight series.

By presenting this data, we do not mean to imply that usage should be increased just for the sake of itself. We do believe, however, that the low average usage per series raises doubts as to the instructional value of the series now being offered.

¹²As reported in memoranda of the ETV branch, as follows: *Interim Report on the Usage of Educational Television, April 21, 1969*, and *Preliminary Three Years S-C-O-P-E Data*, November 5, 1969.

Table 9.3

COMPARATIVE USAGE OF SPECIFIC IN-SCHOOL ELEMENTARY TV SERIES¹
1966-67 and 1968-69

TV SERIES AND TARGET GRADES	1966-1967 School Year (Oahu & Maui-5 Districts)			1968-1969 School Year (Statewide-7 Districts)		
	Total Classes in Target Grades	No. of Classes in Target Grades Using TV Series	Classes Using Series as % of Total Classes in Target Grades	Total Classes in Target Grades	No. of Classes in Target Grades Using TV Series	Classes Using Series as % of Total Classes in Target Grades
Talking Time K-1	871	507	58.2%	1293	416	32.2%
All About You 1-2	829	273	32.9%	1571	434	27.6%
Singing, Listening, Doing 1-2	829	244	29.4%	1176	263	22.4%
Wonderful World of Science 3	377	255	67.6%	395	236	59.8%
Ka Lima Hana 4-5	736	249	33.8%	431	100	23.2%
Strings and Things 4-6	1077	198	18.4%	1193	99	8.3%
Hawaii: Today and Yesterday 4-6	1077	262	24.3%	1193	198	16.6%
Hana No Eau 6	341	164	48.1%	364	116	31.9%

¹Of the ten elementary series used in 1966-67, these eight were the basic instructional series used again in 1968-69. The two other series, *Parlons Francais* and *Americans All*, were not offered in 1968-69. In 1966-67, *Parlons Francais* attracted only 3.9% of the target population and *Americans All*, an ungraded series, attracted 22.8% of the intended viewers.

Repeat broadcasts. Another indicator of ineffectiveness of the ITV program in the DOE is the manner in which TV series are scheduled for broadcasting. While, generally, inefficiency in operations, in and of itself, does not necessarily mean that a program is ineffective, we find that the DOE's use of the open circuit broadcast time available to it is so inefficiently used as to provide cause to believe that the ITV

program is not effectively contributing to the ends of education.

Open circuit broadcast time is a primary resource of the in-school TV program. However, it is allocable for the purposes of ITV only in limited amounts. As such, the "highest and best use" ought to be sought in scheduling its use.

As reflected in table 9.4, about one-third of total allocated broadcast time for in-school instructions is used for "original" programming.¹³ The remaining time is generally devoted to repeat telecasting and non-use time, such as breaks between scheduled programs. The total hours for ITV has increased over the years, but a sizeable portion of the yearly increases has been consumed by repeat telecasting and non-program time. In the three-year period from 1966 to 1969, repeat telecasting and non-program time has increased from 55.7 percent to 64.8 percent of the total ITV broadcast time. Most of this percentage increase is attributable to the growing use of repeat telecasting. For instance, in 1967-68, the ratio of original to repeat programming stood at 1:1 (one repeat for each original telecast). In 1968-69, this ratio decreased to 1:1.5 (more than one but less than two repeat telecasts for each original telecast). This latter ratio was also reflected in the in-school broadcast schedule for the 1969-70 school year.

We do not challenge the use of repeat broadcasting, *per se*. Repeat broadcasting serves a useful purpose in that it offers the prospective users of a particular TV series an option in scheduling its use in the classroom. However, it appears that the present practice of utilizing repeats does not enhance the best use of available broadcast time. To illustrate, the following high school TV series are noted.

¹³"Original" programming refers to the first telecast of a program during the year. All other telecasts of the same program during the year are referred to as "repeat programming."

Franklin to Frost: This is a supplementary literature series of 64 lessons of 30 minutes each shown on a two-lesson-per-week basis. During 1968-69, each lesson was repeated twice, thus the series consumed about 12 percent of the total weekly broadcast time allocated to in-school instructions. We note, however, that as a high school series it was intended that CCTV equipment, made available to all high schools at the start of the second semester, be used to dub this program for playback in the school. Moreover, as ETV usage data for that year indicate, only about 43 classes, statewide, used the series or parts of the series. Notwithstanding this sporadic use, this series was again scheduled in 1969-70 on the same basis as it was the previous year, despite the fact that its scheduling consumed over one-tenth of all available broadcast time.

Decision: The Constitution in Action: This is also an enrichment-type high school series. It consists of seven 30-minute programs with each one repeated twice. ETV usage data for 1968-69 show that only 18 classes, statewide, used this series. Moreover, these classes were all located in only three of the department's seven school districts. Again, we point to the sparse usage of the series. Apparently, however, this factor was of little concern to the DOE in view of its rescheduling of the

Table 9.4
RELATIVE USE OF IN-SCHOOL INSTRUCTIONS BROADCAST TIME ALLOCATIONS
FOR ORIGINAL PROGRAMMING AND OTHER PURPOSES
(School Years 1966-67, 1967-68 and 1968-69)

Broadcast Utilization	1966-67		1967-68		1968-69	
	Hours	Percent	Hours	Percent	Hours	Percent
Allocated broadcast time	397	100.0	704	100.0	773	100.0
Scheduled time uses:						
1) Original telecasts	176	44.3	267	37.9	272	35.2
2) Repeat telecasts/non-program time	221	55.7	437	62.1	501	64.8

Source: Compiled from In-School ETV Broadcast Schedules.

series for 1969-70 with as many repeat broadcasts as it had in the prior year.

In both cases above, the efficient use of broadcast time is in question. For high schools, with their CCTV capabilities, the widespread use of repeat telecasts can be diminished. For example, the *Decision* series can just as well be pre-taped and circulated among the limited number of user schools.

This inefficient use of broadcast time allocated to ITV prevents the effective implementation of ITV. *First*, repeat telecasts of low usage denies broadcast time to those programs of more general usage. After all, the

open circuit system, as contrasted from CCTV, is intended to reach a wide audience simultaneously. *Second*, conceivably there is a point of marginal effectiveness in repeat broadcasts. While the target population may change from year to year, the marginal effectiveness of the program may well diminish due to new techniques, new materials and new educational emphasis.

Evaluation by the DOE

While it is generally acknowledged that ITV is intended for the instructional benefit of students, the DOE has not developed a system by which to assess how well and how much

its students gained from in-school TV instructions.¹⁴ We do not suggest that there is no evaluation at all. The DOE does conduct annual surveys and other evaluations, but these current activities do not provide data which are reflective of instructional effectiveness, *per se*. For example, the two, current, major evaluations are the annual "SCOPE survey" and the teacher "telelesson evaluation."¹⁵ Both, however, concentrate on teacher-oriented information—that is, they assess teacher use of ETV in the classroom and gather teacher opinions about specific telelessons. While these sources might be useful to monitor trends in ETV usage and teacher acceptance of ETV, they do not provide data which are indicative of the instructional effect of ITV programs upon the students themselves.

Recommendations

We recommend that the DOE

1. Develop plans for ITV, including specific statements of objectives, measures to determine

¹⁴The DOE testing program includes periodic and sequential testing of student academic achievement in selected subject areas and skills (STEP test). While this provides a possible source of data for evaluating TV instruction, to our knowledge, it has not yet been specifically and successfully used for such a purpose.

¹⁵The SCOPE survey (school canvass for overall project evaluation) is conducted annually about November to gather data on the extent of ITV programs in use by teachers. The "telelesson evaluation" sheets are submitted by teachers on a voluntary basis which give their views of specific telelessons on such items as lesson content suitability, organization of material, reception quality, and others.

effectiveness, and standards to determine ITV program priorities. The statements of objectives should be such that the attaining thereof will enhance the educational objectives of the DOE.

2. Formulate the design of the system by which TV instructional programs may be transmitted to students. In such design, the role of open circuit broadcast and CCTV should be clearly described, and the standards to be employed in scheduling the use of its open circuit broadcast time and CCTV specified.

3. Begin a system of evaluation to determine the effectiveness and shortcomings of ITV as a whole and the effectiveness and shortcomings of the program series it undertakes.

Chapter 10

IN-SERVICE TEACHER IMPROVEMENT

This segment of the statewide ETV program is concerned with providing ETV programs designed to advance the professional competency of teachers. Accessibility to this service is not necessarily limited to the teacher corps of the DOE. Private school teachers may, for example, take advantage of course offerings for university credits as may all public school teachers. Our review, however, centers on the DOE and its administration of this in-service program.

Program Description

In-service ETV is provided so teachers may (1) increase or expand their subject matter knowledge and (2) up-grade their teaching competency in the methods or skills of instructions. Program offerings are generally of two types—credit and non-credit. Credit programs are offered by the DOE as well as by the UH with each agency assuming the administration of their respective courses (e.g., registration, examination, recordkeeping). Non-credit programs are generally of an informational nature, such as previews of ETV series to be shown to students and general adult programs normally shown in the evenings which are deemed to have some usefulness to teachers.

Approximately \$151,497 or 14.5 percent of the total operating cost of HETV in 1968–69 was spent for in-service activities, \$80,366 by the DOE and \$71,131 by the UH.

Under HETV operational policies, the selection and development of college level credit programs are assigned to the college of education (UH). Non-college credit programs may be undertaken by the DOE, college of education (UH) or the college of arts and sciences (UH), with the DOE assuming primary responsibility in this area. Within the DOE itself, the administration of in-service ETV programs generally lies with the ETV branch.

Normally, teacher in-service programs are broadcast over the open circuit system on weekdays immediately following in-school ETV

(2:30 p.m.) and may extend to the start of evening programs (5:00 p.m.). Up through the 1968–1969 school year, about 10 hours weekly (Mondays – Thursdays) were blocked for in-service programming, but this was increased recently to about 12 hours weekly with the addition of Friday broadcasting.

Summary of Findings

In brief, we find that (1) ETV has not been an effective means of extending formal teacher training, (2) ETV as presently administered by the DOE does not fully enhance the concept of equal treatment and accessibility in its practice of approving courses for credit, and (3) the substantial use made of available broadcast time for non-credit ETV programs has not been, but should be, subject to operational evaluation on a continuing basis.

In-Service ETV Credit Programs

School teachers wishing to be on the DOE's "incentive" pay plan may do so by earning five credits within a period of three years. Credits earned may be in the form of university "A credits," DOE "B credits," or other credits approved by the DOE. University "A credits" may be used for the incentive pay plan and for degree advancement as well. DOE "B credits," on the other hand, can only be used for the incentive plan. The in-service ETV credit program includes both kinds of credits.

The extent of DOE and UH credit offerings and the number of teachers accommodated over the 1966 and 1969 fiscal years are shown in table 10.1.

UH credit offerings. As reflected by table 10.1, the use of ETV by 353 teachers for in-service purposes has been nominal at best. Only three series were offered for credit over the 1966–1969 fiscal years, and none during the last two years. Moreover, the number of participants earning credits has been relatively insignificant considering that the programs broadcast in 1966–67 could reach virtually all of the 3,200 elementary school teachers in the DOE. In brief, it seems reasonable to conclude that ETV has not been an effective means of extending formal teacher training.

DOE credit offerings. Although DOE credit courses appear to have reached more teachers than UH courses, we make one basic observation regarding the use of ETV for this purpose.

Present practices relating to the granting of credits for pay appear to be inconsistent with the basic intent of statewide ETV broadcasting. It may be recalled that one of the original purposes for engaging ETV was to extend learning opportunities throughout the State on as fair and equal basis as possible. While the mere broadcasting of a particular ETV series may serve that purpose, it does so unequally if teachers in one district can be credited for participating in the course while teachers in other districts may not. This occurs with ETV because in most instances school districts decide

whether pay credits shall be granted or not regardless of the statewide nature of broadcast coverage. Consequently, encouragement and incentive for teacher self-improvement are not equally available to all.

If ETV is to be used as a departmental resource, it follows that its services should be made equally available to all who may wish to formally participate in the in-service ETV program. To this extent, the allowance or disallowance of course credit for pay should be uniformly administered by the DOE. We note that ETV credit courses offered in the early years followed this approach, but lately the trend appears toward decentralizing this authority. As a result, it is questionable whether statewide ETV does function in a way so as to encourage teacher participation.

Recommendation. We recommend that the DOE establish operating policies and standards which treat all teachers equally with respect to the granting or non-granting of credits for ETV broadcast courses and which insure the selection of courses for ETV broadcast that are representative of departmentwide in-service training needs.

Non-Credit ETV Programs

Although a substantial amount of broadcast time normally allocated for in-service ETV is used to provide non-credit courses, no evaluation of any consequence is made of this service. During school year 1968–1969, an

Table 10.1
TEACHER IN-SERVICE PARTICIPATION IN ETV CREDIT COURSES
(FY 1965–66 through FY 1968–69)

Credit Given By		ETV Series	Total Teachers Earning Credits	No. of Teachers by Fiscal Year			
U.H.	DOE ¹			1965–66	1966–67	1967–68	1968–69
	ETV	Teaching with Television	1609	364	1245	--	--
	ETV	Teaching with Television (advance course)	86	--	86	--	--
	ETV-AV	Extending Audio-Visual Resources	1141	--	477	664	--
	ETV-AV	Understanding Educational Media	1570	--	--	1269	301
	4	Music in the Elementary Schools	79	--	Non-credit	79	--
	1	The Living Textbook	216	--	--	146	70
	6	Communications and Education	370	--	--	--	370
	7	A Time of Your Life (In-service series)	892	--	--	--	892
	5	It's Your Health (In-service series)	184	--	--	--	184
		Sub-total	6147	364	1808	2158	1817
X		Principles of Mathematics	255	255 ²	Non-credit	--	--
X		Earth Science	68	--	68	--	--
X		Take Words	30	--	30	--	--
		Sub-total	353	255	98	--	--
3	9	Total Teachers Earning Credit	6500	619	1906	2158	1817

Source: ETV Branch and Personnel Office, both of the DOE.

¹DOE credits offered by the following: ETV -- ETV Branch
AV -- Audio-Visual Section
"4," etc. -- No. of districts offering course credit.

²This series telecast in 1965–66 over a commercial TV station, then repeated over station KHET in 1966–67 as a non-credit offering.

estimated 80 – 85 percent of the in-service broadcast time was devoted to non-credit programs, but no data have been collected and no substantive evaluation has been made of the ETV usage by the teachers for whom this service was intended. We are of the opinion that ETV broadcasting should be treated as a public resource and the uses made thereof should be subject to scrutiny. To this extent, this segment of in-service ETV should not be treated lightly. Unless the value of present uses can be shown, this broadcast time could be better allocated to other programs, such as formal adult education programs and other uses which cater to the public-at-large.

Recommendation. We recommend that the DOE develop a system for monitoring ETV usage of non-credit programs to validate the need for and audience usage of such broadcast services.

Chapter 11

FORMAL ADULT EDUCATION

ETV programs for adults may be broadly categorized as “formal” or “informal.” Formal programs are those designed to teach basic academic subjects or skills in structured lessons and which are usually, but not necessarily,

accredited by educational institutions. Programs not structured in this fashion are called informal ETV programs. This chapter focuses on ETV usage for formal educational purposes (exclusive of teacher training) while the next, chapter 12, discusses the informal type of adult ETV programs under the heading of “public television” (PTV).

Program Description

Formal adult ETV is basically intended to afford opportunities and otherwise encourage adults to continue their educational pursuits outside institutional settings. DOE’s formal adult educational function is particularly intended for those persons who, in youth, left school or had their education curtailed and were unable to obtain a high school education.¹ Therefore, the DOE provides elementary and secondary education to those adults who now desire to continue or refresh their high school or pre-high school education. The UH’s formal adult education activities focus on post-high school education. Persons with the equivalent of a high school education who can profit from any of the credit or non-credit courses may participate. Students who attend regularly receive certificates upon completion of their course of study or credits towards a degree. Therefore, the two primary objectives of adult education in Hawaii are as follows:

¹Final Report of the Advisory Committee, p. 4.

To provide the equivalent of a high school education.

To provide opportunities to develop skills and knowledge beyond the high school level in specialized intellectual and vocational pursuits.

Underlying these objectives is the expressed belief that individuals need to continually up-grade their skills and knowledge in order to keep pace with the changing social order and technological demands.²

Under current HETV policies, the task of selecting and developing adult instructional TV programs is assigned to at least four different organizational segments of the UH and DOE. They are as follows.

Subject Area	Organization
Pre-high school and High School	Adult education branch (DOE)
Post high school and continuing education	College of general studies (UH) ³
Community college	Community college division (UH)
Agriculture and home economics	College of agriculture (UH) in coordination with the adult education branch (DOE)

²Ibid.

³The college of general studies is now incorporated into the “division of continuing education” of the university, and the division now assumes this programming responsibility.

Of the above units, the adult education branch (DOE) and the college of general studies (UH) are most frequently involved in non-institutional, formal adult education.

Total expenditures by the UH and DOE amounted to \$12,100 or only one percent of the total HETV operating costs for 1968–69.

Summary of Findings

A review of HETV adult education programs of the past three years indicates that (1) only minimal use has been made of open circuit ETV to advance formal adult education and (2) the potential of ETV as a supplement or alternative to regular adult education classes has not been fully explored.

Minimal Use of ETV

When State ETV was established in 1966, it was expected “to raise the intellectual, civic, and vocational levels of those who are out of school” through extensive educational opportunities as would be made available to the general population by the joint efforts of the UH and the DOE.⁴ In recognition of this potential, the HETV set aside a block of two hours each weekday evening (6:00 – 8:00 p.m.) for formal adult programs.⁵

⁴Final Report of the Advisory Committee, p. 4.

⁵As reported by the director, ETV branch (DOE), to the adult education advisory council in the minutes of the council’s meeting of December 5, 1965.

The experience to date, however, suggests that only minimal use is being made of ETV for this educational purpose. We find, for example, that (1) only about one-fourth of the time block set aside for formal adult programs is actually used for this purpose; (2) in any single year, no more than seven percent of the total ETV broadcast time is devoted to provide formal adult instruction; and (3) to our knowledge, only two ETV series were sponsored by the DOE, and none by the UH, which were designed to extend the formal educational curriculum of these institutions to the general populace.⁶

In brief, we conclude that ETV has provided minimum opportunities for acquiring formal education and, to this extent, has not lived up to the potential expected of it as a means of extending formal educational opportunities beyond institutional settings.

Inadequate Exploitation of ETV Potential

Although ETV has been used only minimally in the past for formal adult instruction, we have reason to believe that the use of the medium for this purpose offers potential economies which have not been fully exploited. We base this finding on our comparison of the ETV series called "TV High School," which was telecast for one semester during the 1968-69 school year,

⁶The DOE-sponsored ETV series were "Operation Alphabet," a program which emphasized basic reading and writing skills, and "TV High School," which is discussed in detail in the following section.

with parallel instruction provided under the regular system of high school level adult education classes.

Before stating our findings in detail, we should like to emphasize two points. *First*, in presenting our analysis, we are not advocating the blanket use of ETV for adult instruction. On the contrary, we believe that selective application, and only after careful study, is the proper course to take. Our main intent is to illustrate the feasibility of ETV usage as an adjunct to on-going methods and, in this way, draw attention to the need for more careful analysis of ETV potentials in pursuing statewide adult education programs. *Second*, the ETV series was only used once and does not afford sufficient data to draw significant conclusions. However, it is the only source available to make any evaluation of ETV usage in the adult high school program. Thus, our evaluation is exploratory and subject to refinement. The analysis follows.

Assumptions. In order to evaluate the two diverse modes of instruction along some common grounds, we make some assumptions regarding the need, objectives and enrollment data of the adult education program of the DOE. They are:

Public need. DOE program data are reasonably reflective of the public demand for high school level adult education programs. We note that the DOE uses 1960 census data which indicate that 54 percent of the State's

adult population, age 25 and over, did not complete high school.⁷ In the absence of more current data to the contrary, this percentage represents a relatively large segment of the population in need of formal adult education.

Objectives. The number of persons granted high school diplomas through the DOE adult education program is a valid output measure of the program. Although program documents do not identify program outputs as such, "diplomas issued" is considered by program officials to be a desired result and is one of the statistics used to compare annual results of activities.

Enrollment. The ETV series covered one semester. No comparable semester enrollment for community adult education classes in 1968-69 was readily available.⁸ Therefore, in order to compare both ETV and classroom instruction modes, the entire 1968-69 classroom enrollment figure was halved under the assumption that annual enrollment is twice the semester figures.

⁷As represented in the DOE departmental operating budget request for FY 1970-71, p. 211.

⁸Enrollment figures are not normally compiled or reported by the various community adult education centers. The information was supplied upon request for the 1968-69 school year.

Program comparability. The DOE provides two general levels of instruction for the non-high school graduate. One covers basic education up to the eighth grade level; the other continues with high school instruction. We focus on the latter.

In general, the classroom-type instructional program and the ETV series for the prospective high school graduate are very similar. Both programs are diploma oriented. A student enrolled in either may, upon completing common, prescribed requirements, qualify for a high school diploma.⁹ These requirements include (1) registering for and completing an approved credit course, (2) passing the California achievement test (CAT), and (3) passing the general education development test (GED).

Primary differences between the two programs lie in the structure and duration of the courses offered. The curriculum of adult community schools provides a variety of courses in academic subjects but treats each as a separate course; whereas, the ETV series is a course in itself which is divided into five academic sub-courses (English, science, math, social studies, literature). However, for diploma qualification purposes, the completion of one approved classroom course is sufficient to qualify for the GED test. The same applies to completion of the ETV series. In terms of course

⁹A student may acquire a diploma by one of two ways. He may accumulate a sufficient number of course credits or he may elect the examination method. In the latter case, the GED test is used.

length, classroom instruction (60 hours) is double that of the ETV series (30 hours), but both extend over a semester of 12 weeks.

In both cases, student tuition is waived but the student pays for his textbooks and for achievement testing.

Rate of effectiveness. Using "diploma issued" as the standard of measure and applying this measure to enrollment, we find that the rate of success is nearly equal for both classroom-type and ETV instruction; at least it was so in 1968-69, to-wit:

ETV series. The ETV series enrolled 449 students statewide of which 96 earned diplomas for a success rate of 21.4 percent. All students were assumed to be non-graduates since the ETV series was structured to prepare enrollees for the GED test.

No. enrolled in high school level, non fee, credit courses (1968-69)	10,272	—	<table border="0"> <tr> <td style="padding-right: 5px;">No. enrolled in academic curriculum</td> <td style="padding-right: 10px;">5762</td> <td style="padding-right: 5px;">—</td> <td style="padding-right: 5px;">No. already graduated high school</td> <td style="padding-right: 10px;">2416</td> </tr> <tr> <td style="padding-right: 5px;">No. enrolled in elective curriculum</td> <td style="padding-right: 10px;">4510</td> <td style="padding-right: 5px;">—</td> <td style="padding-right: 5px;">No. of non-graduates</td> <td style="padding-right: 10px;">3346</td> </tr> </table>	No. enrolled in academic curriculum	5762	—	No. already graduated high school	2416	No. enrolled in elective curriculum	4510	—	No. of non-graduates	3346
No. enrolled in academic curriculum	5762	—	No. already graduated high school	2416									
No. enrolled in elective curriculum	4510	—	No. of non-graduates	3346									

¹⁰Non-graduates enrolled in the elective curriculum may also use course credits earned to qualify for the GED test and, hence, are potential diploma candidates too.

Community schools. In the classroom setting, statewide enrollment was "shredded" to isolate and identify the number of non-graduates in academic studies so as to equate this population with that of the ETV series. This was done by (a) separating enrollment in the basic academic curriculum from the elective curriculum and, further, by (b) identifying the number of students enrolled in the basic academic curriculum who were reportedly non-graduates. The results are summarized below.

During 1968-69, a total of 727 students in the community schools were issued high school diplomas. Thus, applying this figure to the 3,346 non-graduates enrolled in the academic curriculum, the success rate was 21.7 percent. If all non-graduates enrolled in both academic and elective curricula were considered, then the success rate would have been 16.9 percent.¹⁰

Based upon the foregoing, we find that the effectiveness of adult high school education, as measured by the number of graduates produced, is nearly equal for both classroom-oriented instruction and ETV instruction.

Cost comparison. In terms of program costs, ETV appears to be an economical adjunct to formal adult education. Our analysis is explained below.

ETV costs. Two direct relevant cost factors are identified for ETV: (a) cost of leasing the "TV High School" series for one semester—\$3,600 and (b) cost of TV transmission based on \$17 per hour for 60 broadcast hours, which allows for one original and one repeat telecast for each of the 30 lessons of the series—\$1,020.¹¹

Classroom cost. Only one relevant cost factor is identified, that of the classroom instructor. This cost is based on the hourly rate of \$6.00 for 60 instruction hours, or a total of \$360 per class. We understand that some classroom space is rented for adult classes but rental costs are difficult to prorate between different programs. Rental costs are therefore excluded from consideration here.

Non-add costs. Certain program costs are common to both ETV and classroom programs and are excluded. They include publicity costs, registration processing, administration and student testing.

Based on the foregoing, we arrive at the following comparison of program costs between ETV and classroom adult education.

	"TV High School" ETV Series	Classroom Based, High School Academic Program (non-graduates only)
Enrollment one semester	449 students	1673 students ^a
Number of classes	—	93 classes ^b
Total direct costs	\$4,620	\$33,480 ^c
Average cost per student enrolled	\$10.29	\$20.01 ^d

^aOne-half of total non-graduate students enrolled in the academic curriculum in 1968-69.

^bDerived by: enrollment ÷ average class size (18 students) as determined for the high school, non fee, program as a whole for 1968-69.

^cDerived by: number of classes x \$360 (instruction cost per class).

^dDerived by: total direct cost ÷ number of students enrolled.

¹¹The hourly rate, as estimated by the HETV network, represents transmission cost for the network as a whole. (HETV network memorandum, dated February 15, 1968, to the director

of the ETV branch (DOE)). The network assumes all transmission costs but, for purposes of this analysis, the cost is relevant to the adult education program and is therefore identified therewith.

As indicated, the estimated pro-rata cost of ETV (\$10.29) is about one-half as much as classroom-conducted courses (\$20.01). Clearly, ETV education is a relatively efficient and economical program when compared to classroom adult education. Stated in other terms, the \$4,620 cost attributed to ETV provides the equivalent of 25 more classes, which if taught by instructors would otherwise cost \$9,000 in instructors' fees.

Other related factors. Besides cost and effectiveness factors, there are other considerations which bear upon the question of ETV utilization. We note, particularly, that one of the concerns leading to the inception of ETV in 1966 was the problem of accommodating adults who are unable or unwilling to attend adult evening classes to pursue their educational interests. It seems that ETV fits that role to a degree. But, with its discontinuance, there is no alternative provided.

Conclusion. Based upon the trial experience gained during the 1968-69 school year in the use of ETV, it seems that adult instruction by television affords a potentially effective and economical means of extending the reaches of the formal adult education program beyond institutional limits. As shown, the ETV series used was just as effective as regular on-going methods in promoting student attainment of high school level education and at a significantly lower per pupil cost.

Admittedly, the analysis can be refined as a planning "tool." While we do not advocate the

use of ETV education exclusively or even the substitution of classroom education with ETV education, there appear to be ample indicators to warrant a full review of the feasibility of ETV in the adult education programs of the DOE.

Notwithstanding the foregoing, the DOE has no definite plans, either current or future, to research or apply instructional TV in its formal adult education programs.¹² In fact, we understand that the program lacks any long-range plans which could otherwise lay out the future implications of instructional technology upon adult education programs. We believe that failure to adequately provide for program alternatives leaves questionable the effectiveness of decision-making processes which lead to the commitment of public funds.

Recommendations. We recommend that the DOE

1. Re-examine the program planning process and program plans for its formal adult education activities and incorporate therein provisions which assure that planning attention is given to analysis of program alternatives on a continuing basis.

¹²A preliminary staff evaluation done by the adult education branch of the "TV High School" series in September 1969 requested that follow-up ETV activities be explored. To date, however, no such follow-up has been made.

2. Determine more completely the relative effectiveness of on-going methods of providing instruction and the costs thereof in relation to other feasible adjunctive or alternative methods, including ETV, as a means of providing more widespread participation in its formal adult education programs.

Chapter 12

PUBLIC TELEVISION

Program Description

Public television, abbreviated herein as "PTV," is essentially that segment of HETV educational programs which is intended for general public viewing and which is not devised for formal instruction or administrative communication by public school systems.¹ It basically consists of informational, instructional and cultural programs in the arts, humanities, sciences, public affairs and other fields of educational interest not otherwise made available by commercial television.

¹Our use of the term "public television" closely parallels the definition used by the Carnegie Commission on Educational Television which refers to the TV program "of human interest and importance which is not at the moment appropriate or available for support by advertising, and which is not arranged for formal instruction." (See its report entitled, *Public Television, A Program of Action*, Harper and Row, 1967, p. 1.

Objectives. Broadly stated, PTV is intended to inform, increase understanding, develop skills and abilities, and to effect attitudinal changes in its viewers. Network planning documents describe these objectives thusly:

"to develop, strengthen and extend the capabilities of the citizen to further understanding in the sciences, social studies and language arts...to develop an appreciation of our cultural heritage in music, literature and art...to extend insights into ethical values...to develop skills and knowledge in various fields of endeavor...to inform the viewer fairly of the important issues of the day...to promote intelligent attitudes toward fundamental issues in society."²

In essence, PTV ostensibly strives "to educate in the broadest sense" through selective and varied presentation of programs to more fully inform and enrich the lives of its viewers.

Organizational roles. Under present HETV policies, PTV is predominantly, but not exclusively, a responsibility of the division of ETV broadcasting of the university. The division serves in two capacities. *First*, as the principal operator of the HETV open circuit broadcast service, it develops the PTV broadcast schedule as a whole and monitors programs intended for broadcast to assure conformity with broadcast

²Division of ETV broadcasting, university of Hawaii, *Multi-Year Program Plan, FY 1969-70 to FY 1973-74*, p. 2.

requirements. *Second*, as an originator of ETV programs, it is assigned the task of developing public affairs and related PTV programs.

In addition to the division, other units of the UH as well as units of the DOE participate in PTV program development but more on a cooperative or shared basis. For example, programs dealing with agriculture and home economics are the primary responsibility of the college of tropical agriculture (UH) with the adult education branch (DOE) assuming a cooperative role. Similarly, the development of informal continuing education ETV offerings is a shared responsibility between the college of general studies (UH) and the adult education branch (DOE).

Program scope. PTV encompasses a diverse range of subject content and format and is not unlike commercial television. The major difference, of course, lies in the non-commercial, non-profit status of PTV and its focus on educational ends. For purposes of identification, PTV programs may be classified into four broad groups, as follows.³

General education: Includes non-credit programs of an instructional or informational nature which are designed to develop or enhance knowledge and skills in areas of special interests.

³These categories are basically derived from the federal communication commission's classification of TV programs with some modifications to make them more comprehensively applicable.

Public affairs: Includes discussions, speeches, documentaries, editorials and similar programs primarily concerning local, national and international affairs, issues or problems.

Performing/visual arts: Includes programs in which the performing aspect predominates (drama, opera, concert, dance) or which feature visual forms of art (painting, sculpture, photography). Programs of this category are designed to enrich experiences rather than to teach skills in structured lessons.

Other: Includes all programs not readily classifiable into the above groups, such as sports and previews of network series.

In terms of HETV emphasis, as measured by broadcast volume, general education programs comprised the largest single category of PTV programs during 1968-69 (46.9%), followed by public affairs (29.3%), performing/visual arts (23.3%), and all others (0.5%). In comparison with the prior year, however, the programming pattern for 1968-69 reflected an increased emphasis on performing/visual arts programs with a corresponding decrease in general education programs. (See table 12.1.)

In terms of cost, approximately \$361,488 and \$24,609 were expended by the UH and DOE, respectively, to develop, produce and broadcast public television programs during 1968-69. The combined figure of \$386,097

Table 12.1
PTV PROGRAMMING, DISTRIBUTION BY CATEGORIES
FY 1967-68 and 1968-69

Program Category	Percent of Distribution		Percent Change
	1967-68	1968-69	
General Educational	53.1	46.9	- 6.2
Instructional (non-credit)	(12.0)	(11.5)	
Informational	(41.1)	(35.4)	
Public Affairs	27.8	29.3	+ 1.5
Performing/Visual Arts	16.6	23.3	+ 6.7
Other	2.5	.5	- 2.0

Source: Table 12.2 below.

amounts to 36.9 percent of the total 1968-69 operating expenses for HETV.

Broadcast hours. PTV averages about 34 broadcast hours per week and constitutes about 50 percent of the weekly HETV broadcast schedule. PTV programs are telecast each evening, except Saturday, and also during early afternoon on Sundays. Generally, one hour each weekday evening is devoted to children's programs and the remaining time is programmed for adults. In the aggregate, PTV consumed some 1,764 broadcast hours during 1968-69.

This represents an increase of some 240 broadcast hours over the 1967-68 year largely due to Sunday broadcasts which were only in partial effect during 1967-68 but in full effect during 1968-69.⁴ (See table 12.2.)

Program sources. PTV programs are produced locally, leased from various national or regional ETV production centers, or borrowed from various civic or public organizations at no

⁴Sunday broadcasting commenced in January 1968.

Table 12.2

ESTIMATED PTV BROADCAST VOLUME
Total/Weekly Scheduled Broadcasts (Hours)
FY 1967-68 and 1968-69

Program Category	Total Broadcast Hours		Weekly Average Hours	
	1967-68	1968-69	1967-68	1968-69
General Educational	808	828	15.5	15.9
Instructional (non credit)	(182)	(203)	(3.5)	(3.9)
Informational	(626)	(625)	(12.0)	(12.0)
Public Affairs	423	516	8.2	9.9
Performing/Visual Arts	253	411	4.9	7.9
Others	38	9	.7	.2
Total	1522	1764	29.3	33.9

Source: Evening and Sunday programming as compiled from HETV network broadcast schedules.

cost. As an affiliate of the National Television Network (NET), HETV relies most heavily on this source in acquiring programs of national or regional interest, as well as much of its cultural programs, for local broadcasting.⁵

Summary of Findings

Our examination of local PTV focused on questions related to program adequacy and program effectiveness. Program adequacy refers

⁵The NET is a noncommercial, nonprofit corporation which is a central source of national and international programming for a network of affiliated, independent ETV stations.

to the relationship between specific public educational needs and the sufficiency of ETV services provided to meet those needs. Program effectiveness concerns the effects of actions taken toward attaining specific desired ends.

In both areas, we generally find that:

1. HETV lacks definitive operational systems, processes and standards by which it or any other agency can make an assessment of either the adequacy or effectiveness of its PTV program services. We find PTV planning to be deficient or lacking in basic data and in meaningful and useful definitions of its purposes, objectives and standards.

2. There is virtually no system for conducting program evaluation.

3. There is significant fragmentation of responsibilities for program selection and development which tends to detract from the effective conduct of this program.

PTV Planning Inadequacies

By its very nature, public television caters to a diverse audience of unknown size in the communities which it serves. As such, the need for careful planning is evident if some assurance is to be had as to whether this public medium is being utilized efficiently and effectively. In this context, then, because of the wide range of options available in the use of the medium, it follows that some precision should be practiced in defining the public missions assumed by PTV and the objectives to be sought and that some program measurements should be developed to assist in assessing the adequacy and effectiveness of program services.

Inadequate data. Program documents fail to define the specific role assumed by HETV in the overall scheme of public programs and lack data defining the target audience and their educational-informational needs and other related factors which bear upon decisions affecting the scope and priorities of PTV programs. For instance, while PTV ostensibly serves the public interests and needs, no useful data are available which identify these specific public needs. Nor is there provided any rationale

as to why and how ETV is used to service these elusive ends. In general, therefore, we find the PTV program to be lacking basic data necessary for program decision-making and that this condition denies public policy-makers the assurance that the program is indeed being directed at and used for purposeful public educational endeavors.

We note particularly that HETV policy intends that PTV programs be "purposeful and directive" and that they be based upon and developed through identification of the public needs and interest.⁶ It appears, however, that this concept of "directed use" has failed to materialize in practice for the lack of appropriate operational plans and means to comprehensively ferret out, examine and select areas of public concern in which PTV could be used effectively. Consequently, PTV may be said to be only incidentally related to the ongoing communitywide educational programs.

Lack of meaningful program objectives. The stated objectives of PTV were described earlier. We find them to lack adequate specificity and usefulness. Lack of specificity is noted in two respects. *First*, these objectives are generalities of the scope and nature of educational broadcasting, *per se*, and can be applied with

⁶Per the HETV policy, it was intended that the program service be "based upon, and developed through, the broad areas of intellectual interest and need" to "serve to the fullest extent the interest and need of the people." While this declaration of intent is admittedly broad, it does imply the task of searching out and identifying areas of public interest and need for mass TV communication (Appendix C).

equal facility and effect to other media such as radio and newspaper. *Second*, they fail to draw any relationship to the local ETV constituency and make no reference to Hawaii's problems and aspirations in elevating public education which, presumably, is the prime reason for initiating ETV in the State. The general treatment of program objectives also diminishes their usefulness as indicators of program success or failure and as management guides to direct the present or future course of PTV programs. The lack of clear, specific, measurable program objectives hinders the legislature and others concerned with developing public policies from properly examining the performance record of PTV. We are of the opinion that objective statements, if properly developed, can aid immeasurably to public understanding and acceptance of ETV.

Lack of standards. Basically, there are two broad types of standards common to PTV programs. *First*, there are standards designed to preserve the noncommercial and impartial status of the ETV station and to otherwise conform with applicable broadcasting regulations. These generally govern the use of the broadcast service, e.g., equal time for controversial issues, non-partisan, non-sectarian, etc. The *second* type includes standards which control program content, development and scheduling. These standards represent programmatic policies, e.g., setting priorities, setting output quantity or quality levels, allocating broadcast time, etc. This discussion concerns the latter standards.

In general, we find that HETV lacks meaningful program standards by which to guide

the selection and development of PTV programs. While there are some general statements affecting programming, these have not been developed into specific standards which can be readily applied to day-to-day operations. Two such examples follow.

Program documents claim that performance evaluation of public affairs and community interest programs "may be measured by the number of hours devoted to such broadcasts."⁷ This "standard" is inadequate and inapplicable for there is no quantitative base to which broadcast volume hours can be meaningfully related and tested for performance. Further, there is no basis by which one can say whether actual performance levels are acceptable or unacceptable since the level of reasonable performance expectation has not been established.

HETV *Policy* states that a "balanced program schedule" should be developed, that programs be "well produced technically," and that programs be of the "highest educational quality."⁸ These intentions, however, have not been further developed or refined. They remain as gross statements of what is desirable and offer no practical guideline to the operating staff.

⁷Division of ETV broadcasting, university of Hawaii, *Multi-Year Program Plan, FY 1969-70 to FY 1974-75*.

⁸*Program and Operational Policy HETV*, p. 1.

As a consequence, the program is denied effective guidance as to the direction, scope and emphasis it should pursue. Program selection and development decisions are currently governed primarily by (a) what is readily available in videotape libraries of national or regional ETV program distributors and (b) if local production is involved, the availability of funding on a "first come-first served" basis.⁹ Neither approach effectively reconciles the use of ETV with the "needs and interests" it purportedly exists to serve. Moreover, the lack of common, established standards precludes assessment as to whether all requests or ideas for PTV programs from individuals or organizations are consistently and fairly treated.

In essence, under current practices, selection and development of PTV programs are based on the subjective judgment of a few as to what constitutes the public interest without an overall framework and supporting guidelines by which to defend such decisions. While we recognize that professional experience in educational broadcasting is a necessary factor for sound programming, the inadequacies pointed out here are essentially matters of public policy which extend beyond technical competency. We therefore stress the need for added direct and overt policy guidance to provide for the purposeful, efficient and effective use of ETV to meet demonstrated public needs.

⁹Local productions are generally funded by the budget of the HETV broadcast facilities, except that in some cases, such as the university's division of continuing education, funds are also provided by the user agency to help defray honorariums for participants of ETV programs.

Recommendations. We recommend that, pending clarification of the roles of the various agencies in PTV,¹⁰ the ETV council, the university of Hawaii, and other participants in PTV provide for systematic planning for PTV, including the formulation of specific objectives, the determination of effectiveness measures and the establishment of clear standards for the selection and development of PTV programs. In the accomplishment of such plans, we further recommend that the UH:

1. Design means by which to comprehensively determine the public needs and interests which may be advanced by public television. We suggest such measures as conducting periodic canvass of public and community agencies concerned with public problems and services, e.g., departments of social services, health, labor, transportation, office of consumer protection, county protective services, etc.

2. Develop a system by which individual requests or suggestions, findings and recommendations brought to light by the canvass may be screened and assigned priorities for implementation. Assignment of priorities should consider, among other things, relative target audience size, timeliness, urgency and availability of other media.

¹⁰See chapter 4 and the recommendations contained in subsequent section of this chapter.

Lack of Program Evaluation

Program evaluation is an integral function of management. Properly done, evaluation can highlight strengths and weaknesses of a program, identify areas requiring corrective action, and assist in the re-planning process, particularly with respect to resource allocation and program policies.

PTV programs account for about one-half of the HETV broadcast schedule. Yet, despite this heavy emphasis, there is virtually no post-telecast evaluation of PTV. We find that there is lacking a system for collecting data as well as procedures and standards for effecting program analyses with the result that data collected two or more years ago are still being used to support current budget requests and program plans.¹¹ We note also the lack of any reference to PTV program evaluation in the future plans of HETV.

This situation goes counter to the original intentions in funding ETV in Hawaii, namely, that informal ETV programs "be constantly subjected to research and evaluation in order to determine the effectiveness of the service."¹²

¹¹During the first year of broadcasting, various attempts were made to collect data to secure some indication of how well ETV was being received by the community (e.g., telephone survey, mail-in requests, mail count, etc.). However, all such efforts ceased about October of 1968, when publication and distribution of monthly broadcast schedules were discontinued, reportedly for economy reasons. Until that time, this publication served as the principal means by which audience "feedback" on selected programs were obtained.

¹²Final Report of the Advisory Committee, p. 13.

Moreover, this lack of program evaluation denies public officials information which bear upon decisions they must make regarding future funding and priorities of the program. Our review leads us to conclude that this deficiency, coupled with planning inadequacies, has created an information bank devoid of public needs and acceptance of ETV.

Recommendation. We recommend that, pending clarification of the roles of the various agencies in PTV, the ETV council, the university, and other participants in PTV develop a system for the continuing assessment of PTV programs. Such a system should, as a minimum

1. focus on program results and relate them to program objectives;

2. establish a method for collecting field data on a timely basis, employing a variety of research techniques, as may be practicable and within reasonable cost, to obtain indications of public responsiveness to PTV programs and the value thereof to the viewer; and

3. specify staff responsibilities for the conduct of program evaluation and the maintenance of the data collection system.

Ineffectual Organization for PTV

Basic deficiencies reported earlier with respect to PTV planning and evaluation appear to result, in part, from the ineffectual manner in

which PTV program responsibilities are assigned. In this regard, we find that there are both a "gap" and an "overlap" in assignments which have fragmented PTV to such a point that no one agency can be said to have overall concern and responsibility for it. Our explanation follows.

Functional gap. While it is generally believed that the university's division of ETV broadcasting has overall charge of PTV, in practice the division does not function in this manner. As described earlier, the division acts in a dual role. On the one hand, it monitors the entire broadcast service of HETV to assure conformity with broadcasting policies and serves as the production agency for locally-initiated ETV programs. On the other hand, it serves as one of several groups which are assigned to develop different subject matter programs for broadcast. In the latter role, the division is designated as the prime developer of public affairs/community service programs.

The functional gap arises from the division's interpretation of its role in and responsibilities for network program management. Basically, the division has adopted the position that its proper role is that of a "service" agency which "does not seek to control or be responsible for the content of any of the types of educational television programs," other than what it is specifically assigned to develop; namely, public affairs/community service programs.¹³

¹³Memorandum, director, educational television broadcast, to the vice-president for academic affairs, university of Hawaii, February 17, 1966.

Adherence to this concept effectively separates the involvement of the division from other PTV programs and, consequently, the presumption is that program planning and evaluation will be carried out by individual agencies rather than on a network-wide basis. This, however, has not been the case. For example, HETV policies on program evaluation do not specify agency roles for this activity and, thus, only rarely has evaluation of any consequence been conducted of PTV programs and activities by individual sponsoring agencies. There exists, then, a significant discontinuity in the administration of the PTV program.

Functional overlap. Among the agencies themselves, there are common but overlapping interests which further tend to divide responsibility for PTV. For example, the university's division of continuing education, college of agriculture and division of ETV broadcasting, and the DOE's adult education branch each is assigned distinct program responsibilities by HETV policy. However, the DOE, whose assigned area of responsibility is pre-diploma, basic adult education, has seen fit also to sponsor PTV programs which overlap into areas of program development reserved to the university.¹⁴ This is based largely on the premise that, HETV policy notwithstanding, the adult education program does, by law, encompass such broad areas as civic and

¹⁴Two such programs entitled "Pau Hana Years" and "Operation Information" were sponsored by the DOE. Under network policy, these programs would have been proper subjects of UH sponsorship since they are basically community service type programs not involving basic, pre-diploma education.

naturalization training, homemaking and parent education, and activities to promote cultural-recreational interest.¹⁵ As such, the DOE adult education branch has not felt compelled to follow HETV policy in undertaking adult ETV programs.

Based on the foregoing, we believe that the matter of PTV program responsibilities, inclusive of program planning and evaluation responsibilities, should be clarified and made

specific in order to assure full and consistent coverage of all facets of this operation.

Recommendation. We recommend that, pending such reorganization of HETV as may be made pursuant to our recommendations contained in chapter 4, the ETV council clarify and expressly define the role and responsibilities of the UH division of ETV broadcasting and other participating agencies in the planning, development, presentation and evaluation of "public television" broadcast service.

¹⁵Section 301-2, HRS 1968, permits the DOE to include these and other subject matter in its education curriculum.

**PART IV
FINDINGS AND RECOMMENDATIONS
RELATING TO FINANCIAL MANAGEMENT OF HETV**

Chapter 13

INTRODUCTION

Financial management for HETV is the responsibility of both the UH and the DOE. Moneys for ETV are appropriated to and expended by the two departments. This part focuses on the adequacy with which financial transactions, books and accounts are handled by these agencies.

Our major findings are:

1. The university is maintaining a special fund for ETV, contrary to law.
2. There are certain administrative deficiencies at both the UH and the DOE which require correction to insure accountability and adherence to law.

Chapter 14

GENERAL FUND AND OTHER FUNDS

The expenses for ETV at both the UH and the DOE are paid for out of the State general

fund. From time to time, federal funds supplement the general fund. At the university, there is a second source of funds—a "special fund" which consists of receipts from the sale of production series, videotapes, etc., and from rental of equipment and facilities.

Summary of Findings

The single, most important finding here is that the existence and use of the special fund at the university is contrary to law.

Fund Characteristics

The combined operating expenses of the UH and the DOE exceed \$1.0 million a year. For the fiscal year 1968-69, for example, the total expenditure out of the general fund was \$1,004,775:

University of Hawaii	\$ 497,368
Department of Education	<u>507,407</u>
Total	\$1,004,775

Of this total amount, \$28,540 of the DOE expenditure constituted federal funds. The total

expenditure out of the special fund at the university was \$4,666 in fiscal year 1968-69.

Generally about 40% of the total expenditure is for personal services. Currently, there are 31 staff members at the UH division of ETV broadcasting and 17 at the DOE ETV branch.¹

UH Special Fund

The special fund for ETV at the UH was established in December 1966. It was created for the purpose of receiving income and expending funds for specific ETV projects not contemplated in the operating budget.² The university treats this special fund as "an account" within another special fund called the "UH Special Fund."

Receipts. The ETV special fund receives income as follows:

1. *Production services rendered.* The ETV division occasionally provides technical services for a fee to various organizations to produce non-commercial television programs. These programs are usually of a non-recurring nature. During the period December 12, 1966 to June 30, 1969, for example, the ETV division was paid \$20,566 for producing five programs.

¹Based on UH and DOE departmental budget submissions for fiscal biennium 1971-73.

²Memorandum, UH director of finance to ETV director, December 12, 1966.

2. *Sale of films and videotapes.* From time to time, private organizations and governmental agencies request the ETV division to supply them with prints of certain television productions. The ETV division charges for these prints. From 1966 to June 30, 1969, \$4,654 was received from the sale of videotapes and film prints.

3. *Rental of equipment and facilities.* Occasionally, the ETV division rents out its equipment and studio facilities to various organizations, such as colleges at the university, governmental agencies, and private organizations. A total of \$1,042 in rentals was collected during 1966 to June 30, 1969.

4. *Reimbursements.* Shipping charges for ETV programs sent to Hawaii by the National Educational Television (NET) on the mainland are paid for by the ETV division. After the programs are used in Hawaii, they are then shipped to American Samoa. The postage from Hawaii to American Samoa is initially paid for by the ETV division. At a subsequent date, American Samoa reimburses the ETV division and the reimbursement is deposited into the special fund. Postage reimbursements from 1966 to June 30, 1969 totaled \$11,104.

Expenditures. The fund ostensibly is used to pay for expenses incurred in connection with the revenue-generating services that the ETV division renders. However, a perusal of the expenses actually made indicates that the fund is used for items similar to those paid for from the general fund—e.g., dues and subscriptions,

postage and postal charges, stationery and office supplies, repair and maintenance, etc. Further, a closer examination reveals that all expenditures incurred in generating the special fund receipts are paid for from the general fund like any other ETV expenses and that the special fund is tapped for any and all expenditures of ETV when the general fund appropriation begins to run out, usually at the close of the fiscal year. It thus appears clear that the special fund is not necessarily used for expenditures related to the revenues of the fund but is used to supplement the general fund appropriations.

Special fund unauthorized. The special fund is without legal status. Under section 304-8, HRS, special funds at the university may be established by the State comptroller upon the recommendation of the State director of finance. No comptroller's authority was secured by the university to create this special fund. The university contends that this special fund is really simply an *account* within another special fund called the "UH Special Fund" and that therefore no authorization is required.

The university's contention is untenable. *First*, the "UH Special Fund" is merely a name given to a collection or grouping of small special funds at the university which are combined for convenience in bookkeeping. Thus, the "UH Special Fund" itself has no legal status. *Second*, each special fund within the so-called "UH Special Fund" was created for a specific purpose, none of which is related to ETV. If the university's contention is upheld, there would be nothing to prevent the university from creating a

special fund for any purpose by calling it an "account" of the "UH Special Fund." There is no statutory basis granting the university such flexibility.

For the foregoing reason alone, the ETV special fund should be dissolved. It should also be abolished because it simply is a device to spend more money than authorized by the legislature. It serves no *special* purpose, as we noted above; it serves merely as another fund to be used when the ETV division's usual general fund appropriation runs out.

Recommendation. We recommend that the university immediately discontinue the ETV special fund.

Chapter 15

SOME SELECTED PROBLEMS

There are certain management practices at the UH and the DOE which require remedial attention. We discuss these practices here. Although the discussion is in the context of the UH or the DOE, some of our comments are applicable to both institutions.

Summary of Findings

1. Method of calculating salaries at the university needs attention.
2. Both the UH and the DOE are engaged in questionable practices of handling receipt of funds from outside sources.
3. The DOE has engaged in unauthorized purchasing practices to avoid the bidding requirements of the State.

University of Hawaii

Payment to ETV director upon termination of employment. The director of the ETV division resigned from his position on June 30, 1969. He requested for and was granted a lump sum payment of \$6,227 for 95 vacation days earned and unused as of that date. We find that the university erred in computing the amount due the director. The university based the computation on \$1,384 per month, the amount of salary that the director was earning on June 30, 1969. The amount, however, should have been based on \$1,497 per month, the amount of salary that the director would have earned on July 1, 1969, had he remained as director. Act 127, SLH 1969, granted State employees a general salary increase effective July 1, 1969.¹ Under section 79-7, HRS,

¹Section 35, Act 127, SLH 1969, provided a general salary increase of at least eight percent in the compensation of all university personnel appointed by the board of regents, effective July 1, 1969.

“Whenever an employee’s service is to be terminated, . . . the retiring employee may be paid forthwith, in lieu of his vacation allowance, the amount of compensation to which he would be entitled or which he would be allowed during the vacation period if he were permitted to take his vacation in the normal manner”

Thus, if the director had been permitted to take his vacation in the normal manner on July 1, 1969, he would have been paid during his vacation at the new salary rate for 95 working days. Therefore, the university still owes the director \$503, representing the difference between the lump sum payment computed on a monthly base salary of \$1,497 as against \$1,384 for the period July 1 to November 13, 1969.

We further find that the director was paid an additional \$445 which he was not entitled to receive. This sum represents monthly stipends of \$100 a month for the period July 1 to November 13, 1969. Prior to his resignation, the director had been receiving this stipend under a university policy which provides for the payment of such stipends as additional compensation to instructional personnel who assume extra administrative duties and responsibilities.² After the effective date of his

²“Additional compensation is paid for extra administrative duties and responsibilities in those cases where the administrative function is not primary or is not permanent. The amount depends on the size or importance of the department or agency, the length of time in the position, or both. Payment of the additional stipend continues during the period of service in the position.” University of Hawaii, *Handbook for Faculty and Staff*, September 1964, “Compensation for Department Chairmen, Special Program Directors, Laboratory School Principals,” etc., p. 26.

resignation on June 30, 1969, the director no longer occupied the position of director of ETV and, as such, his services were no longer available to the university. Upon our inquiry, it was discovered that a coding error was the cause of this stipend payment. The university has agreed that this payment should not have been made.

The two errors mentioned above cancel out each other, except to the extent of \$58 in favor of the former director.

Recommendation. We recommend that the university proceed to pay the \$58 due the former director of the ETV division. Further, we recommend that the university take such necessary measures as to insure that errors of the above nature are avoided in the future.

Unauthorized handling of receipts. The ETV division has in the past deposited funds it received with the University of Hawaii Foundation, a private eleemosynary organization, not under the control of the university or the State. Included among such funds have been receipts from the sale of guitar study guides developed in conjunction with the broadcast of a folk guitar series. Between the period October 1966 to June 30, 1969, a total of \$7,026 had been collected from the sale of the guides and deposited with the Foundation. Also included among the funds deposited with the Foundation have been grants and donations, such as the grants received for the purpose of producing the “Mark Water’s Story.” The funds so deposited with the Foundation have been paid out from time to time at the request of the

ETV division for varying purposes. In addition, in fiscal 1968-69, the ETV division on one occasion endorsed a check it received as a grant and negotiated it to an individual as payment for services rendered to the division. These methods of handling receipts violate section 40-32, HRS, and the university’s business affairs circular no. 29, dated June 25, 1964. Section 40-32, HRS, states:

“Every public accountant collecting or receiving revenue or other moneys in Honolulu shall pay weekly, or at such times as may be otherwise specially appointed, into the treasury all sums of money collected or received by him on account of the revenue or otherwise,”

The university’s business affairs circular no. 29 states:

“Anyone receiving cash for the University for any purpose, is responsible for depositing it with the University cashier (or directly with the bank when authorized to do so) daily”

When the ETV division receives funds from outside sources, the funds become *public* funds, the ETV division being a public agency. The purpose of the statute and the university policy is to prevent the diversion of public funds and to minimize the risks of misappropriation of public funds.

Recommendation. We recommend that all funds received by the ETV branch from any

source for any purpose be deposited forthwith with the university cashier.

Inaccurate property inventory records. Under Hawaii statutes, all persons or agencies of a public character having possession, custody, control or use of property belonging to the State are required annually to file with the State comptroller a sworn return or inventory containing a full, true and correct list in detail of all such property. The filing of such returns with the comptroller is required on or before August 15 of each year. Each annual return is to include all property as of July 1 of the year for which the return is made.³

Our review indicates that the property inventory records of the UH do not reflect a full and accurate list of ETV equipment and facilities in its control and use. Specifically, we note the omission of all five TV translator stations (and allied equipment) constructed on Kauai in 1967 and the omission of the two translator stations constructed on Hawaii in 1968. These installations should have been shown on the property records as of the close of the 1968-69 fiscal year, but were not.

Recommendation. We recommend that the UH insure the listing of all State property under its control.

³Section 106-1, Hawaii Revised Statutes.

State Department of Education

Rental of office space. The ETV branch and two other DOE organizational units lease approximately 8906 square feet of commercial office space at the Waiialae Shopping Center and pay an annual rent of \$37,404. The five-year lease was executed in November 1966 and terminates in 1971. Under the terms of the lease, the DOE is required to pay all real property taxes apportionable to the space leased. In accordance with this lease term, the DOE has been including in its payment of lease rental, its proportionate amount of the real property tax—approximately \$1,200 per year.

Under section 246-36(2), HRS, exemption from the real property tax is allowed for "real property under lease to the State or any county under which lease the lessee is required to pay the taxes upon such property," provided, of course, that a claim to this effect is properly filed with and approved by the department of taxation. The granting of such exemption is contingent upon two conditions. *First*, the lease agreement must be duly recorded at the bureau of conveyances, and *second*, the agreement must stipulate that the lessee is required to pay the real property tax. The DOE's lease agreement meets these conditions.

The payment of the real property tax by the DOE, of course, returns to the State treasury. However real property tax collections are, except to the extent of covering administration expenses of the State, turned over to the counties. To this extent, then, it might be said

that the State can save the cost of the tax if the DOE would apply for exemption under section 246-36(2).

Recommendation. We recommend that the DOE secure exemption from payment of real property tax on the rented office space at the Waiialae Shopping Center. We also recommend that all lease agreements of the DOE now in effect involving the rental of commercial office or building space be reviewed and exemptions from the real property tax be obtained wherever applicable.

Unauthorized purchasing procedure. During the summer of 1966, the DOE advertised for bids for the purchase of TV receivers and stands. Although bids for the TV receivers were obtained, no acceptable bid was received for

TV stands. (One bid was received but it did not meet the specifications.) Consequently, the DOE negotiated for the purchase of TV stands and effectuated purchases on a piecemeal basis as indicated in the following tabulation. No approval was sought from the governor to effectuate these purchases.

The procedure followed violated the provisions of section 103-22, HRS, which, at the time of the purchases, stated that "No expenditure of public money . . . where the sum to be expended shall be \$4000 or more, shall be made except under contract let after public advertisement for sealed tenders, in the manner provided by law. No expenditure for public purposes shall be so divided or parceled as to

PURCHASES OF TV STANDS BY THE DEPARTMENT OF EDUCATION
DURING THE PERIOD 9/23/66 to 1/25/67

Purchase Order No.	Purchase Order Date	No. of TV Stands	Purchase Price	Unit Price	Delivery to School District
530018	9/23/66	39	\$ 1,629	41.76	Honolulu
530102	11/17/66	65	2,714	41.76	Central
530113	12/25/66	51	2,130	41.76	Leeward
530114	12/ 6/66	59	2,464	41.76	Windward
530115	1/12/67	38	1,705	44.86	Maui
530130	12/13/66	71	2,965	41.76	Honolulu
530171	1/25/67	33	1,481	44.86	Kauai
530184	1/12/67	<u>25</u>	<u>1,122</u>	44.86	Hawaii
	TOTAL	<u>381</u>	<u>\$16,210</u>		

defeat or evade this section.”⁴ Where no tender is received in response to the advertisement, a contract may be negotiated *with the approval of the governor*.

It appears that the subject purchases were deliberately parceled to evade the law. Note, for example, that three purchase orders were issued consecutively (nos. 530113–530115) between the period December 6, 1966 and January 12, 1967 for purchases of TV stands for Oahu schools totaling approximately \$6,299.

We believe that efforts should have been made to effect the subject purchases within the framework of existing legal means.

Recommendation. We recommend that the DOE take stringent and appropriate action to insure that future purchases are made within legal requirement.

Proceeds from the sale of DOE publications. Under section 296–17, HRS, the DOE is permitted, at its discretion, to prepare, print and publish various materials for public sale. Formerly, this law also permitted the DOE to establish a separate fund for the purpose of depositing the receipts from such sales and expending the sums so deposited to defray some or all of the publication expenses. However, the law was amended by Act 175, SLH 1965, to require that “all sums of money received from the sale of such publications shall be deposited to the credit of the general fund of the State.” The DOE school code, policy no. 6123, was

⁴Amendments were made to this section by Act 142, SLH 1969, but such amendments do not affect our discussion here.

subsequently amended in July 1965, to reflect this change.

Contrary to the above legal and departmental requirements, proceeds from the sale of publications are not being deposited to the credit of the State general fund. Specifically, we note the following.

From the date of the enactment of Act 175, SLH 1965, to November 1968, the DOE continued to deposit proceeds from the sale of publications into a separate fund. The balance of this fund totaled \$2,571 as of June 30, 1969. Included in this balance is approximately \$600 of proceeds received from the sale of TV teacher’s guides and other ETV publications. As of this writing, the moneys from the sale of ETV and other DOE publications received subsequent to Act 175 still remain in the separate fund.

Subsequent to November 1968, moneys received from the sale of ETV and other DOE publications have been credited to the office of public information and publications as reimbursements for expenditures incurred by the office in printing the publications, and not to the credit of the general fund as required by law.

Recommendation. We recommend that all proceeds from the sale of ETV materials and other DOE publications received since July 1, 1965 and still retained in the separate fund and all future proceeds from such sales be deposited to the credit of the general fund as required by law.

PART V RESPONSES OF AFFECTED AGENCIES

It is our practice to request each of the agencies affected by our examination to submit in writing its comments on the audit recommendations, including information on the specific actions that have been taken or will be taken with respect to the recommendations. On March 15, 1971, we transmitted copies of the preliminary report on the *Audit of the Hawaii Educational Television System* to the university of Hawaii, the department of education, and the educational television council and asked for their comments on the recommendations. A copy of the transmittal letters sent to these agencies is attached as attachment no. 1.

On March 24, 1971, the president of the university of Hawaii transmitted the response of the university to our office; on March 25, 1971, the chairman of the board of education transmitted the response of the department of education; and on March 26, 1971, the chairman of the educational television council submitted his comment on one specific recommendation and transmitted the responses of the university of Hawaii and the department of education. The UH and DOE responses transmitted by the chairman of the ETV council are essentially the same responses which we had previously received from the two agencies. The council chairman’s comments are attached as attachment no. 2, and the UH and DOE responses are attached as enclosures A and B to attachment no. 2.

Following our usual practice, we reviewed our audit recommendations in the perspective of the responses of the agencies for the purpose of identifying those issues which are still outstanding.

GENERAL EVALUATION OF THE AGENCY RESPONSES

Both the university of Hawaii and the department of education express misgivings about the audit report. The university states that the report “is entirely negative” throughout, and the department of education believes that the report “appears unduly critical of the shortcomings of the ETV system.”

The agencies misunderstand the basic purpose of an independent audit, which is simply to identify those policies and practices which need to be corrected. By the very nature of auditing, the result of any examination is usually a *critical* report. We recognize that criticism is not always welcome, and that to those managers and employees in the government service who believe that they are already doing their best, criticism may appear to be a reflection of their efforts.

However, criticism by itself is not the end product of an audit report. The ultimate focus is not on what is wrong but on *what needs to be done*. In this respect, all parties to the audit, those who conduct the audit as well as those whose programs or agencies are subjected to audit, should be oriented towards the formulation and assessment of recommendations which are likely to result in improvements.

The university of Hawaii and to a lesser extent, the department of education, question the timeliness of the report. The university states that "An examination of the footnotes in support of the narrative reveals that the report often is based on data and documentation which *may or may not* be applicable presently." (Our emphasis.) Our citation of any documentation means that the documentation is applicable. If an earlier document is used as a citation rather than a later document and if other documents, such as the *Prospectus for the Seventies* of the president of the university of Hawaii, are not cited, it means that the documents not cited contain no information which materially changes our description of the condition or our finding.

We point out in the introduction to the report that our examination extended to January 1971 and, as pertinent, data were updated and findings and conclusions verified as of December 1, 1970. The report then is as current as may be expected, and the only allowance for changed conditions should be that period from December to the present.

The department of education has generally responded in a positive manner to the audit recommendations. It states that "DOE-ETV is well on its way in implementing the more significant recommendations contained in the Auditor's report." The department concludes that the report:

"... does highlight the basic weaknesses of the State ETV system. While explanations and apologies may be offered for the mistakes and problems of the past five-plus years, it is clear that ETV in Hawaii has reached a turning

point in which further employment of state resources must be based on major redirections in programming and ITV utilization.

"Reformations in planning and management of operations are indicated too. The Auditor's report should provide a solid basis for effecting such changes."

The department does raise several points which should be clarified:

(1) The department offers a number of indices which purport to show instructional television "program impact on Hawaii's schools." The indices identify such aspects as the number of broadcast hours, the number of schools and teachers using instructional television, the number of TV sets, etc. These indices merely measure resource input or program size. They do not show what results have been achieved in terms of educational objectives.

(2) The department believes that the audit assesses ETV by using the concepts of Planning-Programming-Budgeting (PPB), and that "it seems unfair to indict any enterprise, public or private, through the *ex post facto* application of criteria and principles of administration." While PPB as a *system* may be relatively new, we do not believe that it is unreasonable to expect agencies to know what end-results they are trying to achieve and to have some criteria to measure whether or not they are succeeding. Neither do we believe it to be unreasonable that before undertaking anything new, agencies should look at all of the alternatives and assess their costs and benefits. These are basic principles of management which should be continuously applied, *with or without* PPB as a *system*.

(3) The department believes that State "ETV outputs are at least as good, and in some cases better than national averages," and that the results of a national study of ETV "would depict the Hawaiian situation as somewhat typical of the national scene." In the first place, the national averages do not measure the end-results which ETV is trying to accomplish, and in the second place, all program managers should seek improvements regardless of the national scene.

The university of Hawaii, in contrast to the department of education, skirts almost every basic issue raised by the report. In its response, the university ignores those recommendations which are specifically applicable to its management and operations.

The emphasis is on finding fault with the audit report, including the more peripheral aspects of the report, rather than on self-appraisal in terms of the audit findings and recommendations. In a reversal of who did the audit and what was audited, it has submitted a "University of Hawaii *Evaluation*" of the audit report (our emphasis).

If the university had addressed itself to the specific audit recommendations and if it had offered alternatives to the recommendations, there would now be some basis for evaluating alternative courses of action to improve those aspects of the ETV system which are the responsibility of the university. It has chosen not to do so. We reluctantly conclude that the university does not share the views of the department of education that improvements in ETV planning and management can be and should be sought along the lines suggested by the audit report. We conclude also that if improvements are to be forthcoming, direction will have to be furnished by an authority higher than the president of the university.

For having failed to grasp the basic purpose of an audit, it is not surprising that the university should proceed to characterize the audit report as "flawed sufficiently to raise a variety of questions," "grossly misleading," "difficult to know how much confidence to place in its validity," or to have the president of the university conclude:

"In the light of the many problems raised, and errors and omissions in the draft report you have sent us, we would earnestly recommend that the report not be published until there has been a full opportunity to review its deficiencies with you."

We have never before been asked to defer publication of an audit report, and we have never deferred one. However, we would not hesitate to do so if indeed, there are errors in a report. In this case, our rendering of the report means that it meets auditing and reporting standards and that we reject the president's characterization of the report.

The university also charges that a defect in the report is the "curious way in which it uses statistical and other data to support its conclusions." It juxtaposes two statements from the audit report: (1) a statement relating to the educational role of ETV, "There is very little today to indicate that ETV is indeed contributing to the improvement and growth of education in Hawaii"; with (2) a statement relating to in-service training, "It seems reasonable to conclude that ETV has not been an effective means of extending formal teacher training."

Having made this juxtaposition, the university proceeds to state: "We fail to understand the logic whereby, on the one hand, there is insufficient data available to conclude that ETV has been effective, yet, on the other hand, there is ample evidence upon which to conclude that ETV has not been effective." This should not be particularly mind-boggling if the university were to view our statements in their proper context: (1) there is little data to conclude that ETV has been effective in *contributing to the improvement and growth of education*; (2) there is data to reasonably conclude that ETV has not been effective in *extending formal teacher training* (our emphasis).

The university grants us "the benefit of doubt as to why this serious defect exists in the ETV audit." The doubt should not exist, and the benefit is unnecessary.

The educational television council, through its chairman, has also requested that the audit report not be made public at this time. The chairman, however, evidently recognizes that the audit report does contain recommendations which should be implemented. He states: "To motivate the Council to implement the recommendations in the report, the legislature might want another report in two years from now."

GENERAL MANAGEMENT: THE WEAKNESS IN ETV ORGANIZATION

The audit finds that effective coordination and direction of the ETV system are lacking. Overall responsibility for ETV is obscure and the responsibility of the various agencies is not clearly defined.

The ETV council was established by executive order to formulate the budget, make policies and standards for the operation of the system, and approve or disapprove expenditure proposals. As presently constituted, the ETV council has not and, in our opinion, cannot accomplish the tasks for which it is responsible. Legally, the council is only advisory; its review of the separate ETV budgets of the department of education and university of Hawaii is perfunctory and has little impact; it performs very little management control functions; it exerts no control over proposed expenditures; it has no staff responsible to it; and perhaps the most important point of all, since the council is composed of only three members, two of whom are the university president and the superintendent of education, the council has become a forum for the advancement of the institutions' narrow and divergent interests, with the public member functioning as a mediator between the two contending forces.

The audit recommendation is that the legislature create a public broadcasting authority in which responsibility for the statewide ETV system and for public television would be centralized. We believe that this alternative will result in a clear delineation of authority over the statewide system and that it will pinpoint responsibility and make public television a viable State program. The authority would be headed by a single executive and an advisory board would be established to advise the director on the development of the State system and on public television program policies and standards. The board would be expanded from the present three members on the ETV council to a more broadly based membership.

The department of education concurs with the recommendation. DOE states that in one of its own reports, it had strongly noted "the apparent ineffectiveness of the ETV council in giving direction and coordination to the state ETV System"

The university of Hawaii has not addressed itself directly to the recommendation. However, it expresses the notion that "an even stronger service to the State would result from a clear recognition that the University should serve, in good faith, as the hub from which all of the State's ETV activities are coordinated and direction given." It apparently wants to be the central agency for coordinating and directing all ETV operations. It states, "under this concept the University would serve as an impartial agent for the State to coordinate all ETV requests and provide a service which balances, to the greatest extent possible, the multiple objectives which educational television is expected to achieve for the State."

We do not know where this would leave the department of education. In any event, we do not believe that the university can be an "impartial agent." It is a principal user of the broadcast facilities and understandably, it cannot help but be concerned with promoting its own interests.

The ETV Council apparently wants to see the ETV system headed by a council established by law rather than by a single executive. The chairman has reported that "the council can see only disadvantages in establishing a separate public television authority," and that "advantages can be attained by an active and expanded ETV Council." The chairman apparently believes that a legally established, strengthened and expanded ETV council would be capable of directing the ETV system. Although bodies such as councils are less desirable forms of organization for administering a system or program, the chairman's alternative should be examined along with our recommendation for a public broadcast authority headed by a single executive.

GENERAL MANAGEMENT: DOUBTFUL VALIDITY OF ETV POLICIES

Our examination of ETV's program and operational policy which was adopted by the ETV council on April 6, 1966, and the rate schedule policy which sets forth fees to be charged to private agencies for the use of ETV facilities and services, points up deficiencies which cast doubt on their validity.

The audit finds that, while it was the council's intent that both "policies" be referred to the board of regents of the university of Hawaii for its review and approval, neither policy has been formally adopted by the board. We find also that certain broadcast policies which appear to be the subject of the Administrative Procedures Act of 1961 have been in force without undergoing the adoption process outlined in the act. Such policies include those under which conditions are imposed prohibiting the use of the ETV broadcast service by certain private individuals and organization and, in that way, affects the rights of or procedures available to the public.

The Administrative Procedures Act prescribes common administrative procedures which all State and county agencies are required to follow when making rules and in adjudicating contested cases. We believe that there are several ETV policy statements which fall within the legal definition of a "rule" and are therefore subject to promulgation in the manner prescribed by the Administrative Procedures Act.

The audit recommendation is that the university review the policies adopted by the ETV council and (1) determine those policies which fit the definition of "Rule" under the Administrative Procedures Act and, as appropriate, institute proceedings to formalize their adoption pursuant to the act; and (2) determine those policies which are limited to the internal administration of the HETV network and effect their adoption by the board of regents.

These recommendations stem from our conclusion that: "*The program and operational policies under which ETV now functions are of doubtful validity.*"

The university does not discuss the recommendations. Instead, it uses our conclusion to charge that: "Confidence in the report is further eroded when one considers the extent to which the report is given to overstatement and unqualified generalizations." It cites our conclusion as an example, and dismisses it with the remark: "What a sweeping and inclusive statement."

We do not believe that the university would knowingly treat lightly and dismiss an issue pertaining to compliance with policy and law. On the possibility that its precipitous dismissal was made in ignorance of the detailed findings and explanations which appear in pages 18-20 of our report, we urge that the university re-examine our conclusion and recommendations in the context of the findings and explanations presented.

HETV TRANSMISSION FACILITIES

The audit finds that, while adequate ETV transmission signals are available to most Oahu public schools, signals are poor or not available to a significant number of neighbor island schools. The audit also finds that there is a need for a complete review of the objectives and plans for ETV. We note that there is an apparent change in direction and emphasis for which a sizeable commitment of funds will be required.

The university's current plan, prepared by the consultant firm of Jansky and Bailey, calls for a completely different combination and configuration of transmission equipment from previous plans. It foresees the State system as eventually embracing all public broadcasting, including FM radio as well as television. It provides for the installation of transmitters, translators, instructional television fixed service stations, wideband, multi-purpose microwave transmission system, and central and regional production facilities.

The total investment cost under the new plan is estimated at \$8.0 million and the annual operating cost is estimated at \$900,000. The university proposes to install the entire system in the next six years.

We have noted that the large commitment of funds which the legislature is being requested to make represents fundamental changes. However, there is no official statement anywhere which clearly and specifically defines what the State is *now* trying to achieve by ETV. There is no evidence of what alternatives were considered in determining the new objectives, directions, scope and system of HETV and no demonstration of any cost-effectiveness analysis.

The audit recommendation is that implementation of the multi-million dollar plan be suspended until the public broadcast authority is created, or pending the creation of the authority, that the university in cooperation with the ETV council review the

missions of ETV, establish specific objectives, direction and scope of the State TV system and determine and design the hardware system to be installed. We believe also that before making any investment decision, and particularly an investment of the magnitude of the university's plan, various, feasible alternatives should be considered and that the system design should clearly describe operational concepts and objectives, define the equipment and personnel needs, and subject the cost estimates to sensitivity tests.

The university labels our presentation of this issue as "spurious and absolutely without foundation." It insists that "it is imperative, for the success of the entire system, that the Jansky and Bailey study be implemented at the very earliest moment."

We note that the department of education apparently believes otherwise. In his communication transmitting DOE's comments on the audit report, the chairman of the board of education states that:

"... the Board of Education's primary concern with respect to ETV is the completion of the system so that every child in the state will have equal access to the advantages of instructional television. The Board feels that the accomplishment of this objective should take precedence over all other aspects in the further development of the state's ETV system, e.g. the development of color production and transmission capabilities."

In any event, we believe that it is reasonable and prudent to further examine the university plan and assess its implications before making an investment decision from which there may be no turning back.

HETV RECEPTION SYSTEM

The audit finds that there are intra-district distribution disparities in that some schools are less equipped and less capable of utilizing ETV information than their counterparts; that the department of education is without a firm, effective and consistent standard as to how to allocate its equipment for optimum use and benefit to educational programs; that some schools are unprepared and unable to integrate ETV broadcasts into their programs; and replacement policies are needed to eliminate duplicate refunding practices for stolen ETV equipment and to effect normal replacement requirements due to obsolescence.

The department of education generally concurs with the recommendations to correct the deficiencies. However, it believes that our report tends to exaggerate the non-utilization of ETV reception equipment. In our report, we estimated that \$22,000 worth of TV receivers were not regularly used. The department feels that the assignment of a dollar value to the sets makes it appear as if there has been a "a huge waste of public funds."

In our opinion, a condition of equipment resources, of whatever amount, which are left idle for extended periods at one source when the same type of equipment is in demand elsewhere constitutes inefficiency in the allocation and utilization of resources. It is particularly distressing that over 30% of the TV receivers in intermediate schools were idle when the same equipment could have been reassigned to elementary schools. It should be recognized that equipment purchased out of State funds are not the sole property of the individual schools to which the equipment is initially assigned. Where necessary, the department can and should reallocate resources to secure maximum utilization.

Curiously, on a matter which concerns the department of education, the university has chosen to express its concurrence, and in doing so completely distorts our comments and recommendation.

The university states: "We concur with the Auditor's report to the effect that DOE should immediately adopt a policy requiring that, as TV sets either are replaced because of obsolescence, or are added to increase present inventory, color sets be purchased. In view of the fact that HETV will be color capable within the next few months, it would appear unwise to add black and white sets with an effective useful life of from five to ten years."

Our only reference to color TV sets is by way of a warning. We state: "Even now, there is considerable interest in replacing the present monochromatic (black and white) TV receivers with color TV receivers which, if allowed without administrative control, could drastically increase the cost of maintenance above present levels."

The audit recommendation on equipment replacement is that: "... DOE develop definitive standards to guide administrations at all levels in planning for and effecting incremental equipment replacements due to mechanical deterioration or obsolescence."

These standards should consider, among other factors, the need for the equipment, its mechanical serviceability, repair costs, obsolescence, and alternative media. In this connection, as may be necessary, we recommend further that the DOE develop inspectional systems to test and verify the application of standards developed for this purpose."

Only through verbal gymnastics can the university interpret our recommendations and our warning as constituting a recommendation to purchase color TV sets.

CLOSED CIRCUIT TELEVISION

The audit finds that the department of education's effort to implement closed circuit television (CCTV) in the public schools has generally proceeded without plans and preparation to assure its effective and economical development. The general inadequacy in planning has resulted in (1) a substantial portion of the schools failing to utilize their CCTV capabilities to the fullest extent and (2) operational difficulties such as the unpreparedness of the schools to utilize CCTV and the inefficient, disparate and costly practice of amassing CCTV equipment at the school level. These effects are most pronounced at the high school level.

The department of education agrees with the audit recommendations to correct the deficiencies. The department indicates that all of the recommendations will be incorporated in the comprehensive long range plans currently being developed by DOE.

However, the department questions our reference to dollar values of idle closed circuit television equipment. In our report, we point out that recording and playback equipment worth over \$55,000 was under-utilized in the high schools. The department states that this represents only about 10% of the State's investment in CCTV equipment and that "considering how little time was provided for schools to prepare for the use of their CCTV systems, these dollar values appear to fall well within acceptable limits." We disagree. We do not believe that there are any acceptable levels under which there can be waste of resources.

IN-SCHOOL INSTRUCTION

ETV was introduced in the public schools on the strength of its potential as an educational tool to advance the quality of education and to promote fair and equal treatment of all public school students.

The audit finds that the department of education does not systematically plan for instructional television (ITV). It has no operational objectives for ITV as a whole, nor for each of the program series which is presented. It has no standards by which to measure effectiveness of ITV programs and to guide selection and development of specific ITV programs. There are indicators that instructional television is not contributing significantly to the attainment of educational objectives. Audience penetration of ITV instructions is low when considered in terms of the reception capabilities of the schools.

The audit recommendations call for DOE to develop plans for instructional television, including specific statements of objectives, effectiveness criteria and standards to determine ITV program priorities. DOE should also formulate the design of the system by which TV instructional programs may be transmitted to students, and clearly describe the role and scheduling standards of open circuit broadcast and closed circuit television. The department should also begin a system of evaluation to determine the effectiveness and shortcomings of instructional television as a whole and the effectiveness and shortcomings of the program series it undertakes.

The department of education states that the "recommendations offered . . . are well-taken." It indicates that "significant steps have already been taken to integrate ITV programming with the DOE's total effort to improve instruction and to develop curricula."

IN-SERVICE TEACHER IMPROVEMENT

In-service teacher training through ETV is provided so that teachers may increase or expand their subject matter knowledge and upgrade their teaching competency in the methods or skills of instruction. Program offerings are generally of two types—credit and non-credit.

The audit finds that (1) ETV has not been an effective means of extending formal teacher training, (2) ETV as presently administered by the DOE does not fully enhance the concept of equal treatment and accessibility in its practice of approving courses for credit, and (3) the substantial use made of available broadcast time for non-credit ETV programs has not been, but should be, subject to operational evaluation on a continuing basis.

We note that under present practices, teachers in one district can be credited for participating in a particular course while teachers in other districts may not. This occurs with ETV in-service training because in most instances school districts, rather than State policy, decide whether pay credits shall be granted, regardless of the statewide nature of broadcast coverage. Because of this condition, we believe that encouragement and incentive for teacher self-improvement are not equally available to all.

The audit recommendation is that DOE establish operating policies and standards which treat all teachers equally with respect to the granting or non-granting of credits for ETV broadcast courses and which insure the selection of courses for ETV broadcast that are representative of departmentwide in-service training needs. Because a substantial amount of broadcast time has been allocated to provide non-credit courses through ETV and no evaluation has been made, DOE should also develop a system for monitoring ETV usage of non-credit programs to validate the need for and audience usage of such broadcast services.

The department of education agrees with the recommendation for evaluation of non-credit courses. However, it believes that decisions relative to offering particular courses, to offer them for credit or non-credit, and to offer them for credit statewide or at district option should be left to the respective sponsoring DOE groups.

We disagree. It is unreasonable to grant some teachers, and deny others, the opportunity of earning credit for the same course offering. We find no valid reason to support this practice and urge the department to re-examine this issue.

FORMAL ADULT EDUCATION

Adult education, through ETV, is intended to afford opportunities and otherwise encourage adults to continue their educational pursuits outside institutional settings. DOE's formal adult educational function is particularly intended for those persons who, in youth, left school or had their education curtailed and were unable to obtain a high school education.

The audit finds that only minimal use has been made of open circuit ETV to advance formal adult education. It also finds that the potential of ETV as a supplement or alternative to regular adult education has not been fully explored.

The department of education states that "it is true that a comprehensive study has not been made of the potentials for advancing adult education via television. What has been done consists of previewing and evaluating available programs." It states also that "further trials with ETV adult education courses appear to be warranted."

We urge the department to again review our recommendations that it re-examine the program planning process and program plans for formal adult education and that it assess the costs and effectiveness of alternatives, including ETV, as a means of providing more widespread participation in its formal education programs.

PUBLIC TELEVISION

Public television is that segment of HETV educational programs which is intended for general public viewing and which is not devised for formal instruction or administrative communication by public school systems. It basically consists of informational, instructional and cultural programs, in the arts, humanities, public affairs and other fields of educational interest not otherwise made available by commercial television.

The audit finds that HETV lacks definitive operational systems, processes and standards by which it or any other agency can make an assessment of either the adequacy or effectiveness of its public television services. There is virtually no system for conducting program evaluation. Furthermore, there is significant fragmentation of responsibilities for program selection and development which tends to detract from the effective conduct of this program.

The audit recommendations call for the ETV council, the university of Hawaii, and other public television participants to provide for systematic planning for public television, including designing means by which public needs and interests may be determined. These organizations should also develop a system for the continuing assessment of public television programs. Because no single agency can be said to have overall concern and responsibility for public television, the ETV council also should clarify and expressly define the responsibility of the UH division of ETV broadcasting and other participating agencies to assure full coverage of all facets of this operation.

The university does not address itself to the recommendations. However, it mentions our finding of the lack of program evaluation for public television and characterizes one of the statements as "absolutely inaccurate." We are aware that the university program plan does contain a passage that the Hawaii ETV network, "with whatever speed is possible," will proceed to develop an evaluation and applied research capability and "to seek to discover means by which evaluation and research functions may, at least, be initiated." This substantiates that the university does not have a program evaluation capability, and its program "plan" for evaluation is not really a plan at all but a vague expression of intention.

We note that an ad hoc committee, composed of university of Hawaii and department of education personnel, prepared a 1970 report, *Hawaii Educational Television: Status and Future*. The report states: "Public television is not evaluated in any systematic way. Audience size and viewer response data are not collected. The only kind of feedback is in the form of telephone calls and letters initiated by viewers. No attempt to tabulate and analyze such feedback is made."

The report also states: "It is impossible to see how valid programming decisions can be made without some assessment of audience size and characteristics, and viewer reactions to particular programs. Programming decisions are determined, therefore, solely by requests initiated by interest groups."

In view of what was previously reported by the UH-DOE team, our audit finding on this matter should not be too startling to the university.

FINANCIAL MANAGEMENT

The audit findings are that the university is maintaining a special fund for ETV, contrary to law and that there are certain administrative deficiencies at both the university and department of education which require correction to insure accountability and adherence to law.

The department of education indicates that corrective action has been taken or will be taken with respect to financial management deficiencies.

The university attempts to justify its practice with respect to the use of a special fund, and it does not discuss the other administrative deficiencies.

We remind the university that its establishment of a special fund for ETV is contrary to law.

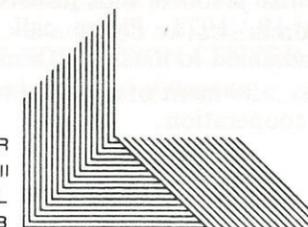
CONCLUSION

Having reviewed the agency responses, we reaffirm our major audit findings that: (1) The ETV system is without clear lines of responsibility and authority; (2) There is a lack of validly established policies to govern the management and operations of the ETV system; and (3) Deficiencies in the development, acquisition and use of ETV facilities and equipment resulted in inefficient and ineffective use of public funds. We believe that before any additional outlays are made for ETV, particularly for the massive capital investments which the university proposes, the deficiencies which exist need to be corrected and the entire system brought under firm policy and management controls.

We recommend legislative review of the organization of the State ETV system to bring about the kinds of policy direction and management controls required.

ATTACHMENT NO. 1

THE OFFICE OF THE AUDITOR
STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813



CLINTON T. TANIMURA
AUDITOR
YUKIO NAITO
DEPUTY AUDITOR

March 15, 1971

COPY

Father Robert Mackey, Chairman
Educational Television Council
Chaminade College of Honolulu
3140 Waialae Avenue
Honolulu, Hawaii 96816

Dear Father Mackey:

Enclosed is a copy of our preliminary report on the *Audit of the Hawaii Educational Television System*. The term "preliminary" indicates that the report has not been released for general distribution. However, copies of this report have been forwarded to the Governor and the presiding officers of both houses of the Sixth State Legislature. In addition, we have forwarded copies of the report to the departments affected.

The report contains a number of recommendations. I would appreciate receiving your written comments on them, including information as to the specific actions that have been taken or will be taken with respect to the recommendations. Please have your written comments submitted to us by March 24, 1971. Your comments will be incorporated into the report and the report will be finalized and released shortly thereafter.

If you wish to discuss the report with us, we will be pleased to meet with you, at our office, on or before March 19, 1971. Please call our office to fix an appointment. A "no call" will be assumed to mean that a meeting is not required.

We appreciate your assistance and cooperation.

Sincerely,

Clinton T. Tanimura
Legislative Auditor

cc: Dr. Shiro Amioka
Dr. Harlan Cleveland

Note: Similar letters were sent to the Board of Regents of the University of Hawaii and to the Board of Education.

ATTACHMENT NO. 2

ST. LOUIS-CHAMINADE EDUCATION CENTER
St. Louis High School . Chaminade College of Honolulu

3140 Waiialae Avenue
Honolulu, Hawaii 96816
Telephones 732-1471 . 734-1904

March 26, 1971

COPY

Mr. Clinton Tanimura
Auditor
State of Hawaii
State Capitol
Honolulu, Hawaii 96813

Dear Mr. Tanimura:

After receiving the preliminary draft of your Audit of the Hawaii Educational Television System on March 15, 1971, I arranged to meet with you, your deputy and two members of your staff on Wednesday, March 17. At that time I asked for an extension of time for the ETV Council to respond to the recommendations in your report. With this extension granted, I asked Dr. Lark Daniel and Dr. Shinkichi Shimabukuro to study the audit report and present their findings to the ETV Council.

They presented their report to the ETV Council on Wednesday, March 24, at a regular meeting of the Council. The Council requested the Department of Education and the University of Hawaii to present their own itemized criticism of your report as attachments to this letter.

The Council devoted the meeting to certain general reflections and to the specific recommendation for the creation of a public broadcasting authority. The following general remarks were made:

- (1) The report is not a true audit of the present status of the Hawaii Educational Television System. The footnotes alone indicate very little information after 1969.
- (2) The report makes no mention of the minutes of the important meeting of the ETV Council on December 10, 1970, at which the Council formulated certain policies implementing some of the audit recommendations.

(3) The preliminary report was distributed to the Governor, the presiding officers of both houses of the Sixth State Legislature and to the departments affected. The Council wonders whether these persons were asked to react to the recommendations as the Council was. Would it not have been better to send out only the final draft to those listed above?

(4) I was not aware that an audit was being made. No one queried me about the working of the Council although I was the first chairman and I was appointed again by the Governor on September 29, 1970.

The Council gave more attention to the recommendation on the creation of a public broadcasting authority. The Council recommends that the ETV Council itself be established by law rather than by executive order. The Council can see only disadvantages in establishing a separate public television authority. The anticipated advantages can be attained by an active and expanded ETV Council. The action of the Council on December 16, 1970, is an indication of what the Council can accomplish. To motivate the Council to implement the recommendations in the report, the legislature might want another audit report in two years from now.

Considering the attached reports and the contents of this letter, the Council respectfully requests that the Audit Report of the Hawaii Educational Television System be not made public at this time. A series of constructive meetings with Dr. Daniel, Dr. Shimabukuro and the Council would result in a better report, more acceptable to all concerned.

Sincerely,

/s/ ROBERT R. MACKEY S.M.
Very Rev. Robert R. Mackey, S.M.
Chairman
State Council on Educational Television

RRM/bly

cc: Dr. Harlan Cleveland
Dr. Shiro Amioka
Dr. Lark Daniel
Dr. Shimabukuro
Gov. John A. Burns

ENCLOSURE A

UNIVERSITY OF HAWAII . HONOLULU, HAWAII 96822

The President

March 24, 1971

Mr. Clinton T. Tanimura
Legislative Auditor
State of Hawaii
State Capitol
Honolulu, Hawaii 96813

Dear Mr. Tanimura:

Chairman Charles S. Ota of the Board of Regents has asked me to respond to your letter of March 15th, asking the University to provide by March 24th written comments on a draft report, entitled "Audit of the Hawaii Educational Television System."

The Chairman of the State Educational Television Council, Father Robert R. Mackey, has asked that the University and the Department of Education provide detailed comments which can be transmitted to you under cover of a general reaction to the recommendations in the draft "audit". We have provided this material to Father Mackey today.

In the light of the many problems raised, and errors and omissions in the draft report you have sent us, we would earnestly recommend that the report not be published until there has been a full opportunity to review its deficiencies with you.

Warmest regards.

Sincerely,

/s/ Harlan Cleveland
Harlan Cleveland

Father Mackey
cc: Superintendent Shiro Amioka

REVISED

UNIVERSITY OF HAWAII EVALUATION
of
"Audit of the Hawaii Educational Television System"
Office of the Legislative Auditor
March, 1971 *

INTRODUCTION

The University has been asked by the Legislative Auditor, Clinton T. Tanimura, for written comments on the report, "Audit of the Hawaii Educational Television System." Inasmuch as we believe the report to be deficient in a number of important respects, we respectfully submit the comments which follow.

GENERAL DEFECTS IN THE AUDITOR'S ETV REPORT

After fairly thorough study and discussion, we find ourselves puzzled concerning several characteristics of the report, per se. Certain features of the report make it difficult to know how much confidence to place in its validity. It is certainly evident that the writers of the report have invested a great deal of time and effort during the intervening years since it was begun back in 1968. It appears that the authors have made a conscientious effort to school themselves in the complicated and specialized knowledge which is required to speak with authority in the field of instructional and public television. Yet, granting this, the University believes that the report is flawed sufficiently to raise a variety of questions relative to its general applicability to ETV in Hawaii at the present time. To be sure, there are a number of points that the report makes which should be weighed and considered. However, each evaluative assertion, and each of the recommendations which it proposes, must be judged within the context of the general defects which are characteristic of the report.

Specifically, we find the general credence which may be placed in the report weakened by the following factors:

**The response refers to the pagination contained in the preliminary report which was distributed to agencies concerned. Page numbering in the final report differs from that of the preliminary report. For the convenience of the readers, all page references contained in the agency's response have been altered to conform to the numbering in the final report.*

1. Pervading the entire report, is a confusion regarding the relationship between Educational Television as it exists today and ETV as it may have existed at the time of the data upon which the evaluations or recommendations are based. Throughout the report, assertions are made which read as though they represent the reality of today when, in fact, they are derived from (1) data supplied by UH or DOE two, four, or even five years ago; (2) data or observations made by the Legislative Auditor's staff one and one-half or more years ago, or (3) retrospective accounts of UH/ETV or DOE/ITV operations which are, at best, recollective. An examination of the footnotes in support of the narrative reveals that the report often is based on data and documentation which may or may not be applicable presently.

We offer but two examples of how extremely misleading the "Audit of the Hawaii Educational Television System" report can be as a result of assertions that are made on the basis of data which are no longer valid.

First, on page [15], the report states, "The ETV division . . . views itself principally as a 'service' agency to provide production and transmission services to the users of the ETV transmission facilities." This assertion is based upon a Memorandum dated February 17, 1966. The fact of the case is shown in the Division of Educational Broadcasting's "Program Comprehensive Plan," dated December, 1970 (copies of which were supplied the Legislative Auditor's staff) in which the statement is made (page 3):

"However, it should also be realized that the Network has a responsibility, as well, to initiate television and film programming. It must, as a normal part of its operation, identify state and community needs—and within the usual constraints of policy from above, and good judgment on the part of management, undertake to meet a responsibility to provide a total non-commercial broadcasting service to the people of Hawaii. This fact is particularly obvious with regard to the development of an effective public broadcasting service."

Second, and an even more alarming example of the audit report's inaccuracy, occurs on page [78]. While discussing the matter of "program evaluation," the report asserts, "We note also the lack of any reference to PTV program evaluation in the future plans of HETV." This statement is absolutely inaccurate and would give an entirely misleading impression of HETV's present development to anyone reading the report. In fact, ETV's "Program Comprehensive Plan," referred to above, states (page 6):

"Evaluation. With whatever speed is possible, the Hawaii ETV Network will proceed to develop an 'evaluation' and 'applied research' capability. Unfortunately, there is no position

count or other support in either the FY 1969–70 or the FY 1970–71 budgets for this important activity. Nevertheless, HETV will seek to discover means by which evaluation and research functions may, at least, be initiated. It does not require extended discussion to justify the point that programming and production decisions should be based, at least in part, upon prior audience research; or that, having produced a program, an evaluation of its effectiveness should be made.”

2. A second defect in the “Audit of the Hawaii Educational Television System” report is the curious way in which it uses statistical and other data to support its conclusions. Throughout, the report continually asserts that there exist no data which demonstrate that ETV has been successful in either formal education for the classroom, or for informal education at home. A typical statement is the one on page [51], to the effect that, “There is very little today to indicate that ETV is indeed contributing to the improvement and growth of education in Hawaii.” Or, on page [61], the statement, “In brief, it seems reasonable to conclude that ETV has not been an effective means of extending formal teacher training.”

We fail to understand the logic whereby, on the one hand, there is insufficient data available to conclude that ETV has been effective, yet, on the other hand, there is ample evidence upon which to conclude that ETV has not been effective. We wonder at this inconsistency. A conclusion as to whether ETV has or has not achieved a measure of success would be derived from the same set of data. It makes no sense to assert repeatedly, as the report does, that UH and DOE can provide no data regarding the effectiveness of ETV while at the same time asserting that there is sufficient data available to the auditors for them to conclude that ETV has been ineffective. There either is data available to arrive at the “effective–ineffective” conclusion or there is not. Granting the benefit of the doubt as to why this serious defect exists in the ETV audit, it remains that there is further reason to wonder how much confidence one should place in the report’s conclusions and recommendations.

3. Confidence in the report is further eroded when one considers the extent to which the report is given to overstatement and unqualified generalizations. A few examples should suffice to make the point. On page [19], there is the assertion that, “The program and operational policies under which ETV now functions are of doubtful validity.” What a sweeping and inclusive statement. On page [51] the report says, “There is a general lack of systematic planning of educational programs at both the DOE and the UH.” With no attempt to be caustic, one can only say that such a statement is untenable. The writers of the report have completely ignored a number of detailed planning documents prepared by both UH/ETV and DOE/ITV during 1970–71. And it should be pointed out that these papers were supplied to the staff of the Legislative Auditor’s

office. On page [76], in a discussion of ETV’s program objectives in the area of “public television” (PTV), it is asserted that “. . . they fail to draw any relationship to the local ETV constituency and make no reference to Hawaii’s problems and aspirations in elevating public education . . .” This gross generalization simply does not take into account the fact of HETV’s “Program Comprehensive Plan,” 1971–72 through 1976–77, which treats this topic in detail.

It is usual, in a document which intends to be “factual,” for it to offer its conclusions with modest assurance, qualifying its “findings” wherever appropriate. The credibility of the ETV audit is diminished, in the University’s judgement, by the excesses of its assertions and conclusions.

4. A fourth curious feature of the report is the fact that it is entirely negative throughout. Quite literally, one would search in vain through the entire 101 pages of the report for the relief of one sentence, or even one phrase within a sentence, which reflects favorably upon the activities of either the University or DOE. For a report to be in balance, it must report success and strengths in concert with shortcomings. Whatever the deficiencies of ETV at present, it most certainly is also characterized by success and achievement. No one could responsibly hold the view that the UH/ETV and the DOE/ITV operations are without merit and have made no contribution to the education of Hawaii’s children and adults. Yet this is exactly the position taken by the Auditor’s report. One must ask again how much confidence can be placed in a report which shows no balance and achieves no perspective.

In view of the serious flaws in the Auditor’s report, which were discussed above, it is the considered judgment of the University that the conclusions of the authors must be entertained with considerable skepticism. If this is true, and it surely must be, then the recommendations which the report offers must be accorded the same skepticism since they are based upon the conclusions. Nevertheless, as the points have been raised, it would appear useful to comment upon some of the conclusions and recommendations contained in the report.

COMMENT UPON SELECTED CONCLUSIONS AND RECOMMENDATIONS

1. Throughout the Auditor’s report, reference is made to the fact that ETV, as it presently exists, is different in concept and operation from educational television as conceived and intended in Hawaii six or more years ago. For example, on page [9], it is pointed out that, “In both general management and hardware management, the basic plan proposed in 1964 and endorsed by legislative resolution in 1965 has experienced significant changes.” Each time the point is made,

it is stated or implied that the changes have been made without the concurrence of proper authorities; and more than that, that the changes somehow subvert the best interests of the State.

First of all it should be declared that, of course, ETV has developed and enlarged physically and conceptually since its inception! It has evolved in response to emerging needs in the school. It has expanded its scope to share its capacity for service also with the larger community. As nationally the potential of educational television has been realized through experimentation and natural development, the local growth of ETV has reflected an attempt to provide for Hawaii an equal share of the benefit which is inherent in non-commercial broadcasting. To require that ETV remain frozen at the level of its inception would be comparable to restricting the roads and highways of Hawaii to the transporting of children to school while denying their use for commerce and other purposes.

Equally to the point is the fact that the growth and change in ETV over the years has resulted from thoughtful planning and goal setting. A study of the very documents which the Auditor's report cites (such as the various Program Comprehensive Plans which were developed and revised over the years) reveals that whatever changes have occurred were the result of a very considerable amount of planning at many levels of responsibility from Staff to State ETV Council. As but examples, out of many documents which were generated within the last year, may be mentioned:

- a. State ETV Council Recommendation to Governor Burns, dated January 12, 1971.
- b. President Cleveland's statement re ETV.—"The University of Hawaii: Prospectus for the Seventies," January 9, 1970
- c. Sense of Direction paper—"Developing the Hawaii ETV Network as a Public Resource," dated February 15, 1970.
- d. Program Comprehensive Plan, 1970-71 through 1976-77 (Revised December, 1970).

As to approval or concurrence of proper authority for the changes which have been made, the following should be noted:

- a. First of all, ETV's annual budget request must be reviewed and acted upon by both the Governor's office and the Legislature. In the process ETV must submit comprehensive plans, statements of objective, and justification for what it has done in the year past and what it proposes to do in the year to come. In addition, ETV representatives must appear

in person at a number of both Senate and House of Representatives committee meetings to explain its past performance and describe and justify its objectives for the future. This means that each year, since its inception, ETV's operation has been reviewed by the Governor's office and the Legislature. Any budget approval would have to be based upon an advance explanation by ETV as to what it would do in the ensuing year. As a concrete example, for FY 1970-71, ETV stated that it would increase its effort in the area of "public television." It identified its plans and objectives in this regard and, after receiving Legislative approval of its budget, ETV has proceeded to implement those objectives. Thus, it may be seen that this "change" in ETV operation had been "approved" by proper authority.

- b. Second, the State ETV Advisory Council is charged by the Governor to assume "responsibility for policy decisions concerning program, production, and operational aspects of the statewide educational television in Hawaii." On the Council are the President of the University, the State Superintendent of Education and a distinguished citizen at large. Whatever changes ETV Staff has effected over the years would have to be consistent with Council policy and meet the Council's approval.

In the University's judgment, then, the growth and development of ETV, with the attendant changes in administration and operation which naturally accompany such changes, are the result of appropriate planning and have taken place with the concurrence of proper authority.

2. Another consistent theme of the Auditor's report constitutes variations on the idea that, "the ETV system is without clear lines of responsibility and authority (Chapter 4)." In the judgment of the University, while in the main this criticism lacks substance, we do feel that there are ways in which the Statewide administration of the ETV system could be improved.

First, however, it must be realized that the present arrangement for coordination and direction have certainly worked well enough for educational television to take roots, grow, and with each passing year serve the children and adults of the State ever better. Traditional hierarchical arrangements of authority have worked with reasonable precision. The Governor appoints a State ETV Council. The State ETV Council reflects representation for the University, the Department of Education, and the public at large. The University has a flow of control from the Board of Regents, to the President of the University, to the management of the ETV operation whose function it is to implement the policies and directions which have been set at higher levels.

At the operational level, we would propose, however, that perhaps an even more effective

arrangement could be established were coordination and direction (consistent with policy set from above) more closely associated with the actual production and transmission of educational television, viz., the Division of Educational Broadcasting. We must agree to some extent that at present there is a tendency for various entities to operate autonomously, viewing the ETV facilities as merely a service which they may use. We submit that an even stronger service to the State would result from a clear recognition by other entities that the University should serve, in good faith, as the hub from which all of the State's ETV activities are coordinated and direction given. Under this concept the University would serve as an impartial agent for the State to coordinate all ETV requests and provide a service which balances, to the greatest extent possible, the multiple objectives which educational television is expected to achieve for the State.

In sum, it should be recognized that the present coordination and direction given educational broadcasting in Hawaii by the State ETV Council offers the advantage of a participatory arrangement through which the needs and wishes of a number of interested parties coalesce and are given expression in policy decisions.

3. We would concur with the Auditor's report in their recognition of "the increasing emphasis throughout the United States toward the use of open-circuit broadcast facilities for public television rather than educational television programs." And here one must keep in mind the distinction between producing TV programs and transmitting them. Both the University and DOE envision that in the future HETV will devote increasingly less of its transmission time broadcasting in-school programs; that instruction may be delivered better by other means, with open-circuit transmission used to serve the viewer at home with public television. In any case, for efficiency and economy, the production of all kinds of educational and public television must be centralized in the facilities of HETV.

COMMENTS IN BRIEF

It is patently impossible, within the time which has been allowed for response, to comment in depth upon all of the conclusions related to UH which are contained in a 101-page document. Thus, the section which follows will deal only briefly with a number of points which are raised in the Auditor's report. Nevertheless, we wish it understood that our estimate of their importance is not reflected in the brevity of their treatment. It is simply a matter of time and manageability.

1. (Page [9]) There most certainly exists a validly established body of policies to govern the management and operations of the ETV system. The Auditor's report itself contains, as

Appendix C, the document, "Program and Operational Policy Hawaii Educational Network," which provides very specific policies for staff implementation. This statement has been refined and enlarged by subsequent actions of the State ETV Councils.

2. (Pages [10, 12, 15]) The State ETV Council provides the proper kind and degree of coordination and direction for UH/ETV and DOE/ITV staff. The Council was never intended to be, and in fact, never should act in an "operational" capacity. Sufficient direction is given so that competent staff management can carry out the will of the State.
3. (Page [12]) The State ETV Council has requested that the UH/ETV and DOE/ITV budgets be considered by the Legislature together. Of course, the Council can only recommend to the Governor that such action be taken. The actual decision to do so is not within their purview.
- *4. (Pages [14, 15]) The University agrees with the Auditor's report that the DOE should not hire staff whose background and function is primarily in the area of production, as they presently are doing. We concur that, "Under normal practice, producer-directors are allocated only to the Division of ETV Broadcasting to service all local productions." We further agree that, "If this trend continues, the division of functions between the UH and the DOE, as now provided, would become meaningless and it could lead to the formation of another staff of producers in the DOE and the duplication of functions and equipment."
5. (Pages [15, 79]) We reiterate that the University does not view "itself principally as a 'service' agency to provide production and transmission services to the users of the ETV transmission facilities." In accord with the aforementioned obligation of the UH to operate the ETV system in the best interests of the entire State, HETV must necessarily function as the agency for initiating a balanced and fair operation from among the many options which exist. It must serve as a hub to coordinate the many demands which are made on the system.

*The ETV Council will have to describe more accurately the responsibility of the University of Hawaii for the production of programs. It is one thing to be responsible for production in the studio itself; and it is another thing to be responsible for all the steps leading up to the work in the studio. The DOE does need personnel in the production area for these preliminary steps. (Note added by Robert R. Mackey. /s/ R.R.M.)

6. (Page [16]) The University, too, "recognizes the increasing emphasis throughout the United States toward the use of open-circuit broadcast facilities for public television rather than educational television programs. An examination of the present KHET-TV program schedule will confirm the increased activity in this area which has been undertaken during the last year.
7. (Page [21]) We must insist that "the apparent change in direction and emphasis" is certainly not a change, in the sense of HETV undertaking activities which have not been approved. It simply is a matter that the original objectives set for ETV far exceeded the capacity of ETV to respond. With each passing year, and an increase in capacity, new efforts are made to implement the original broad based concept of ETV objectives.
8. (Pages [30-31]) The University takes very strong exception to the recommendation that, "Implementation of the 1970 Jansky & Bailey plan be suspended . . ." This engineering plan was based on eight pages of detailed specifications which were developed, and supplied by HETV to Jansky & Bailey, after several months of review and study. Jansky & Bailey is one of the foremost broadcast engineering firms in the entire United States. The conclusions advanced in the Auditor's report are spurious and absolutely without foundation. It is imperative, for the success of the entire system, that the Jansky & Bailey study be implemented at the very earliest moment. None of the multiple objectives of ETV can be attained unless an adequate transmission system exists.
9. (Page [42]) We concur with the Auditor's report to the effect that DOE should immediately adopt a policy requiring that, as TV sets either are replaced because of obsolescence, or are added to increase present inventory, color sets be purchased. In view of the fact that HETV will be color capable within the next few months, it would appear unwise to add black and white sets with an effective useful life of from five to ten years.
10. (Page [52]) We must comment again upon a most serious defect in the report, namely, that it both contends that there are no data upon which to assess the effectiveness of ETV, and that there are data to show that it has not been successful. This logical inconsistency is illustrated in the sentence, "Despite this lack of formally stated objectives and measures of effectiveness, there are indicators to suggest that ETV is not contributing significantly to the attainment of educational objectives." This same statistical/technical error is made throughout the document and renders its conclusions questionable.

11. (Page [64]) The University concurs that, "... ETV broadcasting should be treated as a public resource and the uses made thereof should be subject to scrutiny. To this extent, this segment of in-service ETV should not be treated lightly. Unless the value of present uses can be shown, this broadcast time could be better allocated to other programs, such as formal adult education programs and other uses which cater to the public-at-large."
12. (Pages [75-78]) We would emphasize again that HETV urges that it be given budget support by the Legislature to establish an adequate "audience research and program evaluation" function at the staff level (see page [] above). This is an area of activity which requires a high level of knowledge and skill, and consumes huge numbers of manhours. It cannot be done "off the cuff" by present staff. As soon as support is forthcoming, precise research and evaluation procedures will be added to the HETV operation.

Related to the point under discussion, but going quite beyond it, is another serious defect which pervades the entire Auditor's report. Throughout, both UH and DOE are criticized for failing to carry out some particular function. The report blithely concludes that the agencies have been remiss and that they should proceed at once to remedy the defect. The unfortunate aspect of this kind of criticism is that it fails to take into account whether the agency is staffed and funded to carry out the activity. A perfect case in point is the matter of data collection and program evaluation. For HETV to establish a serious effort in evaluation would require the addition of two staff members plus secretarial and other kinds of support. Roughly, for this one activity, a budget increase of about \$65,000 would have to be granted HETV. In view of the fact that HETV has not had a single staff position increase approved in the last five years, one wonders how seriously the Auditor's report really takes its own criticism. We suggest that, along with recommendations to institute additional staff activities, the Auditor's report should recommend that increased support be granted by the Legislature and the State government.
13. (Page [85]) HETV receives no revenues by which to effect a profit, from any of the activities in which it engages. As a State agency, it attempts to extend its reach to help other State entities, if it can do so without depleting funds which have been approved for other purposes. This means that upon occasion it is necessary to expend funds in order to render the service. This is done with the understanding that HETV will be recompensed for its unbudgeted expenses. This activity on the part of HETV results in additional benefits to the State without diverting funds from their original purpose. To render this service, it is mandatory that there be a mechanism whereby HETV can recoup its expenses.

The University concludes its evaluation of the document, "Audit of the Hawaii Television System, March, 1971" with the general conclusion that the report is grossly misleading relative to the present state of educational television in Hawaii. The completely negative nature of the report does not reflect at all accurately the significant contributions which educational television currently makes to the child and the adult populations of Hawaii. The University of Hawaii expresses its serious reservations as to the general validity of the report while reaffirming its belief that the record of HETV justifies continued and increasing support.

ENCLOSURE B

STATE OF HAWAII
BOARD OF EDUCATION
P. O. Box 2360
Honolulu, Hawaii 96804

March 25, 1971

Mr. Clinton T. Tanimura
Legislative Auditor
State of Hawaii
Honolulu, Hawaii

Dear Mr. Tanimura:

Enclosed is the Board of Education's response to your Audit of the Hawaii Educational Television System.

I would like to state additionally that the Board of Education's primary concern with respect to ETV is the completion of the system so that every child in the state will have equal access to the advantages of instructional television. The Board feels that the accomplishment of this objective should take precedence over all other aspects in the further development of the state's ETV system, e.g. the development of color production and transmission capabilities.

Thank you for this opportunity to review and respond to your audit.

Sincerely,

/s/RICHARD E. ANDO
Richard E. Ando, M.D.
Chairman

Enclosure
cc: Dr. Shiro Amioka

DRAFT – FOR DISCUSSION ONLY

DOE RESPONSE TO LEGISLATIVE AUDIT OF THE HAWAII EDUCATIONAL TELEVISION SYSTEM
MARCH 1971

SUMMARY AND CONCLUSIONS

1. The Audit of the Hawaii Educational Television System conducted by the Office of the Legislative Auditor appears unduly critical of the shortcomings of the state ETV system. Nothing positive is indicated, and no attempt is made to assess the actual outputs of the HETV and the DOE-ETV. No perspective is, therefore, given to the findings. On the contrary, the impression is created that the management of the ETV system, both by the DOE and the UH, is almost wholly inefficient, ineffective and wasteful.

The truth is that a considerable amount of useful services are provided by the state ETV system. The DOE-ETV, for example, is able to document the following indices of ITV program impact on Hawaii's schools:

- a. ITV Programming over the past four years has averaged 786 program units totalling 647 hours of broadcast time.
- b. Over 6,000 classroom groups utilized ITV during 1969–70.
- c. Over 200 schools and about 3,500 teachers used ITV during 1969–70.
- d. Over 82,000 students participated in ITV programs offered by the DOE.
- e. Approximately 30 hours of in-school instruction and 9 hours of in-service education are scheduled for broadcasting each week.
- f. Approximately 300 production units of new programs resulting in six new series will be completed during FY 1970–71.
- g. Approximately 1,850 receivers and CCTV-VTR systems in 49 schools will receive repair and maintenance services during FY 1970–71.

- h. Approximately 1,500 teachers will receive in-service education via television during FY 1970–71.

It is quite likely that the basic fault, and, the source of its major problems, is that the DOE-ETV is attempting to do too much with the resources it has.

2. In large measure, the Report evaluates past policies, procedures, and practices in the light of today's perspectives. This is especially evident in the emphasis given to long range comprehensive planning, cost-benefit, and systems analysis. It is evident too in the attention given to specifying objectives, standards, and program effectiveness measures.

These are recent notions drawn from the PPB, management by objectives and accountability movements of today. They were not a part of program planning and operations expectancies during the period upon which the bulk of the Auditor's evaluation was based.

Planning and operations management was much less rigorous during those days. The very planning document approved by the 1965 Legislature which instituted the state ETV system is reflective of the less rigorous demands of the times.

It seems unfair to indict any enterprise, public or private, through the expost facto application of criteria and principles of administration.

3. In general, the referents used in the Auditor's evaluations are vague. Data are presented in isolation and in such manner as to exaggerate their significance. Dollar values and percentage rates and ratios are generally treated in this manner.

One is moved to ask: compared to what is the data significant? Is it significant compared to total investments, rates achieved by other similar enterprises, national standards?

The fact is that the state ETV outputs have been compared by various mainland consultants as being at least as good, and in some cases better than national averages is not noted at all. In addition, the Auditor failed to note the results of a national study of ETV conducted by the USOE which would depict the Hawaiian situation as somewhat typical of the national scene.

4. The Auditor's report would have been more timely had it been released at least a year and a half ago. The evaluation basically covers the period 1965 to summer 1969. Only cursory attention is given to the period FY '69–70 to the present.

It fails to give sufficient credit to certain initiatives taken in recent months. It altogether ignores two documents prepared during FY '69-70:

- (a) Hawaii Educational Television: Status and Future (Jan. 1970)
- (b) DOE-ITV: A Statement of Directions (Spring 1970)

These documents defined significant ways in which DOE-ETV should be redirected, especially with respect to its ITV programming and patterns of ITV utilization. It also analyzed the reasons why the ETV Council was an ineffective governing body for the state ETV system, and recommended alternative solutions, one of which was the creation of a separate public authority for ETV.

The Auditor, also failed to give sufficient credit to the long range comprehensive planning that was initiated during the late Spring of 1970. This was subsequently absorbed by the effort to put DOE-ETV on the PPB system. A first draft of the program analytic document has been completed. It will be extensively revised before submission for approval as an official document.

In short, the DOE-ETV is well on its way in implementing the more significant recommendations contained in the Auditor's report.

- 5. All this is not to say that the Auditor's report is not without merit. It does highlight the basic weaknesses of the state ETV system. While explanations and apologies may be offered for the mistakes and problems of the past five-plus years, it is clear that ETV in Hawaii has reached a turning point in which further employment of state resources must be based on major redirections in programming and patterns of ITV utilization.

Reforms in planning and the management of operations are indicated too. The Auditor's report should provide a solid basis for effecting such changes.

PART II
FINDINGS AND RECOMMENDATIONS RELATING TO
THE MANAGEMENT OF THE HETV SYSTEM

CHAPTER 4
GENERAL MANAGEMENT

A. Summary of Finding

Effective coordination and direction are lacking. Overall responsibility for ETV is obscure and the responsibility of the various agencies is not clearly defined.

B. Recommendation

Create a public broadcasting authority, . . . , in which responsibility for the statewide ETV system and for public television is centralized.

DOE RESPONSE

A. Summary of Finding

It is true that the controls over the three sub-systems of the state ETV system exercised by the ETV Council has been loose and largely indirect. This does not mean, however, that at the operational levels between the DOE and the UH, considerable coordination and cooperation is not going on.

ITV programs are being selected, scheduled and broadcast. Local productions of ITV and in-service programs are being undertaken. These activities could not proceed without considerable close planning and coordination between the DOE and the UH ETV sections.

It is admitted, however, that more constant consultation at the director level and above would be desirable especially with respect to planning and budgeting.

The roles and responsibilities of the DOE with respect to ITV programming and in-school hardware installations have been clear, at least to the DOE. It has assumed responsibilities for the selection of leased programs, and the identification of local production needs. It determines the broadcast schedule for ITV and in-service programs. It disseminates all information to the field relative to ITV programming. It coordinates all reception and CCTV system installations. It determines the content, and takes major responsibilities in the preparation of scripts for locally produced programs.

The employment of executive producers by the DOE does not reflect vagueness in the assignment of production responsibilities. It reflects a growing realization that effective television programs require the close interaction between content specialists and TV-media specialists throughout the process of program development.

The need for a DOE executive producer was brought to a head with the decision to offer a new curriculum in sex and family life education for the upper elementary and high school levels, utilizing ITV as the major instructional resource.

With the increasing realization that the effectiveness of ITV is dependent upon program quality, the DOE has sensed an increasing need for executive producers who could be involved in DOE productions from the beginning to the end of each production project.

The employment of executive producers has not resulted in duplication of work by HETV and the DOE. An effective and functional division of labor has been determined in which all studio activities and considerable portions of graphics and filming work is assigned as the responsibility of the HETV producer-directors.

Neither does Pau Hana Years as a DOE project reflects vagueness regarding PTV programming responsibilities. The DOE makes no claims to authority over PTV programming. Pau Hana Years started under special funding in the Adult Education Branch of the DOE, but has always been considered a part of PTV. No difficulties at the operational levels have been noted due to the fact that the staffing budget for the series is accounted for in the DOE budget. Discussions have already been initiated to transfer totally the responsibility for Pau Hana Years to the UH. This will be done as soon as the budgets for the next biennium become clear.

B. Recommendation

The apparent ineffectiveness of the ETV Council in giving direction and coordination to the state ETV system is noted strongly in a 1970 DOE report.* In the report, the reasons for the failure of the Council are cited. Alternative solutions, including the establishment of a separate ETV authority is also discussed.

The DOE concurs with the recommendation proposed in the Auditor's report. The separation of PTV from DOE and UH ITV is a direction that the state system has been moving during the past few years, especially as the DOE has attempted to move vigorously in ITV programming and in the development of reception and CCTV systems.

The establishment of the separate authority should not, however, result in the loss of production resources and transmission services for the DOE. At least, current levels of resource allocation to the DOE should be maintained.

CHAPTER 6 HETV RECEPTION SYSTEM

RECEPTION CAPABILITIES AND STANDARDS

A. Summary of Findings

1. There are intra-district distribution disparities in that some schools are less equipped and less capable of utilizing ETV information than their counterparts.
2. The DOE is without a firm, effective and consistent standard as to how it should allocate its equipment for optimum use and benefit to educational programs.

B. Recommendation

DOE establish a consistent guideline and budgetary practice in the allocation of reception equipment to the districts and schools.

*Hawaii Educational Television: Status and Future

DOE RESPONSE

A. Summary of Findings

1. Intra-district disparities in the distribution of TV receivers are principally due to (a) larger allocations made to elementary than to secondary schools, (b) smaller allocations made to schools with unreliable or no transmission coverage, and (c) the effect of acquisitions made through federal funds, and funding sources other than state or federal funds. The latter reflects individual school efforts and value judgements, and the availability of federal funds which differ from school to school.

Nevertheless nearly 70 percent of the schools are above or near the three classrooms per receiver standard. This is even more significant when the fact that the actual statewide average is 3.6 classrooms per receiver, not 3.0. Intra-district disparities appear, not to be significant in this light.

2. The DOE has not enunciated consistently defined standards over the years. Moreover, until recently, no equipment standards have been defined in association with long range comprehensive planning for TV reception and closed-circuit installations.

The lack of standards is more apparent than real, however, especially as they relate to the distribution of receivers. There is considerable uniformity between districts, and, as noted above, intra-district disparities are not as significant as the Auditor's report might lead one to believe.

B. Recommendation

Standards and consistency in budgetary practice would be desirable. However, controls should not be so rigid that local initiatives, reflecting strong local interest in taking full advantage of available program resources, are discouraged. Neither should the emphasis be on centralized control over quantities as over quality and the compatibility of hardware systems.

While it is true that currently schools utilize various funding sources to acquire TV hardware, schools consistently consult with the ETV Branch relative to brands and models to purchase.

UNDERUTILIZATION

A. Summary of Finding

Some schools are unprepared and unable to integrate ETV broadcasts into their programs. As a result, approximately eight percent of the DOE's operable TV receivers valued at \$22,000 were idle during the 1968-69 school year.

B. Recommendations

1. Future acquisitions of reception equipment by the DOE be preceded by proper instructional program planning and system design on the implementation of the instructional program plans.
2. In the deployment of reception equipment, the DOE consider (a) the ETV instructional programs to be provided, (b) alternative ETV viewing arrangements for maximum utilization of the equipment already on hand, and (c) the redistribution of those equipment from schools where they are under-utilized to schools where their utilization is better assured.
3. Develop a system for the periodic review of equipment utilization by user agencies to assure their continued and purposeful use. Systematic monitoring of ETV equipment usage is particularly desirable in view of the constantly changing nature of ETV broadcast programming and changes to school instructional programs, the result of which may alter ETV viewing patterns in specific schools.

DOE RESPONSE

A. Summary of Finding

The ETV Branch takes into consideration the utilization capabilities of schools before equipment is allotted. The total ITV program offerings at the various grade levels is a basic consideration. School level allotments are made taking into consideration (a) the availability of a reliable transmission signal, (b) the number of TV outlets, and (c) school level expression of need based on plans to utilize particular series. District Superintendents are given final authority in determining school allotments.

Major dislocations in the distribution of receivers were experienced in certain areas of the neighbor islands because of slow downs in the extension of the ETV transmission systems. Other dislocations were due to the DOE's inability to proceed as planned with the installation of antenna system.

The ETV Branch must depend upon schools to follow through on their plans to utilize ITV. There is sufficient programming to enable schools, especially elementary schools to put every set into good use. The failure to use ITV programs is a function of individual teacher judgements, and, considering the fact that ITV programs are largely offered on a voluntary use basis, the utilization rates actually achieved are more than adequate.

The Auditor's report tends to exaggerate the non-use factor. The very definition of non-use as more than four weeks when a piece of equipment is left idle is to be questioned. What of the remaining twenty-eight weeks of the school year? Is any correction made for pieces of equipment used intensively for given periods?

The extrapolation of non-use data into dollar values of equipment not used regularly again exaggerates the case. Not only is the basic data to be questioned, but no referent is provided to determine whether or not the dollar value cited is significant. It is simply cited in isolation as if it should be self-evident that the dollar value is a huge waste of public funds.

B. Recommendation

The ETV Branch has already made an initial attempt at long range comprehensive planning for the state DOE ITV program development.

Inasmuch as the ETV Branch's budget for the next biennium does not provide for major new inputs in TV hardware, there will be sufficient time to prepare a complete and comprehensive planning document before the next major investment in TV hardware is made. Meanwhile, efforts will be continued in the selection and production of quality ITV programs.

EQUIPMENT REPLACEMENT

A. Summary of Finding

Replacement policies are needed to eliminate duplicate refunding practices for stolen ETV equipment and to effect normal replacement requirements due to obsolescence.

B. Recommendations

1. With respect to practices involving the replacement of stolen TV property, we recommend that the DOE clarify the respective roles of the business office and the ETV branch so as to avoid the duplicate refunding of such property.
2. On the matter of normal equipment replacement, we recommend that the DOE develop definitive standards to guide administrations at all levels in planning for and effecting incremental equipment replacements due to mechanical deterioration or obsolescence. These standards should consider, among other factors, the need for the equipment, its mechanical serviceability, repair costs, obsolescence, and alternative media. In this connection, as may be necessary, we recommend further that the DOE develop appropriate inspectional systems to test and verify the application of standards developed for this purpose.

DOE RESPONSE

A. Summary of Finding

Duplicate funding to cover cost of replacing stolen equipment has occurred. In no case, however, has a stolen set been replaced by two new sets. The duplicate funds, it must be presumed were utilized in some other way. This is admittedly due to lack of coordination between the ETV Branch and the Business Office.

It is also true that no policy on the replacement of old and/or obsolescent equipment has been adopted. This is true for receivers as well as CCTV equipment. The ETV Branch budget request for '71-'73 provided for the replacement of twelve video-tape recorders in the Hawaii District which has become obsolescent and unduly high in repair costs.

In addition, the five year life expectancy for receivers should be changed to ten years. It has been learned from experience that the average set should last ten years, and that a good rule of thumb is to replace a set when the second picture tube replacement is needed.

B. Recommendations

1. Steps have already been initiated to avoid the duplication of funds in replacing stolen equipment.
2. The enunciation of replacement standards will be made as a part of the comprehensive long range planning already initiated.

CHAPTER 7
CLOSED CIRCUIT TELEVISION

A. Summary of Findings

1. The DOE effort to implement CCTV in the public schools has generally proceeded without adequate plans and preparations to assure its effective and economical development; there has been a decided lack of program and operational planning. This general inadequacy in planning has resulted in (1) a substantial portion of the schools failing to utilize their CCTV capabilities to the fullest extent and (2) operational difficulties such as the unpreparedness of the schools to utilize CCTV and the inefficient, disparate and costly practice of amassing CCTV equipment and materials at the school level. These effects are most pronounced at the high school level where the bulk of the CCTV equipment is located.

B. Recommendations

1. Plan and develop programs on a systematic basis, taking into account the potentials of CCTV in the promotion of educational objectives.
2. Formulate systems specifications for CCTV, specifying the components and configuration of the system, including an identification of the system's operational concepts and objectives, a description of the kinds and amounts of equipment, personnel, facilities and other elements required to support the system, and an identification of the full investment and operating costs of the system.

3. Develop plans for the installation of CCTV systems in the schools, outlining the schedule for implementation over the next six years.
4. Establish policies and procedures for the acquisition and use of CCTV equipment and materials.

DOE RESPONSE

A. Summary of Finding

CCTV installations were made largely through local school and district initiatives. The Hawaii District was the first to make such installations, utilizing ESEA Title I as its vehicle. Other schools and districts followed suit utilizing various funding resources.

A major increment of VTR installations was made in 1968-69 school year in conjunction with the institution of the new sex and family life curriculum. Nevertheless, the CCTV systems currently existing are wholly under the control of individual schools and districts. The state administration has not yet fully assumed responsibility for planning of the development and the operations of CCTV systems.

The ETV Branch has exerted every effort to provide support services for CCTV utilization by (a) scheduling repeat broadcasts specifically for dubbing purposes, (b) making dubs and delivering them to schools, (c) training school personnel in the operation of CCTV equipment, (d) aiding in the installation of CCTV equipment and distribution services, and (e) assuming major responsibilities in the repair and maintenance of CCTV hardware.

The Branch has done all these things as far as its resources would allow. Beyond these services, provisions for the effective utilization of CCTV is left as district and school level responsibilities. There are vast differences among schools in the extent to which they utilize their CCTV installations, which indicates what can be done with CCTV when serious efforts are made at local levels.

The utilization rates presented in the Auditor's report are not questioned. Their interpretation, however, needs qualification. The data were gathered during the 1968-69

school year when more than half of the high schools were just becoming acquainted with a new and relatively complicated instructional resource. In this light, it appears that the 55 percent rate for schools using their systems for off-air dubbings, and the 44 percent rate for schools utilizing more than the required FLSE series indicate a more than satisfactory utilization rate.

Again, the propriety of citing dollar values of supposedly idle equipment is to be questioned. Citing these dollar values in isolation, without the benefit of referents, exaggerate their significance. It should be noted that they each represent only about 10 percent of the total state investment in CCTV hardware. Seen in this light, and considering how little time was provided for schools to prepare for the use of their CCTV systems, these dollar values appear to fall well within acceptable limits.

It is admitted that the 1968-69 installation of CCTV system had the earmarks of a crash program. The immediate objective was a limited one: to provide every high school in the state with increased capabilities for utilizing the new FLSE program. There was, in fact, extensive statewide utilization of the new FLSE program, a feat that could not have been accomplished within one year, except through the effective coordination of TV resources.

B. Recommendation

All the recommendations presented in this section will be subsumed within the comprehensive long range plans currently being developed. The initial draft has been completed, and is being reviewed and evaluated by various parties.* On the basis of feedback received so far, the document will require extensive revision before it will be submitted for adoption by the DOE.

*This is the analytic document cited in the Auditor's report. Contrary to the report, this document is not a final draft and has no official DOE status.

PART III FINDINGS AND RECOMMENDATIONS RELATING TO THE EDUCATIONAL ROLE OF HETV

CHAPTER 9 IN-SCHOOL INSTRUCTION

A. Summary of Findings

1. There is a general lack of systematic planning for ITV. There are no operational objectives for ITV nor for each of the program series, there are no standards by which to measure effectiveness of ITV programs; and there are no standards to guide selection and development of specific ITV programs.
2. Despite this lack of formally-stated objectives and measures of effectiveness, there are indicators to suggest that ITV is not contributing significantly to the attainment of educational objectives. Audience penetration of ITV instructions is low when considered in terms of the reception capabilities of the schools; and there is an inefficient use of repeat broadcasts.

B. Recommendations

1. Develop plans for ITV, including specific statements of objectives, measures to determine effectiveness, and standards to determine ITV program priorities. The statements of objectives should be such that the attaining thereof will enhance the educational objectives of the DOE.
2. Formulate the design of the system by which TV instructional programs may be transmitted to students. In such design, the role of open circuit broadcast and CCTV should be clearly described, and the standards to be employed in scheduling the use of its open circuit broadcast time and CCTV specified.
3. Begin a system of evaluation to determine the effectiveness and shortcomings of ITV as a whole and the effectiveness and shortcomings of the program series it undertakes.

DOE RESPONSE

A. Summary of Findings

1. The DOE does plan for ITV. Each year's programming and production plans are generally laid out during the budget preparation period. Detailed plans specifying programs for the next broadcast season, and production goals, activities, assignments and schedules, for the next school year, are prepared before the end of each fiscal year. Such planning activities are carried out as normal parts of the total operational activities.

Whether the planning work done is "systematic" may be subject to question depending on how the term is defined. It is systematic in the sense that programming plans are prepared so that the effective coordination of program selection, scheduling, information dissemination to schools, publication of guides, ordering program materials, liaisons with station for transmission, etc. are carried out in a timely manner.

The planning is also systematic in the sense that the ITV programming is integrated with the program plans of the curriculum branches of the OIS. The ETV Branch is a support service. As such it takes initiatives in determining ITV needs together with administrators and program specialists of the respective content areas. The relationship of each ITV program to a larger whole is to be found in the program development of the content areas. The relationship is not to be found in the over-all ITV programming itself.

The planning is not systematic in the "systems analysis" sense. A rigorous, definitive plan for ITV programming was never laid out. The ETV Branch has never operated under the advantage of a clear and forceful mandate to the DOE as a whole to take maximum advantage of TV in implementing program plans. The Branch has had to employ persuasion and become responsive to expressions of interest on the part of other DOE groups. Under such circumstances, the only practical program planning functions are those that involve periodic assessment of needs, and responding to requests and encouraging interests as they become evident.

On hindsight, it does appear that this was the only way that ETV could have established itself within the DOE. Had it moved more forcefully and in accordance with pre-determined plans, it would have been resisted by the various groups of the DOE.

The DOE's ITV programming consisted, during the period 1965 to 1968, exclusively of

enrichment and supplementary programs. Utilization of any TV series was a matter for individual teacher discretion. While much was done to encourage and prepare teachers for series utilization, ITV program inputs were not considered vital to the successful implementation of any content area.

During FY '68-69, a decision was made to implement a new sex and family life curriculum for the upper elementary and high school levels. ITV was to be the major instructional resource for this new curriculum. Up to this point in time, this curriculum is the only required ITV series.

Objectives are delineated for every ITV series. These are, however, generally stated as in the case with most statements of objectives in education. The emphasis on definitive (behavioral) and measurable objectives is a recent phenomenon and education generally is lagging in this respect, not because of deliberate resistance, but because of the state of the art in objective writing and their measurement.

Given the basically supplementary and enrichment nature of ITV programming, and the state of art in measurements of program effectiveness, any evaluation of the ITV input per se on learner behavior would be futile. It would be extremely difficult to account for mediating and interactive factors so that the ITV effect could be isolated. The planning and preparation for such evaluation goes far beyond current DOE evaluation, resources, let alone the staffing of the ETV Branch. Such an evaluation plan would have to be elaborate, and unless coordinated with a total DOE evaluation program, would be unduly burdensome to teachers and students.

The national experience with ITV research is that there is no significant difference between conventional and televised instruction. There is sufficient bases for assuming that an ITV program is effective and worthwhile if the programs (a) has content validity, (b) meets technical requirements, (c) is used under favorable viewing conditions, and (d) is related to the on-going classroom activities via pre and post viewing activities. The DOE's ITV programming provides for each one of these conditions, with the possible exception of item c in cases where receivers are not conveniently available.

The SCOPE survey conducted bi-annually provides useful information relative to rates of ITV utilization, population breakdowns, viewing conditions, and user attitudes. The survey was patterned after evaluation plans utilized elsewhere in the nation. Further the survey is consistent with (a) the kind of information needed for program and facilities

planning, (b) the total scope and role of ITV in the DOE, and (c) the staff capabilities of the ETV Branch and the DOE as a whole.

2. The analysis of data on audience penetration is invalid. It fails to account for two important factors: (a) a significant number of schools were not able to receive television programs, and the pre 1968 receiver to classroom ratio was 1 : 6.4; and (b) the effect of wider selection of programs for given grade levels on usage of particular programs.

To use the potential viewing audience as the total classes in the state in given grade levels is invalid. This would have to be an estimate which accounts for non-participating schools and for inadequate receiver to classroom ratio.

As was noted above, the ITV programming is essentially supplementary and enrichment in nature. Teachers have varieties of reasons for using and not using particular programs and/or series and these are not directly reflective of program effectiveness. Troublesome prior arrangements that need to be made act as deterrents. When two or more series are offered to given grades, use of one series or other may drop because teachers are wary of providing too much televised instruction. Yet providing options to teachers is valued.*

The treatment of repeat broadcasts as inefficient use of time and reflective of program ineffectiveness is invalid. Repeat broadcasts are scheduled for valid purposes (a) to provide optional times for classroom use of particular series and, (b) to provide additional opportunities for preparing off-air dubs. The one-plus times that programs are repeated is considered justifiable use of broadcast time to accomplish these two purposes.

The increase in total broadcast time since FY '68 was due mainly to the lengthening of the broadcast day by starting at 8:00 AM rather than at 8:30 AM. This was done specifically to provide time for off-air dubbing by high schools. In addition late afternoon hours are used for repeat broadcasts to give high schools a chance to make off-air dubs.**

*Further, when taken in the light of other materials that are offered on a supplementary and enrichment basis (e.g., films, filmstrips, etc.) even the overall 24.5% use rate reported appears to be very significant.

**The agreements for leased programs prohibit the dubbing of programs for repeated use beyond one semester. They, therefore, have to be re-dubbed each semester.

Non-program time stems from unavoidable gaps created by non-uniform program lengths. Although programs differ in length, they need to be scheduled for fixed time periods and on schedules that repeat regularly on weekly cycles. Some loss in non-program time is to be preferred over the confusion that would result from a broadcast schedule that differs each week.

However, the lumping of non-program time with repeat broadcasts tends to inflate the data for non-productive broadcast time. The two categories of time use should be reported separately. The inference of program ineffectiveness from this analysis (which is to be seriously questioned) would be much less impressive.

B. Recommendations

The recommendations offered in this section are well-taken. Significant steps have already been taken to integrate ITV programming with the DOE's total effort to improve instruction and to develop curricula. Planning has already been started in the consolidation of the two sections (HCC and ETV) into a development section and media section. ITV program development will thus be considered within the context of the Department's curricular needs.

Such provisions as statements of objectives, evaluation of program effectiveness, and resource allocation by priorities will be effected automatically within the Department's procedures for systematic curriculum development. The procedures begin with the assessment of needs and an analysis of the most economic and judicious alternative to follow in meeting each need.

In this process, television will be employed only as it is determined that it would be the most effective way to meet particular development objectives. Through this approach, each ITV program developed and/or leased will become an integral part of the curriculum and instructional program of the Department.

These directions for ITV in the DOE are indicated in documents prepared during FY '70.* A proposal for moving in these directions will be submitted early in FY '72.

*Hawaii Educational Television: Status and Future.
DOE-ITV: A Statement of Directions.

CHAPTER 10
IN-SERVICE TEACHER IMPROVEMENT

A. Summary of Findings

1. ETV has not been an effective means of extending formal teacher training,
2. ETV as presently administered by the DOE does not fully enhance the concept of equal treatment and accessibility in its practice of approving courses for credit, and
3. the substantial use made of available broadcast time for non-credit ETV programs has not been, but should be, subject to operational evaluation on a continuing basis.

B. Recommendations

1. DOE establish operating policies and standards which treat all teachers equally with respect to the granting or non-granting of credits for ETV broadcast courses and which insure the selection of courses for ETV broadcast that are representative of departmentwide in-service training needs.
2. DOE develop a system for monitoring ETV usage of non-credit programs to validate the need for and audience usage of such broadcast services.

DOE RESPONSE

A. Summary of Findings

1. It was understood from the beginning that ETV was to be employed in extending in-service teaching opportunities for teachers. This purpose, however, was never interpreted to mean that a regular and continuing program of in-service courses is to be offered via ETV. Rather it was always assumed that in-service needs which are appropriate for television would be provided. The determination of need is essentially the responsibility of the curriculum and personnel branches of the DOE.

The ETV Branch has taken initiatives in providing courses in media training and in providing training programs in the utilization of particular series. It also took initiatives in

making suggestions to particular curriculum and personnel specialists. Television in-service courses have always been considered as a part of the regular staff development program of the DOE and not as a separate entity.

In fact, the staffing of the ETV Branch was never adequate to coordinate and supervise a regular and continuing program of in-service courses. Such courses require adequate manpower to process records, correspond with enrollees, evaluate student papers and tests, and make periodic visitations to viewing centers. Without such supporting services, television courses tend to become ineffective, and certainly not comparable to courses provided through conventional means.

In addition, the development of in-service courses require additional staff and facilities resources. Again, the quantity of local productions actually undertaken fully utilized the available staff, and studio and other facilities.

In short, the in-service program offered via ETV is about all that can be reasonably expected within current budget levels.

2. The granting of credits for any in-service activity on a statewide basis is a determination made by the particular organizational unit sponsoring the activity. This is true for televised courses as well as conventional workshops. TV courses sponsored by the ETV Branch for credit have all been offered for credit on a uniform statewide basis.

Normally closer supervision and additional work is required of enrollees in activities offered for credit. Credits offered also means that more time and effort is required on the part of the sponsoring party. The tendency, therefore, is to offer for credit on a statewide basis, only those courses which are of sufficient urgency and scope to warrant the added inputs of time and effort. Individual districts may have its own perceptions regarding the merits of a particular in-service activity. It could see fit to take on the necessary added work involved in giving credits in order to insure wider participation. To provide such an option to districts appears to be desirable. Certainly it is more to be desired than not to offer particular in-service opportunities at all.

It is understandable that credits offered at district option would evoke complaints among teachers whose districts decide not to offer credits for particular courses. This circumstance, however, is based on value judgements made at state and district levels—judgements which are not made highly but only upon serious consideration

relative to alternative uses for staffing resources.

The concept of equal treatment appears to be irrelevant in the ETV context. The concept is relevant in the context of the DOE's total staff development program. The major avenue for staff development is through state and district sponsored workshops and institutes. The fact is that the DOE personnel responsible for planning the staff development program is constantly mindful of the need to provide equal opportunity for in-service education throughout the state. The program of summer institutes, and workshops offered in various localities throughout the state attest to this concern. The fact that a preponderant majority of the state's teachers are able to maintain themselves on the incentive pay track is evidence that in-service work is accessible, although not equally, to all.

3. No assessment is made of non-credit courses offered via television. This is seen as an important oversight which will be rectified as soon as feasible.

B. Recommendations

1. As was previously indicated, equal treatment is not the central issue in the in-service courses offered through ETV. The ETV Branch shall continue to be responsive to interests expressed by the curriculum and personnel specialists, and will continue to take initiatives in suggesting in-service needs that could be effectively met via television. The decisions relative to offering particular courses, to offer them for credit or non-credit, and to offer them for credit statewide or at district option shall be left to the respective sponsoring DOE groups. Such decisions will be made with a view toward maximizing the total staff development program of the DOE.

In-service courses appropriate for ETV is not determined on the basis of whether the need is departmentwide or not. The determination is based on the nature of the learning experiences needed to achieve course objectives. TV has strengths and weaknesses in providing different kinds of experiences. ETV in-service programming, as in ITV programming, must be sensitive to the medium's strengths and weaknesses.

It is not unwise to provide ETV programming for minority audiences in the more remote communities whose alternatives for in-service work is more limited than those for their urban counterparts. ETV programs, unlike commercial TV, is not always rated on the basis of audience size.

2. The ETV Branch shall fill-in the gap that exists in assessing the utilization of its non-credit in-service series. This will be done in conjunction with the surveys taken for ITV programs. The results will be disseminated among appropriate DOE personnel. The Branch will take initiatives in consulting with appropriate parties relative to the programming implications of the survey results.

CHAPTER 11 FORMAL ADULT EDUCATION

A. Summary of Findings

1. Only minimal use has been made of open circuit ETV to advance formal adult education and
2. the potential of ETV as a supplement or alternative to regular adult education classes has not been fully explored.

B. Recommendations

1. Re-examine the program planning process and program plans for its formal adult education activities and incorporate therein provisions which assure that planning attention is given to analysis of program alternatives on a continuing basis.
2. Determine more completely the relative effectiveness of on-going methods of providing instruction and the costs thereof in relation to other feasible adjunctive or alternative methods, including ETV, as a means of providing more widespread participation in its formal adult education programs.

DOE RESPONSE

1. It is quite obvious that there is considerable inconsistencies in the assignment of ETV responsibilities for adult education. This is reflective of the fact that the DOE and the UH share responsibilities in this area.

Programming for the 6:00 to 8:00 PM time slot has always been assigned as a UH responsibility. On the other hand, the DOE has an adult education program which should be taking advantage of ETV. It is true that the DOE has made only minimal use of this resource. The ETV Branch has not been as active in initiating adult education ETV programming as it has with ITV. Initiatives will be taken to consult with the Adult Education Branch on recommendations for ETV programming in this area.

2. It is also true that a comprehensive study has not been made of the potentials for advancing adult education via television. What has been done consists of previewing and evaluating available programs. Other than TV High School, none of the programs previewed has been found to be acceptable, even for trial purposes.

The discontinuation of TV High School was based on the fact that pre and post test results showed no significant gains. The fact that 21.4 per cent of the enrollees in TV High School during the trial period passed the GED test is not, therefore, attributable to course effectiveness. The most that could be said from this study is that enrollment in TV High School motivated 96 out of 449 students to take the GED test. The probabilities are that the 96 would have passed whether they had taken TV High School or not.

This is not to say that the analysis presented in the Auditor's report is invalid. The absence of significant learning gains attributable to a televised course is a common finding in television research. Similar findings are equally common for other instructional modes including conventional classroom modes. Such findings are more likely to be reflective of the state of art in the measurement of program effectiveness rather than the actual ineffectiveness of courses.

The cost comparison is suggestive of significant advantages. Further trials with ETV adult education courses appears to be warranted.

PART IV FINDINGS AND RECOMMENDATIONS RELATING TO FINANCIAL MANAGEMENT OF HETV

CHAPTER 15 SOME SELECTED PROBLEMS

DOE RESPONSE

1. Rental of Office space and exemption from real property taxes.
Steps have already been taken to alert the DOE Business Office to the legal provisions noted.
2. Unauthorized purchasing procedures.
Procurements falling within the provisions of section 103-22, HRS shall be conducted under the direct supervision of the DOE Business Office.
3. Proceeds from sale of DOE publications.
The purchase of TV teacher's guides and other ETV publications are handled by DOE administrative units other than the ETV Branch. The DOE Business Office has already been apprised of this item in the Auditor's report.

APPENDIX A

Third Legislature, 1965
State of Hawaii

H.C.R. NO. 84

HOUSE CONCURRENT RESOLUTION
RELATING TO EDUCATIONAL TELEVISION IN HAWAII

WHEREAS, the development and operation of educational television in Hawaii will result in major pedagogic advances and higher levels of learning for Hawaii's citizens, young and old alike; and

WHEREAS, educational television and its management within the State has been a subject of legislative concern for a number of years; and

WHEREAS, the Department of Education and the University of Hawaii in cooperation with the Governor have developed a sound plan for the operation of the Hawaii educational television network, which plan has the approbation of the legislature; now, therefore,

BE IT RESOLVED by the House of Representatives of the Third Legislature of the State of Hawaii, Regular Session of 1965, the Senate Concurring, that the Department of Education and the University of Hawaii in cooperation with the Governor be and they are hereby requested to implement their plan for the establishment and operation of the Hawaii educational television network which plan includes, but is not limited to, the following: (1) close and continuing cooperation between the University and the Department; (2) establishment of a State Educational Television Council consisting of the President of the University, the Superintendent of Education and one member appointed by the Governor, which Council shall set policies and approve financial plans; (3) designation of the University as the licensee under applicable federal statutes; (4) location of major origination and production facilities at the University; and (5) major emphasis on in-school instruction (with responsibility in the University for programs beyond the high school level and in the Department for programs below the University level) and in-service training of public school teachers (with responsibility in the Department); and

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Governor, the Superintendent of Education and the President of the University of Hawaii.

APPENDIX B

EXECUTIVE ORDER NO. 23

WHEREAS, in recognition of the great potential of educational television in the improvement, expansion and enrichment of education, the Governor appointed in January 1964 an Advisory Committee on Educational Television to review and re-evaluate the prospects of such a program in Hawaii, and to make reports and recommendations for such executive or legislative action as may be necessary to establish such a system; and

WHEREAS, on July 29, 1964, the University of Hawaii, pursuant to authority from the Governor, filed applications for the appropriate licenses and for federal matching funds to make such system a reality; and

WHEREAS, said Advisory Committee, in its final report to the Governor, recommended the creation, by executive order or otherwise, of a Council on Educational Television to provide guidelines with respect to program, production and operational aspects of a statewide educational television system; and

WHEREAS, the Third Legislature of the State of Hawaii has endorsed the creation of said Council in House Concurrent Resolution No. 84.

NOW, THEREFORE, I, JOHN A. BURNS, Governor of the State of Hawaii, pursuant to the power vested in me, do hereby establish within the office of the Governor, a State Council on Educational Television to consist of three members, including the Chairman to be designated by me, as follows:

The President of the University of Hawaii,

The Superintendent of Education, and

A member to be appointed by me to represent the public-at-large.

The Council shall make recommendations to and advise the Governor with respect to the capital and operating budgets to be submitted to the legislature for the educational television system and policies and standards that should be adopted for the orderly and effective operation of the proposed

State Educational Television System, including those relating to program, production, operation and utilization of the system with a view toward making the system readily available, as practicable, at reasonable cost, pursuant to law. The Council shall make recommendations to and advise the Governor on approval or disapproval of proposed expenditures for the Educational Television System. All proposed expenditures for the Educational Television System shall first be reviewed by the Council, unless otherwise directed by the Governor.

The Council may, with the prior approval of the Governor, appoint or employ personnel necessary to assist it in the performance of its functions.

The Council shall have such other advisory duties and functions as I may hereafter assign.

DONE at Iolani Palace
Honolulu, Hawaii, this 31st
day of August, 1965.

/s/ John A. Burns
JOHN A. BURNS
Governor of Hawaii

APPROVED AS TO FORM:

/s/ Bert T. Kobayashi
BERT T. KOBAYASHI
Attorney General

PROGRAM AND OPERATIONAL POLICY
HAWAII EDUCATIONAL TELEVISION NETWORK

I. Program Philosophy

The program service of the Hawaii Educational Television Network is based on the principle that the service should, in fact, be educational; that the lesson/programs should effect changes in the viewer of an educational nature. The program service will provide a balanced program schedule of integrated services, designed to present instructional, informational and educational experiences based on, and developed through, the broad areas of intellectual interest and need. The basic philosophy of the program service is to educate in the broadest sense and to provide lesson/programs of the highest educational quality which are well produced technically and which may be integrated into the existing formal and informal educational system of the State.

II. Broadcasting Policy

- A. Definition of terms: The terms broadcast and broadcasting as used herein shall include any and all television transmission, both sound and picture, designed for immediate or eventual use on the air.
- B. The educational television broadcast facilities and resources shall be so utilized as to advance the educational purpose of the State and to serve to the fullest extent the interests and needs of the people of the State.
- C. In all broadcasting, the highest standards of good taste shall prevail and the reputation of the University, the State Department of Education, and any other agency of the State shall be upheld and defended from misuse or misrepresentation in any form.
- D. No broadcast shall place the University of Hawaii, the State Department of Education or any State agency or division of the State in the position of endorsing or opposing any candidate for public office or the platform or objectives of any political party, religious organization, or any special interest group.

- E. No exclusive broadcasting privileges shall be granted to any private or public agency or organization.
- F. Since the Educational Television Network is operated primarily for the dissemination of information and the promotion of free and critical inquiry into problems of public concern, its services shall be used only by those parties capable of making a contribution to the public interest and welfare.
- G. Divergent views on controversial issues shall have equal opportunity for representation, except when presented as an integral part of regularly scheduled academic instruction or as a part of objective news reporting. Controversial issues appropriate to the welfare of the citizens of Hawaii will be broadcast on non-academic programs with the provision that in all instances every possible effort will be made to provide equal opportunity for the presentation of opposing views. Wherever feasible, the opposing views will be presented on the same program, or through back-to-back programming, and in all cases appropriate announcements will be made to clarify the Hawaii Educational Television Network's reason and position in broadcasting the program, according to the rules and regulations of the FCC.
- H. Programs originated by the Hawaii Educational Television Network may be broadcast or rebroadcast by other stations under the following conditions:
 - 1. All such programs must be presented on a non-commercial sustaining basis.
 - 2. Written permission from the Division of Educational Television Broadcasting at the University must be obtained in advance for live or simultaneous rebroadcasting of any program as required by regulations of the Federal Communications Commission.
 - 3. As a general rule, each program must be carried in its entirety in a continuous uninterrupted performance; however, permission may be obtained to rebroadcast a unit of a longer program.
 - 4. Proper identification of the sources must immediately precede and follow the program or the portion thereof.
 - 5. The station rebroadcasting the program or program series must assume full responsibility for all necessary clearances in the areas of copyright, music performances, etc.

- I. Programs for special interest groups (Community Chest, United Fund, etc.): The objectives of the Hawaii Educational Television Network are primarily educational; therefore, a request for program time which is obviously to promote campaigns, drives, or causes, however worthy, will not be granted. The Hawaii ETV Network will, however, develop programs of an educational and informational nature concerning the activities of special interest groups. The Hawaii ETV Network believes that it can lend effective support to organizations that are seeking public assistance by broadcasting programs of an informational nature concerning the activities of these organizations, and it will encourage continuing series of programs that will inform and thus bring about a greater understanding of the activities of educational, cultural and charitable groups that depend upon the public for their support.
- J. Religious programs: Religious programs other than those growing out of curriculum or departmental offerings of the University of Hawaii must originate with and be representative of the organized religious councils or bodies which represent the religious groups of Hawaii. Programs must not contain doctrine, dogma, or ritual. They must be of historical, inspirational or non-denominational nature. Religious music is acceptable. No program shall contain any derogatory reference to any race, creed, or religion.
- K. The Hawaii ETV Network will prohibit the appearance of any announced political candidate except as specified under Section 315 of the Communications Act of 1934, as amended.
- L. The Hawaii Educational Television Network and its ETV stations shall appropriately identify all programs produced for or under the supervision of agencies other than the State Department of Education and the University of Hawaii.

III. Sponsorship

A. Private Agencies

The Hawaii Educational Television Network is a non-commercial educational television service. The stations are licensed by the F.C.C. as non-commercial educational television stations. According to the rules of the Federal Communications Commission, the stations cannot sell time for advertising purposes to any business, industry, organization or individual.

It is understood and recognized that many private organizations support a number of educational activities and may be interested in underwriting programs over the Hawaii Educational Television Network. The Network will therefore accept the support of business, industry, organizations and individuals in underwriting programs or program series of an educational and informational nature. Such support will be acknowledged on the air according to the rules and regulations of the Federal Communications Commission.

B. Public Agencies

Any department or division of the University or the State Department of Education supported by funds appropriated in the General Fund from the State Legislature shall not be charged for programs, program production or transmission services. Agencies of the State, local and Federal government other than the University or the Department of Education, which seek to broadcast programs over the Hawaii Educational Television Network shall pay the "out-of-pocket cost fees" determined by the State ETV Council.

IV. Operational and Program Responsibility

- A. Broad policy decisions for the Hawaii Educational Television Network are the responsibility of the State ETV Council which exercises control over the educational service of the network. The educational television stations of the network are licensed to the University of Hawaii and to its Board of Regents. The University of Hawaii is therefore finally and solely responsible for all programs broadcast over the Hawaii ETV Network.

The Director of the Division of Educational Television Broadcasting at the University shall be responsible to the President and the Board of Regents for exercising judgment to maintain legal, technical and program standards for any broadcast over the Hawaii ETV Network in accordance with the Federal Communications Commission rules and regulations. Program requests which in the judgment of the Director of ETV Broadcasting are not clear as to their legal, technical or educational aspects shall be referred to the State ETV Council. Final decision as to programs broadcast over the network stations, however, rests with the Board of Regents of the University who are licensees of the stations.

- B. The Division of Educational Television Broadcasting at the University shall be responsible for the determination and selection of program subject content in the broad area of public service and community affairs. The State Department of Education shall be responsible for the selection and development of program subject content of an in-school nature on both elementary and secondary levels. The State Department of Education, the College of Arts and Sciences shall be responsible for the selection and development of program subject matter content of an in-service teacher training nature for non-college credit with the State Department of Education maintaining primary responsibility in this area. The University of Hawaii College of Education shall be responsible for the development of subject matter content for in-service teacher training programs of a college credit nature. The College of General Studies at the University of Hawaii shall be primarily responsible for the development of program content of a continuing adult education nature on the post-diploma and college levels. The Adult Education Division of the State Department of Education shall be primarily responsible for the development of adult education programming on the pre-diploma and non-credit level. The Community College Division of the University of Hawaii shall be primarily responsible for the development of program subject content of programs broadcast for the Community Colleges. The Cooperative Extension Service of the College of Tropical Agriculture shall be primarily responsible for the development of program subject content for all programs of an agricultural or home economic nature working in cooperation with the State Department of Education's Adult Education branch. The Division of Educational Television Broadcasting of the University shall serve as a production service and facility for these program sources and shall be responsible for all aspects of production and technical presentation of any program of local origin of any subject area broadcast over the Hawaii ETV Network.

PUBLISHED REPORTS OF THE LEGISLATIVE AUDITOR

Audit Reports

- 1966 1. Examination of the Office of the Revisor of Statutes, 66 pp. (out of print).
- 1967 1. Overtime in the State Government, 107 pp.
2. Management Audit of Kula Sanatorium, 136 pp.
- 1968 1. Financial Audit of the Department of Health for the Fiscal Year Ended June 30, 1967, v.p. (out of print).
2. Financial Audit of the Department of Planning and Economic Development for the Fiscal Year Ended June 30, 1967, v.p. (out of print).
3. Financial Audit of the Department of Regulatory Agencies for the Fiscal Year Ended June 30, 1967, v.p. (out of print).
4. Financial Audit of the Department of Hawaiian Home Lands for the Fiscal Year Ended June 30, 1967, 54 pp.
5. Financial Audit of the Oahu Transportation Study for the Period July 1, 1962 to August 31, 1967, 68 pp.
6. Financial Audit of the Hawaii Visitors Bureau for the Period July 1, 1966 to January 31, 1968, 69 pp. (out of print).
7. State Capital Improvements Planning Process, 55 pp. (out of print).
8. Financial Audit of the Hilo Hospital for the Fiscal Year Ended June 30, 1967, 43 pp. (out of print).
9. Financial Audit of the Hawaii Visitors Bureau for the Period July 1, 1967 to June 30, 1968, 42 pp.
- 1969 1. Financial Audit of the General Fund, State of Hawaii, for the Fiscal Year Ended June 30, 1968, v.p. (out of print).
2. Financial Audit of the Judicial Branch, State of Hawaii, for the Fiscal Year Ended June 30, 1968, v.p. (out of print).
3. Financial Audit of the State Department of Budget and Finance for the Fiscal Year Ended June 30, 1968, v.p.
4. General Audit of the Department of Personnel Services, State of Hawaii, 129 pp. (out of print).
4. A Summary of the General Audit of the Department of Personnel Services, 53 pp.
5. Financial Audit of the Samuel Mahelona Memorial Hospital for the Fiscal Year Ended June 30, 1968, 34 pp.
6. Financial Audit of the Honokaa Hospital for the Fiscal Year Ended June 30, 1968, 41 pp.
7. Financial Audit of the Kohala Hospital for the Fiscal Year Ended June 30, 1968, 34 pp.
8. Financial Audit of the Kona Hospital for the Fiscal Year Ended June 30, 1968, 44 pp.
9. Financial Audit of the Kauai Veterans Memorial Hospital for the Fiscal Year Ended June 30, 1968, 30 pp.
10. An Overview of the Audits of the Act 97 Hospitals, 18 pp.
- 1970 1. Management Audit of the Department of Water County of Kauai, 65 pp.
2. Audit of the Kamehameha Day Celebration Commission, 47 pp.
3. Audit of the Medical Assistance Program of the State of Hawaii, 392 pp.
- 1971 1. Financial Audit of the State School Lunch Services Program, Department of Education, for the Fiscal Year Ended June 30, 1970, v.p.
2. Audit of the County/State Hospital Program, 124 pp.
3. Audit of the State Vendor Payment Process, 63 pp.

Other Reports

- 1965 1. Long and Short Range Programs of the Office of the Auditor, 48 pp. (out of print).
2. A Preliminary Survey of the Problem of Hospital Care in Low Population Areas in the State of Hawaii, 17 pp.
- 1966 1. Procedural Changes for Expediting Implementation of Capital Improvement Projects, 9 pp.
- 1967 1. The Large School: A Preliminary Survey of Its Educational Feasibility for Hawaii, 15 pp.
2. State-City Relationships in Highway Maintenance, and Traffic Control Functions, 28 pp.
3. Manual of Guides of the Office of the Legislative Auditor, v.p.
- 1969 1. Transcript of Seminar in Planning-Programming-Budgeting for the State of Hawaii, 256 pp.
2. Airports System Financing Through Revenue Bonds, 9 pp (out of print)
3. Second Annual Status Report on the Implementation of Act 203, Session Laws of Hawaii 1967 (Relating to State-County Relationships), 13 pp. (out of print).
4. An Overview of the Governor's 1969-70 Capital Improvements Budget, 61 pp. (out of print)
5. A Supplementary Report on the Audit of the Hawaii Visitors Bureau, 2 pp. (out of print)
- 1970 1. A Study of the Compensation of Coaches of Interscholastic Athletics of the State Department of Education, 31 pp.
- 1971 1. A Study of the State Highway Special Fund, 14 pp.

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