

The Production and Evaluation
of an
ITV Utilization Tape

by
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Abstract

Production and Evaluation of an ITV Utilization Tape

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The purpose of this thesis equivalent was the production and evaluation of a 30-minute *ITV Utilization Tape as well as to survey attitudinal, technical and logistical considerations affecting the relative frequency of instructional television use in the classroom.

The program was designed to foster a general awareness and positive attitude by demonstrating diverse teaching potentials for a variety of ITV programming.

The population was divided into two samples. In-Service teachers were drawn from Montreal elementary schools and classes given by McGill and Concordia University. Pre-Service subjects were drawn from classes given by the Department of Education at Concordia University. Both groups completed a pre-viewing questionnaire canvassing awareness of ITV resources and attitudes, viewed the program and then completed a post-viewing questionnaire to determine prior awareness and audience appropriateness, evaluate the program and indicate degree of involvement and further interest in ITV utilization.

Chi-square and median tests were run on the ordinal data.

*Instructional Television

Results indicate that Pre-Service subjects displayed a greater propensity for audio-visual materials (including ITV) when compared to the moderate attitude of the In-Service sample. Lack of technical support seemed to be the greatest prohibitor of ITV utilization.

The program conveyed more new information to the Pre-Service group. Both groups found the message clear and well presented, expressing further interest in obtaining programming and materials as well as a willingness to implement ITV into their classrooms.

ACKNOWLEDGEMENTS

Thanks Bob. Thanks Mom. Thanks Susan.

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Chapter One

Introduction and Formative Design

Introduction

Since the first broadcast of Sesame Street in 1972, the whole tenor and technology of Instructional Television (ITV)¹ has evolved, meshing hitherto independent fields of inquiry; media production, message design and educational psychology. From the static, "closed circuit" rendering of the surrogate classroom teacher, has emerged an array of programming that is at once truly instructional and truly "TV", acknowledging television, as a viable element in the instructional setting.

The findings of no significant differences in many early T.V. studies (e.g. Penn. State Studies) brought about both a reevaluation of T.V. as a medium of the "Talking Head" and the methods used to study television production. Current conceptualization of the appropriateness of televised instruction stresses the unique characteristics of the medium, rather than substituting one medium for another.

Theorists such as Salomon argue that it is the symbolic codes inherent in a given medium or the way in which a medium conveys a given content that makes the difference (Salomon, 1979).

1. For purposes of clarity and parsimony, the term "ITV" is used subsume all programming that can be usefully integrated into an instructional or educational setting.

Today, ITV curricula ranges from the demonstrative to the dramatic, catering to audiences across grade levels and subject matter, capitalizing on the myriad of technical, aesthetic and communication strategies that have confirmed commercial television as an inevitable source of information, entertainment and socialization. However ITV effectiveness is a double-edged sword. A program may not be effective due to intrinsic variables (design, production etc.) or because of utilization considerations. The best designed program will be ineffective if inappropriately used or if it simply fails to reach its target audience (e.g. Ball & Bogatz).

In northern New York State (Plattsburgh), PBS affiliate WCFE, Channel 57, provides free programming, services and materials designated to a potential viewing audience of over 2,000 teachers and 40,000 students residing in the main broadcast area of Clinton, Essex and Franklin counties. However there is reason to believe that "North Country" teachers are not consistently using ITV as alternative instructional treatment.

Attempts to cull demographic and utilization information through mailing list "ballots" and equipment surveys (see Appendix 1) yielded dismal returns (under 3%); perhaps a further comment on lack of ITV awareness or or interest in the target population. Reasons cited (through personal communication with WCFE's ITV director

and regional services) include teacher bias, technophobia or simply a lack of information.

In the spring of 1982, as an intern at Channel 57, the researcher undertook the production of a 30-minute "ITV Utilization Tape" designed to foster awareness of ITV potential in the classroom, and provide a broadbased understanding of typical ITV sessions. This program would be used to supplement or supplant "In-service Workshops" conducted periodically by WCFE's ITV director Rodney Saunders.

The purpose of this thesis-equivalent is two-fold. First, information gathering should provide a more articulate description of the current situation vis a vis teacher attitude, logistical and technical considerations and survey the causes of relative utilization.

Secondly, formative evaluation of the program itself will yield information on viewer reaction across a variety of variables as well as determining the most appropriate audience for this production. Assessment of the needs of the target population will make refinements to the product possible.

2

Target Audience

In-Service Teachers. Content, format and production

2. Certain aspects of the content were designed to cater to those "North Country" teachers working within the broadcast area of PBS Station WCFE, Channel 57 located in Plattsburgh N.Y. Pilot studies confirmed that this regional slant did not detract from the generic potential of the program.

variables were largely intended to cater to primary and secondary teachers (K through 12) with a minimum of one year experience in the classroom. Many of the implicit messages concerning the ITV session, teacher mediation, the classroom dynamic and decisions on format and "presenter" variables were made with in-service teachers in mind. This primary target audience would include teachers:

1. not using ITV out of ignorance, bias, fear, lack of information
2. using ITV - less than to an optimal degree
 - open to new ideas
 - seeking more information

Pre-Service Teachers. (Education Students)

Pilot studies revealed that Education students, initially intended as a secondary audience, displayed a greater shift in awareness when exposed to the program than In-Service teachers. Also in filling out the pre-treatment questionnaire, students displayed considerably more enthusiasm in their "hypothetical" utilization of a variety of A.V. materials (including ITV in the classroom) than in-service teachers.

As a result of this disparity, it was decided to compare groups of Ed. Students with In-service teachers on their exposure to the program.

Secondary Audience.

Administrators - principals
- curriculum planners

Parents

Educational Objectives

After seeing this program, the viewer will be aware of the range of effective Instructional Television utilization in the classroom; its potential across grade levels, subject matter and teaching styles.

Selection. The viewer will be aware of the range of programming available; how programs are disseminated, through a variety of sources, most notably the local or regional Public Broadcasting Station or through internal Audio Visual Departments. The viewer will be aware of the types of programming suitable to their curriculum, or specific teaching situations.

Support Materials. The viewer will be aware of the availability of adjunct Curriculum Teacher's Guides containing suggestions for integration of ITV into the daily curriculum, related activities and content reinforcement.

Teacher's Role. The viewer will comprehend the importance of teacher mediation in the ITV session;

Before: Student orientation; tie-in to base-line knowledge.

During: Keying in students to teacher-specified content.

After: Review, follow-up and related activities.

Logistics. The viewer will be aware of the variety of methods for bringing ITV into the classroom,

the possibility of off air taping, storage of programming and the flexibility of ITV scheduling.

Exploiting the Medium. The viewer will be aware of the advantages of television for arousing interest and motivation, in a variety of subject matter, bringing into the classroom experiences that are unavailable through other means.

-(Affective Objectives)-

The Teacher's Role. The viewer will understand the importance of teacher mediation in the ITV session, without abdicating authority to the television, and the possibility for teacher input in ITV selection and evaluation.

Technophobia. The viewer will be aware of the nominal technical demands on the ITV user.

ITV vs. Commercial T.V. The viewer will be aware of the disparities between ITV and commercial television vis a vis production, content, format and utilization.

Media Selection

"Media" may be defined as "carriers of messages from some transmitting source to the receiver of the message" (Romiszowski, 1981. pg. 339). Romiszowski outlines a checklist for the selection of appropriate media of specifically intended educational messages. While the selection of television as a medium to discuss, inform,

and "educate" on the topic of Instructional Television utilization seems glaringly pragmatic, the systematic decision making in the development of (any) instructional media facilitates decision making in the production and evaluation of those intended messages.

Content Objectives: The primary intention of "Spread the Word" is to do just that; to foster a general awareness and a positive attitude toward ITV utilization, by demonstrating diverse teaching potentials for a variety of ITV programming and documenting the opinions of students, teachers and administrators on effective ITV utilization.

The utilization medium seems an optimal mode of communicating continguously these intended messages, (Romiszowski, 1981) as well as offering a representative sample of available ITV programming.

Effective Communication. Romiszowski makes a distinction between "informational" (unidirectional), "instructional" (two-way) and fixed vs. flexible media. While this 30-minute videotape is both fixed and informational, its content, format and mode of presentation is broad enough to hopefully generate specific questions concerning indigenous facilities and individual teaching requirements.

Facilities Time: Most schools, and institutions are currently equipped with at least one VCR and monitor of either 1 2" (betamax, VHS) or 3 4" format. The videotape presentation seems eminently flexible in terms of

location, dissemination and audience size.

Availability: The easy transport, and product reproduction (dubbing) makes the video format an inexpensive and accessible commodity for distribution and dissemination.

Cost-Effectiveness: Student-crew and the use of studio facilities and "remote" equipment during station "down-time" (periods of relative inactivity) honed production costs down to the minimal expense of tape-dubbing.



Chapter 2

Content and Production Design

The 30-minute program (exact time - 28:45, in order to fit easily into the programming slot at WCFE, Channel 57) begins with a 45 second "teaser"; a montage featuring, diverse ITV utilizers, from students to administrators each expressing an opinion or feeling about television from their unique perspective. Each statement is "punctuated" by simultaneous freeze-frame and the recorded sound of a camera motor drive, in order to establish a rhythmic, forward motion. The last statement ("Spread the Word") fades to black, followed by music, moving graphics and titles.

This opening sequence has a dual purpose. The content and personae attempt to orient the viewer to the subject matter, personae and perspective of the presentation. By creating a "SET" in the viewer, his/her perceptions, organizations and expectations of upcoming messages should be aided by these opening cues (Fleming and Levie, 1979).

Freeze-frame, music and "punchy" editing of the graphics and titles attempt to draw the viewer's attention. Fleming and Levie cite movement, brightness

changes and abrupt changes in volume, pitch and direction as effective means of gaining the receiver's attention.

Finally, the opening attempted to emulate the format and "look" of the slickly packaged programming, typical of commercial television. While an expensive look (in the absence of expensive equipment!) does not insure greater learning, (Schramm, 1972) it seems an important consideration in light of the subject matter and objectives of this program (Lesser, 1972).

To further establish perceptual organization, and arouse a need in the viewer, (Fleming and Levie, 1979) the voice over introduction and rationale, in juxtaposition with visuals and graphics, outline the topics to be discussed and the issues that will be raised in an advance organizer of the forthcoming content.

The main body of the program consists of eleven discreet vignettes ranging from approximately two to four minutes in length, each one dealing with some aspect of ITV utilization. Levie and Fleming observe that perceivers are affected by the stimulus and their past experience, present interests and needs, suggesting "...the designer should permit a diversity of perceptual organizations..." and "...where materials are to involve audience discussion or inquiry the activity should avoid restrictive set" (p. 12) The open, "documentary" format will hopefully achieve a balance that is instructional, yet subject to individual interpretation, enabling the

viewer to modify the stimulus and extract information partially determined by his her past experience.

Voice-over narration serves to delineate or introduce segments, where necessary, and to provide additional information. However, for the most part verbal information is conveyed by the interviewees - active participants in ITV utilization.

The body of the message consists of interaction of interviews, footage of classroom or "remote" situation and snippets of ITV programming. In most instances "cutaway" footage is presented in contiguity with verbal information to provide illustration and instantiation of concepts. In those purely visual sequences containing implicit information, every effort was made (through matched editing) to convey to the viewer what the student is seeing. For example, in the segments stressing dynamic, active ITV viewing the audience will see intercutting of the classroom responding to an ITV quiz, or singing along with their television teacher and footage of the program itself without "missing a beat". Levie and Fleming note that "Objects and events encountered in proximity in space, time and context...will be perceived as related ideationally and functionally" (p. 70).

The more concrete the association (between verbally conveyed concepts and classroom footage ITV snippets) and the greater the provision for concurrent information in the two modalities, the more readily that information

will be learned and retained. The decision to utilize an open ended, documentary style rather than adhering to a pre-determined script to carry the intended message, greatly increased the number and duration of shoots, videotape ratio and the extent of post-production requirements. However the portrayal of "real situations" and the testimonials of "real people" justifies this format, catering to the cognitive and affective objectives of the program. The "presenters" of this program are similar to the audience, except perhaps in respect to their attitude towards and degree of ITV utilization.

The depicted scenes are an integral part of audience schema, tied into prior knowledge and belief systems. These "presenters" are not in a contrived, optimal ITV situation, but ostensibly share similar goals, values and teaching standards, experiencing the same frustrations of time, budget and logistical constraints. Teachers talking to teachers. Studies on attitude change reveal that attractiveness and credibility of the source will persist if the receiver can gain satisfaction through identification with the source and a congruence with his/her belief system (Levie and Fleming, 1979).

Content Outline

Form of Presentation: 30-minute videotape \ colour.

Title "pread the Word - Television is for Learning".

While every attempt was made to produce a "broadcast quality" program, the main intention was to present this videotape to a "captive audience" within a professional day, media seminar, ITV workshop, or otherwise pedagogic setting. Ample time should be allotted after viewing to respond to any specific questions generated as a result of the program. Samples of Teacher's Guides and adjunct print materials should be available for distribution and perusal as well as information on the local disseminator \ broadcaster of ITV programming.

Synopsis

:00	:45	"Teaser" (advance organizer): Montage of teachers, students and administrators; single statements on ITV (FREEZE FRAME MOTOR DRIVE)
:45	1:45	Open Music Graphics Titles
1:45	4:00	Introduction (Voice over, Video of classrooms, ITV snippets, Graphics) - Television-integral part of environment - Motivation to watch already exists - Television "window on the world" - ITV caters to diverse teaching

- styles
- Selection
- Teacher's Role
- Utilization (logistics)
- Advantages of T.V.

- 4:00 7:00 Segment 1 (V.O. intro, teacher (F 60) interview, kindergarden footage snippets "Song Bag" "Gather Round")
- ITV in interactive
 - Teacher mediation paramount
 - ITV fills in "specialty gaps"
 - ITV talks to target audience
 - Different setting
 - Fun
 - Exploit existing motivation to watch
 - Literature "comes to life"
 - Different way to learn
 - Follow-up
 - ITV is convenient
- 7:00 7:45 Segment 2 (straight interview, principal, M 60)
- (just) another classroom resource
 - Teachers should preview
 - Use guides
 - Follow-up
- 7:45 10:50 Segment 3 (V.O. intro, teacher interview, M 45, Grade 6 footage snippets - "Truly American" - social studies)
- ITV supplements daily curriculum
 - Before: tie in to prior knowledge base
 - drama gives new insight to history
 - GUIDES
 - PRE-VIEWING
 - Kids attend to ITV
 - "Window on the World"
 - Communicates to target audience
 - "Entertainment" learning (?)
- 10:50 11:15 Segment 4: (straight interview, principal M 60)
- another classroom resource, AV material
 - teacher's role the same

- 11:15 14:45 Segment 5: (V.O., intro, teacher F 40, 4th grade footage, snippets "The Write Channel," "Math Patrol")
- before: student orientation, tie-in
 - ITV student participation
 - learning goes beyond viewing session
 - entertainment attention learning (?)
 - caters to diverse teaching styles
 - GUIDES
 - another way to learn
 - language arts
- 14:45 18:45 Segment 6: (teacher interview F 30, 4th grade footage snippets "Assignment the World", Romeo & Juliet)
- ITV topical, window on world
 - ITV caters to target audience
 - teacher mediation indispensable
 - promotes active viewing
 - follow-up
 - beyond viewing session
 - integrated into curriculum, home
 - literature "comes to life"
 - ITV motivates reading
 - related activities
- 18:45 19:55 Segment 7: (interview, A.V. Director M 40, A.V. footage, demonstration)
- GUIDES
 - Information channel to teachers
 - minimal technical demand on teachers
 - ITV is flexible
 - ITV is easy to use
- 19:55 21:55 Segment 8: (V.O. intro, interview kids, teacher F 28 snippet "Parlez-moi" Grade 7 footage)
- language "comes to life"
 - follow-up "drill"
 - advantage of T.V. to "show and tell"
 - teacher mediation
 - tie-in to curriculum
 - break in classroom routine
 - entertainment motivates, holds attention
 - humour serves as mnemonic
 - PREVIEW
 - prepare material
 - ITV is flexible scheduling

- teacher in control
- ITV caters to target audience

21:55 24:00 Segment 9: (V.O. intro, interview teacher F 45 grade 8 footage snippet "On the Level")

- Drama speaks to individual
- "modelling" potential
- caters to target audience
- incorporate into daily audience
- incorporate into daily curriculum
- Guides
- teacher in control
- BEFORE activities
- AFTER activities
- active participation

24:00 27:30 Segment 10 (V.O. intro, teacher interview M 35, kid testimonial grade 7 footage, snippet "Community", remote footage)

- ITV window on "scientific" world
- fills in speciality gaps
- ITV geared to classroom use
- Teacher mediation
- beyond the viewing session
- supplants financial, logistical constraints
- advantage of the medium
- integrated into daily curriculum

27:30 29:00 Segment 11 (V.O., control room, committee footage)

- broadcast schedule flexible
- print materials available
- ITV evaluated by teachers
- information - address phone contacts

29:00 CREDITS MUSIC

Chapter Three

Method of Evaluation

The intent of this evaluation is two-fold; to measure the efficacy of the 30-minute videotape and to gather relevant information from the target audience.

Responses from the measuring instrument will affect decisions concerning further modifications of the videotape and ascertain, albeit in a post-hoc fashion, a clearer understanding of the state of facilities, attitudes and degree of ITV utilization within the target audience.

Specifically, data gleaned from subject responses address the following issues:

- a. To determine in a post-hoc manner whether there was a need for this tape in the first place.
- b. To gather salient information regarding the real situations within the schools, and teachers' baseline attitudes concerning ITV.
- c. How this information affects actual ITV utilization.
- d. To determine if the primary target audience is in fact who it is supposed to be. To determine

whether messages conveyed in the program are amenable to the proposed target audience (audience appropriateness)

- e. To evaluate the program.
- f. To seek patterns of response i.e. to match variances in the subject population with evaluation of the program along a variety of variables.
- g. To determine the degree of viewer involvement and the limitations of this particular program.

Subjects generated from two areas. In-Service teachers were gleaned from professional days and workshops dealing with related issues. Pre-service teachers (education students) were selected from the Education Department at Concordia University.

Instrumentation (see Appendix 2)

Prior to viewing the program, subjects are required to complete a questionnaire, providing a comprehensive entry description of the viewer across a number of variables.

Information such as age, sex, education (general and relating to ITV utilization), grades and subjects taught provide the necessary demographic background.

The subjects are required to complete an A.V. resource "inventory" to determine their awareness of the current state of facilities, equipment and information in

their schools, as well as an opportunity to enumerate resource deficiencies that might preclude ITV utilization.

Attitudes and opinions on television in general and an assessment of the effectiveness of instructional television in a variety of classroom strategies are canvassed in order to determine a baseline attitude profile. Subjects are also required to complete a checklist outlining actual utilization of A.V. materials (including ITV). Actual utilization can be matched against subjects' perception of available resources and attitudinal data to determine motivation behind relative utilization.

After watching the program subjects are required to complete a second questionnaire, generating their reactions to the program.

A prior awareness checklist is provided to determine what (if any) new information was conveyed in the videotape. Likert-scale items should provide viewer reactions across a number of program variables in an attempt to provide responses to these questions:

Productions variables. (editing, colour, audio, special FX). Was the level of "professionalism" adequate to maintain attention, and convey the intended message, or was it amateurish, thereby detracting from the message and decreasing credibility?

Format variables. Was the sequence and pacing of the show enhancing or detrimental to the educational objectives? Was the organization and presentation of information in a

series of discreet "documentary" style vignettes a clear and effective mode of communication? Did the "teaser" montage, introduction and advance organizer successfully establish a cognitive set for viewing?

Presenter variables. Were the teachers, students and administrators interviewed in the program, articulate and convincing? Were the classroom situations portrayed, realistic and relevant to the viewers?

Content variables. Was the information (as outlined above in the Educational Objectives) adequately conveyed? Did viewers "get the point"?

The next sections provide the viewer with options to suggest modifications in the content, depth of involvement and their notion of the program's optimal target audience. Subjects can express further interest in seeing related, more specific programming.

Finally an open-ended section invites the viewer to express his her opinion vis a vis the program and generate any specific questions that may not have been accounted for in the objective section.

The questionnaire requires approximately fifteen minutes for each of the two sections. The whole procedure, including viewing the program, requires an hour.

As mentioned above, pilot testing revealed a disparity between in-service teachers and education students, both in their opinions on the use of A.V. materials in the

classroom and reactions to the videotape itself.

As a result, it was decided to include education students as well as In-Service teachers as subject groups to determine to what extent the daily classroom experience modifies attitudes towards A.V. resources and ITV utilization.

It would seem that the real world constraints of curriculum planning, scheduling, classroom size and limited resources might put a damper on the unflagging optimism of the teacher in training. As well, it would seem salient to ascertain differences in group appraisal of the videotape in terms of intended message and the conveyence of (new) information. Results gleaned from this study should provide focus for subsequent ITV utilization materials and workshops.

The questionnaires for the two groups are identical in most respects. The demographic section is altered to accomodate pre-service teachers and actual utilization checklists are semantically modified so as to be hypothetical in nature (e.g. once in the classroom, would you ?).

A total of 92 subjects (54 in-service teachers, 38 pre-service teachers) participated in the study, gleaned from a variety of pedagogic settings in Montreal, Québec.

Nineteen subjects emerging from a teacher's meeting at Jewish People and Peretz Schools were administered the study by the author. Some had been alerted to the study by word of mouth and a memo circulated and posted in the teacher's lounge in both the Cote St. Luc and Snowdon branches. Others were solicited on the spot.

Ten teachers from Hampstead School participated in the study during a free hour on a Professional Day.

Twelve teachers were obtained from a diploma course in media offered through McGill University. Up to this point, the course had not dealt with material specifically pertaining to ITV utilization.

Thirty-eight students and 13 teachers were obtained from two classes given through the Education Department at Concordia University.

These groups included in-service teachers completing undergraduate degrees or pursuing post-graduate credits in Education. The majority of students were following bachelor directed streams in Education or Early Childhood Studies. The remainder of the students were pursuing other majors (as indicated) with a minor in Education.

Subject Profile (In-Service)

Age. In-service teachers ranged from 21-63 years

with a mean of 34.5.

Sex. The sample was predominantly (85%) female.

Teaching Setting. Subjects came from a variety of pedagogic environments, including Pre-School (31%), Elementary (31%) and High School (4%). An "Other" category was established to accommodate those subjects (38%) in alternative teaching situations, including Judaic Studies, Special Education, "Shop" and CEGEP level Business. It was determined through personal communication (and the open-ended sections of the questionnaire) that these participants were still amenable to ITV utilization and that their response was a valid contribution to both the information gathering and evaluation components of this study.

Teaching Experience. Teaching experience ranged from 2 to 40 years with a mean of 11.5 years.

Education. Most (53%) of the teachers possessed a Bachelor's degree with 19% pursuing Post Graduate credit and 13% having completed a Master's degree. Only 8 participants (15%) fell into the Pre-Bachelor category.

Subject Profile (Pre-service)

Age. Pre-service subjects ranged from 20 to 46 years with a mean age of 24.5.

Sex. The sample was largely (97%) female.

Undergraduate Major. Most of the samples indicated

either Early Childhood Studies (63%) or Education (26%). Those falling into the "other" category listed Psychology, Sociology, or English as their major.

Procedure

At the outset, the researcher introduced himself and briefly explained the purpose of the study. The subjects were thanked for their interest and cooperation and informed that they would be viewing a 1 1/2 hour program and filling out two questionnaires, one before and one after.

The researcher went on to say that any questions concerning the production, the study or particular questions about ITV would be gladly entertained after the procedure.

It became apparent from the pilot-test to add that active or current ITV utilization was not requisite to subject participation, but rather as experienced teachers or education students, their input was considered "expert appraisal".

The pre-questionnaire was distributed and took from 10 to 15 minutes to complete. Lights were dimmed and for 30 minutes they viewed the program. Afterwards they took from 10 to 15 minutes to complete the post-questionnaire.

At the end of the hour the researcher again thanked the sample and responded to questions; reiterated mailing information and on a few occasions engaged in informal conversation in small groups.

It should be noted that certain logistical variables may have hindered optimal administration of the study.

Teachers from the JPPS group underwent the procedure rather late in the day and some complained of the hour. Playback equipment at Hampstead School was technically impaired, distorting the video image. An apology was registered by the researcher.

Data Analysis

Data generated from the measuring instrument is both descriptive and ordinal in nature. Therefore, non-parametric statistics were used in the analysis.

In addition, because of the nature of the questions being asked, a number of grouping structures were possible, all of which would mask potentially important responses of the subjects. Since this was an evaluation of subjects' reaction to the videotape program and since information gleaned was intended as formative data in the design of this and other such programs, the questions were analysed individually. In all analyses, chi-square statistics or median tests (based on a chi-square distribution) were used so as not to violate the nature of the data and to conservatively estimate the question on which the samples (i.e. between group and within the In-Service group) differed.

In the case of this study, non-significant results and frequencies often share an equal importance in ascertaining a clear picture of subject attitude and response. While there are more elegant and parsimonious means of presenting results, it was determined, given the need to preserve the nature of each question, to list each item in the main body of the text. Tables and graphs are presented in Appendix 3.

Chapter Four

Evaluation Results

Pre-Viewing

In-Service and Pre-Service subjects completed a checklist outlining relative utilization (actual and hypothetical, respectively) of a variety of audio-visual materials in the classroom. In-Service subjects completed an A.V. resource inventory to determine their awareness of the current state of facilities, information and equipment in their school and enumerate those resource deficiencies that might preclude ITV utilization.

Both groups then indicated their degree of facility with video playback equipment, and education pertaining to ITV utilization. Televiewing habits of subjects and their children were documented.

Using a 5-point Likert Scale, opinions on television in general and an assessment of the effectiveness of Instructional Television in a variety of classroom strategies were canvassed in order to determine a baseline attitude profile.

Post-Viewing

After viewing the program, subjects indicated their degree of prior knowledge on a content checklist and evaluated the program across the variables indicated above. Suggestions for program modification and optimal target audience were canvassed. Degree of interest and involvement were indicated by choosing topics for more

specific video-instruction and ITV related activities. Finally, open-ended questions provided opportunity for viewer reactions and response not accommodated by the objective sections.

Pre-viewing Results

A.V. Utilization Checklist. To determine the relative utilization (In-Service-actual, Pre-Service-hypothetical) of each of the audio-visual materials listed, frequencies were generated on the "never", "occasionally" and "often" categories. Tables 1a and 1b present these percentages and the ranks of each item according to frequency of use for the two subject groups. The In-Service group cited Records, Photos\Graphics, and newspaper\magazines as the most "often" used materials and Commercial and Instructional Television as the least popular (most "never") ones. Pre-Service subjects also reported Photos\Graphics, Newspapers\Magazines and Records as the most often used and Commercial Television as least popular. However, compared to the ("occasionally" and "often") 36% of teachers actually using ITV, 95% of the education students expected to use instructional television in the classroom.

It was determined to isolate that 36% of the In-Service subjects (ITV users) for subsequent within-group analysis. Henceforth, the 36% of the In-Service sample was compared with the remaining 64% (nonusers), in an attempt to discriminate the views of ITV users from non-

users. An independent samples chi-square was performed, investigating ITV users tendency towards other classroom media. As illustrated in Table 2, ITV users were significantly disposed towards 16mm film ($p = .0088$) and commercial television ($p = .0008$) when compared with In-Service non-users.

Table 3 displays differences between Pre-Service (hypothetical) and In-Service (actual) responses on the A.V. utilization checklist. Of the 10 items listed, there were statistically significant responses on 7. Based on these results, frequency distributions on general media use were generated to ascertain a clearer picture of group difference. As illustrated in Graphs 1 and 1a the Pre-Service group was positively skewed in its response. In-service teachers responded much more moderately. One might expect that a larger sample ($n=54$) would yield a more normal distribution.

A.V. Resource Inventory. Table 4 summarizes In-service response to the resource inventory, providing further insight to relative ITV utilization.

Only 7% of the sample was optimally equipped for ITV use and 30% possessed the minimum requisite hardware. Subjects responded more favourably to the personae and resource sections, indicating at least 50% of the schools provided staff and facilities for information dissemination.

Frequencies on the "greater use" items (Table 5) seem

to corroborate earlier sections. Equipment and specific ITV information were listed as priorities in facilitating ITV utilization.

Technical Background. Contrary to expectation (due to the disparity in age), 65% of the In-Service sample could already operate video playback equipment, compared to 38% of the Pre-Service subjects.

ITV Course. Of the 30% of the In-Service sample who had taken a course or seminar related to ITV utilization, 53% felt the experience provided "all they needed to use ITV effectively" while 47% indicated that it was "insufficient". Of the 34 subjects who had no prior exposure, 87% indicated they "would like to take such a course".

To determine if there was any connection between ITV related education and utilization, a chi-square was performed, using ITV utilization and ITV courses as independent variables. No significant differences were found.

34 of the 35 Pre-Service subjects with no ITV related coursework also expressed the desire to "take such a course".

Televiwing Habits. In-Service subjects displayed more conservative viewing habits than Pre-Service. 46% of the teachers indicated that they watched less than one hour of television per day compared to 42% of the education students who reported between 2 and 4 hours of

televiewing per day.

Both groups (where applicable) advocated parental supervision and guidance in their children's watching.

ITV Effectiveness in the Classroom (In-Service). To determine if there were differences among teachers on their perceptions of ITV effectiveness in a variety of classroom strategies, median tests were performed on each of the items, using both the hypothetical (3.0) and observed medians, with ITV utilization as the independent variable.

When measured against the 5-point scale (hypothetical mean), only one item produced significant differences. When presented the question; "How effective do you feel ITV would be in providing the main body of instruction?", ITV users and non-users varied significantly (chi-square=4.158, $p=0.041$ two tailed). No ITV user responded higher than 3.0 on the Likert Scale.

Table 6a presents In-Service response to the ITV Effectiveness items, including observed medians, chi-square range and p., using ITV utilization as the independent variable.

1. Teachers felt ITV was not an appropriate way to "introduce a unit of instruction", with 54% of the sample falling on or below the observed median of 3.0.
2. Teachers indicated that ITV was an effective way to "supplement" a unit of instruction, with an observed median of 4.0.
3. Users and non-users varied significantly (chi-square=4.158, $p=.041$, two tailed), on the "main body of instruction" item. Teachers were actually divided across the scale generating a combined median of 3.0.

4. Teachers agreed that ITV would be effective in "review or reinforcement" of subject matter. The observed median was 4.0.
5. In-service subjects responded favourably to ITV's potential in "visually illustrating some theoretical concept", generating a median of 4.0.
6. Teachers reported that television in the classroom would effectively "arouse motivation and interest" their subject matter. The observed median was 4.0.
7. Subjects indicated that ITV could successfully "present case studies of some knowledge, generating a median of 4.0.
8. Teachers felt that ITV could not adequately "demonstrate a psycho-motor skill". Perhaps their perception of television as an inherently pacifying, unidirectional medium led 31 subjects to fall on or below the observed median of 3.0.
9. Teachers agreed that television was a useful tool to "dramatize some aspect of the curriculum." The observed median was 4.0.
10. Teachers indicated ITV was an effective springboard for "initiating a classroom discussion", generating a median of 4.0.
11. Teachers strongly agreed that ITV could provide a "change of pace" from other classroom activities, generating a combined median of 5.0.
12. While not significant at .05, users and non-users differed on ITV's potential for "student-directed learning" ($\chi^2=2.923$, $p=.087$). Perhaps because of the ITV-users emphasis on teacher mediated television, 13 of the 19 subjects in the user category fell below the observed median of 3.5 while 21 of the 35 non-users fell above 3.5 on the scale.

ITV Effectiveness (In-Service by Pre-Service). To determine if differences existed between the two subject groups, median tests were performed on the ITV Effectiveness items, using In-Service and Pre-Service categories (subject type) as the independent variable. The samples were compared against the scale (hypothe-

tical median, 3.0) and observed medians.

When measured against the scale, only one item ("dramatizing some aspect of the curriculum") produced significant results $\chi^2=8.022$, $p=.005$ two-tailed), with 67% of the student sample falling on, or below the 3.0 median. Frequencies and observed medians below offer some insight to this result.

Table 6b presents In-Service and Pre-Service responses to the ITV Effectiveness items, including observed medians, χ^2 , range and p , using In-Service and Pre-Service as independent variables.

1. Students and teachers agreed that ITV is not an effective means of "introducing a unit of instruction", with over half the population (58 subjects) rating 3.0 or lower ($N=92$).
2. Both samples felt ITV was a good way to "supplement a unit of instruction". The observed media was 4.0.
3. The population agreed that ITV was not capable of providing "the main body of instruction" with 84% of the student sample and 83% of the teacher sample indicating 3.0 or lower.
4. Student and teachers rated ITV as an effective tool for "review or reinforcement", with an observed median of 4.0.
5. Pre-service and In-Service subjects felt television would be useful in "visually illustrating some theoretical concept". The observed median was 4.0.
6. Both groups concur that ITV can "arouse motivation and generate interest", generating a combined median of 4.0.
7. The population agreed that television is an effective way to "present case studies". The observed median was 4.0.
8. Students agree with teachers that ITV, perhaps due to its unidirectional nature, cannot adequately

"demonstrate a psycho-motor skill", with 54 subjects rating this item 3.0 or lower.

9. While not statistically significant ($p=.089$) against the observed median of 4.0, frequencies support the disparity in student and teacher opinion on ITV's capability to "dramatize some aspect of the curriculum".
10. While not statistically significant ($p=.069$) against the observed median of 4.0 all frequencies again support Pre-Service In-Service differential ratings on ITV's effectiveness in "initiating a classroom discussion".
11. While clustered around the observed median of 4.0, In-Service and Pre-Service samples varied significantly ($\text{Chi-square}=4.985$, $p=.026$, two-tailed) on ITV's effectiveness in "providing a change of pace". Items 9, 10 and 11 offer some insight into what could be conceived as an ideological difference in reference to ITV's effectiveness. Each of these statements pertain to ITV potential in what may be termed "soft instruction"; that is classroom activity that enhances and rounds out the curriculum, while not crucial to teaching per se. Perhaps, while the seasoned teacher recognizes the necessity for such activity, the education student lacks the classroom experience and security to endorse materials offering a "change of pace".
12. Both group rated ITV as ineffective in "providing opportunity for student directed learning". Perhaps due to the perceived importance of teacher mediation and television's reputedly unidirectional and pacifying nature, 49 of the total subjects fell at or below the observed median of 3.0.

ITV Opinion (In-Service). To determine if there were differences among teachers in their opinions on ITV utilization and potential in their classrooms, median tests were performed on each of the 21 items, using both the hypothetical and observed medians, with ITV utilization as the independent variable.

While no significant differences were found between users and non-users, frequencies and generated medians provide insight into In-Service reactions to and

expectations of ITV.

This section yielded more conservative response, possibly due to canvassing in a more direct way and tapping more personal experiences.

1. Teachers did not feel television was an effective way to "increase attention and motivation in the classroom". 60% of the sample fell on or below the observed median of 3.0.
2. In-Service subjects agreed that ITV did not promote "an active viewing environment", with 68% of the teachers indicating 3.0 or lower and a combined median of 2.0.
3. Users and non-users concurred that they have "difficulty finding adequate programming", generating an observed median of 4.0 and substantiating earlier indications of a dearth of ITV-specific information.
4. Teachers responded neutrally to "preparing for an ITV session as I would any other", distributed equally about the observed 3.0 median.
5. The sample was divided unfavourably on whether they "would have difficulty incorporating ITV into my schedule", generating a median of 3.5.
6. Users and non-users were divided equally on whether "most ITV programs...seem to communicate effectively", generating a combined median of 3.0.
7. Teachers were divided favourably on whether "television...facilitates my teaching objectives", with an observed median of 3.5.
8. Teachers agreed that "television can provide experiences that cannot be created in most classrooms", with 63% of the sample rating a 4 or a 5 on this item.
9. Supporting the notion that teacher mediation is essential when using adjunct materials, In-Service subjects concurred that "new teachers should not fear that ITV would usurp their position", with 79% of the sample falling above 3.0.
10. Users and non-users agree that ITV is different in concept and setting than commercial television, generating an observed median of 4.0.

11. Most teachers did not feel "teaching with ITV requires a new set of skills", with 66% of the sample rating 3.0 or lower.
12. In-service teachers strongly disagreed that "...ITV programs can stand alone as instruction." Generating a median of 1.75 and corroborating earlier responses.
13. Initially considered a subject bias and a deterrent to utilization, technophobia was not revealed as a subject trait. Response to this item generated an observed median of 1.0.
14. Teachers agree they do not "have all the materials I need..." generating a median of 1.0 and substantiating the demand for ITV software.
15. Initially considered a subject bias, teachers do not "attribute declining literacy levels to television" with 75% of the sample rating 3 or lower on this item.
16. Subjects strongly agree that "the teacher's function, is as important in an ITV session as any other...", generating an observed median of 5.0.
17. Substantiating similar responses, teachers indicated they were not "concerned that ITV detracts from the basics"...with 84% of the sample rating this item 3.0 or lower.
18. Teachers were divided unfavourably as to whether "ITV is produced specifically for classroom use" with 68% of the subjects falling on or below the observed median of 3.0.
19. Supporting the demand for ITV related information teachers indicated they "would use ITV more, if there was more information available", with 76% of the sample rating a 4 or 5 on this item.
20. Teachers strongly agreed that ITV was not "an easy way out for students and teachers" generating an observed median of 1.0.
21. Subjects agreed that "television could enhance the learning process...", with 73% of the subjects rating a 4 or 5 on this item.

ITV Opinions (In-Service) by (Pre-Service). To determine if differences existed between students and

teachers in their opinions on ITV utilization and potential in the classroom, median tests were performed on each item (hypothetical, observed) using Subject Type as the independent variable.

When measured against the scale, two items produced significant differences.

Students and teachers differed significantly ($\chi^2=7.511$, $p=.006$, two-tailed) as to whether they would "have difficulty incorporating ITV into my schedule" with 68% of the Pre-Service sample falling on or below the median compared to 50% of the in-service subjects. This result may reflect the relative enthusiasm for A.V. materials as documented in earlier sections.

Pre-service and In-service groups differed significantly ($\chi^2=4.651$ $p=.031$ two-tailed) ratings the statement "New teachers should not fear that ITV will usurp their position in the classroom". More students felt that television posed some threat, with 45% of the sample falling on or below the median, compared to 21% of the In-service group. Possibly, classroom experience emphasizes the importance of teacher mediation when using classroom materials of any medium.

Table 7b presents combined responses to the ITV opinion items, including observed medians, χ^2 , range and p , using subject type as the independent variable.

2. Both groups agreed that ITV could not promote "an active viewing environment", with 65% of the pre-service subjects and 60% of the In-Service subjects falling on or below the combined median of 3.0.
3. While not significant, frequencies indicate a disparity in the groups' estimate of "difficulty in finding "adequate programming". Teachers perceive a greater difficulty with 52% rating 3.0 or higher, compared to 63% of students rating 3.0 or lower on this item. If such a disparity actually exists, the ramifications are double edged. Either this reflects the hypothetical vs. actual tendency toward A.V. utilization as outlined in earlier sections, or students have in fact been exposed to more ITV programming.
4. While not significant, frequencies seem to support different group perceptions on whether to "prepare for my ITV session as I would any other" with 76% of the Pre-Service group falling on or below the combined median of 3.0 compared to 58% of the In-Service group.
5. As indicated above, teachers and students differed significantly on whether they would have "difficulty incorporating ITV into my schedule", with students anticipating fewer logistical problems.
6. Teachers and students responded neutrally as to whether "most ITV programs...seem to communicate effectively". Generating a combined median of 3.0.
7. All agree that "ITV does facilitate teaching objectives" generating an observed median of 4.0.
8. Both groups concur that "television could provide experiences that cannot be created in most classrooms", with a combined median of 4.0.
9. While not significant (see significance at 3.0 above) at the generated median of 4.0, frequencies support the disparity on whether "new teachers should not fear that ITV will usurp their position...". 79% of the In-Service sample rated this item 4 or 5 compared to 55% of the Pre-Service sample.
10. Both groups agree that ITV is different in concept and setting than commercial T.V., generating a combined median of 4.0.
11. More students than teachers felt that "teaching with

ITV requires a new set of skills", with 44% of the Pre-Service group falling above the observed median of 3.0 compared to 34% of the In-Service group.

12. While the generated median is low (2.0), the two groups differed significantly (chi-square=9.402, p=.002 two-tailed) on whether an ITV program can "stand alone as instructional treatment".
13. Students and teachers agreed they were not worried "about all those buttons and dials" generating a combined median of 1.0 on the "technophobia" item.
14. All agreed they did not have "all the guides and materials needed" generating a combined median of 1.0 and substantiating the need for ITV specific information and adjunct print materials.
15. Contrary to expectations, more students than teachers felt "declining literacy levels can be attributed to television", with 74% of the Pre-Service Sample falling on or above the observed median of 3.0 compared to 43% of the in-service group.
16. All agreed that "the teacher's function is as important in an ITV session as any other" generating a combined median of 5.0.
17. Both groups felt that ITV does not "detract from the basics of education", with an observed median of 2.0.
18. Most subjects did not think that "ITV programs are produced specifically for classroom use" with 74% of the students and 67% of the teachers rating this item 3.0 and lower.
19. Both groups agreed they would "use ITV more if there was more programming information available" substantiating similar items.
20. All agreed ITV is not an "easy way out" generating a combined median of 2.0.
21. While clustered around the observed median of 4.0., the two groups differed significantly (chi-square=6.085, p .014 two-tailed) as to whether "television can enhance the learning process". Perhaps this reflects the ideological differences (as outlined above) in the two groups vis a vis ITV's place in "soft" instruction.

Post Viewing

Prior Awareness (In-Service). To determine if there were differences among teachers on their prior awareness and to achieve an indication of what (if any) new information was conveyed by the program, median tests were performed on each of the 28 items, using both hypothetical and observed medians, with ITV Utilization as the independent variable.

When measured against the scale no significant differences were found.

Table 8a presents in-service responses to the Prior Awareness items, including observed medians, chi-square, range and p., using ITV Utilization as the independent variable.

1. Teachers were very aware that "T.V. played a big part in my students lives" with an observed median of 5.0.
2. Subjects were aware that they "could capitalize on student motivation..." generating a combined median of 4.0.
3. Some teachers were not aware that "ITV is flexible (i.e. scheduling)" with 52% of the sample falling on or below the observed median of 3.0.
4. Teachers were aware that the "ITV could be used to... supplement the daily curriculum", with an observed median of 4.0.
5. Teachers were aware that "the teacher's role was indispensable...", generating a combined median of 4.0.
6. Teachers were aware of the "need to preview programs", with 83% of the sample rating 4 or 5 on this item.
7. Teachers were aware of the need for "student orientation".

8. Teachers were very aware of importance of "follow-up"..., with 87% of the sample rating 4 or 5 on this item.
9. While clustered around the observed median of 4.0 users and non-users differed significantly ($\chi^2=8.926$, $p=.003$ two-tailed) on their awareness that "minimal technical proficiency is required".
10. Teachers were aware that "ITV is a different way to teach" generating an observed median of 4.0.
11. Teachers were aware that "ITV promotes active viewing".
12. Some teachers were not aware that "ITV fills in specialty gaps"...with 56% of the sample falling on or below the observed median of 3.0.
13. Teachers were aware that "ITV programs are designed to communicate to its audience" with an observed median of 4.0.
14. Teachers were aware that "ITV programs are produced... by objective", with an observed median of 4.0.
15. Some teachers were not aware that "...programs are produced to fit into class periods" with 59% of the sample falling on or below the observed median of 3.0.
16. Some teachers were not aware of ITV's capability "to provide new insight by presenting case studies" with 50% of the sample rating 3.0 or lower on this item.
17. Teachers were aware that "ITV can bring to life some aspects of the curriculum" with an observed median of 4.0.
18. Most teachers were not aware that "curriculum and teacher's guides were available" with an observed median of 2.0.
19. Teachers were aware that "...entertainment aspects attract attention and increase motivation with an observed median of 4.0.
20. Teachers were aware that "learning goes beyond the viewing session" with an observed median of 4.0.
21. Teachers were aware that "ITV caters to diverse teaching learning styles" with an observed median

- of 4.0.
22. Teachers were aware that ITV is "topical and fast paced" with an observed median of 4.0.
 23. Some teachers were not aware that "ITV motivates reading and writing with 63% of the sample falling on or below the observed median of 3.0.
 24. Teachers were aware that "programs can be taped off the air..." with an observed median of 4.0.
 25. Teachers were aware that "ITV can show and tell" with an observed median of 4.0.
 26. Teachers were aware that they required no special skills...", with an observed median of 4.0.
 27. Teachers were not aware that "programming and print materials were free..." generating an observed median of 1.0
 28. Some teachers were not aware that "...teachers can choose and evaluate programs..." with 56% of the sample falling on or below the generated median of 3.0.

Prior Awareness (In-Service) by (Pre-Service).

To determine if there were differences between education students and teachers on their prior awareness and to achieve an indication of what (if any) new information was conveyed by the program, median tests were performed on each of the 28 items, using both hypothetical and observed medians, with Subject Type as the independent variable.

When measured against the scale, 5 items produced significant results.

5. In-Service and Pre-Service subjects differed significantly chi-square=4.247 p=.039 two-tailed) on their awareness that "the teacher's role was indispensable in an ITV session." Perhaps the experienced teacher is more certain that with any learning material, teacher mediation is imperative.

6. In-Service and Pre-Service subjects differed significantly ($\chi^2=8.713$ $p=.003$ two-tailed) on their prior awareness of "the need to preview programs". Again, any teaching materials, regardless of the medium, regardless of the medium, requires teacher familiarity to be implemented effectively.
7. The two groups differed significantly ($\chi^2=7.459$, $p=.006$ two-tailed) on their prior awareness of "the need for student orientation prior to viewing". Substantiating the items above, teachers better understand the importance of integrating materials into a cogent curriculum, and cuing their students to attend the pertinent details before exposure.
8. Teachers and students differed significantly ($\chi^2=4.269$, $p=.039$ two-tailed) on their prior awareness that "minimal technical proficiency is required". It is surprising that Pre-Service subjects, representing "the younger generation" and displaying a great propensity towards A.V. materials would be less aware of the requisite skills.
9. Teachers and students differed significantly ($\chi^2=.520$ $p=.011$ two-tailed) on their prior awareness that "ITV is topical and fast paced...". Perhaps the contingent of ITV users in the In-Service sample and their exposure to actual programming contributed to the difference.

Table 8b presents combined responses to the Prior Awareness items, including χ^2 , observed medians, range and p , using Subject Type as the independent variable.

1. While clustered around the observed median of 4.0, In-Service and Pre-Service groups differed significantly ($\chi^2=3.974$, $p=.002$ two-tailed) on their prior awareness that "T.V. played a big part in (my) students' lives".
2. While clustered around the observed median of 4.0, teachers and students differed significantly ($\chi^2=3.974$, $p=.046$ two-tailed) on their prior awareness that "I could capitalize on student motivation..." While the combined medians of the

above items display awareness in both samples, perhaps teachers' daily exposure to children at work and play convinces them with greater certainty of the prevalence of television in the students' lives.

3. Some teachers and students were not aware that "ITV is flexible (i.e. scheduling) with 52% of the In-Service sample and 61% of the Pre-Service sample falling on or below the observed median of 3.0.
4. Students and teachers were aware that "ITV could be used to...supplement the daily curriculum", with an observed median of 4.0.
5. With an observed median of 3.0, teachers and students were divided significantly across the scale as above.
6. Teachers and students were aware of "the need to preview programs" with 83% of the In-Service sample and 53% of the Pre-Service group rating a 4 or 5 on this item.
7. While clustered around the observed median of 4.0, teachers and students differed significantly (chi-square=4.165, $p=.041$ two-tailed) as above.
8. While clustered around the observed median of 4.5, teachers and students differed significantly (chi-square=7.577 $p=.006$ two-tailed) on their prior awareness on "the importance of follow-up". While both groups displayed awareness, perhaps the classroom experience of the In-Service sample accounts for the significant result.
9. Both groups were aware that "minimal technical proficiency is required" when divided across the observed median of 4.0.
10. Both groups were aware that "ITV is a different way to teach", with an observed median of 4.0.
11. Students and teachers indicated a prior awareness that "ITV promotes active viewing" with a combined median of 4.0.
12. Some teachers and students were not aware that "ITV fills in specialty gaps..." with 56% of the In-Service sample and 53% of the Pre-Service group falling on or below the observed median of 3.0.
13. Both groups were aware that "ITV programs are designed to communicate to its audience" with an observed median of 4.0.

14. Students and teachers were aware that "ITV programs are produced...by objective", with an observed median of 4.0.
15. Some teachers and students were not aware that "...programs are produced to fit into class periods" with 59% of the In-Service and 66% of the Pre-Service group falling on or below the observed median of 3.0.
16. Some teachers and students were not aware of ITV's capability "to provide new insight by presenting case studies", with 50% of In-Service subjects and 66% of the Pre-Service group falling on or below the observed median of 3.0.
17. Teachers and students were aware that "ITV can bring to life some aspects of the curriculum", with an observed median of 4.0.
18. Most teachers and students were not aware that "curriculum and teachers guides were available". generating a combined median of 2.0.
19. Teachers and students were aware that "...entertainment aspects attract attention and increase motivation with an observed median of 4.0.
20. Teachers and students were aware that "learning goes beyond the viewing session" with an observed median of 4.0.
21. Teachers and students were aware that "ITV caters to diverse teaching learning styles" with an observed median of 4.0.
22. When divided across the obtained median of 4.0, both groups displayed prior awareness that "ITV is topical and fast paced".
23. Some teachers and students were not aware that ITV could "motivate reading and writing" with 63% of the In-Service sample and 74% of the Pre-Service subjects falling on or below the observed median of 3.0.
24. Students and teachers were aware that "programs can be taped off the air..." with an observed median of 4.0.
25. Students and teachers were aware that "TV can show and tell" with an observed median of 4.0.

26. Student and teachers were aware that they "required no special skills..." with an observed median of 4.0.
27. Teachers and students were not aware that "programming and print materials were free of charge, generating a combined median of 1.0.
28. Some teachers and students were not aware that they could "choose and evaluate...programming", with 56% of the In-Service sample and 71% of the Pre-Service group falling on or below the observed median of 3.0.

Program Evaluation (In-Service)

To determine if there were differences among teachers in their reactions to the program and to achieve an indication of In-Service response across a variety of program variables, median tests were performed on each of the 36 items, using both hypothetical and observed medians, with ITV Utilization as the independent variable.

When measured against the scale, one item produced significant results.

4. Users and non-users varied significantly ($\chi^2=4.903$ $p=.027$ two-tailed) on whether they "found it easy to organize the information". Table 9a presents In-Service responses to the Program Evaluation items; including χ^2 , observed medians, range and p , using ITV utilization as the independent variable. In order to present results in a more comprehensive format; items are grouped under program variable headings, content, presenter, form and production. When coding the questionnaire, all negative statements were semantically reversed.

Content

1. Teachers agreed that the program "gave...new insights into the topic", with an observed median of 4.0.
3. Users and non-users concurred that the program did not "try to do too much" with an observed median of 4.0.
5. As shown in the Prior Awareness items, teachers

felt "it largely confirmed what (I) already knew" with little new information conveyed by the program and an observed median of 2.0.

7. However, teachers did agree they "learned new facts about "ITV" generating an observed median of 4.0.
15. Teachers agreed they "got a realistic idea of what might transpire before, during and after an ITV session", with an observed median of 4.0.
17. Teachers felt they got a "realistic idea of what's required in planning an ITV lesson", with an observed median of 4.0.
19. Users and non-users felt they "had a better idea of the types of ITV programming available" with an observed median of 4.0.
20. However, teachers did not feel they have a better idea of "how to...obtain a particular ITV program or series". Perhaps the regional slant of a Canadian sample viewing on American program contributed to 69% of the In-service group falling on or below the observed median of 3.0.
21. Approximately half of the teachers felt they had "obtained...new ideas on how to use ITV in my subject area". Perhaps the proportion of teachers falling into the "other" category contributed to 52% of the sample falling on or below the observed median of 3.0.
22. Users and non-users agreed that the program was "a comprehensive treatment of the topic", generating an observed median of 4.0.
23. However, about half the sample "would have preferred a more in-depth coverage..." with 52% falling on or below the observed median of 3.0. Objective and open-ended sections below, give some indication of the content that might have been included.
31. Users and non-users agreed that "the program presented feasible uses for ITV..." with an observed median of 4.0.
32. Teachers strongly agreed that "the show gives a good idea of the proper use of ITV's with an observed median of 5.0.

Presenter

16. In-service subjects strongly concurred that "students... seemed attentive to the ITV program", with an observed median of 5.0.
18. Teachers also strongly agreed that "students seemed to benefit from the ITV lesson", generating an observed median of 5.0.
27. Perhaps because of the "other" contingent and a general perception of a lack of facilities, the In-Service sample was divided on whether "the program presented a realistic impression of classroom conditions", with 50% rating 3 or lower on this item.
28. All agreed that "the interviewers presented their information clearly", with an observed median of 4.0.
29. Subjects strongly disagreed that the portrayed in the program "have the same facilities at their disposal..." generating an observed median of 1.0.
30. For reasons cited above teachers were divided on whether "the class situations I saw are relevant to mine", with 61% of the sample falling on or below the observed median of 3.0.

Form

2. Users and non-users agreed that the program was not "slow and dragged out" with an observed median of 4.0.
4. Users and non-users varied significantly (chi-square 8.406 p . 004 two-tailed) about the observed median of 4.0. on whether they "found it easy to organize the information." While the combined groups were able to organize the information, perhaps the ITV user has, through experience, developed a more sophisticated schema, facilitating the decoding of the message.
6. The two In-Service groups varied significantly (chi-square=4.329 p=.037 two-tailed) about the observed mean of 4.0. on whether "the program was clear and consistent". Again, this difference may be attributable to the discriminatory ability developed through related experience.
8. Teachers strongly agreed they had "no trouble following the drift of the program" generating a combined median of 4.0.
9. In-Service subjects agreed the program was not "too fragmented", with an observed median of 4.0.
10. Teachers strongly agreed that "the show seemed to have a clear purpose" generating a combined medium of 5.0.
11. Teachers strongly agreed that the show was "not too academic" with an observed median of 5.0.
12. Teachers agreed that the individual segments were "not too short..." with an observed median of 4.0.
14. In-Service subjects felt that "after a while the information seemed redundant" with 59% falling on or below the observed median of 3.0.
24. Teachers agreed that the show "ended with an adequate summary", generating a combined median of 4.0.
25. All agreed the program was "well organized" with an observed median of 4.0.
26. In-Service subjects agreed that the program was not "too hard sell" with an observed median of 4.0.
33. All agreed that "the introduction gave me a good idea of what was coming up" with an observed median of 4.0.

36. All agreed that the opening sequences "attracted my attention and 'clued me in' to the program's objectives," generating a combined median of 4.0.

Production

13. In-Service subjects agreed that "the show looked professional and well produced", with an observed median of 4.0.
34. All strongly agreed that "technical problems did not distract from the intended message" with an observed median of 5.0.
35. All agreed the show did not "seem amateurish and reduce my attention", with an observed median of 4.0.

Program Evaluation (In-service) by (Pre-service)

To determine if there were differences between In-Service and Pre-Service subjects in their reactions to the program and to achieve an indication of the combined response across a variety of program variables, median tests were performed on each of the 36 items, using both hypothetical and observed medians, with Subject Type as the independent variable.

When measured against the scale, three items produced significant results.

5. In-Service and Pre-Service subjects varied significantly $\chi^2=3.826$ $p=.05$ two tailed) on whether the program "largely confirmed what I already knew", with the program conveying more new information to the Pre-Service group. Substantiating the Prior Awareness results this item supports the notion of pre-service audience appropriateness for the program.
25. Students and teachers varied significantly ($\chi^2=4.892$, $p=.027$ two-tailed) on whether "the program was well organized". As noted above, when comparing In-Service users and non-users on a similar item, group differences may be attributed to a more fully elaborated schema. Therefore the organizational facility derived through relevant experience, may be more developed in

the In-Service user than non-user and generally more developed in the In-Service group than Pre-Service.

29. Pre-Service and In-Service groups varied significantly ($\chi^2=.826$ $p=.50$ two-tailed) on whether the teachers portrayed in the program "seemed to have the same facilities at their disposal..." Consistent with results outlined in earlier sections, students displayed less awareness of the dearth of ITV related hardware characteristic of the local schools surveyed.

Table 9b presents combined responses to the Program Evaluation items, including χ^2 , observed median, range p ., using Subject Type as the independent variable. Results are grouped under program variables as above.

Content

1. Students and teachers agreed that the program "gave...new insights into the topic" generating a combined median of 4.0.
3. Pre-Service and In-Service subjects agreed that the program did not "try to do too much" with an observed median of 4.0.
5. Pre-Service and In-Service samples were actually divided significantly ($\chi^2=.826$ $p=.05$ two-tailed) across the scale, generating an observed median of 3.0. on whether the program "largely confirmed what (I) already knew". This result further substantiates the notion of audience appropriateness.
7. Both groups agreed they "learned new facts about ITV" with an observed median of 4.0.
15. Teachers and students agreed they "got a realistic idea of what might transpire before, during and after an ITV session", with an observed median of 4.0.
17. Teachers and students felt they got "a realistic idea of what's required in planning an ITV lesson", generating an observed median of 4.0.
19. Both groups agreed they "had a better idea of the types of ITV programming available" with an

observed median of 4.0.

20. However, for reasons outlined above, Pre-Service and In-Service subjects were divided on whether they had a better idea of "how to... obtain a particular ITV program or series". While not significant ($p = .069$), frequencies indicate that more students than teachers felt they had a "better idea", with 53% of the Pre-Service sample rating a 4 or 5 on this item compared to 31% of the In-Service group. Perhaps, in spite of the regional slant, it was adequate for the education students to be made aware that facilities for program dissemination do exist.
21. Generating a combined median of 4.0, both groups agreed that they had "obtained new ideas on how to use ITV in my subject area".
22. Teachers and students agreed that the program was "a comprehensive treatment of the topic" with an observed median of 4.0.
23. However both groups "would have preferred a more in-depth coverage..." with 66% of the pre-service sample and 52% of the in-service group falling on or below the observed median of 3.0. Sections below give some indication of the additional content that might have been included.
31. Teachers and students agreed that "the program presented feasible uses for ITV..." with an observed median of 3.0.
32. Both groups strongly agreed that "the show gives a good idea of the proper use of ITV", generating a combined median of 4.5.

Presenter

16. In-Service and Pre-Service subjects strongly concurred that "students seemed attentive to the ITV program", with an observed median of 5.0.
18. Both samples also strongly agreed that "students seemed to benefit from the ITV lesson" generating an observed median of 5.0.
27. Teachers and students agreed that "the program presented a realistic impression of classroom conditions" with an observed median of 4.0. It would seem that the disparity between subjects' classrooms and those portrayed in the

show revolves around the relative availability of ITV-specific facilities and not the classroom dynamic per se.

28. Both groups agreed that "the interviewers presented their information clearly", with an observed median of 4.0.
29. While the combined median (2.0) is low, Pre-Service and In-service subjects varied significantly ($\chi^2=15.843$, $p=.000$ two-tailed) on whether teachers portrayed in the program "seemed to have the same facilities", substantiating the disparity in group awareness of the current state of ITV related facilities available locally.
30. For reasons cited above, students and teachers were divided on whether "the class situations I saw are relevant to mine", with 61% of the In-Service sample and 50% of the Pre-Service group falling on or below the combined median of 3.0.

Form

2. Both groups agreed that the program was not "slow and dragged out" with an observed median of 4.0.
4. Teachers and students concurred that they "found it easy to organize the information" with a combined median of 4.0.
6. Both groups agreed the program was "clear and consistent" with a combined median of 4.0.
8. Students and teachers, strongly agreed that they had "no trouble following the drift of the program" generating a combined median of 5.0.
9. In-Service and Pre-Service subjects agreed the program was not "too fragmented" with an observed median of 4.0.
10. Both groups strongly agreed that "the show seemed to have a clear purpose, with an observed median of 5.0.
11. Both groups, strongly agreed the show was not "too academic" with an observed median of 5.0.
12. Students and teachers agreed that the individual segment were not "too short", with an observed median of 4.0.

14. While both groups felt that "after a while the information seemed redundant", frequencies indicate that fewer students thought so, with 45% of the Pre-Service sample falling on or below the observed median of 3.0., compared to 59% of the In-Service group.
24. Both groups agreed that the show "ended with an adequate summary" generating a combined median of 4.0.
25. All agreed that "the program was well organized" with an observed median of 4.0.
26. Both groups agreed that the program was not "too hard sell" with an observed median of 4.0.
33. In-Service and Pre-Service subjects agreed that "the introduction gave me a good idea of what was coming up" with an observed median of 4.0.
36. All agreed that the opening sequences "attracted my attention and 'clued me in' to the program's objectives", generating a combined median of 4.0.

Production

13. Both groups agreed that "the show looked professional and well produced" generating a combined median of 4.0.
34. Teachers and students strongly agreed that "technical problems did not distract from the intended message", with an observed median of 5.0.
35. All strongly agreed that the program did not "seem amateurish and reduce my attention" generating a combined median of 5.0.

Program Modification

Table 10 presents In-Service and Pre-Service response to the program modification section. Frequencies indicate that both groups would have preferred more substantiated evidence of ITV's effectiveness in the classroom.

Optimal Target Audience

Table 11 presents In-Service and Pre-Service response to "who would benefit most from this presentation?" Frequencies indicate that both groups felt that in-service teachers, followed by education students, would benefit most.

Additional Programming

Table 12 presents In-Service and Pre-Service "interest in seeing shorter more specific programs". Frequencies indicate that both groups would be interested in seeing programs dealing with ITV lesson planning at specific grade levels, in specific subject areas, followed by a show explaining the technical aspects of ITV acquisition.

Degree of Involvement

Table 13 presents In-Service and Pre-Service response to the "would you be willing to checklist".

Open Ended Sections

The following presents a synopsis of In-Service and Pre-Service responses elicited by open ended questions, in an attempt to cull informatin that may not have been included in the objective or likert-scale items. Teachers' and students' responses are cataglogued seperately according to "best", "worst", "general comments" and "specific questions". For a transcript of most cited statements, see Appendix 4.

Best (In-service)

Teachers felt the program was a cogent, informative overview of the field, effectively conveying the scope of ITV's potential in the classroom. They found the documentary style vignettes a clear format for demonstrating ITV's role in enhancing and supplementing the curriculum, in a variety of subjects and grade levels and displaying the plethora of ITV programming and materials available. In-Service subjects were impressed at the clear and convincing interviews and the involved attitude of the teachers portrayed in the program. They agreed with the teachers' approach to proper ITV use and were encouraged by the emphasis on student participation and the children's apparent interest and response.

They particularly liked the "Science" segment.

Best (Pre-service)

Education students found the program well documented, pleasant viewing. They were made aware that ITV is an accessible adjunct to classroom teaching, useful in introducing and reinforcing the daily curriculum in a variety of areas.

They particularly appreciated the teacher's role explained in the interview segments and their (the teachers) implementation of appropriate programs for specific instructional purposes. They found the children's enthusiasm and attention strong and positive before, during and after the ITV session and felt they

"really seemed to learn".

They particularly liked the "Science" segment.

Worst (In-service)

From a thematic perspective, teachers found the show biased, lacking in specific evidence or documented proof of ITV's effectiveness. They felt it did not address typical ITV "abuse" such as unconscientious teachers and "spaced out" students.

Some subjects found the kids too perfect and the conditions too ideal. They felt it wasn't relevant to show them optimally equipped American classrooms.

Teachers found the program a little long and too repetetive. At points the conflicting audio tracks were distracting.

Canadian teachers were notably piqued by the French teacher's accent and disliked the "Language Arts" segment.

Worst (Pre-service)

Pre-service subjects also felt the program avoided the "other side of the coin" presenting only the positive side of ITV utilization.

Education students found the program redundant and also disliked the "Language Arts" segment.

General Comments (In-service)

Teachers further expressed their new appreciation of the subject matter and their interest in using ITV in their classrooms. Most were discouraged at the indiginous lack of equipment, reiterating that those classes portrayed in the program "...were priviledged. We have

one set (no cable) for 576 students!".

General Comments (Pre-service)

Pre-service subjects felt they had gained a better understanding of ITV Utilization through their viewing of the program.

Specific Questions (In-service)

Primarily, teachers wanted to know when Montreal area schools would be similarly equipped for ITV utilization, and until then, where they could acquire specific ITV programming and materials.

They were concerned about copyright laws and the legality of off air taping.

Teachers were also interested in the logistical aspects of ITV utilization, such as optimal class size and number of sets per number of students.

Specific Questions (Pre-service)

Students also inquired when ITV will be made locally available and why it hasn't officially been integrated into school curricula yet.

Chapter Five

Discussion & Conclusions

Utilization Attitude

While both In-Service and Pre-Service samples cited "traditional" non-print materials (i.e., teaching adjuncts that are both practical and readily accessible to the classroom teacher) most often, students displayed a much greater propensity towards A.V. materials (including ITV) both in variety and frequency. In contrast to the moderate attitude of their professional counterparts, their zealous intentions seem to reflect a naivete born of textbook cases and the university setting.

The real world constraints of scheduling, budgets and less than optimal class size often prohibit incorporation of A.V. materials into the daily curriculum. They are too often perceived as "extras", to be used if time permits and facilities are available. In the case of ITV, it is the simple lack of necessary hardware and appropriate materials that serves to preclude utilization rather than some innate orthodoxy or resistance to change. The tendency for the In-Service ITV user to integrate other forms of electronic media such as commercial television, or 16mm film is probably not due to a disparity in training or teaching philosophies but rather an indication of available facilities and support systems. Given nominal technical support, and the tapping of an already existing information flow it is likely that local teachers

would initiate moderate but regular ITV utilization.

Providing there is adequate direction and supervision, teachers would probably take advantage of television's capacity to add another dimension to classroom teaching. It would seem they harbour real concerns about the inherent unidirectionality of the medium and the threat of television's often mesmerizing effect. ITV-users, perhaps as a result of direct experience and observation, seem particularly leery of T.V.'s pacifying nature and adamant about teacher mediation.

However teachers also understand that ITV, conscientiously used, can provide an effective and diverse supplement to the curriculum and a unique alternative to the daily routine. They are not intimidated by the technical requisities or concerned that a television in the class will undermine their authority, cloud their objectives or paralyse their students. ITV is another teaching material, judged on its ultimate ability to motivate, facilitate and integrate the learning experience.

Differences observed in the student sample again seem attributable to a lesser awareness of the rigours and constraints of daily teaching, as well as lacking a confidence and broader perspective that come only with ongoing classroom experience.

They seem less cognizant of the dearth of facilities and funds currently relegated to ITV Utilization and the

problems encountered in incorporating "additional" material into an already overloaded schedule. However, rather than deriding their optimism, it may be that this "new generation" of teaching professionals will expect-and demand requisite hardware and materials as a matter of course.

It is interesting to note that education students, representing the "T.V. Age" and admitting to greater televiewing than their older counterparts, are more inclined to blame television for declining literacy levels and more concerned that television in the classroom will threaten their position. They seem less willing to grant ITV the latitude of providing a "change of pace", preferring to ascribe to it more specific instructional intent. Perhaps students perceive ITV as "something different", demanding special preparation and requiring new and different skills.

New Awareness Audience Appropriateness

In terms of new information, the primary benefit for in-service teachers focussed on the functional and logistical aspects of ITV rather than the underlying teaching principles necessary for effective utilization. Through exposure to the program and the variety of ITV snippets and situations therein, teachers were informed that sources for production and broadcasting of television programming specifically designed to cater to the classroom teacher do exist and are being exploited.

Teachers had not been aware that programs are produced to integrate smoothly into the class period and that repeat broadcasts facilitate scheduling within the week. They hadn't realized that many series provide accompanying guides and support materials or that through their local broadcasters, teachers could choose and evaluate programming to suit their particular needs. The diverse array of actual ITV programming pointed out new areas and possibilities for implementing television in the classroom.

Students also benefitted from the logistical components of the show and their exposure to the variety of ITV programming. However, results show that even when samples displayed prior awareness of the teacher's role in the ITV session or the pre through post integration of ITV in the classroom, education students were often significantly less aware than teachers. Emphasis on teacher mediation, familiarity with the materials (previewing), reinforcement (follow-up), tying individual lessons into the broader framework (student orientation) and an acumen for what motivates students are all basic and transferable teaching skills which are assimilated and developed through classroom experience. While these differences were manifested in terms of ITV utilization, they are, in the opinion of this researcher not specifically attributable to ITV.

Therefore, the ITV lessons portrayed in the program may have provided more of a model of effective instruction

for the Pre-Service sample. For the teacher group, this aspect of the show merely confirmed that television merits a viable position in the classroom dynamic.

Program Evaluation

Content. As mentioned above, subjects gained new insights and ideas about ITV, but not much new information in the "how to" area. Teachers and students agreed that the show presented proper techniques for planning and implementing an ITV lesson, however they felt (to varying degrees), they already knew "how to". In a sense these results reinforce a primary message of the program; to be an effective ITV user is simply to be a good teacher, combining those generic skills with exposure to programming and adjunct materials.

Subjects did not feel the program outlined specific means for obtaining programming and materials, reflecting the show's regional slant and promotional aspect vis à vis Channel 57. While these problems did not emerge during the pilot testing, it is important to bear in mind the objectives and appropriate viewing conditions of the program. Designed to generate audience-specific questions within an ITV workshop setting, "Spread the Word" has been successfully integrated into seminars conducted by WCFE in the "North Country" and the Children's Broadcast Institute in Montreal. In both cases, viewers were able to direct indigenous queries to the seminar leaders on how to establish contacts in their areas for programming and

related materials.

Both groups felt the show neglected to present "real" (authoritative) proof of ITV's effectiveness in the learning process and some acknowledgement of its negative elements. It seems that the arguments in favour of ITV utilization were perceived as sincere and convincing but incomplete. While the interviewers were rated highly as conscientious peers perhaps the inclusion of an educational psychologist armed with content-specific expertise and conclusive statistics would upgrade source credibility (Fleming and Levie, 1978). Fleming and Levie also note that "introducing and refuting opposing arguments may be facilitative (in attitude change) when the receiver is already familiar with the issue" (p. 218).

Presenter. Viewer reactions strongly support the documenting of "ITV in action". The personae depicted in the show and the classroom situations portrayed were perceived as positive, plausible and relevant except in one respect. Teachers in particular noted the gross disparity in facilities and support systems currently available to their colleagues "to the South". Particularly in the open ended sections, In-Service subjects responded in a tone bordering on irate at the seeming inaccessibility of hardware, programming and information within their schools.

Form. The documentary format was found to be a clear and effective means of conveying the message in terms of sequence, pacing and style. The introduction and

organizer worked well in establishing a cognitive set and organizing subsequent information. Perhaps due to a more fully developed schema teachers found it easier than students to organize, but results show that it was not a deterrent to the intended message.

While the program met with its "soft sell" objectives in providing a broadbased introduction to ITV utilization respondents may have preferred a more in-depth presentation.

In an attempt to present a diversity of classroom situations, the same utilization messages may have been repeated once too often. Particular for In-Service subjects, the show may be redundant and "a little too long".

Production. It would seem that the level of professionalism was adequate to maintain viewer attention and convey the intended message. The only production variable subject to modification would be the dual audio tracks which at some points are distracting.

Recommendations. While maintaining the 30-minute time slot, it would seem possible to pare down the production by eliminating one or more of the classroom vignettes, without diminishing the expository effect of the program. This "free time" could be put to good use by incorporating an authority figure providing cursory acknowledgement of ITV's negative side and evidence of television's effectiveness within the learning process, substantiated by contiguous statistical graphics.

In order to eliminate the regional and promotional slant for audiences not in direct contact with WCFE, the voice over could be modified to maintain a generic quality, suggesting various approaches for establishing ITV services "in your area". However, in a workshop setting the seminar leader can easily provide these local avenues. For example, while Channel 57 will not reach Montreal schools, simple cable installation provides access to PBS Channel 33 in Burlington Vt. and TVO, both of whom broadcast commensurate ITV curricula complete with accompanying print materials.

It would also seem productive to design shorter video modules dealing with the technical and legal aspects of ITV acquisition (i.e. off-air taping) and specific subject areas of utilization (e.g. a comprehensive coverage of High School Chemistry or middle Level French). In fact some series (e.g. "Parlez-moi", "Assignment the World") do provide pilot programs designated for the In-Service teacher, illustrating the series' potential in the classroom and suggesting pre-viewing and follow-up activities.

Judging from subject response on the "degree of involvement" and open-ended sections, in-service and pre-service teachers expressed an enthusiasm and willingness to incorporate ITV into their daily curricula. Hopefully, "Spread the Word" will help foster a greater awareness and articulate existing attitudes, ultimately making ITV a reality.

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3. Lesser, G.S., Assumptions Behind the Production and Writing Methods in Sesame Street, Quality in Instructional Television, W. Schramm ed., The University of Hawaii Press, 1972.
4. Romizowski, A.J. Designing Instructional Systems. London: Kogan Page, New York, Nichols Publishing, 1981.
5. Salomon, G. Interaction of Media, Cognition and Learning. San Francisco: Jossey-Bass Publishers, 1979.
6. Schramm, W. What the Research Says; Quality in Instructional Television, W. Schramm ed., The University of Hawaii Press, 1972.

Appendix 1.

ITV Ballot (Channel 57)

BALLOT

69

PLEASE COMPLETE AND RETURN TO
YOUR BUILDING ITV REP: _____

(If you do not use ITV, see instructions at
bottom of this page)



WCFE
itv57

This brochure contains descriptions of new ITV series, a schedule for the three days of Preview Week (November 23-25) and rating sheets for series being previewed and for series currently in the ITV schedule. Indicate your responses by placing a check mark in the appropriate boxes.

We encourage you to complete and return your ballot as soon as possible while impressions of the series are still fresh in your mind. (PRIOR TO DECEMBER 18) We can respond to your programming needs only if you communicate with us. Please spend a moment or two to complete this ballot. It will be time well spent.

RATING (✓)
Excellent = 1
Poor = 5

RECOMMEND FOR
NEXT YEAR? (✓)

PROGRAMS	1	2	3	4	5	YES	NO
ANIMATED CHILDREN STORIES							
AMERICAN LEGACY							
ART MAKER, THE							
BIOLOGY							
BODY WORKS, THE							
DISCOVERING INSECTS							
EAT WELL, BE WELL							
EUREKA							
GOOD WORK							
INVENTIVE CHILD							
MATH WISE							
MORAL QUESTION							
MUSIC BOX							
NOVEL, THE							
READ ALL ABOUT IT II							
READ IT							
SAFETY SENSE							
SCIENCE ALLIANCE							
STORIES WITHOUT WORDS							
THIS CURIOUS WORLD							
TIMELY PLACES							
WHO CARES, I CARE							
WHY IN THE WORLD							
YOU AND YOUR WORLD							
ZOO ZOO ZOO							
DEALING IN DISCIPLINE							
INCREASING CHILDREN'S MOTIVATION TO READ & WRITE							

To be completed by ALL teachers

School District _____ Grade/Subject Area _____

Comments: _____

DO NOT USE ITV ☐

PREVIEW / EVALUATION WEEK

NOV. 23-25

MONDAY	TUESDAY	WED
<p>7:30 Sesame Street</p> <p>8:30 Why In The World <i>Prog. No. 101</i></p> <p>9:00 The Science Alliance <i>Prog. No. 1</i></p> <p>9:15 The Art Maker <i>Prog. No. 1</i></p> <p>9:30 Stories Without Words <i>Prog. No. 1</i></p> <p>9:45 Discovering Insects <i>Prog. No. 1</i></p> <p>10:00 Music Box <i>Prog. No. 1</i></p> <p>10:15 Safety Sense <i>Prog. No. 1</i></p> <p>10:35 Eureka <i>Prog. No. 1</i></p> <p>10:40 Good Works <i>Prog. No. 1</i></p> <p>10:45 The Moral Question <i>Prog. No. 1</i></p> <p>11:15 Math Wise <i>Prog. No. 1</i></p> <p>11:30 This Curious World <i>Prog. No. 1</i></p> <p>11:50 The Body Works <i>Prog. No. 1</i></p> <p>12:00 The Science Alliance <i>Prog. No. 1</i></p> <p>12:15 The Novel <i>Prog. No. 1</i></p> <p>12:30 Why In The World <i>Prog. No. 102</i></p> <p>1:00 Timely Places <i>Prog. No. 7</i></p> <p>1:15 Eat Well, Be Well <i>Prog. No. 1</i></p> <p>1:20 Inventive Child <i>Prog. No. 1</i></p> <p>1:30 Read All About It II <i>Prog. No. 1</i></p> <p>1:45 Readit <i>Pilot Program</i></p> <p>2:00 Body Works <i>Prog. No. 1</i></p> <p>2:10 Eat Well, Be Well <i>Prog. No. 1</i></p> <p>2:15 Stories Without Words <i>Prog. No. 1</i></p> <p>2:30 Discovering Insects <i>Prog. No. 1</i></p> <p>2:45 Biology <i>Prog. No. 1</i></p> <p>3:00 Dealing In Discipline <i>Prog. No. 1</i></p>	<p>7:30 Sesame Street</p> <p>8:30 Eureka <i>Prog. No. 1</i></p> <p>8:35 Inventive Child <i>Prog. No. 1</i></p> <p>8:45 Readit <i>Pilot Program</i></p> <p>9:00 Animated Children's Stories <i>Prog. No. 1</i></p> <p>9:15 Safety Sense <i>Prog. No. 2</i></p> <p>9:35 The Body Works <i>Prog. No. 1</i></p> <p>9:45 Zoo Zoo Zoo <i>Prog. No. 1</i></p> <p>10:00 Read All About It II <i>Prog. No. 2</i></p> <p>10:15 American Legacy <i>Prog. No. 1</i></p> <p>10:30 You and Your World <i>Prog. No. 1</i></p> <p>10:50 Inventive Child <i>Prog. No. 2</i></p> <p>11:00 Why In The World <i>Prog. No. 103</i></p> <p>11:30 Stories Without Words <i>Prog. No. 1</i></p> <p>11:45 Timely Places <i>Prog. No. 2</i></p> <p>12:00 This Curious World <i>Prog. No. 1</i></p> <p>12:20 Eureka <i>Prog. No. 1</i></p> <p>12:25 Good Works <i>Prog. No. 1</i></p> <p>12:30 The Novel <i>Prog. No. 1</i></p> <p>12:45 Math Wise <i>Prog. No. 1</i></p> <p>1:00 The Science Alliance <i>Prog. No. 2</i></p> <p>1:15 Who Care, I Care <i>Prog. No. 1</i></p> <p>1:30 Animated Children's Stories <i>Prog. No. 2</i></p> <p>1:45 The Art Maker <i>Prog. No. 2</i></p> <p>2:00 The Moral Question <i>Prog. No. 2</i></p> <p>2:30 The Music Box <i>Prog. No. 1</i></p> <p>2:45 Discovering Insects <i>Prog. No. 1</i></p> <p>3:00 Increasing Children's Motivation to Read & Write <i>Prog. No. 4</i></p>	<p>7:30 Sesame Street</p> <p>8:30 Zoo Zoo Zoo <i>Prog. No. 1</i></p> <p>8:45 Who Cares, I Care <i>Prog. No. 1</i></p> <p>9:00 The Novel <i>Prog. No. 1</i></p> <p>9:15 Eat Well, Be Well <i>Prog. No. 1</i></p> <p>9:20 Inventive Child <i>Prog. No. 1</i></p> <p>9:30 Discovering Insects <i>Prog. No. 1</i></p> <p>9:45 The Art Maker <i>Prog. No. 1</i></p> <p>10:00 The Body Works <i>Prog. No. 14</i></p> <p>10:10 Eureka <i>Prog. No. 2</i></p> <p>10:15 Readit <i>Pilot Program</i></p> <p>10:30 Who Cares, I Care <i>Prog. No. 1</i></p> <p>10:45 Biology <i>Prog. No. 1</i></p> <p>11:00 Animated Children's Stories <i>Prog. No. 3</i></p> <p>11:15 Science Alliance <i>Prog. No. 1</i></p> <p>11:30 Music Box <i>Prog. No. 1</i></p> <p>11:45 The Body Works <i>Prog. No. 14</i></p> <p>11:55 Eat Well, Be Well <i>Prog. No. 1</i></p> <p>12:00 Telecourse</p> <p>1:00 Read All About It II <i>Prog. No. 1</i></p> <p>1:15 Stories Without Words <i>Prog. No. 1</i></p> <p>1:30 Safety Sense <i>Prog. No. 2</i></p> <p>1:50 You & Your World <i>Prog. No. 1</i></p> <p>2:10 This Curious World <i>Prog. No. 2</i></p> <p>2:30 Math Wise <i>Prog. No. 1</i></p> <p>2:45 American Legacy <i>Prog. No. 1</i></p> <p>3:00 Why In The World <i>Prog. No. 103</i></p>

Appendix 2
Pre and Post Questionnaires

AGE: _____

SEX:

☐ M☐ F

GRADE(S) TAUGHT: _____

SUBJECT(S) TAUGHT: _____

YEARS OF TEACHING
EXPERIENCE: _____

EDUCATION:

☐ Bachelor☐ Post Graduate☐ Masters☐ Doctorate

In your class do you use:

Filmstrips	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Films (16 mm)	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Sound/Slide	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Commercial T.V.	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Instructional T.V.	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Overhead Projector	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Audio Cassettes	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Records	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Photos/Graphics	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often
Newspapers/Magazines	<input type="checkbox"/> never	<input type="checkbox"/> occasionally	<input type="checkbox"/> often

In your particular school (building) are you equipped with:

1. A cable hook-up in each classroom
☐ yes
☐ no
☐ I don't know
2. An antenna on the roof
☐ yes
☐ no
☐ I don't know
3. A T.V. (B & W or Colour) in each classroom
☐ yes
☐ no
☐ I don't know
4. A T.V. monitor and VCR*($\frac{1}{2}$ " or $\frac{3}{4}$ ") in each classroom
☐ yes
☐ no
☐ I don't know
5. Monitor and VCR(s) on trolleys that can be moved from class to class
☐ yes
☐ no
☐ I don't know
6. Monitor and VCR(s) in a central location - requiring the class to move
☐ yes
☐ no
☐ I don't know
7. Person(s) responsible for the distribution of A.V. equipment and materials
☐ yes
☐ no
☐ I don't know
8. Person(s) responsible for disseminating information and /or handling requests for A.V. materials
☐ yes
☐ no
☐ I don't know
9. A catalogued A.V. resource centre where you can borrow slide/tapes, films, Instructional Television tapes etc.
☐ yes
☐ no
☐ I don't know

*Video Cassette Recorder

10. My use of ITV (Instructional Television) would be greatly facilitated with the addition of:

- ☐ time
- ☐ equipment
- ☐ personnel
- ☐ space
- ☐ information (e.g. curriculum, teacher's guides)
- ☐ OTHER (please specify) _____

11. Can you operate video playback equipment?

- ☐ yes
- ☐ no

12. Have you taken a course (seminar, workshop) which included content on the use of ITV in the classroom? ☐ yes

☐ no

13. If yes, did you find the experience: ☐ taught you everything you need to use ITV effectively

☐ not relevant to your needs

☐ insufficient

☐ unrealistic

If no, would you like to take such a course ..

☐ yes

☐ no

Tick off the statement that best corresponds with your viewing habits:

I watch television at home for:

- ☐ less than an hour a day
- ☐ less than 2 hours a day
- ☒ between 2 and 4 hours a day
- ☐ more than 4 hours a day

My children watch television at home for:

- ☐ less than an hour a day
- ☐ less than 2 hours a day
- ☐ between 2 and 4 hours a day
- ☐ more than 4 hours a day
- ☐ NA*

I try to monitor my children's viewing, helping them select programs and watching with them when I can:

- ☐ never
- ☐ occasionally
- ☐ often
- ☐ NA

*Not Applicable

The following is a list of common classroom strategies. Compared with other instructional approaches how effective is ITV in:

	NOT EFFECTIVE		VERY EFFECTIVE		
1. Introducing a unit of instruction	1	2	3	4	5
2. Supplementing a unit of instruction	1	2	3	4	5
3. Providing the main body of instruction	1	2	3	4	5
4. Review or reinforcement	1	2	3	4	5
5. Visually illustrating a theoretical (eg. math, science) concept	1	2	3	4	5
6. Arousing motivation or generating interest in your subject area	1	2	3	4	5
7. Presenting case studies; i.e.: a concrete application of some knowledge (e.g. science, language arts, math, economics)	1	2	3	4	5
8. Demonstrating a psycho-motor skill	1	2	3	4	5
9. "Dramatizing" some aspect of the curriculum (e.g. literature, history, social skills, 2nd language)	1	2	3	4	5
10. Initiating classroom discussion	1	2	3	4	5
11. Providing a "change of pace" from other classroom activities	1	2	3	4	5
12. Providing opportunities for student-directed learning	1	2	3	4	5
13. Other effective uses (please specify)					

Circle the number that best corresponds with your opinion about these statements:

- | | | STRONGLY DISAGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY AGREE |
|--|------------------------------|-------------------|---|---|---|---|---|----------------|
| 1. Television in the classroom is an effective way to increase motivation and attention in my coursework | *NA <input type="checkbox"/> | | | | | | | |
| 2. I find that Instruction Television promotes an active viewing environment in my classroom | NA <input type="checkbox"/> | | | | | | | |
| 3. I've had difficulty finding adequate programs for my subject area | NA <input type="checkbox"/> | | | | | | | |
| 4. I prepare for my ITV session in the same manner as any other lesson | NA <input type="checkbox"/> | | | | | | | |
| 5. I have difficulty incorporating ITV into my teaching schedule | NA <input type="checkbox"/> | | | | | | | |
| 6. Most ITV programs I have seen seem to communicate effectively to my students | NA <input type="checkbox"/> | | | | | | | |
| 7. Television in the classroom does <u>not</u> facilitate my teaching objectives | NA <input type="checkbox"/> | | | | | | | |
| 8. The technology of the television medium can provide experiences that cannot be created in most classrooms | NA <input type="checkbox"/> | | | | | | | |

*Not Applicable

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STRONGLY DISAGREE

STRONGLY AGREE

9. New teachers should not fear that using ITV will usurp their position in the classroom. NA ☐ 1 2 3 4 5
10. My students already watch too much T.V. at home and ITV has largely the same effects NA ☐ 1 2 3 4 5
11. Teaching with ITV requires a whole new set of skills NA ☐ 1 2 3 4 5
12. Most ITV programs I have seen can stand alone as instructional treatments NA ☐ 1 2 3 4 5
13. The thought of all those buttons and dials make me nervous NA ☐ 1 2 3 4 5
14. I have all of the ITV materials and guides necessary to use ITV effectively NA ☐ 1 2 3 4 5
15. Declining literacy levels can be attributed to television NA ☐ 1 2 3 4 5
16. The teacher's function is as important in an ITV session as in any other lesson NA ☐ 1 2 3 4 5
17. I'm concerned that ITV detracts from "the basics" of education NA ☐ 1 2 3 4 5
18. In my experience, ITV is produced specifically for classroom use NA ☐ 1 2 3 4 5
19. I would use ITV more if there was more programming information available NA ☐ 1 2 3 4 5

STRONGLY DISAGREE

STRONGLY AGREE

20. Television in the classroom is
"an easy way out" for teachers
and students

NA ☐

1 2 3 4 5

21. The television can enhance the
learning process in my subject

NA ☐

1 2 3 4 5

AFTER

Please indicate on the following scale, the extent to which you were aware, prior to seeing this program, that:

	Not Aware			Very Aware	
	1	2	3	4	5
1. T.V. played a big part in my student's lives.	1	2	3	4	5
2. I could capitalize on student motivation and use ITV to increase attention and general interest.	1	2	3	4	5
3. ITV is flexible (i.e.: scheduling)	1	2	3	4	5
4. ITV could be used to introduce, supplement or reinforce the daily curriculum.	1	2	3	4	5
5. My (the teacher's) role was indispensable in an ITV session.	1	2	3	4	5
6. The need to preview programs.	1	2	3	4	5
7. The need for student orientation, prior to viewing.	1	2	3	4	5
8. The importance of follow-up discussion and activities.	1	2	3	4	5
9. Minimal technical proficiency is required.	1	2	3	4	5
10. ITV is a different way to teach.	1	2	3	4	5
11. ITV promotes <u>active</u> viewing.	1	2	3	4	5
12. ITV fills in "specialty gaps" left by budget and personnel constraints.	1	2	3	4	5
13. ITV programs are designed to communicate to its audience.	1	2	3	4	5
14. ITV programs are produced to accomplish instructional objectives.	1	2	3	4	5
15. ITV programs are produced to fit into a class period.	1	2	3	4	5
16. The capability of the medium to provide new insight by presenting "case studies".	1	2	3	4	5

	Not Aware				Very Aware
17. ITV can "bring to life" some aspects of the curriculum.	1	2	3	4	5
18. Curriculum and teacher's guides were available	1	2	3	4	5
19. The "entertainment" aspects (e.g.: music, action, humour) attract attention and increase motivation.	1	2	3	4	5
20. Learning goes beyond the viewing session.	1	2	3	4	5
21. ITV caters to diverse teaching/learning styles.	1	2	3	4	5
22. ITV is topical and fast paced, changing with the times.	1	2	3	4	5
23. ITV motivates reading and writing.	1	2	3	4	5
24. Programs can be taped off the air and stored for later use.	1	2	3	4	5
25. The television medium can "show" and "tell" at the same time.	1	2	3	4	5
26. Teachers required no "special skills" to use ITV effectively.	1	2	3	4	5
27. Programming and print materials were free of charge.	1	2	3	4	5
28. Local teachers can choose and evaluate programs that best suit their needs.	1	2	3	4	5

Circle the number that best corresponds with your opinion of the videotape:

	STRONGLY DISAGREE					STRONGLY AGREE				
1. The program gave me new insights into the topic.	1	2	3	4	5					
2. The program was slow and dragged out.	1	2	3	4	5					
3. It tried to do too much.	1	2	3	4	5					
4. I found it difficult to organize the information	1	2	3	4	5					
5. It largely confirmed what I already knew	1	2	3	4	5					
6. The program was clear and consistent	1	2	3	4	5					
7. I learned new facts about ITV	1	2	3	4	5					
8. I had no trouble following the drift of the program.	1	2	3	4	5					
9. The program was too fragmented.	1	2	3	4	5					
10. The show seemed to lack a clear purpose.	1	2	3	4	5					
11. It was too academic.	1	2	3	4	5					
12. The individual segments were too short to adequately convey the information.	1	2	3	4	5					
13. The show looked professional and well-produced	1	2	3	4	5					
14. After a while, the information seemed redundant	1	2	3	4	5					
15. I got a realistic idea of what might transpire before during and after the ITV program	1	2	3	4	5					
16. Students shown in the program seemed to be attentive to the ITV program.	1	2	3	4	5					
17. I got a realistic idea of what's required in planning an ITV lesson.	1	2	3	4	5					
18. Students shown in the program seemed to benefit from the ITV session.	1	2	3	4	5					

STRONGLY DISAGREE

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STRONGLY AGREE

- | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 19. I have a better idea of the types of
ITV programming available. | 1 | 2 | 3 | 4 | 5 |
| 20. I have a better idea of how to go about
obtaining a particular ITV program or
series. | 1 | 2 | 3 | 4 | 5 |
| 21. I obtained some new ideas on how to use
ITV in my subject area. | 1 | 2 | 3 | 4 | 5 |
| 22. It was a comprehensive treatment of the
topic. | 1 | 2 | 3 | 3 | 5 |
| 23. I would have preferred a more in-depth
coverage of the topic. | 1 | 2 | 3 | 4 | 5 |
| 24. The program ended without an adequate summary. | 1 | 2 | 3 | 4 | 5 |
| 25. The program was well organized. | 1 | 2 | 3 | 4 | 5 |
| 26. The program was too "hard-sell". | 1 | 2 | 3 | 4 | 5 |
| 27. The program presented a realistic impression
of classroom conditions. | 1 | 2 | 3 | 4 | 5 |
| 28. The interviewers presented their information
clearly. | 1 | 2 | 3 | 4 | 5 |
| 29. The teachers seemed to have more facilities
at their disposal than I have. | 1 | 2 | 3 | 4 | 5 |
| 30. None of the class situations I saw are
relevant to mine. | 1 | 2 | 3 | 4 | 5 |
| 31. The program presented feasible (plausible)
uses for ITV in the classroom. | 1 | 2 | 3 | 4 | 5 |
| 32. The show gives a good idea of the <u>proper</u>
use of ITV in the classroom. | 1 | 2 | 3 | 4 | 5 |
| 33. The introduction gave me a good idea of what
was coming up. | 1 | 2 | 3 | 4 | 5 |

STRONGLY DISAGREE

STRONGLY AGREE

- | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 34. Technical problems distracted from the intended message. | | | | | |
| 35. The show seemed amateurish and reduced my interest. | 1 | 2 | 3 | 4 | 5 |
| 36. The opening sequences attracted my attention and "clued me in" to the program's objectives. | 1 | 2 | 3 | 4 | 5 |

If the content of this program could be modified would you prefer to see:

- ☐ More documented proof of ITV's effectiveness
- ☐ Interviews with psychologists and subject
matter experts
- ☐ An in-studio panel discussion
- ☐ Other (please specify)

What was the best thing about the program you just saw?

What was the worst thing about the program you just saw?

In your opinion, who would benefit most from this presentation?

- ☐ Education students
- ☐ In-service teachers (co-workers)
- ☐ Administrators
- ☐ Parents
- ☐ School Boards
- ☐ Other (please specify) _____

After watching this show, would you be interested in seeing shorter, more specific programs dealing with:

☐ The technical aspects of ITV acquisition (e.g.: off-air taping)

☐ Optimal monitor placement in the classroom.

☐ ITV lesson planning in your subject area and grade level.

☐ Other (please specify) _____

Would you be willing to:

Put your name on a curriculum guide mailing list?

☐ yes

☐ no

Plan a lesson using instructional television in your class?

☐ yes

☐ no

Speak to: { co-workers } about ITV in your school

☐ yes

{ administrators }

☐ no

{ parents }

Participate on a committee evaluating ITV programming in your district?

☐ yes

☐ no

General Comments: Please feel free to articulate your opinions on the program you just saw.

Are there any specific questions that came to mind while watching the show?

Thank you for your interest and co-operation!

Appendix 3
Tables and Graphs



Table 1a
A.V. Utilization Checklist (In-service)

USE CATEGORIES						
Media	NEVER		OCCASIONALLY		OFTEN	
	<u>%</u>	<u>RANK</u>	<u>%</u>	<u>RANK</u>	<u>%</u>	<u>RANK</u>
Filmstrips	22	7	57	1	20	5
Film (16mm)	33	4	56	2	6	7
Sound/Slide	48	3	44	4	7	6
Commercial TV	85	1	9	8	6	7
Instructional TV	64	2	30	7	6	7
Overhead Projector	30	5	44	4	26	4
Audio Cassettes	26	6	48	3	26	4
Records	9	10	31	6	59	1
Photos/Graphics	11	9	33	5	56	2
Newspapers/Magazines	17	8	44	4	39	3

Highest

Lowest

Table 1B
A.V. Utilization Checklist (Pre-service)

USE CATEGORIES

Media	Never		Occasionally		Often	
	<u>%</u>	<u>RANK</u>	<u>%</u>	<u>RANK</u>	<u>%</u>	<u>RANK</u>
Filmstrips	3	4	81	1	16	9
Film (16mm)	3	4	78	2	19	8
Sound/Slide	5	4	68	4	27	5
Commercial TV	30	1	65	5	5	10
Instructional TV	5	3	59	7	36	4
Overhead Projector	14	2	62	6	24	6
Audio Cassettes	3	4	76	3	22	7
Records	3	4	59	7	38	3
Photos/Graphics	3	4	43	9	54	1
Nespapers/Magazines	3	4	51	8	46	2

Highest

Lowest

Table 2
Media*by ITV Utilization (In-service)

Media	chi-square	p	df
Filmstrips	1.393	.2378	1
Film (16 mm)	5.369	.0205	1
Sound/Slide	.594	.4407	1
Commercial TV	8.738	.0031-	1
Overhead Projector	0	1.000	1
Audio Cassettes	.860	.3538	1
Records	1.532	.2157	1
Photos/Graphics	.579	.3137	1
Newspapers/Magazines	1.624	.2025	1

*for percentages in each category see Table 1a

Table 3

Mediause (In-service) by (Pre-service)

Media	chi-square	p	df
Filmstrips	7.89	.05	2
Film (16 mm)	12.57	.01	2
Sound/Slide	20.71	.01	2
Commercial TV	32.01	.01	1
ITV	34.66	.01	2
Overhead Projector	3.83	.05	2
Audio Cassettes	10.16	.01	2
Records	5.08	.05	1
Photos/Graphics	2.60	.05	2
Newspapers/Magazine	4.06	.05	1

*for percentages in each category see Tables 1a and 1b.

Table 4

A.V. Resource Inventory (In-service)

Available Facility	8
Cable hook-up	6
Antenna	19
T.V. in classroom	9
V.C.R. in classroom	7
T.V./V.C.R. mobile	24
T.V./V.C.R. in central location	30
A.V. equipment personnel	48
A.V. information personnel	50
A.V. resource centre	65

Table 5
Greater Use (In-service)

Catagory	%
Time	39
Equipment	59
Personnel	19
Space	22
Information	56

Table 6A

ITV Effectiveness by ITV Utilization (In-service)

Item#	Median	chi-square	range	p(two tailed)
1.	3.375	.029	4.0	.866
2.	3.833	.087	4.0	.768
3.	2.643	4.158	4.0	.041
4.	3.833	.002	4.0	.961
5.	4.000	.087	4.0	.768
6.	4.088	.075	3.0	.758
7.	3.900	1.279	4.0	.258
8.	3.265	.117	5.0	.733
9.	4.167	2.241	3.0	.134
10.	4.056	.500	3.0	.479
11.	4.629	EXACT	3.0	.000
12.	3.500	2.923	4.0	.087

Table 6B

ITV Effectiveness (In-service) by (Pre-service)

Item#	*Median	chi-square	range	p (two-tailed)
1.	3.0	.150	4.0	.699
2.	4.0	1.354	4.0	.245
3.	3.0	.030	4.0	.862
4.	4.0	.003	4.0	.930
5.	4.0	.092	4.0	.762
6.	4.0	.102	4.0	.750
7.	4.0	.239	4.0	.625
8.	3.0	.007	5.0	.933
9.	4.0	2.884	4.0	.089
10.	4.0	3.317	4.0	.069
11.	4.0	4.985	3.0	.026
12.	3.0	.286	4.0	.593

*combined

Table 7A

ITV Opinions by ITV Utilization (In-service)

Item#	Median	chi-square	range	p (two-tailed)
1.	3.310	3.242	4.0	.072
2.	3.000	.056	4.0	.812
3.	3.625	.051	4.0	.821
4.	3.214	EXACT	4.0	.611
5.	3.500	EXACT	4.0	.214
6.	3.450	EXACT	4.0	.288
7.	3.455	.027	3.0	.869
8.	4.042	.272	4.0	.602
9.	4.250	.209	2.0	.642
10.	4.056	.062	3.0	.803
11.	4.629	1.015	3.0	.314
12.	1.75	.000	4.0	.989
13.	1.317	2.977	4.0	.084
14.	1.341	.018	4.0	.892
15.	2.250	.003	4.0	.956
16.	4.688	EXACT	4.0	1.000
17.	1.821	.083	4.0	.774
18.	2.917	.190	4.0	.663
19.	4.286	1.287	4.0	.257
20.	1.446	.779	4.0	.378
21.	4.458	.609	4.0	.435

Table 7B

ITV Opinions (In-service) by (Pre-service)

Item#	*Median	chi-square	range	p (two-tailed)
1.	3.125	.194	4.0	.65
2.	3.176	.000	4.0	.997
3.	3.125	.872	4.0	.350
4.	2.650	1.229	4.0	.268
5.	2.607	7.511	4.0	.006
6.	3.227	.153	4.0	.696
7.	3.750	.051	4.0	.821
8.	3.318	1.214	4.0	.271
9.	3.786	.015	4.0	.903
10.	2.200	.050	4.0	.823
11.	3.318	.574	3.0	.449
12.	2.844	9.402	3.0	.002
13.	1.292	.001	4.0	.969
14.	1.333	.059	4.0	.808
15.	3.273	2.293	4.0	.130
16.	4.429	EXACT	4.0	1.000
17.	2.250	.578	4.0	.447
18.	2.929	.096	4.0	.756
19.	4.250	.030	4.0	.863
20.	2.111	.362	4.0	.547
21.	3.808	6.085	4.0	.014

*combined

Table 8A

Prior Awareness by ITV Utilization (In-service)

Item#	Median	chi-square	range	p (two-tailed)
1.	4.656	EXACT	4.0	1.000
2.	4.063	.100	4.0	.751
3.	3.429	.884	4.0	.347
4.	4.050	.010	4.0	.920
5.	3.773	.012	4.0	.912
6.	4.400	.029	3.0	.866
7.	4.273	.019	3.0	.889
8.	4.706	EXACT	3.0	1.000
9.	4.125	8.926	4.0	.003
10.	3.900	1.279	4.0	.258
11.	3.618	.036	4.0	.849
12.	3.300	3.070	4.0	.080
13.	4.109	.010	3.0	.920
14.	4.000	.007	4.0	.936
15.	3.045	.019	4.0	.889
16.	3.500	0	4.0	1.000
17.	4.180	.012	3.0	.912
18.	2.265	.055	4.0	.814
19.	4.300	.055	4.0	.814
20.	4.150	.100	3.0	.756

cont'd

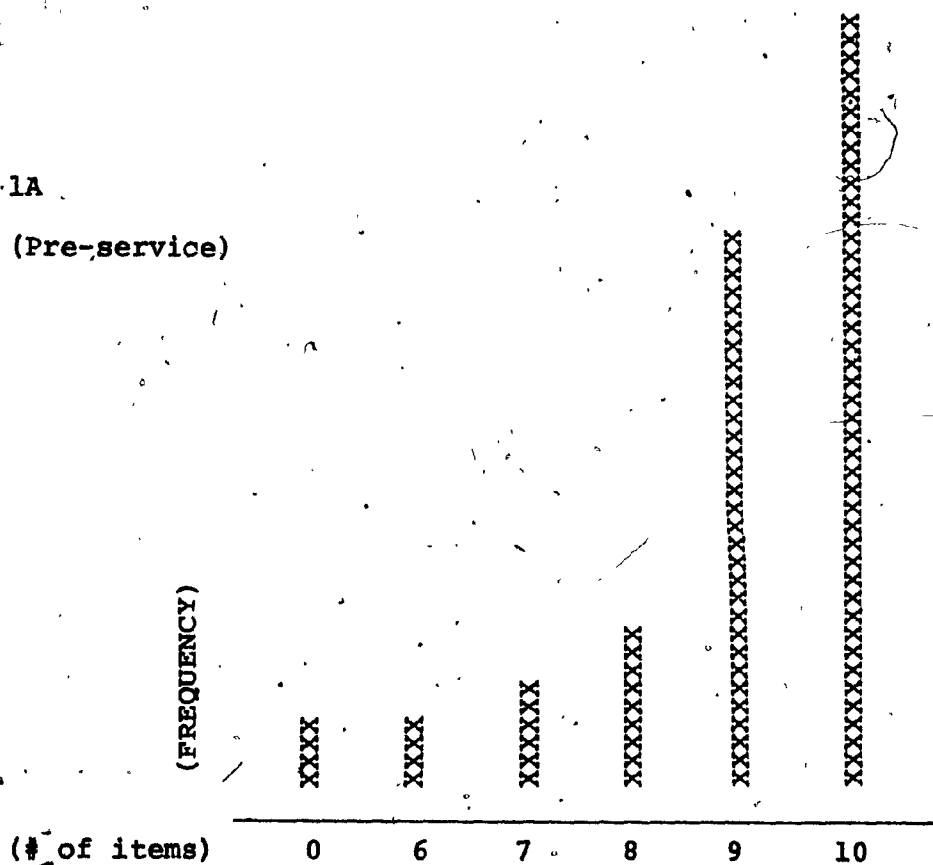
Item#	Median	chi-square	range	p (two-tailed)
21.	3.643	.245	4.0	.621
22.	4.000	.087	4.0	.768
23.	3.063	.075	4.0	.785
24.	3.929	.012	4.0	.912
25.	4.273	.019	3.0	.889
26.	3.700	1.999	4.0	.157
27.	1.344	.518	4.0	.472
28.	3.250	.366	4.0	.545

GRAPHS

Graphs 1A and 1B present Pre-service and In-service responses to the 10 item A.V. Utilization checklist

1A

(Pre-service)



1B

(In-service)

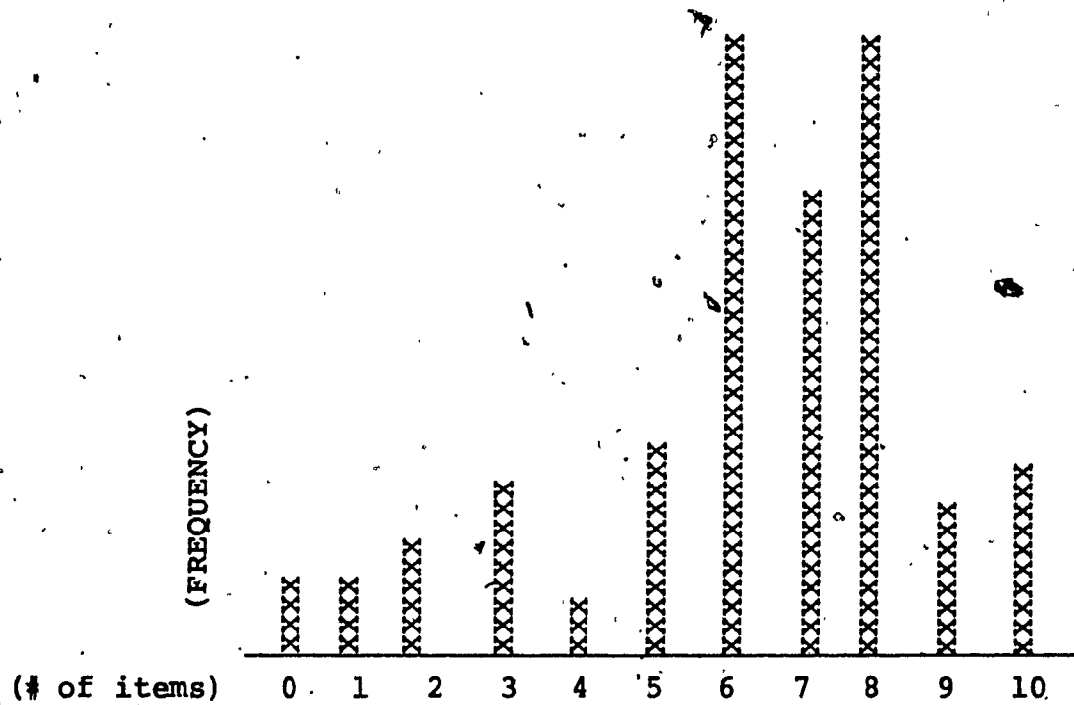


Table 8B

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Prior Awareness (In-service) by (Pre-service)

Item#	* Median	chi-square	range	p (two-tailed)
1.	3.667	10.032	4.0	.002
2.	3.688	3.974	4.0	.046
3.	3.167	.374	4.0	.541
4.	3.731	.590	4.0	.442
5.	3.111	4.247	4.0	.039-
6.	3.625	1.444	4.0	.230
7.	3.577	4.165	4.0	.041-
8.	4.150	7.577	3.0	.006
9.	3.346	2.513	4.0	.113
10.	4.000	.007	4.0	.934
11.	3.857	.042	4.0	.838
12.	3.389	.004	4.0	.948
13.	3.944	.590	4.0	.442
14.	3.833	.155	4.0	.696
15.	2.643	.174	4.0	.677
16.	2.955	1.666	4.0	.197
17.	3.938	.454	4.0	.500
18.	2.400	.058	4.0	.810
19.	4.333	.000	4.0	.993
20.	3.962	.102	4.0	.750

Item#	*Median	chi-square	range	p (two-tailed)
21.	3.591	.040	4.0	.842
22.	3.233	.755	4.0	.385
23.	2.682	.730	4.0	.393
24.	3.833	.162	4.0	.687
25.	4.125	.174	4.0	.677
26.	3.278	1.203	4.0	.273
27.	1.405	.028	4.0	.867
28.	2.611	1.663	4.0	.197

*combined

Table 9A
Program Evaluation by ITV Utilization (In-service)

Item#	Median	chi-square	range	p (two tailed)
1.	3.875	.826	4.0	.363
2.	4.111	.745	3.0	.388
3.	3.967	.236	3.0	.627
4.	4.350	8.406	3.0	.004
5.	2.438	.040	4.0	.841
6.	4.458	4.329	2.0	.037
7.	4.100	.270	4.0	.603
8.	4.808	EXACT	3.0	1.000
9.	4.050	.497	4.0	.481
10.	4.600	EXACT	3.0	1.000
11.	4.600	EXACT	3.0	1.000
12.	4.188	.019	3.0	.889
13.	4.208	.075	4.0	.785
14.	3.237	.518	4.0	.472
15.	4.136	.012	4.0	.912
16.	4.536	EXACT	3.0	1.000
17.	4.026	.254	4.0	.614
18.	4.600	EXACT	3.0	1.000
19.	3.860	.198	4.0	.655
20.	3.000	.826	4.0	.363

cont'd/

Item#	Median	chi-square	Range	p (two-tailed)
21.	3.423	.137	4.0	.712
22.	3.929	.012	4.0	.912
23.	3.447	.040	4.0	.841
24.	3.850	.077	4.0	.782
25.	4.250	.004	4.0	.948
26.	3.786	.868	4.0	.351
27.	3.500	0	4.0	1.000
28.	4.042	.007	4.0	.936
29.	1.344	.194	4.0	.660
30.	2.833	1.523	4.0	.217
31.	4.318	.658	.0	.417
32.	4.569	EXACT	3.0	1.000
33.	3.921	1.766	3.0	.184
34.	4.682	EXACT	4.0	1.000
35.	4.629	EXACT	4.0	1.000
36.	3.921	.497	4.0	.481

Table 9b
 Program Evaluation (In-Service) by (Pre-Service)

Item#	*Median	chi-square	Range	p (two-tailed)
1.	4.550	3.317	4.0	.069
2.	4.417	.602	4.0	.438
3.	4.333	.500	3.0	.479
4.	4.417	.004	4.0	.948
5.	2.944	3.826	4.0	.050-
6.	4.214	1.294	2.0	.264
7.	4.214	.026	4.0	.873
8.	4.289	EXACT	3.0	1.000
9.	4.318	.794	4.0	.373
10.	4.708	EXACT	3.0	1.000
11.	4.500	EXACT	3.0	1.000
12.	4.500	.445	3.0	.505
13.	3.874	1.276	4.0	.259
14.	3.643	1.351	4.0	.245
15.	4.206	.003	4.0	.954
16.	4.636	EXACT	3.0	1.000
17.	3.900	.240	4.0	.624
18.	4.595	EXACT	3.0	1.000
19.	4.083	2.282	4.0	.131
20.	3.591	3.317	4.0	.069

cont'd/

Item#	*Median	chi-square	Range	p (two-tailed)
21.	3.688	.390	4.0	.532
22.	3.444	.903	4.0	.342
23.	2.955	1.249	4.0	.264
24.	3.500	.817	4.0	.366
25.	3.833	.583	4.0	.445
26.	3.671	3.170	4.0	.075
27.	3.735	.004	4.0	.952
28.	4.079	.026	4.0	.872
29.	2.000	15.843	4.0	.000
30.	3.500	.714	4.0	.392
31.	4.063	.728	4.0	.393
32.	4.367	.404	3.0	.525
33.	4.000	.013	3.0	.910
34.	4.550	EXACT	4.0	1.000
35.	4.500	EXACT	4.0	1.000
36.	4.045	.251	4.0	.617

*combined

Table 10
Program Modification

In-Service %	Pre-Service %	Modification
35	63	more documented proof
41	39	interviews with psychologists and experts
6	16	panel discussion

Table 11
Benefit Most

In-Service %	Pre-Service %	Who
54	68	education students
70	79	in-service teachers
41	47	administrators
35	55	parents
41	61	school boards

Table 12
Additional Programming

In-Service %	Pre-Service %	Program
39	53	technical aspects of ITV
19	22	optimal monitor placement
78	75	ITV lesson planning in four area

Table 13
Degree of Involvement

In-Service %	Pre-Service %	Involvement
76	69	mailing list
61	78	plan a lesson
63	83	speak to colleagues
37	66	participate on a committee

Appendix 4
Synopsis of Open Ended Section

Best (In-Service)

- Bring the "real world" into the classroom
- A new view of teaching
- Interviews with teachers how they use it
- Watching students interest, participation
- Very professional - I liked how they tied-in the sequences'
- Science sequence
- Excellent learning experience;
- Different age/subject, children's involvement "in action"
- Being introduced to the idea
- Variety of ITV examples (snippets)
- ITV can aid the curriculum
- "Diversity it afforded the students" (?)
- How effective ITV can be
- Variety of programming available (snippets)
- Teachers approach to effective ITV it.
- Informs about ITV it., emphasis on student participation
- Exposure to the volume of material and resource available
- Teachers were convincing of ITV effect and it.
- Very well organized
- ITV possibilities/potential
- Students interest and response
- Student involvement
- How effectively ITV can be used
- Setting up the whole learning experience
- Relaxed but involved attitude of the teachers
- Effective uses
- Creativity and clarity of the program
- The interviews
- Well put together, informative overview of the field
- Extension of the classroom
- Well organized, interesting presentation
- Good clear, interviews
- Attention of the pupils
- Showed proper use of ITV

Worst (In-Service)

- Didn't address ITV "abuse."
- A little too long
- Biased, lacked specific audience
- Repetitive
- Kid's seemed too perfect
- Documented proof
- Stereotypes teachers/students
- Hate the opening
- Repetitive
- American - (regional)
- Some teachers stilted
- Not relevant
- Ideal classroom conditions
- More student feedback
- Bad french accent (xz)
- Principal
- Canada?
- Too long
- Proof? more reactions from children
- Segments a little too short
- Audio tracks distracting

Specific Questions (In-Service)

- ITV in Montreal?
- Optimal class size?
- Legality of off air taping?
- How often would each class use the set?
- Why not in Montreal?
- Why doesn't my school have equipment?
- Ch. 57 (ITV) in Montreal?
- How complete or worthwhile are the guides?
- When will my board offer these services?
- Does each class have a T.V. set all the time?
- How many years before my class has this stuff?
- Copyright laws?
- Where can I get High School chemistry materials?
- Do we have these services in French?
- Applications in handicap settings?
- Where can I get ITV?

General Comments (In- Service)

- Showed how it would optimally be used. "I enjoyed the presentation wish I could my own TV in my class?"
- Makes me aware of new interesting ways to reinforce/introduce what I teach in my class
- Interesting not relevant
- Does not apply realistically to our school
- A new and interesting field I'd like that (equipment) in my class
- More concentration on Early Childhood
- Excellent production/professional
- Enjoyed it - want to use ITV
- Introduced me to the concept
- Regional slant
- Like to see 1 program pre-post
- Makes me realize how much I could use ITV in my class if I had ready access to (equipment)
- We have one set (no cable) for 576 students!
- Therefore "privileged" no cable, no ITV
- Well organized - showed the scope of ITV
- Would be great for teaching French
- More concentration on lower level grade
- I would like psychological assessments of academic benefits and long range effects.
- Very interesting, enlightening

Best (Pre-Service)

- Good, important interviews
- Changed my mind to the extreme about ITV
- Children's reactions, and the learning that occurred
- ITV is accessible
- Supplement to classroom teaching
- Good for introduction and reinforcement of curriculum
- ITV it
- Teacher's role explained
- Pre-post
- "It showed how valuable a tool ITV can be without minimizing teacher effectiveness. It is proving to be a superior adjunct"
- Informative/pleasant viewing
- Science sequence
- Variety of ITV, it and effectiveness
- Children
- ITV here to stay (makes you aware)
- ITV could be used in different subjects *Even Grammar!
- Clear easy to understand and follow
- The types of programs appropriate for specific instructional purposes
- What ITV can do
- Practical use of ITV/Scope/Children's interest
- Bring instruction in a form they're already familiar with
- Children really seemed to learn
- To the point. Subject was very well treated
- Encouraging to see the children's enjoyment, involvement
- Interviews
- Very clear - effective use of time
- Children's enthusiasm strong and positive. Program well documented, informative
- Gave the viewer insight into an important and useful subject

Worst (Pre-Service)

- Repetitive, redundant
- Didn't show the other side of the coin (xn) !
- Language Arts (n.b. teachers too)
- Proof
- Too long
- More explanation
- Where?
- Too short

General Comments (Pre- Service)

- Very interesting
- Gained a better understanding - before didn't have a clear idea
- Very useful was great at giving info on ITV and use in the class
- I would like more specific information
- Interesting, benefit to teachers, helping discuss certain concepts
- Wish I had ITV when I was a kid!

Specific Questions (Pre-Service)

- When will ITV be made more available to teachers here (Canada)?
- Why hasn't it been integrated into the curriculum yet?
- How should a teacher go about acquiring an ITV system?
Where?
- I'm still in doubt - how to use a VCR?