OUTCOME ASSESSMENT STUDY OF KNOWLEDGE CHANNEL'S TELEVISION EDUCATION FOR THE ADVANCEMENT OF MUSLIM MINDANAO (TEAM-M) PROJECT

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All persons have the right to education. However, poverty, ignorance, and corruption are depriving millions of Filipinos the ability to improve their quality of life. Knowledge Channel Foundation, Inc. improves the quality of education through Knowledge Channel.
--Knowledge Channel Foundation, Inc. Mission Statement

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OUTCOME ASSESSMENT STUDY OF KNOWLEDGE CHANNEL'S TEAM MINDANAO PROJECT

I.   INTRODUCTION

The Philippines has been laggard with respect to economic performance compared to its East Asian neighbors. In fact the Philippines is one of the few countries (if not the only one) that missed the so-called "East Asian Miracle" – the several decades of economic growth and poverty reduction experienced by most countries in East and Southeast Asia, beginning in the 1960s. This is due to a number of factors, a major part being the onslaught of political turmoil (past and present) and the debt crisis during the mid-1980s, which the country never fully recovered from. The country's rapid population growth and the slow investment in the needed infrastructure which made the country less attractive to foreign direct investments (FDI) are among the reasons why the economy has been left behind..

Aside from the factors mentioned above, human capital, in the form of education of the country's citizens, has also an important direct effect on the country's economic well being. Several studies, using cross-country and intra-country (provincial) data, have shown the importance of education of the people on the growth of the economy. Barro and Xala-i-Martin (2004), have shown that the level of schooling (measured as number of years of schooling) of males raises the rate at which the economy grows.

The cross-country study of Mapa and Balisacan (2004) has also shown that functional literacy rate (a proxy for human capital) has a positive and significant impact on the income growth of a country. More recently Mapa, Balisacan and Briones (2007), using Philippine provincial data from 1985 to 2003, showed that a one year increase in schooling of the household head increases provincial per capita income by about 0.28 percentage points per year.

1.1. The Performance of the Philippine Education in an East Asian Context

While empirical evidence supports the significant linkage between education and growth the country's performance in the education sector has been dismal. Data from the Department of Education (DepEd) and the National Statistical Coordination Board (NSCB) show that the cohort survival rate (CSR) for elementary schools has gone down from 69.47% in school year 2002-2003 to 63.57% in SY 2003-2004 and 64.87% in SY 2004-2005. For secondary schools, the figures are even more disturbing – CSR decreased from 63.88% in SY 2002-2003, to 60.41% in SY 2003-2004 and 61.33% in SY 2004-2005. This means that out of 100 pupils who begin in the elementary level, 35 fail to finish; in secondary schools, out of the 100 students who start their first year in high school, 39 do not finish and won't have a high school diploma. .

Moreover, the data on net participation rate (NPR) show a depressing picture. From 83.30% in SY 2002-2003, the NPR for elementary schools went down to 81.72% in SY 2003-2004 and further down to 76.06% in SY 2004-2005. The figures for the secondary schools are even bothersome with NPRs of 45.56% in SY 2002-2003, 47.03% in SY 2003-2004 and 42.50% in SY 2004-2005. This means more than half of the youth who should be in high school are actually out of school. This will surely create problems in the future since more than half of the Filipinos who will be joining the labor force in the future would be without the necessary tools to drive the Philippine economy forward (Virola, 2006). The country's performance in educating its youth pales in comparison with our East Asian neighbors. According to Virola (2007), using data from the UNESCO's Institute of Statistics,

> *"in terms of educational attainment, the overall standing of the country is quite good but the emerging trend portends of a bleak future."*

One reason for this is shown in table 1. The proportion of Filipinos among those aged 15 to 34 years who completed at least primary education is at 88-91%. This is lower than that in three ASEAN countries (namely Indonesia, Malaysia, and Thailand) participating in the World Economic Indicators (WEI) program at 92-99%. Moreover, when it comes to the completion in lower secondary education,

while the country is still ahead of Indonesia and Thailand, it lagged behind Malaysia by 13%.

Table 1. Educational Attainment of the Adult Population of Selected countries by Age Group*

		Age Group						
	Year	25-64	15-19	20-24	25-34	35-44	45-54	55-64
At least completed primary education								
Indonesia	2003/04	81	97	93	93	84	73	48
Malaysia	2003	93	99	98	98	95	90	76
Philippines	**2003/04**	**82**	**90**	**91**	**88**	**84**	**78**	**67**
Thailand	2004/05	55	97	95	92	54	25	16
WEI Average of selected countries	2004	78	96	94	93	79	67	52
WEI Average of all countries	2004	81	95	94	91	84	76	63
At least completed lower secondary education								
Indonesia	2003/04	42	60	63	55	42	31	17
Malaysia	2003	65	93	88	83	71	49	26
Philippines	**2003/04**	**64**	**80**	**82**	**74**	**66**	**55**	**40**
Thailand	2004/05	33	73	74	50	33	20	13
WEI Average of selected countries	2004	50	77	77	66	53	39	24
WEI Average of all countries	2004	57	73	76	69	60	51	36
Sources: **UNESCO/UIS WEI (www.uis.unesco.org/publications/wei2006)** **OECD countries (www.oecd.org/edu/eag2006)** Notes: ... data are not available; n. – magnitude is negligible;								

* Table 1 was taken from Virola (2007)

When it comes to the quality of education being delivered, the Philippines is also behind its neighboring countries. The results of the 2003 Trends in International Mathematics and Science Study (TIMSS), shown in table 2, tell us that among the 45 countries that participated in the TIMSS for eighth-grade students, the Philippines ranked 41st in Math and 42nd in Science. The country is scrapping the bottom of the barrel when it comes to Science and Mathematics performance. Moreover, the country's average score was more than 100 points lower than Malaysia and more than 200 points lower than the first ranked country, Singapore. Virola (2007) also noted that among the 25 countries that joined the study among fourth-grade students, the Philippines ranked 23rd in both Mathematics and Science, with the country's average score being more than 200 points lower than the first-ranked country, Singapore.

Table 2. Math and Science Scores/Ranks in the Trends in International Mathematics and Science Study (TIMSS) of Selected Countries *

Scores and Ranks for Eighth-Grade Students, 2003				
Country	Math Score	Math Rank	Science Score	Science Rank
International Average	466		473	
Philippines	378	41	377	42
Indonesia	411	34	420	36
Malaysia	508	10	510	20
Singapore	605	1	578	1
Japan	570	5	552	6
USA	504	15	527	9
Scores and Ranks for Fourth-Grade Students, 2003				
International Average	495		489	
Philippines	358	23	332	23
Chinese Taipei	564	4	551	2
Hongkong SAR	575	2	542	4
Singapore	594	1	565	1
Japan	565	3	543	3
USA	518	12	536	6
Source: International Association for the Evaluation of Educational Achievement;				

* Table 2 was taken from Virola (2007)

With this seemingly insurmountable task of improving the quality of education of the youth in the country and with the hope of contributing to the vision of a community of educated, empowered, and responsible citizens working relentlessly for better Philippines, the Knowledge Channel Foundation, Inc., originally under the name Sky Foundation, Inc., was incorporated in 1999 with the Philippine Securities and Exchange Commission. A non-profit foundation, the channel went on air on November 6, 1999 providing curriculum- and non-curriculum-based programs on cable television that supplemented the Department of Education's (DepEd) curriculum.

In 2000, KCFI entered into a 10-year MOA with DepEd, with the DepEd proclaiming the channel as mandatory viewing in all public schools. Today, the Knowledge Channel is available to over 2.67 million public school students in 1,528 public elementary and high schools in 40 provinces in all regions of the country, and has an expanded household viewer-ship in 58 provinces. However, this figure is still small since out of almost 42,000 public schools throughout the country, only 3.6% have access to Knowledge Channel. With the use of an intervention, the use of television programs to augment the curriculum

in the public schools, Knowledge Channel hopes contribute to improving the quality of education in the country. While television viewing might improve the learning process of the students thereby improving their performance, there are other factors that contribute to the student's achievement and these factors, together with the empirical evidences, are reviewed next.

1.2. Effects of School Inputs on Student Achievement

Numerous studies have been done in trying to identify the relationship existing between student achievement, usually measured by achievement tests, and school inputs the students' receive. School inputs usually identified in various studies include class size, characteristics of teachers including teacher education and teacher experience, teacher salaries, and school expenditure.

While smaller class sizes are shown to provide short-term and long-term benefits (Mosteller, 1999), investing in school resources, such as learning materials and school hardware, improves student performance, boosts promotion rates, and lowers grade repetition (Harbison and Hanushek, 1992). On the other hand, Angrist and Lavy (1998) estimated the effect of in-service teacher training on children's reading and mathematics achievement and found out that the training received by teachers led to an improvement in their students' test scores. The estimates suggest that teacher training provided a less costly means of increasing test scores than reducing class size or adding school hours.

A study by Quimbo (2003) explained Math and Science achievement of public school children in the Philippines using survey data. The results show that younger children post higher scores in all grade levels[1] while the male indicator variable is statistically significant and negatively correlated with both Math and Science scores in all grade levels. This means that male students tend to get lower average scores than female pupils, all things being the same. From the joint tests of significance still from the study of Quimbo (2003), it was proven that the presence of school and home learning materials,

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[1] This supports the hypothesis that older students in each cohort tend to be those who repeated or dropped out from a previous grade level.

regardless of type and combinations, as well as the "effective" presence of teacher (not being absent or being present but not teaching) generally have an impact on scores in all grade levels. On the other hand, however, individual tests of significance show that the specific impacts of combinations of school and home inputs as well as teacher types vary widely across subjects and grade levels. Specifically, television, as a part of school inputs, was found to help improve Math and Science scores for older children.

Kobayashi (2005) studied the effectiveness of school inputs on students' performance, measured as the difference in the National Sample-Based Assessment (NSBA) test scores in 1999 and 2003, in public elementary schools in 23 provinces in the Philippines. The paper explored the effectiveness of school inputs through an investigation of the achievements of an educational project currently being implemented in the Philippines with external financing from the World Bank and the Japan Bank for International Cooperation (JBIC). The study focused on the Third Elementary Education Project (TEEP), a nine-year public investment program which aims to improve the quality of elementary education in the country's 23 poor provinces by providing multiple school inputs such as classroom rehabilitation, textbooks, teacher training, and school management enhancement.

Using data from National Sample-Based Assessment (NSBA) test scores in 1999 and 2003, the study showed that student achievement of TEEP schools improved at a significantly higher rate than that of non-TEEP schools. A further statistical analysis revealed that the variation in score gains is associated with two project components: teacher training, the number of teachers who participated in In-Service Training (INSET) program through TEEP between 1999 and 2003, and school facilities measured as the amount of loan disbursed under School Building Project (the data are in thousands of Filipino Pesos standardized by number of students and used as the school facility variable in the model). The results also indicate that the project inputs are more effective in large schools than in small schools.

1.3.   Effects of the Knowledge Channel Intervention on Students' Performance

Knowledge Channel commissioned studies to evaluate the impact of its programs on the students. Liwag (2000) studied 119 students from 2 pilot schools during the third quarter of SY 1999-2000. Experimental classes (those who viewed Knowledge Channel programs) filled out the Student Appear Questionnaire (SAQ) which comprehensively assessed students' perceptions and opinions of the Knowledge Channel's programming, schedule, delivery appeal, and impact on their learning. From the questionnaires, it was found out that in terms of viewing frequency and conditions, 72% of the students were able to view between 2-5 programs on the KC during the evaluation period while Science students view the most number of shows (6 or more). Two-thirds of the students were able to see the programs in their entirety and classrooms were the usual venues for viewing while 89% had to move from their usual classroom to view the programs. In almost all cases, their teachers accompanied them in watching the shows.

When it comes to integration of Knowledge Channel with classroom lessons, 89% of the students reported that their teachers facilitated a class discussion about the KC programs (but only 66% in Math). While 56% said they were given KC related seatwork or homework, 2/3 claimed that their teachers assessed them on their learning from the TV programs. 89% agreed with the statement that the programs on the KC were relevant and related to their classroom lessons. On average, students found the programs highly interesting, just right in length, and a source of a lot of learning. They expressed the desire for their teachers to continue using the KC in teaching Math, Science, and English. But on the other hand, students had some difficulty comprehending the hosts of the programs and felt that they could follow the lessons better if they were not in English (for Math and Science) and students claimed that often times, they actually understood their teachers' explanations better than the explanations in the videos. Based on the study, some improvements for the channel were suggested. These include the medium of instruction used, the comprehensibility of narration, and the length of the videos (longer if possible). Students said that physical viewing conditions should be improved and that more episodes be added.

In 2006, Knowledge Channel commissioned a study entitled "Impact Evaluation of the Programs of Knowledge Channel on the Performance of the Schools in the National Achievement Test (NAT)" to examined the impact of the programs of Knowledge Channel on school-average student performance, measured in terms of the National Achievement Test (NAT) results. The study was conducted by a group of researchers from the University of the Philippines Diliman, headed by Dennis S. Mapa. In the study an econometric model that explains the determinants of student performance was constructed. The set of determinants include an intervention variable which is the presence of the Knowledge Channel in the schools. The other determinants of school-average student performance identified include: School Facility, School Population, Location, Textbook-to-Pupil ratio, Percentage of Teachers with graduate studies, Measure of Infrastructure of the City/Municipality where the school is located and City/Municipality Income to proxy for capital spending. The study covered 101 Knowledge Channel elementary schools and 32 non-Knowledge Channel elementary schools.

The results of the study showed that there is a positive and significant relationship between the presence of Knowledge Channel and in the improvement of NAT scores and its sub-components (particularly Mathematics and Science) from 2004 to 2006, conditioned on the fact that the Knowledge Channel facilities are being utilized regularly by the students. In the Knowledge Channel schools with high level of utilization, NAT scores and the sub-components (Science, Math and English) increase by an average of at least 2 percentage points per year, all things being the same. Moreover, the presence of Knowledge Channel created a lot of excitement on the part of the students. This excitement and interest shown by the students have motivated teachers to make use of the programs of Knowledge Channel into the classroom discussions.

1.4. Television Education for the Advancement of Muslim Mindanao (TEAM-M)

The Television Education for the Advancement of Muslim Mindanao (TEAM-Mindanao) is a 3-year United States Agency for International Development (USAID)-funded project that seeks to improve the quality of basic public education in the Autonomous Region in

Muslim Mindanao (ARMM), Regions IX and XII through communications technology. The major component of the project involves the provision of the Knowledge Channel (KCh) with its curriculum-based programs to public schools. Through educational television (ETV), the academic performance of grade and high school students watching KCh in these schools is expected to improve in English, Math, and Science. With better education, it is believed, they stand a greater chance to make a better life for themselves and their families.

While initial indicators (such as the principals' observations of increase attendance rate, teachers' observations of increasing level of interest among students watching Knowledge Channel), suggest that the intervention (presence of Knowledge Channel) has increased the level of awareness of the students watching it, there is a need to assess the impact of the project quantitatively.

The purpose of the assessment study is to measure the impact of the programs of Knowledge Channel on the average performance of the students watching these programs. The measures of academic performance are identified as any of the following:

> (a) National Achievement Test (NAT) scores
> (b) Regional Achievement Test (RAT) scores – if available
> (c) Division Achievement Test (DAT) scores – if available
> (d) School's Retention Rate

The performance of the students will be measured using data from the one hundred fifty (150) schools with Knowledge Channel programs in the three (3) regions in Mindanao. This will be done by constructing an econometric model that will capture the determinants of student's performance and incorporating into the model an intervention variable – presence of knowledge channel.

II. RESEARCH DESIGN and OBJECTIVES

2.1. Objectives of the Study

The study shall determine the impact of the Knowledge Channel programs on the performance of the students (averaged for the school) viewing it, using existing data from about 150 elementary and secondary schools where Knowledge Channel has intervened. Students' performance is measured through the National Achievement Test (NAT) results for the period 2005 to 2007. The variable of interest is the improvement in the NAT scores, measured as,

$$\Delta NAT_{2005-2007} = NAT_{2007} - NAT_{2005}$$

This study uses 2005 as the starting year because it was in this year that Knowledge Channel started with the intervention for the TEAM-M project. There were 146 Knowledge Channel schools and 46 Non-Knowledge Channel schools that were covered by the study. The schools classified according to provinces are given in table 3 below. While the schools covered by the TEAM-M project includes both public elementary and high schools, the econometric model will only include elementary schools and not high schools since majority of the schools covered by the project are elementary schools, numbering to about 134 schools.

Specifically, the study aims to:

a. Carry out a comparative evaluation between KCh-supplied schools (experimental group) versus schools without KCh (control group) to determine if having Educational Television (ETV) makes a difference in the quantitative academic performance of students (improvement in the NAT scores). Aside from the quantitative comparison, a qualitative portion of the evaluation will be made. It seeks to find out if there has been an attitudinal and/or behavioral change (absenteeism, rise/drop in enrollment, and renewed/lessened sense of teaching/learning) amongst the students and the teachers of KCh schools.

b. Carry out a comparative evaluation between KCh-supplied schools with low KCh usage rates and those with high usage rates; the reasons behind the acceptance or rejection of the educational intervention by the school.

c. Make recommendations on how KCh can be more effectively utilized in public schools. The study shall take into consideration the relationship between key variables (capacity of the viewing room, school environment, teachers' competencies, teachers' training on ETV as an instructional tool, PTCA involvement in school activities etc.) that affect the level of the effectiveness of the project.

Table 3. Schools Included in the Impact Study by Province

TYPE OF SCHOOL	PROVINCE	With KCH	Without KCH
Elementary	Basilan	7	2
	CotabatoCity	1	0
	Maguindanao	23	9
	North Cotabato	19	9
	Sharif Kabunsuan	20	11
	Sulu	16	5
	Tawi-Tawi	20	4
	Zamboanga del Sur	15	3
	Zamboanga Sibugay	13	3
	TOTAL	**134**	**46**
High School	Basilan	1	0
	Maguindanao	2	0
	Sharif Kabunsuan	4	0
	Tawi-Tawi	1	0
	Zamboanga Sibugay	1	0
	TOTAL	**9**	**0**
Primary	Maguindanao	1	0
	GRAND TOTAL	**144**	**46**

Data collection was done through school visits to the different cities and municipalities. These schools, where Knowledge Channel is present, will be referred to as the experimental schools. In addition to the experimental group, the research team also collected data on schools that will serve as the "control group." The control group consists of schools without Knowledge Channel facilities. These schools (46 public elementary schools) were selected in such a way that the schools' profile (students

population, teacher-student ratio, etc,) are the similar with the schools included in the experimental sample to ensure that the only difference between the experimental group and the control group is the presence of the Knowledge Channel. The information obtained from 134 experimental schools and 46 control schools will be used to build the econometric model. The list of experimental and control schools are provided in appendix 1.

2.2   Data Gathering and Survey Operations

The survey operations for the Impact Evaluation Study of TEAMM Schools were conducted from October 15 to November 30, 2007. Six (6) groups of respondents were interviewed for the study, namely:

(1) School Principals (for both TEAMM and Non-TEAMM schools);

(2) Subject Teachers (for both TEAMM and Non-TEAMM schools);

(3) Barangay Officials (TEAMM schools);

(4) PTCA Officers (TEAMM schools);

(5) ETV Coordinators (TEAMM schools); and

(6) Students (TEAMM and Non-TEAMM schools).

Data from the different respondents were collected using structured questionnaires (please refer appendix 2 for the questionnaires used in the survey).

At the end of the survey operations, the following number of respondents participated in the Impact Evaluation Study of TEAMM:

Type of Respondent	**Number of Respondents**
1. Principal	193
a. TEAMM schools	146

	b. Non-TEAMM schools	47
2.	Subject Teachers	370
	a. TEAMM Schools	295
	b. Non-TEAMM	75
3.	Barangay Officials (TEAMM Schools)	102
4.	PTCA Officers (TEAMM Schools)	165
5.	ETV Coordinators	146
6.	Students	8855
	a. TEAMM Schools	6620
	b. Non-TEAMM Schools	2235

Table 4. Number of Principal who Participated in the Impact Study by Province

TYPE OF SCHOOL	PROVINCE	With KCH	Without KCH
Elementary	Basilan	7	2
	CotabatoCity	1	0
	Maguindanao	23	9
	North Cotabato	19	9
	Sharif Kabunsuan	20	11
	Sulu	16	5
	Tawi-Tawi	20	4
	Zamboanga del Sur	15	3
	Zamboanga Sibugay	13	3
	TOTAL	**134**	**46**
High School	Basilan	1	0
	Maguindanao	2	0
	Sharif Kabunsuan	4	0
	Tawi-Tawi	1	0
	Zamboanga Sibugay	1	0
	TOTAL	**9**	**0**
Primary	Maguindanao	1	0
	GRAND TOTAL	**144**	**46**

Table 5. Number of ETV Coordinators who Participated in the Impact Study by Province

TYPE	PROVINCE	Frequency	Percent
Elementary	Basilan	7	5.22
	CotabatoCity	1	0.75

	Maguindanao	21	15.67
	North Cotabato	19	14.18
	Sharif Kabunsuan	21	15.67
	Sulu	16	11.94
	Tawi-Tawi	20	14.93
	Zamboanga del Sur	16	11.94
	Zamboanga Sibugay	13	9.70
	TOTAL	**134**	**100.00**
High School	Basilan	1	12.50
	Maguindanao	2	25.00
	Sharif Kabunsuan	3	37.50
	Tawi-Tawi	1	12.50
	Zamboanga Sibugay	1	12.50
	TOTAL	**8**	**100.00**
Primary	Maguindanao	1	100.00
	GRAND TOTAL	**143**	

Table 6. Number of Subject Teachers who Participated in the Impact Study by Province

TYPE	PROVINCE	Frequency	Percent
Elementary	Basilan	21	7.66
	CotabatoCity	2	0.73
	Maguindanao	23	8.39
	North Cotabato	27	9.85
	Sharif Kabunsuan	30	10.95
	Sulu	48	17.52
	Tawi-Tawi	60	21.90
	Zamboanga del Sur	24	8.76
	Zamboanga Sibugay	39	14.23
	TOTAL	274	100.00
High School	Basilan	3	15.79
	Maguindanao	6	31.58
	Sharif Kabunsuan	5	26.32
	Tawi-Tawi	2	10.53
	Zamboanga Sibugay	3	15.79
	TOTAL	19	100.00
Primary	Maguindanao	2	100.00
	GRAND TOTAL	295	

Table 7. Number of Subject Teachers who Participated in the Impact Study by Province

Province	Frequency	Percent
Basilan	8	7.84
CotabatoCity	6	5.88

Maguindanao	5	4.90
North Cotabato	7	6.86
Sharif Kabunsuan	16	15.69
Sulu	16	15.69
Tawi-Tawi	18	17.65
Zamboanga del Sur	11	10.78
Zamboanga Sibugay	15	14.71
TOTAL	102	100.00

Table 8. Number of Subject Teachers who Participated in the Impact Study by Province

Province	Frequency	Percent
Elementary Schools		
Basilan	7	4.46
Cotabato	3	1.91
Maguindanao	12	7.64
North Cotabato	37	23.57
Sharif Kabunsuan	27	17.20
Sulu	16	10.19
Tawi-Tawi	20	12.74
Zamboanga del Sur	21	13.38
Zamboanga Sibugay	14	8.92
TOTAL	157	100.00
High Schools		
BASILAN	1	12.50
SHARIF KABUNSUAN	5	62.50
TAWI-TAWI	1	12.50
ZAMBOANGA SIBUGAY	1	12.50
TOTAL	8	100.00

Table 9. Number of Students who Participated in the Impact Study by Province

Type of School	Province	With KCH	Without KCH
Elementary	BASILAN	99	350

	COTABATO CITY	50	0
	MAGUINDANAO	1015	473
	NORTH COTABATO	936	349
	SHARIF KABUNSUAN	1004	519
	SULU	802	254
	TAWI-TAWI	1003	202
	ZAMBOANGA DEL SUR	701	139
	ZAMBOANGA SIBUGAY	699	200
	TOTAL	**6309**	**2486**
High school	BASILAN	50	0
	MAGUINDANAO	93	0
	SHARIF KABUNSUAN	148	0
	TAWI-TAWI	50	0
	ZAMBOANGA SIBUGAY	49	0
	TOTAL	**390**	**0**
	GRAND TOTAL	**6699**	**2486**

2.3.   Focus Group and Square Table Discussions.

In addition to the survey conducted for the impact study, focus group discussions (FGDs) and square table discussions were also conducted with the various stakeholders (students, parents, teachers and principals) in different provinces. FGDs were conducted in Zamboanga Sibugay last November 16, 2007 where representatives (principals, ETV coordinators, subject teachers, parents and students) from 10 schools in the district participated in the whole day activity.

In addition to the FGDs, square table discussion with five different groups of stakeholders were held in Maguindanao, Shariff Kabunsuan, Zamboanga del Sur, Sulu, and Tawi Tawi last December 10 to 23, 2007. Participants of the workshop are the supervisors and principals, ETV coordinators, and PTCA officials, specifically the presidents. The forums' main objective is to gather information on the impact of the Knowledge Channel intervention in their respective schools that may have been missed ut in the survey operations. The forums also tackled the positive and negative effects of the introduction of the Knowledge Channel in the schools covered by the TEAM-M project.

The guide questionnaires used in the focus group discussions held in Zamboanga Sigubay is found in appendix 3.

III. PROFILE OF THE RESPONDENTS

3.1. School Characteristics

Majority of the schools covered by the study can be classified as "small schools" in terms of student population. About 70% of the elementary schools have population of less than 500 students (about 2 sections per grade level) and 92% of the schools have population less than 1000 students. Tables 10 and 11 provide the summary of the over-all student population (for elementary schools) and student population per province visited by the research team.

Table 10. Student Population of Elementary Schools

Students Population	Number of Schools	Percent
less than 500	124	70.06
500 to 999	38	21.47
1000 to 1499	11	6.21
1500 to 1999	3	1.69
2000 to 2500	1	0.56
Total	**177**	**100**

The school's student population plays an important role whether the school is able to maximize its utilization rate (that is, if all students are able to watch all the required programs of the Knowledge Channel). In the previous study by the research team for schools in Luzon and the Visayas, it was found out that having a large student population creates hindrance on the schools' utilization or viewing rate. Given a limited resources such as television set (usually 1 per school) and viewing room (usually 1 room that can accommodate 1 section), that study showed that as student population increases, the opportunity of viewing the programs of Knowledge Channel by the students decreases. The level of maximum (full) utilization based on the actual programs of Knowledge Channel shown per week, is achieved for schools with a maximum of 900 students (about

3 sections per grade level). In other words, the school with one television set can accommodate only a maximum of 900 students that are able to watch all the weekly programs of the Knowledge Channel. If the student population is higher than 900 (say greater than 3 sections), then there will be some students who will be not given an opportunity to watch all the programs of the Knowledge Channel. Thus, we can say that a small student population is a necessary condition for maximum utilization.

Table 11. Number of Students Per School (Average for the Province)

School Level	Province	Type of School	No. of Schools	Min	Max	Mean
Elementary	BASILAN	WITHOUT KCH	2	360	849	605
		WITH KCH	7	174	414	309
	COTABATO CITY	WITH KCH	1	709	709	709
	MAGUINDANAO	WITHOUT KCH	8	297	2310	685
		WITH KCH	22	145	1202	510
	NORTH COTABATO	WITHOUT KCH	9	162	435	294
		WITH KCH	19	180	752	325
	SHARIF KABUNSUAN	WITHOUT KCH	11	215	669	356
		WITH KCH	20	249	1785	669
	SULU	WITHOUT KCH	5	194	463	325
		WITH KCH	16	203	1363	469
	TAWI-TAWI	WITHOUT KCH	4	364	1090	582
		WITH KCH	20	226	1169	550
	ZAMBOANGA DEL SUR	WITHOUT KCH	3	192	211	203
		WITH KCH	15	179	1466	441
	ZAMBOANGA SIBUGAY	WITHOUT KCH	3	327	577	447
		WITH KCH	13	187	1709	674
High School	BASILAN	WITH KCH	1	323	323	323
	MAGUINDANAO	WITH KCH	2	359	1670	1015
	SHARIF KABUNSUAN	WITH KCH	3	278	1601	818
	TAWI-TAWI	WITH KCH	1	243	243	243
	ZAMBOANGA SIBUGAY	WITH KCH	1	853	853	853
Primary	MAGUINDANAO	WITH KCH	1	173	173	173

The other factors that also play important roles on the students' performance are the class size and the students-teacher ratio. It has been shown that smaller class sizes have shown to provide short-term and long-term benefits in improving student performance (Mosteller, 1999). Tables 12 and 13 below show that average students-teacher ratio and

the average class size for the schools covered by the study for both KCh and Non-KCh schools.

Table 12. Average Number of Students for Every Teacher

School Level	Type of School	No. of Schools	Min	Max	Mean	Std. Dev.
Elementary	WITHOUT KCH	45	27.50	109.00	52.14	18.51
	WITH KCH	132	24.17	215.50	54.99	32.90
High School	WITH KCH	8	22.15	55.67	33.80	12.17
Primary	WITH KCH	1	57.67	57.67	57.67	

The average number of students per one teacher in the elementary level for Knowledge Channel schools is about 55 students per teacher which is slightly higher than the average in the Non-Knowledge Channel schools, about 52, albeit not significantly different from each other. What is noticeable is the fact that there are schools, particularly in the Autonomous Region of Muslim Mindanao (ARMM) where the average number of students per a single teacher is more that 200! The reason being is that not all teaching positions have been filled up, thereby increasing the student-teacher ratio. The average class size is around 45 students per section for both the Knowledge Channel and Non-Knowledge Channel schools. However, there are schools that can be considered as "outliers" with more that 70 students per section.

Table 13. Average Number of Students per Section

School Level	Type of School	No. of Schools	Min	Max	Mean	Std. Dev.
Elementary	WITHOUT KCH	45	16.50	74.17	45.21	13.05
	WITH KCH	132	24.17	89.57	45.78	12.40
High School	WITH KCH	8	35.89	72.61	48.85	13.86
Primary	WITH KCH	1	57.67	57.67	57.67	

3.2   Improvement in the Retention, Completion and Survival Rates (2005-2007)

The research team looked into the performance of the Knowledge Channel schools on the three (3) commonly used school indicators, namely: retention, completion and survival rates, vis-à-vis the performance of schools without Knowledge Channel. The schools indicators are defined by the Department of Education (DepEd) as follows:

1. Retention Rate - the proportion of the enrollment in any school year that continues to be in school the following year.

2. Completion Rate - the percentage of first year entrants in a cycle of education surviving to the end of the cycle.

3. Survival Rate (Cohort) - the population of enrollees in the beginning grade or year who reach the final grade or year at the end of the required number of years of study.

Figure 1 below shows the retention rates of the two groups of elementary schools (KCH and Non-KCH) from 2005 to 2007. On one hand, the average retention rate of elementary schools with Knowledge Channel at the start of the TEAM Mindanao project (2005) is about 83.48 percent and increasing to 84.23 percent at the end of the project (2007). The slight increase is not significantly different from zero. On the other hand, the retention rates for Non-Knowledge Channel elementary schools is more volatile, starting with 79.45 percent in 2005 and increasing to 83.62 percent in 2006 and decreasing to 81.95 percent in 2007. Just as in the Knowledge Channel schools, the incremental yearly increase in the retention rate for Non-Knowledge Channel schools is not significantly different from zero. In other words, the retention rates in 2007 for both groups are not significantly different when compared to the 2005 figures.

Figure 1. Retention Rates of Knowledge Channel and Non-Knowledge Channel Schools (2005 to 2007)
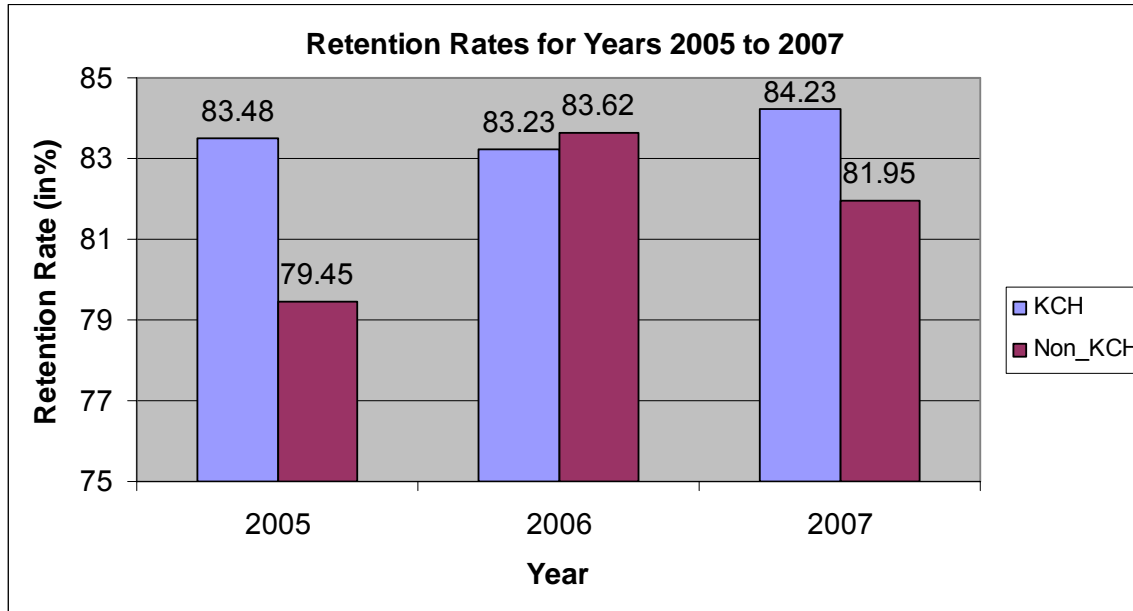
The completion rates for Knowledge Channel and Non-Knowledge Channel schools are shown in figure 2 below. The average completion rate for Knowledge Channel schools in 2007 (75.42%) is significantly higher compared to the 2006 figure (72.56%). On the other hand, the completion rate for non-Knowledge Channel schools has been decreasing since 2005. In fact, the completion rate of 62.09% in 2007 for non-KCh schools is significantly lower when compared to the 2006 figure of 65.42%.

The increase in completion rate was also observed by the principals during the square table discussions where they cited as the positive effects of presence of Knowledge Channel include an increase in enrollment while at the same time a decrease in the absences of students. ETV coordinators also observed a decrease in drop-out rates since it encourages students to go to school. Moreover, the PTCA presidents said that with the introduction of Knowledge Channel, their children are encouraged to go to school.

Figure 2. Completion Rates of Knowledge Channel and Non-Knowledge Channel Schools (2005 to 2007)
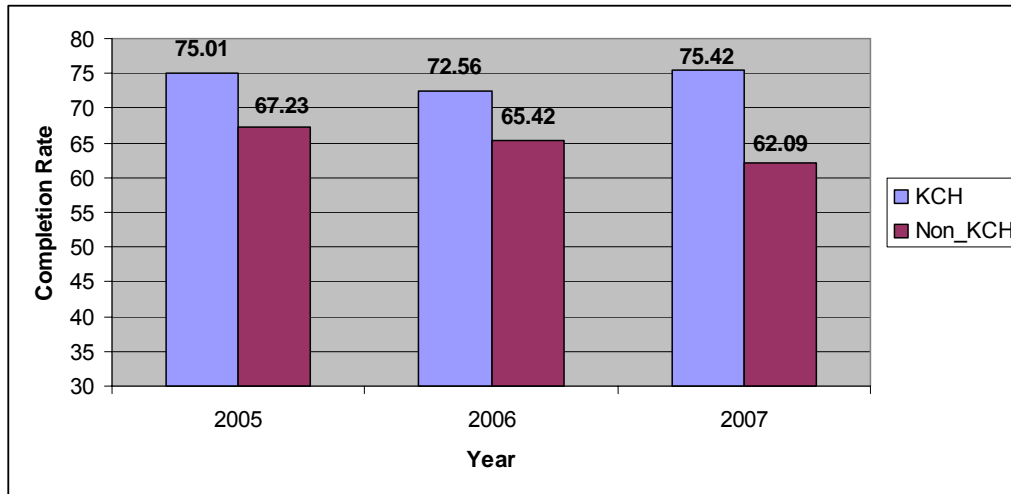
The survival rates for the period 2005 to 2007 of Knowledge Channel and non-Knowledge Channel elementary schools are given in figure 3 below. While the effect of any intervention of the survival rate takes longer period (at least six years for elementary schools), we are cautious in making any conclusion that the improvement in the survival rate is attributable to the ETV intervention. Given that caveat, the data shows that the survival rate for Knowledge Channel schools in 2007, recorded at 72.40% is significantly higher than the 2006 figure of 69.55%. On the other hand, the survival rates for non-Knowledge Channel schools have been on a downward trend for the same period, starting with 69.84% in 2005, 68.51% in 2006 and 66.42% in 2007. The decreases, however, are not significantly different from zero.

Figure 3. Survival Rates of Knowledge Channel and Non-Knowledge Channel Schools (2005 to 2007)
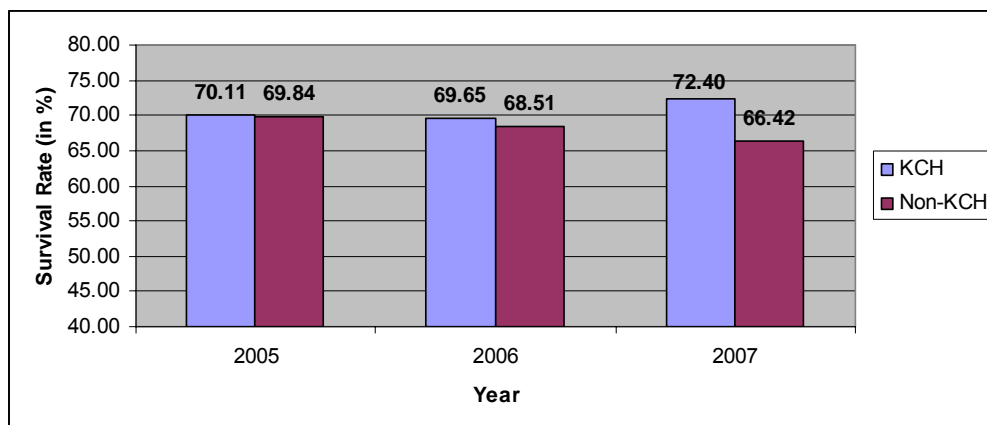
3.3. Profile and Perceptions ETV Coordinators and Subject Teachers

The percentage of school teachers that attended the Knowledge Channel training is given in table 14 below. The figures tell us that majority of the elementary schools, 78 out of 134 (58%), sent more than half of the teachers to the Knowledge Channel seminars. Attendance in a seminar for majority of the teachers, and not just for a few, is a very important exercise to make sure that continuity of the programs is maintained whenever subject teachers are transferred to other schools (teachers turn-over is quite common in the public elementary schools).

Knowledge Channel now requires that majority, if not all subject teachers, must attend the trainings conducted by the Knowledge Channel staff, an important innovation from the previous practice where only representative teachers are asked to attend the training seminar. The training is now conducted in every school or schools that are near each other, compared to the previous district or division-wide training. This new practice makes the training process relatively slower (only few schools are covered at a time), but having the advantage of increased coverage of the target participants – ETV coordinators and subject teachers.

Table 14. Percentage of Teachers who Attended Training of KCH

Type of School	Level of Attendance	Percentage
Elementary	1 to 25 percent	15.30
	25.01 to 50 percent	26.50
	50.01 to 75 percent	21.40
	75.01 to 90 percent	10.20
	90.01 to 100 percent	26.50
	Total	100.00
High School	1 to 25 percent	60.00
	25.01 to 50 percent	40.00
Primary	50.01 to 75 percent	100.00

The ETV coordinator, being the person-in-charge of all activities related to the use of the Knowledge Channel facilities, plays a very important role in the success or failure of the

intervention. For a school with a dynamic ETV coordinator - one who makes sure that the program guide is being followed by the subject teachers and the students – the probability of having a successful intervention increases, all things being the same. Engaging the ETV coordinators more frequently through more training sessions is important step to achieve the status of having a "proactive" ETV coordinator. The figures in table 15 show the percentage of ETV coordinators that attended the training seminars conducted by Knowledge Channel. All ETV coordinators were able to attend at least one seminar, with a few that were able to attend two training sessions.

Table 15. Number of seminars attended as ETV Coordinator

% within TYPE

		TYPE		Total
		Elementary	High School	
number of seminars attended	1	98.2%	100.0%	98.3%
	2	1.8%		1.7%
Total		100.0%	100.0%	100.0%

As important factor that must be present, before any impact of the Knowledge Channel on the performance of the students is realized, is that the students are viewing the programs. To achieve this objective, the ETV coordinator develops a weekly viewing plan based on the program guide released by the Knowledge Channel every year. The viewing plan serves as the viewing schedule for the schools to follow. The viewing plan identifies the specific grade level and section that will watch the program of the Knowledge Channel at a specific time.

The ETV coordinator were asked for their perceptions whether or not the viewing plan is being followed and the results in table 16 show that 94% of the ETV coordinators for elementary schools say that at least 75% of the viewing plan is being followed, with 5% saying that 100% of the viewing plan is followed. The figures here suggest a relatively high level of utilization of the programs of Knowledge Channel for schools under the TEAM-Mindanao. The results in table 16 will be validated later from the responses of the students.

Table 16. How much the viewing plan is achieved

% within TYPE

		TYPE			
		Elementary	High School	Primary	Total
	100 percent	5.2%		100.0%	5.6%
	90 to 99 percent	42.6%	25.0%		41.1%
	75 to 89 percent	46.1%	25.0%		44.4%
	50 to 74 percent	4.3%	12.5%		4.8%
	below 50 percent	1.7%	37.5%		4.0%
Total		100.0%	100.0%	100.0%	100.0%

3.4. Perceptions of the Students

The research team interviewed 6620 students for the impact study. The objectives of the exercise are to gain insights on how the students perceived the programs of the Knowledge Channel, whether the programs are able to help the students in improving their academic performance.

When asked the students on the mode of transportation they used in going to school. This variable is one of the variables identified as possible proxy for the family income. The result provided in table 17 below show that a large percentage of the elementary students interviewed (about 90%) walk when going to school. Another 5% are utilizing a public transport (usually tricycle) and 5.3% goes to school using a private vehicle.

Table 17. How students go to school

% within type

		type		
		Elementary	High school	Total
	walking	89.7%	71.5%	88.7%
	private vehicle	5.3%	3.3%	5.2%
	public vehicle	4.9%	25.1%	6.1%
Total		100.0%	100.0%	100.0%

About 80 percent of the elementary students interviewed spend at least 30 minutes travel tie going to their respective schools, as shown in table 18 below. Of the remaining 20 percent that spend more than 30 minutes travel time, about one-third spend at least an hour traveling to school.

Table 18. Travel time in going to school

% within type

		type		Total
		Elementary	High school	
	less than 5 mins	37.1%	43.7%	37.5%
	5 to 30 mins	42.7%	48.6%	43.1%
	31 mins to 1 hour	13.1%	6.2%	12.7%
	1 to 2 hours	4.9%	1.3%	4.7%
	more than 2 hours	2.1%	.3%	2.0%
Total		100.0%	100.0%	100.0%

When the students were asked how often they watch Knowledge Channel programs in school, most of the elementary students said that they watch at least 2 to 3 times a week (77.50%). Moreover, about one-third of the elementary students watch Knowledge Channel programs everyday (table 19). This shows the high level of utilization rate of elementary schools under the TEAM Mindanao project, compared to schools in Luzon and the Visayas. The utilization rate is more than twice the figure for elementary schools in Luzon and the Visayas. The figures are supported by results of the FGDs where elementary schools in Zamboanga Sibugay normally adjust the class schedules with the schedules of the programs of the Knowledge Channel.

Table 19. Frequency of viewing KCh programs in school

% within type

		type		Total
		Elementary	High school	
	everyday	33.7%	10.9%	32.4%
	2 to 3 times a week	43.8%	42.1%	43.7%
	once a week	11.5%	24.2%	12.2%
	twice a month	3.7%	3.9%	3.8%
	once a month	2.4%	8.6%	2.7%
	rarely	3.5%	6.5%	3.6%
	never	1.4%	3.9%	1.6%
Total		100.0%	100.0%	100.0%

Whenever the students watch programs of the Knowledge Channel, more than two-thirds (67%) of the elementary students interviewed said that they are able to watch the full episode (20 minutes) of the program. The distribution of viewing time is given in table 20 below. A common reason for not able to watch the entire episode is due to the so-called "transition problem". Some precious minutes are wasted moving students from their classrooms to the viewing area. This is one area where the role of the ETV coordinator is crucial. In some schools where there are excellent ETV coordinators, the teacher-in-charge is advised (by the ETV coordinator) of the class' viewing time 10 to 15 minutes before the schedule so that the teacher is able to let his/her students proceed to the viewing area. In this process, the students will have enough travel time to the viewing room, ensuring that the students are able to watch the entire episode. This role of the ETV coordinator is being emphasized during the training conducted by the Knowledge Channel staff, particularly for large schools where there is a considerable distance between the classrooms and the viewing room.

Table 20. How much of is program is viewed

% within type

	type		Total
	Elementary	High school	
19 to 20 mins	66.9%	54.7%	66.2%
15 to 18 mins	16.5%	24.9%	17.0%
10 to 14 mins	10.4%	15.0%	10.6%
0 to 9 mins	6.2%	5.4%	6.1%
(missing)	.1%		.1%
Total	100.0%	100.0%	100.0%

The subject teacher in charge should be present during the viewing of the Knowledge Channel programs and should be able to discuss the topics viewed by the students. Table 21 shows that more than 75% of the elementary students say that their teachers are always present whenever they are viewing the programs. However, more than 10% of the elementary students say that the teacher is not present most of the time. During the FGD some principals and parents have noticed that there are teachers who became lazy when they started using the Knowledge Channel. According to them, the teachers feel that they can go to school late because students can instead watch the Knowledge Channel while

waiting for them. This is one area that needs improvement. It must be emphasized during the training what are the expectations on the part of the teachers whenever the students are viewing the programs. In addition, a proper monitoring system should also be implemented at the schools to minimized cases where the teachers are shirking on their responsibilities because of the presence of the intervention.

Table 21. Teacher presence during viewing

% within type

		type		Total
		Elementary	High school	
	always	77.2%	79.1%	77.3%
	most of the time	9.4%	8.5%	9.3%
	sometimes	10.4%	11.9%	10.5%
	seldom	1.6%	.3%	1.5%
	never	1.4%	.3%	1.3%
Total		100.0%	100.0%	100.0%

Integrating the programs viewed into the regular class discussion is an important aspect of the intervention. The teachers, therefore, must be able to discuss the topics to the students after viewing it. However, the results of survey conducted among elementary students show that this area needs to be properly monitored and improved. From table 22 only 68% of the elementary students say that their teachers are always discussing the topics after every viewing. About 20% of the elementary students say that their teachers discussed the topic sometimes or even less. Moreover, the school principals (during the FGD) have observed that some teachers do not conduct pre and post-viewing discussions. Presence of the subject teacher and how to incorporate the programs viewed by the students are two areas of concern that must be address by the Knowledge Channel team in coordination with the school principals.

Table 22. Teacher discussion after viewing

% within type

		type		Total
		Elementary	High school	
	always	68.0%	62.7%	67.7%
	most of the time	11.7%	12.2%	11.7%
	sometimes	15.7%	21.8%	16.1%
	seldom	1.9%	1.0%	1.8%
	never	2.7%	2.3%	2.7%
Total		100.0%	100.0%	100.0%

When the students were asked to rate the various programs of the Knowledge Channel in terms of whether the programs have been helpful (or not) to their performance in their academic subjects, about 74 percent of the elementary students rated the program SINE'SKWELA as having helped them "very much" with their science subjects. The other programs that were rated highest for having helped very much are: SALAM (66%), BAYANI (61%), MATH-TINIK (57%) and PAHINA (57%). While the results of the programs related to science and mathematics (Sene'skwela and Math-tinik) are expected, the high ratings observed for programs related to value-formation (such as SALAM and BAYANI) are quite surprising. Using data from the elementary students from Luzon and the Visayas, the program SALAM is not rated that high by the students.

The results support the observations of principals and teachers that the possible benefits to students watching the programs of the Knowledge Channel are far-reaching, beyond the students' academic performance. The programs of Knowledge Channel have the potential to mould the students watching them to become better citizens of the country. The principals observed, during the FGDs, that the students especially the Muslim students in their communities are not used to using "Po" and "Opo" when conversing with teachers and the elders. After watching shows like *Hiraya Manawari* and *Salam*, you will definitely hear students use "Po" or "Opo" when they talk to their teachers and the elders.

Table 23. Gaano kahalaga at nakakatulong ang mga sumusunod na programa ng Knowledge Channel? (ELEMENTARY)

	very much		much		moderately		little		not at all		Total	
Sine'skwela	4723	**73.8%**	1163	18.2%	412	6.4%	64	1.0%	34	.5%	6396	100.0%
Science Primary	1044	31.0%	1339	**39.7%**	642	19.1%	198	5.9%	147	4.4%	3370	100.0%
Science Intermediate	2195	**43.5%**	1501	29.8%	903	17.9%	299	5.9%	145	2.9%	5043	100.0%
Why	2083	**41.0%**	1387	27.3%	916	18.0%	447	8.8%	248	4.9%	5081	100.0%
English Elementary	1973	**48.5%**	1027	25.3%	622	15.3%	262	6.4%	182	4.5%	4066	100.0%
Epol-Apple	1958	**45.5%**	1249	29.0%	613	14.2%	275	6.4%	209	4.9%	4304	100.0%
Karen's World	2462	**49.2%**	1293	25.8%	755	15.1%	327	6.5%	167	3.3%	5004	100.0%
Math-Tinik	3074	**57.3%**	1316	24.5%	646	12.0%	222	4.1%	106	2.0%	5364	100.0%
Math Primary	1220	**37.6%**	1007	31.0%	599	18.4%	256	7.9%	166	5.1%	3248	100.0%
Math Intermediate	2114	**46.7%**	1192	26.3%	753	16.6%	275	6.1%	192	4.2%	4526	100.0%
Solved	2524	**51.4%**	1299	26.5%	662	13.5%	287	5.8%	135	2.8%	4907	100.0%
Alikabuk	3001	**55.5%**	1356	25.1%	664	12.3%	226	4.2%	157	2.9%	5404	100.0%
Pamana	2865	**53.6%**	1375	25.7%	699	13.1%	264	4.9%	143	2.7%	5346	100.0%
Bayani	3408	**60.8%**	1259	22.5%	578	10.3%	234	4.2%	122	2.2%	5601	100.0%
GMRC	1632	**45.1%**	945	26.1%	609	16.8%	228	6.3%	201	5.6%	3615	100.0%
Hirayamanawari	1866	**44.6%**	1109	26.5%	700	16.7%	300	7.2%	207	4.9%	4182	100.0%
ATBP	1108	**40.0%**	754	27.2%	489	17.6%	225	8.1%	197	7.1%	2773	100.0%
Integrated Science	175	**37.2%**	115	24.5%	94	20.0%	49	10.4%	37	7.9%	470	100.0%
Chemistry	66	**31.3%**	53	25.1%	46	21.8%	22	10.4%	24	11.4%	211	100.0%
Physics	48	**28.6%**	45	26.8%	35	20.8%	21	12.5%	19	11.3%	168	100.0%
Biology	65	**37.1%**	43	24.6%	30	17.1%	17	9.7%	20	11.4%	175	100.0%
English	121	**48.4%**	59	23.6%	33	13.2%	19	7.6%	18	7.2%	250	100.0%
Algebra	55	**34.6%**	34	21.4%	30	18.9%	20	12.6%	20	12.6%	159	100.0%
Geometry	43	**29.3%**	38	25.9%	27	18.4%	17	11.6%	22	15.0%	147	100.0%
Kasaysayan TV	165	**43.0%**	99	25.8%	60	15.6%	35	9.1%	25	6.5%	384	100.0%
Pahina	1185	**56.6%**	543	25.9%	224	10.7%	92	4.4%	51	2.4%	2095	100.0%
Values and Life-skills	99	**36.1%**	67	24.5%	57	20.8%	20	7.3%	31	11.3%	274	100.0%
Salam	2761	**66.3%**	800	19.2%	357	8.6%	141	3.4%	103	2.5%	4162	100.0%

IV.   FOCUS GROUP DISCUSSIONS (FGD) RESULTS

The students, being the major stakeholders and beneficiaries of the Knowledge Channel are the focus of this study. However, it is of paramount importance to get information on the views and opinions of other major players and partners – the parents, the teachers and the principals in the molding of the youth.

A focus group discussion (FGD) was conducted to elicit information from the various stakeholders. The FGDs were conducted in Zamboanga Sibugay last November 16, 2007. Three separate discussion groups were organized to serve as venue for the exchange of

ideas between the researchers and the major players. One group was organized for the parents, another for the teachers, and the last group was for the principals. Each focus discussion group (FGD) lasted for an approximately more or less than one hour. The FGD was handled by one facilitator and a documenter. In addition, a discussion guide was followed by the facilitator to direct the flow of the discussions and to capture the impacts or effects of the utilization of the Knowledge Channel on the students as viewed by the FGD participants.

And as major beneficiaries, the students' views and opinions of the channel are important so that it can be checked whether or not the Knowledge Channel is meeting their goals. A total of 20 students from 10 schools (2 student-representatives from each school) were invited for the focus group discussion. To better keep track of their answers, the students were given a questionnaire and were guided as they answer every item in the questionnaire.

Forums consisting of 5 groups of stakeholders were also held in Maguindanao, Shariff Kabunsuan, Zamboanga del Sur, Sulu, and Tawi Tawi last December 10 to 23, 2007. Participants of the workshop are members of 3 sectors, namely, the supervisors and principals, ETV coordinators, and PTCA officials, specifically the presidents.

4.1. Zamboanga Sibugay FGD (parents, teachers, and principals)

The participants of the FGDs were parents, teachers and principals from different barangay and central schools in the Province of Zamboanga Sibugay. Parent-participants are all father of child/children from the primary level (17% are parents whose child/ren is/are in Grade 4, 50% Grade 5, 17% Grade 6, and 17% no child[2]). Meanwhile, 8% of the teacher-participants have Filipino as their subject area, 8% English, 25% Math and majority (58%) are teaching general or all subjects in the their respective grade level. Also, most of these teachers are Knowledge Channels coordinators who handle the aspect

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[2] This participant does not have any child who is still studying, but is an automatic member of the Parents and Teachers' Association (PTA) by virtue of his membership in the Barangay Council.

of managing our viewing centers in their respective schools. There were a total of 6 parents, 12 subject teachers and 10 principals who joined the FGDs.

The group discussions' main objective is to collect information as to the impact of the Knowledge Channel to school, community (if there is any), the teachers and most especially to the students. However, what we intended to capture in this exercise is the qualitative impact as described by our parents, teachers and principals.

Prior to the introduction of Knowledge Channel in these schools, the most common practice in the educating our youth in school is through the interaction of students with their teachers. Visual aids were prepared by teachers that they use in relation to their classroom discussions so that the students may be able to understand and appreciate the concepts and lessons they talk about in class. Later on, other instructional media were introduced. These include the audio tapes, VHS tapes, and audio and video CDs. Many of these materials were initially given by non-governmental organizations (like Real World, and Equals). In the advent of computers, one of the parents bought CDs (like Encarta Encyclopedia) for his children's pleasure. However, in the discussion with the three groups, they were unanimous in saying that what these supplemental instructional materials can offer are static pictures. Students can view still pictures of the subject being discussed.

Participants in the FGDs can not help but mention and immediately compare their current situation when they are already using the programs in the Knowledge Channel as supplementary instructional materials in their lessons. When they were asked about their initial impression about the programs, many have expressed being affirmative on it.

Meanwhile, many of these schools have been utilizing programs from the Knowledge Channel for almost two (2) years now. This time, they were asked about their initial impression or reaction when they were told about the Knowledge Channel. Since one of the parents is a former teacher, he viewed that the utilization of the programs in the

Knowledge Channel would help break the monotony and dominance of the teacher in class discussion. Also, teachers can take a break for at least 20 minutes a day.

However, not all impressions that were mentioned were for the Knowledge Channel. There was one negative reaction we noted during the discussion. Initially, some of the teachers and even principals find that the introduction of Knowledge Channel in their curriculum would give additional work load for the teachers especially because teachers would need to plan the viewing session of each class. In addition, they find the swapping of class schedules inconvenient. Later on, they noted though that these inconveniences were temporary and part of the adjustments they have to face in the integration of Knowledge Channel in their classroom activities. Afterwards, all seems to be mechanical and repetitive.

4.1.1. Perceived Effects from Watching Programs of the Knowledge Channel

In the assessment of the participants during the discussion, it turned out that it is not always the case that they find pleasing results in their use of Knowledge Channel. Still, majority of the responses solicited are encouraging views to further utilize Knowledge Channel to complement classroom discussions and activities. Below are highlights of the major points raised in the discussion.

For the Students

As noted earlier, since programs in the Knowledge Channel are presented in a more animated way (e. g., they see the animals, and the body systems in action), students tend to be more appreciative of the lessons tackled in class. From mere looking at still pictures, say of the heart and other parts of the circulatory system, they can now see moving illustrations as to how blood really flows in our blood vessels. Parents noted that their child/ren become more interested in the lessons in class. The teachers and the principals, on the one hand, observed that class performance, in general, improved. They

attribute the improvement in their NAT Scores (5 to 6 percentage points increase) and MPS to viewing of programs from the Knowledge Channel.

Also, they noted that students are more attentive in watching shows in the Knowledge Channel as compared with if their teacher is the one doing the discussion. Furthermore, they observed that retention of lessons dramatically improved. The teachers exclaimed that from only about 25% of the lesson retained, students now are able to recall about 100% of what was discussed in class and what they have seen in the programs. In addition, participation in class recitation and students' scores have improved as well. Absentees are lesser because students do not want to miss any viewing session.

For the Teachers

It is not only the students who enjoy the benefits of watching Knowledge Channel programs. The teachers too find the programs very useful.

Since the launching of Knowledge Channel in their schools, the teachers save more time in producing and preparing visual aids for their lessons. Furthermore, the 20-minute viewing time of the students gives the teacher sufficient time to take some rest from standing in front of the class and from talking. One important contribution noted of Knowledge Channel viewing to teachers is that teachers too learn from the programs. As we know, due to the lack of teachers especially in barangay and rural communities, teachers assigned in these areas are forced to teach majority, if not all of the subjects per grade level. Since the teacher may lack the necessary skill or background on the subject matter, the program guides everyone (both the teacher and the students) in the lesson. Teachers specializing on one subject, on the other hand, find the integration of topics done by programs very amusing. As an example raised by one of the math teachers, they find the episode on fraction and decimals to be very good. In that way, the program was efficient in presenting two concepts that are related to each other.

For the Community

In our discussion with the different groups, it is surprising to note that the impact of Knowledge Channel program viewing do not confine the fences of the school. There were a number of impacts brought to the community as well. Among the noticeable impacts include some applications of practices viewed in one of the programs. These cover solid waste management, and health and sanitation among others. Specific examples given were about the prevention of the community from being victims of the dengue-carrying mosquitoes. Students served as reminder to their teachers and parents as to how they should manage their surroundings to promote a healthier environment.

The principals noted a decrease in drop out rate from about 8% to only 2% now. Additionally, they observed that values being promoted by the shows seem to be very effective. They have cited that the students, especially the Muslim students in their communities are not used to using "Po" and "Opo" when conversing with teachers and the elders. After watching shows like *Hiraya Manawari* and *Salam*, you will definitely hear students use "Po" or "Opo" when they talk to their teachers and the elders.

The linkage between the community and the school were further enhanced through the introduction of Knowledge Channel. Barangay Council and the PTA are working together to ensure the safety of the equipments provided by the Knowledge Channel. Also, there were some initiatives as to allowing the other members of the community in watching programs in the Knowledge Channel. This especially for parents who want to improve their lives by engaging in livelihood activities being showcased in the weekend shows of the Knowledge Channel.

4.1.2. Problems Encountered and Addressing Them

Despite all the beautiful things shared to us by the participants, there were also a number of complaints and problems that arise from the utilization of the Knowledge Channel.

This discussion provided a venue for the participants to air their grievances and to share what actions were taken by other schools in order to address such inconveniences.

1. Improper use of Knowledge Channel viewing
   a. Some principals and parents have noticed that there are teachers who became lazy when they started using the Knowledge Channel. According to them teachers feel that they can go to school late because students can instead watch the Knowledge Channel while waiting for them.
   b. Some principals are still hesitant on using the programs to supplement classroom discussion because teachers fail to conduct pre and post-conference discussions. Though it turned out that many of the principals have foreseen such practice would be feasible, they have doubled their efforts in monitoring teachers. They ensure that the pre and post-conference discussions are strictly practiced by doing inspections and random checks on teachers going and leaving the viewing room.

2. Scheduling
   In order to put to maximum use the programs in the Knowledge Channel, here are some practices relating to scheduling that were effective for many of the schools.

   Class viewing schedules are prepared by the coordinators or teacher in charge a week in advance. The schedule is posted in a bulletin board near the viewing room. In addition, some announce the schedule after the morning flag ceremony and provide each teacher with the mentioned viewing schedule.

3. Shows
   Below are some comments regarding some shows in the Knowledge Channel. They wish the management to address these concerns.
   a. There are programs in the Knowledge Channel where actors are not Filipino. Although the topics being discussed may be interesting, students

and teachers find it hard to understand as these actors have different accents in speaking the English Language. They unanimously suggested that may be it is possible for the Knowledge Channel to produce and showcase shows where talents are Filipinos speaking English.

b. Teachers noted that the 20-minute shows are too short for them. We noticed that this comment is common to relatively bigger campuses with relatively bigger student population. More often than not, in these campuses, they only have one TV set hence it would take time for the students to travel from their classrooms to their viewing room.

In address such concern, a number of suggested actions were raised in the FGD. For some schools, through the cooperation of their PTA and local government units, as they have seen the benefits brought about by viewing of programs in the Knowledge Channel, have pledge to raise funds. The funds will be used to buy additional television sets and they have envisioned that in the next few years or so, each classroom should have individual television sets and connection to the Knowledge Channel.

c. Apart from those mentioned above, one more concern that teachers would like to be addressed is the flashing of important words in the shows. They wanted that these key words be flashed longer so that students, and the teachers as well, will be able to copy and take note of it.

4. Others concerns
   a. The shows, despite being synchronized with the Department of Education's program/curriculum, the program still assumes that the students can immediately take note and understand the concepts being discussed. Sometimes, the pacing of the programs are still too fast for the students to catch up.
   b. Small and barangay schools encountered some problem in generating funds to cover the electric bill of their school. However, with the help of

the community and the local government unit, they are able to sustain the viewing of Knowledge Channel programs in their school.

4.2.   Zamboanga Sibugay FGD (students)

As stated earlier, the students are the major stakeholders and beneficiaries of the Knowledge Channel (Knowledge Channel). And as major beneficiaries, the students' views and opinions of the channel are important so that it can be checked whether or not the Knowledge Channel is meeting their goals.

A number of items were answered by the students. They were asked of their viewing habits at home and reactions of their other household members regarding the Knowledge Channel. The students were also asked of the benefits the watching Knowledge Channel programs bring to themselves, their family, their schooling, and also the community. And finally, the students were given a chance to give suggestions they think will be of great help to them in regards to Knowledge Channel viewing.

4.2.1   Viewing at home

Since the Knowledge Channel is a media-based learning system, it is important to take note of other media students used to aid their education. And one important venue of the use of media is at home. The household is the smallest unit of society. It is where a child or student first learns his or her skills and is where he or she develops habits.

At the same time, it is also important to check how parents respond to the new method of teaching the school gives their child. In this way, the Knowledge Channel can see whether or not the parents are supportive of the use of educational television and viewing of the programs is supplemented and is being continued at home.

The students are first asked questions regarding media being used at their respective households. All 20 students watch television at home. 4 out of the 20 watches alone, 3

watch with friends, while the remaining 65 percent watches with a family member (includes parents, siblings, cousins, grandparent, and aunts).

90 percent of the students said that their parents set rules in television use. Rules set by parents include 'watching television only after homework is done' (5 out of 18) and 'watching television only during weekends and when there are no classes' (5 out of 18).

When asked what shows do they watch at home, 40 percent said they watch at least 1 program shown in cable. Also, 40 percent of the students interviewed watches Knowledge Channel programs at home. Knowledge Channel programs watched at home include Sine'skwela, Math-Tinik, Science Intermediate, Math Intermediate, and Why.

4.2.2. Frequency of Knowledge Channel viewing

When it comes to viewing of Knowledge Channel (Knowledge Channel) programs, the students were asked how frequent they view programs of the Knowledge Channel at home and in school.[3] Of the 20 students, only 1 doesn't watch programs of the Knowledge Channel at home. When asked on how frequent they watch at home, 5 of the 19 (around 26 percent) students watch Knowledge Channel programs most of time to always. In school, all of the students watch Knowledge Channel programs and 80 percent watches most of the time to always. On the other hand, the students were also asked if they watch Knowledge Channel programs in other locations besides in their household and in school. 4 of them answered 'yes' (other location stated were relative's and neighbor's house) but their frequency of viewing in these locations ranges from seldom (2 out of 4) to sometimes (2 out of 4).

The students were also asked on the average time spent per day in watching Knowledge Channel programs at home and in school combined. 50 percent of the students said that they watch for more than an hour (this can be approximated as watching more than 3 shows of the Knowledge Channel while 40 percent watches from 30 minutes to an hour

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[3] Choices on frequency include never, seldom, sometimes, most of the time, and always.

(2 to 3 Knowledge Channel programs) and 10 percent watches in less than 30 minutes (only 1 show).

The results show that the major viewing location of Knowledge Channel programs is in school. And even if students were capable of watching programs of the Knowledge Channel at home (in this case 19 out of 20), more can be done to increase the frequency of their viewing at home.

4.2.3. Reason and importance

The students were then asked of the reasons they watch Knowledge Channel programs. 12 out of the 20 stated reasons with respect to school work. 11 out of the 20 students said they get additional knowledge when they watch and 1 out of the 20 students said he enjoys watching the programs. Below is a list of a few of the actual responses of the students.

- *Because it help me understand my lessons easily.*
- *To add knowledge and information about the world.*
- *Nanonood ako ng mga programa ng Knowledge Channel dahil mas nakakabuti ito sa aking pag-aaral. Masmarami akong nakukuhang leksyon kumpara sa panonood ng mga cartoons.*

The students were also asked of the importance of watching Knowledge Channel programs. All of the students mentioned the significance of watching Knowledge Channel programs in understanding their lessons more. Below is a list of a few of the actual responses of the students in regards to this question.

- *Importante para sa akin ang panunood ng mga programa ng Knowledge Channel dahil noong hindi pa ako nanunood ng Knowledge Channel mahina ako sa recitation kumpara ngayon ngayon kaya lagi na akong nanunood.*
- *It is very important because I can learn much more than what the teacher teaches.*
- *Very important because I not only enjoy watching but I also learn.*

4.2.4. Specific Benefits

The students were also asked of the specific benefits they get from watching programs of the Knowledge Channel. All of the students said that watching Knowledge Channel programs help them in their schooling. 65 percent said that the programs have benefits in their household. 65 percent also said that it helps the community. While all of them said that watching Knowledge Channel programs have positive effects for themselves.

Of the 65 percent who said that Knowledge Channel programs have benefits in the household, 3 (out of 13) included that they apply lessons learned from watching GMRC. They specifically stated that quarrels with their siblings are lessened. One student, on the other hand, said that with Knowledge Channel he can now help in doing household chores because he doesn't have to study anymore since he already understood the lesson when watching Knowledge Channel. Below is some benefits in the household students cited.

- *… my brothers and I are now very fluent in English.*
- *Huwag magtapon ng basura sa mga gilid ng bahay…*
- *Nakakatulong ito ssa mga gawaing pambahay…*
- *…kung noon nag-aaway kami ng mga kapatid ko ngayon hindi na…*

In regards to the benefits the Knowledge Channel brings to the community, the students cited benefits to the environment and to other people. 5 students (out of the 13 who said that watching Knowledge Channel has benefits for the community) said that in watching Knowledge Channel programs they learn how to take care of the environment. On the other hand, 4 (out of 13) said that because of Knowledge Channel they learn how to deal and get along with other people in the community. One student specifically said that people in the community are now more knowledgeable (the student's term is 'intelligent') while another said that Knowledge Channel help by identifying ways on how the community can improve. Here are a few of the benefits the students enumerated:

- *Para matuto ang iba …at mas may alam sila ng mga bagay na ikabubuhay.*
- *Ang hindi pagkalat ng mga basura sa kapaligiran.*

- *Kailangan maging mabait ka sa kapitbahay mo para mabait din sila sa iyo.*
- *Mas maraming natututunan ang mga mamamayan lalo na ang mga estudyante.*

All the students said that programs of the Knowledge Channel help them as individuals. 13 students said that watching Knowledge Channel helps them in studying their lessons. Some mentioned improvement in their grades since they watched Knowledge Channel programs. 4 students, on the other hand, said that Knowledge Channel programs help them beyond their school work. They cited they became more disciplined, they learn how to take care of themselves, and they became more cooperative after watching Knowledge Channel programs. Moreover, 2 students said that they watch Knowledge Channel programs for leisure since they enjoy watching the shows. Below are some of the actual responses of the students.

- *…it is a big improvement for me… it helps me in my assignments and projects…*
- *It can improve my grades in class… I also learn how to be cooperative…*
- *Keeping myself clean and healthy.*
- *…dahil sa panunood ng Knowledge Channel mas na-iimprove ko yung learning skills ko.*
- *Now I can answer my teachers' questions because of the Knowledge Channel that I watch at home and school.*
- *Tumutulong ang Knowledge Channel upang mapaunlad ang aking kaalaman.*

The students were also asked if the programs of Knowledge Channel changed how they look at things. All students answered 'yes'. They were then asked how Knowledge Channel programs changed them. Majority of the students (13 out of 20) said that because of Knowledge Channel shows they now understand lessons more and their knowledge is increased. 3 specifically stated an improvement in grades because of watching Knowledge Channel. An important result is that the students reported a change in their attitudes. 5 students said that because of Knowledge Channel they became of more studious, changed their attitudes and they now have more friends.

4.2.5. Knowledge Channel and Subjects

It is also important to see how Knowledge Channel viewing help the students in particular subjects. The students were asked how watching Knowledge Channel programs helped them in their lessons in Mathematics, English, and Science.

When it comes to Math, the students said that Math programs of the Knowledge Channel help them in learning the techniques and how to solve problems (as reported by 6 students). 2 students specifically said the program discussing decimals as helpful to them.

In English, on the other hand, the students remember programs with topics such as grammar, idioms, adverbs, and rules of a meeting. One student said he now participates during class recitations. Another student said he can now communicate better with their priest who doesn't understand Filipino. In Science, topics students remember are energy, molecules, human body, the earth and the other planets.

4.2.6. Parents and Siblings on Knowledge Channel

15 of the 20 students reported that they discuss programs of the Knowledge Channel with their parents. They were then asked what their parents say and thought of the Knowledge Channel. Parents told their children that Knowledge Channel is good (as reported by 6 students) and they also learn from the shows of Knowledge Channel (as reported by 2 students). The parents also saw an improvement of the child's grades (as reported by 2 students) so they encourage their child to watch more of Knowledge Channel programs (as reported by 1 student).

When it comes to the student's siblings, 14 students said that they discuss programs of the Knowledge Channel with their siblings. 5 students reported that their siblings enjoy watching programs of the Knowledge Channel and they are 'amazed' on what they see.

While 4 students said that their siblings told them that is a good way of learning new things.

The students were also asked if they discuss Knowledge Channel programs with their friends. 15 out of the 20 students said that they do discuss the programs with their friends. According to their friends, Knowledge Channel makes them interested to go to school (as reported by 1 student), the programs are easy to understand (as reported by 1 student), and the programs help them in their studies (as reported by 4 students).

4.2.7. Suggestions

Finally, the students were also asked if the have some suggestion to better improve the services of the channel. Their suggestions include increasing the frequency of their viewing, if possible, watching everyday (from 1 student), increasing showing time per show (from 6 students), increasing programs (6 students) with one student suggesting a program for MSEP, using Filipino characters and not foreigners (1 student), having television sets in the classroom (from 2 students), and 2 students even suggested that they have quizzes every after viewing.

4.3. Square table discussions (Maguindanao, Shariff Kabunsuan, Zamboanga del Sur, Sulu, and Tawi Tawi)

Forums consisting of 5 groups of stakeholders were held in Maguindanao, Shariff Kabunsuan, Zamboanga del Sur, Sulu, and Tawi Tawi last December 10 to 23, 2007. Participants of the workshop are members of 3 sectors, namely, the supervisors and principals, ETV coordinators, and PTCA officials, specifically the presidents.

The forums' main objective is to gather information on the impact of the Knowledge Channel intervention in their respective schools. The workshop not only intends to get hold of information as to the direct impact to the students of the information. That is, whether or not watching the programs of the Knowledge Channel have an impact to the

education (and to an extent, the grades) of the students. As what can be seen from the results of the forums below, Knowledge Channel intervention also has and indirect effect to the school such as a decrease in drop-out rates and increase in enrollment, among others.

The workshop specifically tackled both positive and negative effects of the introduction of the Knowledge Channel in their schools. It also became a venue where educators shared the lessons they learned in using technology-based education intervention. And finally, the forum became a place where the participants provided their thoughts and suggestions on how to sustain the use of the Knowledge Channel.

4.3.1. What went right with the Knowledge Channel being introduced in the school (as reported by 4 groups)

With the introduction of Knowledge Channel in their schools, the principal cited a number of positive effects to the students. These positive effects include an increase in enrollment while at the same time a decrease in the absences of students. Academic proficiency and performance is increased. Also, the students' communication skills and participation is increased.

According to the ETV coordinators, the Knowledge Channel became a substitute for teachers' lectures. It lessens the work and burden of the teachers since the programs become substitutes to the usual visual aids being used. The intervention makes lessons interesting while making both teachers and students aware of new concepts and innovations. The Knowledge Channel also stimulates, encourages, and increases the eagerness of the students to study.

As stated by the principals, the ETV coordinators also observed a decrease in drop-out rates since it encourages students to go to school. Overall, the viewing of the Knowledge Channel programs increases the performance of the students.

The positive effect of the intervention can be checked through the changes the parents themselves see in their child. The PTCA presidents said that with the introduction of Knowledge Channel, their children are encouraged to go to school. The students showed an improvement of skills like learning how to read and the students now easily understand their lessons. This is shown and proven through the improvement of their children's grades. Also, students are able to share freely with their parents what they see in the programs of the Knowledge Channel.

4.3.2. What went wrong with the Knowledge Channel being introduced in the school (as reported by 3 groups)

Besides the positive effects of the intervention introduced to the schools, the groups were also able to identify the limitations of the project as well as the problems they have encountered while using the Knowledge Channel.

The principals, ETV coordinators, and PTCA presidents were one in saying that electricity (and its absence) is a major hindrance in utilizing the Knowledge Channel. And in connection with their problem of the absence of electricity is the problem of lack of funds for payment of electric bills. Principals of Zamboanga del Sur schools particularly cited that during heavy rains, there is no signal.

The groups also said that one television is insufficient for a school with a large number of students. And it does not help that in some schools, the viewing room is rather far from the classrooms.

Another problem that they face is with regards to security in the schools. In Zamboanga del Sur, there was an attempt in stealing the television set. While in Tawi Tawi, they solved this problem by employing security guards paid by parents.

The ETV coordinators expressed their concern in the lack of follow up from the teachers after viewing. They also said that teachers are too dependent on the ETV coordinator.

And that it is difficult for them to do the additional tasks of being an ETV coordinator because they already have a lot of load because teachers are few.

The principals also expressed concern with peace and order (i.e. terrorist attacks) which hampers viewing of the programs. They also said that there are some activities they, at times, have to prioritize so viewing is impeded. One concern that the principals also said is that students at times are not able to understand well the language and vocabulary being used in the programs.

4.3.3. Lessons learned from using technology-based educational intervention (as reported by 1 group; Shariff Kabunsuan)

The forum held at Shariff Kabunsuan shared the lessons they have learned after Knowledge Channel was introduced to them in their schools and they while they were utilizing the new intervention. The Knowledge Channel was able to expose the pupils not only by providing new learning experiences on things the students have not seen before and relating these things to their lessons but also by becoming an agent for understanding other cultures and how to live harmoniously with others.

The principals also cited that they should value the new opportunity given to their school. To do this they should grab every chance to participate in activities where the school is invited. They should also integrate as much as possible the modules provided by the Knowledge Channel in their lessons.

They also noted that they should be aware of time allotments so that as much as possible every student will have a chance in viewing Knowledge Channel programs. However, the principals stated their concern with the problem with electricity. They pointed out that this big opportunity as provided to them by the Knowledge Channel will be useless if there is no electricity.

4.3.4. Sustainability of the Knowledge Channel (as reported by 3 groups; Shariff Kabunsuan, Sulu, and Zamboanga del Sur)

Lastly, the participants were asked of their plans on how to sustain and continue viewing of the programs of the Knowledge Channel. Their plans can be grouped into 3. First, plans of the school, which includes maintenance of the equipment and dedication to the programs. Second, soliciting help to the community, specifically the parents and the barangay officials. And lastly, with work from the Knowledge Channel team.

The school's participation in the sustainability of the Knowledge Channel can be further divided into 2 goals—first, physical maintenance and improvement and, second, diligence and dedication of the principals and ETV coordinators. Physical maintenance and improvement includes acquisition of additional television sets, improvement of the viewing area so that students will be motivated to watch, and taking care of the current equipment given to them.

Principals further said that they should be responsible for regular monitoring and close supervision of the ETV coordinators and for giving updates through regular meetings with the community. The ETV coordinators, on the other hand, should take the initiative to see to it that utilization of the technology be maximized.

Principals of the forum held at Zamboanga del Sur specifically suggested that can collect monthly dues from the pupils worth one to two pesos. They added that will require the teachers to provide additional television sets that will later on be shoulder by the parents.

The PTCA presidents showed their support in the principal's goal of maintaining the Knowledge Channel intervention in the school. They said that there should be teamwork between the PTCA and the barangay officials regarding problems faced by the school when it comes to payment of bills, maintenance of equipment, and security of the school. They are also willing to search for funds in order to increase the number of television sets

in the school. They also expressed willingness to monitor utilization of the technology in the schools.

The PTCA added and reminded the principals and ETV coordinators that ETV equipment provided to the schools should be used only for their intended purpose and that the equipment should be handled carefully and kept properly.

And lastly, the stakeholders said that it will be of great help if there is continuous innovation with regards to the programs of the Knowledge Channel.

4.4.   Conclusions

The stories, experiences and views shared to us by the participants (the parents, the teachers and the principals) are overwhelming. We have noted, as one of the teachers told us, that Knowledge Channel changed how students look after television viewing. "Knowledge Channel viewing has become a personal experience for the students."

In addition, the participants have noted that through Knowledge Channel, classroom discussions and lesson learned are now being "standardized". Learning is now more "centralized". Knowledge Channel provides opportunities in learning for the students in the rural communities to catch up with those in Metro Manila schools. They were glad to note that "now, the pupils in our communities and even in the remotest area wherever in the country, as long as they have Knowledge Channel, have access to quality instructional media."

The improvement of scores and grades of the students and the way they perform in class may seem to be an important impact of Knowledge Channel but more than that, there might also be other benefits – molding better citizens of this country, as cited by our participants. The Knowledge Channel has fostered community unity and interaction among community organizations towards self-improvement.

V. ECONOMETRIC MODEL EXPLAINING THE IMPROVEMENT IN THE NATIONAL ACHIEVEMENT TEST (NAT) SCORES (2005 to 2007)

To determine the impact of the presence of the Knowledge Channel programs on the performance of the schools, an econometric model was constructed to identify the determinants of students' performance. Several variables were identified as possible determinants of the performance of the students, measured in terms of the improvement in the average NAT scores (and its sub-components) from 2005 to 2007. These variables are:

a. Teacher Characteristics – measured as the percentage of teachers in the school with at least Master's units.

b. School Students Population – measured as the total students' population in 2005 (measured in natural logarithm).

c. Proportion of Female Teachers (percentage of female teachers over total number of teachers).

d. Percentage of Locally Generated Income of the City/Municipality, defined as the local income (from local taxes and fees) divided by total income. This variable shall serve as a proxy for LGUs income other than the Internal Revenue Allotment (IRA) which is crucial in supporting the school's expenditure. The variable is measured in 2003.

e. Presence of Knowledge Channel – an indicator variable with value 1 if the school has an intervention (Knowledge Channel) and 0 otherwise.

f. ARMM Schools – an indicator variable for schools in the Autonomous Region of Muslim Mindanao (ARMM). Schools in the ARMM are given a value 1 and 0 otherwise.

The framework of the model is provided in Figure 4. It is hypothesized that the presence of the intervention (Knowledge Channel) will have a significant effect on the improvement of the schools NAT scores. Aside from the presence of the Knowledge Channel there are other factors, such as student population and LGU's income, that may have impact on the improvement in the NAT scores and these variables are included in the models.

Figure 4. Framework of the Econometric Model

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│                                                                   │
│   ┌──────────────────┐              ┌──────────────────────┐     │
│   │   Presence of    │              │  Improvements in the:│     │
│   │ Knowledge Channel│─────────────▶│     NAT scores       │     │
│   │                  │              │   SCIENCE scores     │     │
│   └──────────────────┘              │    MATH scores       │     │
│                                     │   ENGLISH scores     │     │
│                                     └──────────────────────┘     │
│                                                ▲                  │
│                                                │                  │
│                              ┌─────────────────────────────┐     │
│                              │ Determinants of Improvement  │     │
│                              │     Student Population       │     │
│                              │     Income of the LGUs       │     │
│                              │      Teachers Quality        │     │
│                              │      Initial Conditions      │     │
│                              │     Number of Textbooks      │     │
│                              └─────────────────────────────┘     │
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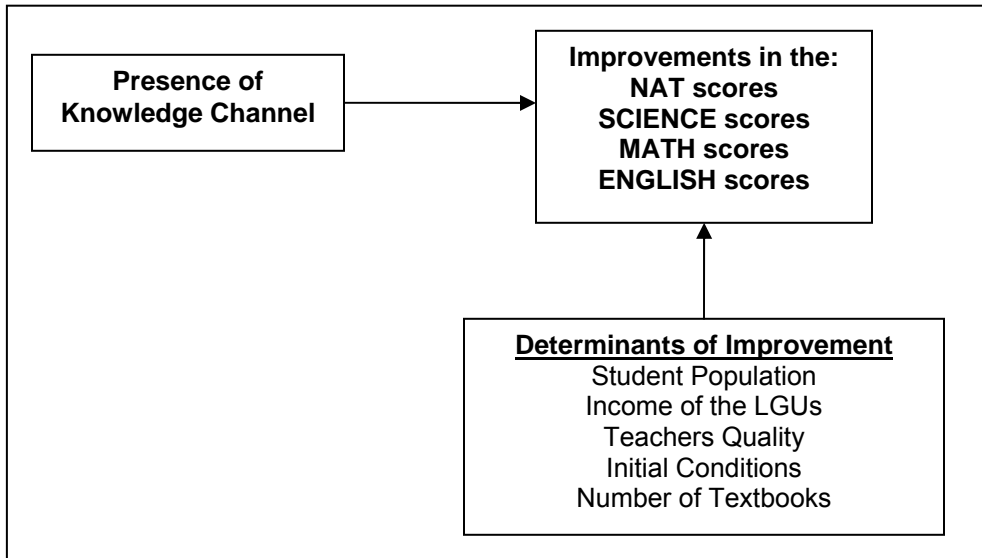
5.1. Comparison of Improvement in the NAT scores: Knowledge Channel vs. Non-Knowledge Channel Schools (2005 to 2007)

The period 2005 to 2007 was selected as the period for evaluation because most of the schools in the TEAM-Mindanao project were provided Knowledge Channel connections in 2005. The variable of interest here is the improvement in the NAT scores (and its sub-components, namely, Science, Mathematics and English) from 2005 to 2007. Table 24 provides us with the summary statistics on the improvement of the NAT scores and its sub-components for both Knowledge Channel and Non-Knowledge Channel elementary schools.

The average improvement in the NAT scores for the Knowledge Channel elementary schools from 2005 to 2007 is 1.88 percentage points, which is slightly higher than the improvement in NAT scores recorded for non-Knowledge Channel schools (about 0.60 percentage-point) for the same period. However, the two average improvements in NAT scores are not significantly different from each other. In other words, the average improvement in the NAT scores for elementary schools with Knowledge Channel is just equal to the average improvement in the NAT scores for non-Knowledge Channel elementary schools.

Looking at the improvement in the three sub-components of the NAT scores, Mathematics, Science and English, the figures show the same results, that there is no significant difference in the improvement in the scores between Knowledge Channel and non-Knowledge Channel schools.

Table 24. Improvement in the NAT scores and its Sub-Components (2005 to 2007) of Knowledge Channel and Non-Knowledge Channel Schools

	Presence of KCH	Mean	Std. Dev.
NAT Scores Difference	With	1.88	12.52
	Without	0.59	14.21
Math Score Difference	With	1.82	17.56
	Without	1.61	20.04
Science Scores Difference	With	-3.34	13.68
	without	-4.82	15.3
English Scores Difference	with	0.73	15.17
	without	0.88	18.24

The results in table 24 seem to be unexpected, that there is no difference in the improvement in the NAT scores between Knowledge Channel and non-Knowledge Channel schools. There are evidences suggesting that the presence of intervention did improve the performance of the students (such as the case of schools in Zamboanga Sibugay). The research team then looked into the improvements in the scores when the schools are divided into areas: ARMM and non-ARMM. The results of these comparisons are provided in tables 25 and 26.

The results in table 25 show that, on the average, elementary schools with Knowledge Channel in the non-ARMM provinces have higher improvement in their NAT scores (year 2007 vs. 2005) compared to the non-Knowledge Channel schools. The 2007 NAT average for Knowledge Channel schools is 5.85 percentage points higher than the 2005 figures. This increase is significantly higher than the corresponding increase observed for non-Knowledge Channel schools during the same period of 1.43 percentage points.

For the science component of the NAT, while both groups showed lower average scores in 2007 compared to the 2005 figures, the drop in the average score for Knowledge Channel schools is lower at -0.61 compared to the drop in average score for non-Knowledge Channel schools at -6.51 percentage points.

Table 25. Improvement in the NAT scores and its Sub-Components (2005 to 2007) of KCH and Non-KCH Schools (Non-ARMM elementary schools)

	Presence of KCH	Mean	Std. Dev.
NAT Scores Difference *	With	5.85	12.27
	Without	1.43	10.09
Math Score Difference	With	6.55	15.10
	Without	10.58	11.41
Science Scores Difference *	With	-0.61	14.29
	Without	-6.52	12.12
English Scores Difference	With	5.61	16.03
	Without	6.89	16.62

* Knowledge Channel schools have higher improvement in NAT and Science average scores than non-Knowledge Channel schools; significant at the 10% level.

While there is a significant improvement in the NAT for Knowledge Channel schools located in non-ARMM provinces, the results for schools in the ARMM are quite different as shown in table 26 below. There is no significant difference between the improvement in the NAT scores for Knowledge Channel and non-Knowledge Channel schools in the ARMM. The sad part is that the average NAT score for Knowledge Channel schools in 2007 is even lower than the 2005 figure, albeit not significantly different from zero. Both groups of elementary schools in the ARMM had lower average scores for Mathematics, Science and English in 2007 than in 2005. In other words, the NAT scores (and its sub-components) seem to be on the downward trend for elementary schools in the ARMM.

Table 26. Improvement in the NAT scores and its Sub-Components (2005 to 2007) of KCH and non-KCH Schools (ARMM elementary schools)

	Presence of KCH	Mean	Std. Dev.
NAT Scores Difference *	with	-0.64	12.09
	without	0.25	15.69
Math Score Difference	with	-1.13	18.42
	without	-0.92	21.70
Science Scores Difference	with	-5.04	13.09
	without	-4.15	16.54
English Scores Difference	with	-2.31	13.86
	without	-1.48	18.59

* NAT score is computed as the average of Mathematics, Science, English and HEKASI scores. The average score in HEKASI is not shown in the analysis.

The average improvement in the NAT scores for Knowledge Channel and non-Knowledge Channel schools sorted by province are given in table 27 below (the tables corresponding to the sub-components in Mathematics, Science and English, respectively, are provided in appendix 4).

Table 27. Improvement in the NAT scores (2005 to 2007) of KCH and Non-KCH Schools (by Province)

Province	Type of School	Count	Minimum	Maximum	Mean	Std Dev
Basilan	Non-KCh Schools	2	-12.38	-12.38	-12.38	.
	KCh Schools	7	-20.16	18.28	-2.59	12.34
Maguindanao	Non-KCh Schools	9	-21.62	24.53	5.68	15.34
	KCh Schools	23	-27.15	28.11	2.42	17.02
North Cotabato	Non-KCh Schools	9	-12.98	16.00	0.30	12.93
	KCh Schools	20	-28.72	26.19	2.19	13.76
Sharif Kabunsuan	Non-KCh Schools	11	-28.41	18.20	-2.67	15.88
	KCh Schools	22	-20.95	7.70	-3.51	8.78
Sulu	Non-KCh Schools	5	-7.02	28.43	5.72	16.02
	KCh Schools	16	-18.97	21.56	-1.01	11.76
Tawi-Tawi	Non-KCh Schools	4	-26.30	8.37	-8.41	17.36
	KCh Schools	20	-16.38	23.44	0.95	9.03
Zambo Del Sur	Non-KCh Schools	3	7.59	9.36	8.48	1.25
	KCh Schools	16	-4.59	38.91	**10.95**	10.56
Zambo Sibugay	Non-KCh Schools	3	-6.46	4.06	-1.00	5.27
	KCh Schools	13	-6.35	20.59	**5.20**	10.26

On one hand, the results show that Knowledge Channel schools with large improvement in the NAT average during the period 2005 to 2007 are schools in Zamboanga del Sur (10.95 percentage points) and Zamboanga Sibugay (5.20 percentage points). Elementary schools in North Cotabato have positive average improvement in the NAT scores of 2.19 percentage points, higher than the posted improvement in the NAT scores of non-Knowledge Channel schools in that province. The same table shows, on the other hand, that most elementary schools in the province of ARMM (Basilan, Sharif Kabusuan and Sulu) have lower NAT average scores in 2007 compared to figures in 2005.

5.2.   Results of the Econometric Models

A further analysis was made to determine the factors that affect the change or improvement in the elementary school's average NAT scores from 2005 to 2007. Several econometric models were used to account for the contribution of the different variables hypothesized to have impact on the NAT scores improvement. The variable of interest is the improvement in the schools' NAT scores from 2005 to 2007. The results of the econometric models are shown in tables 28 and 29.

Table 28 shows the first two regression models where the variables of interest are the improvement in the NAT scores and improvement in the Science scores (2005 to 2007). The regression results show that student population (in natural logarithm) and the percentage of locally generated income (as a percentage of total income) of LGUs have significant and contrasting effects on the improvement of the NAT scores.

Table 28. Regression Models for the Determinants of the Improvement in NAT and Science Scores (2005 to 2007)

	NAT 05-07			Science 05-07	
Explanatory Variables	**Coefficient**	**S.E.**		**Coefficient**	**S.E.**
Student Population (Natural Logarithm)	-3.76*	1.83		-1.72	1.73
Percentage of Locally Generated Income (over total income)	0.33*	0.16		0.27**	1.73
Presence of Knowledge Channel	6.14*	2.6		6.06**	3.15
Constant	16.6	11.22		-0.35	11.03

* significant at 5% level: ** significant at 10% level

As the student population of the school increase, the average improvement in the NAT scores for that school decrease, all things being the same. This result supports the earlier researches showing that large population creates a hindrance in the students' performance. This variable is significant for the improvement in the NAT scores but not for the improvement in the Science scores.

The percentage of locally generated income (as a percentage of total income) has a positive and significant effect on the improvement in the NAT scores. The regression results show that as city/municipality-generated income increases by ten percentage points, the average improvement in the NAT scores will increase by 3.3 percentage points, all things being the same. The results suggest that as the local government unit increases its locally generated revenues (example through taxes and business permits) it becomes flexible in terms of the providing support for the public elementary schools in the city or municipality. Local government units that do not really solely on the Internal Revenue Allotment (IRA) have greater flexibility in supporting social programs. Most of the LGUs in the area are actually dependent on the Internal Revenue Allotment (IRA) for their municipalities' budgetary requirements. This variable highlights the importance of LGUs support to the public schools. This variable is significant for both the improvement in the NAT and Science scores.

The regression results in table 28 also shows that schools with Knowledge Channel tend to have a higher NAT and Science scores improvement compared to the schools without Knowledge Channel. The results are both significant for the improvement in the NAT scores (at the 5% level) and the Science scores (at the 10% level). This means that Knowledge Channel schools tend to increase the average NAT and Science scores (from 2005 to 2007) by about 6 percentage points, respectively, all things being the same. This is about 3 percentage-points average increase per year. The regression results show that, controlling for other variables, presence of Knowledge Channel in the elementary schools does create an impact on the NAT and Science scores.

The contrasting results in the improvement in the NAT scores between elementary schools in the ARMM and non-ARMM provinces previously shown in table 25 to 27, where schools in the ARMM did no show any improvement in the NAT scores from 2005 to 2007 (with some schools having lower 2007 scores than in 2005), are validated by the regression results in table 29. An indicator variable representing the elementary schools in the ARMM is included in the regression model. The variable ARMM has a value of 1 if the elementary school is in the ARMM province and 0 if it is in a non-ARMM province. The result shows that this variable has a negative and significant impact of the average improvement in the NAT scores. Elementary schools in the ARMM have, on the average, lower NAT scores in 2007 compared to 2005, all things being the same. The estimated average decrease is about 4 percentage points or roughly 2 percentage points per year. The indicator variable used here is just a proxy variable that represents other variables that creates hindrance to the improvement in the students' performance, notably variables that are related to poverty. As this report will later show, the level of poverty in the ARMM provinces is significantly higher compared to the non-ARMM provinces included in the study.

The same regression results show that presence of Knowledge Channel has significant and positive effects on the improvement in the NAT scores as in the previous model. The elementary schools with Knowledge Channel tend to gain, on the average, 5.75 percentage points in their NAT scores in 2007 over the 2005 average (close to 3 percentage points gain per year), all things being the same. This result is almost the same as the results in the previous regressions.

Table 29. Regression Models for the Determinants of the Improvement in NAT Scores (2005 to 2007)

	NAT 05-07	
Explanatory Variables	**Coefficient**	**S.E.**
Student Population (Natural Logarithm)	-3.12*	1.72
Percentage of Locally Generated Income (over total income)	0.16	0.16
Presence of Knowledge Channel	5.75**	2.71
ARMM Schools	-4.15*	2.45
Constant	16.94	10.67

* significant at 5% level: ** significant at 10% level

One possible reason why the elementary schools in the ARMM area tend to have lower improvement in the NAT scores is because of the level of poverty in the area. Numerous studies have shown the link between poverty and students' performance: a hungry student is not expected to perform well in school. This study looked at the proportion of poor households in 2003 (information coming from the 2003 Family Income and Expenditure Survey (FIES)) for cities and municipalities included in the TEAM Mindanao project. The poverty estimates are usually given at the provincial level but the National Statistical Coordination Board (NSCB) was able to estimate the cities/municipalities poverty incidence using data from the 2003 FIES (NSCB, 2005). This information was used in the analysis for this study. Table 30 shows that for cities/municipalities included in the TEAM Mindanao project, the proportion of poor households in ARMM area is significantly higher than in the non-ARMM areas. For ARMM cities/municipalities, the average proportion of poor households in 2003 is about 62 percent, around 6 percentage points higher than the proportion of poor households in the non-ARMM cities/municipalities included in the study.

Table 30. Comparison of the Proportion of Poor Households in the ARMM and Non-ARMM Municipalities in 2003)

AREA	N	Average Proportion of Poor HHs *	Std. Deviation
ARMM Cities/Municipalties	119	0.619	0.084
Non-ARMM Cities/Municipalties	64	0.557	0.089

*The proportion of poor households is statistically higher in the municipalities of the ARMM compared to non-ARMM municipalities; significant at the 1% level

The regression models discussed show that presence of Knowledge Channel indeed provides additional stimulus to the students that contributes to the improvement in the average NAT scores. Elementary school with Knowledge Channel gained an additional 3 percentage points per year in the NAT scores over non-Knowledge Channel schools in the study. The other determinants of the improvement in the NAT scores are student population (has a negative effect) and income of the municipalities/cities where the schools are located (has a positive effect). Finally, elementary schools in the ARMM tend to have lower improvement in the NAT scores

VI. CONCLUSIONS

This study aims to determine the impact of the programs of Knowledge Channel on the schools under the TEAM Mindanao project. Using the information from the Knowledge Channel elementary schools (experimental group) and the non-Knowledge Channel schools (control group), as well as the different focus group discussions, the study have established that,

a. There is a positive and significant relationship between the presence of Knowledge Channel and in the improvement of NAT scores and its sub-components from 2005 to 2007. For elementary schools with Knowledge Channel, NAT scores and the Science sub-component increased by an average of about 3 percentage points per year compared to non-Knowledge Channel schools, all things being the same;

b. The impacts of Knowledge Channel programs on the performance of students will be felt most likely in the areas of Science and Mathematics, where classroom discussions and lesson learned are now being "standardized" because of the presence of Knowledge Channel. The results of the focus group discussion show that the presence of Knowledge Channel is perceived (by the principal, teachers and students) as providing opportunities in learning for the students in the rural communities to catch up with those in Metro Manila schools;

c. The presence of Knowledge Channel created a lot of excitement on the part of the students. The excitement and interest shown by the students have resulted to a decrease in drop-out rates since the ETV encourages students to go to school. The data suggests that completion rates for schools with Knowledge Channel are increasing; and,

d. The improvement of scores and grades of the students and the way they perform in class may seem to be an important impact of Knowledge Channel but more than that, there might also be other benefits – molding better citizens of this country, as cited by participants in the FGDs. The Knowledge Channel has fostered community unity and interaction among community organizations towards self-improvement.

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Appendix 1. List of Knowledge Channel and Control Schools Visited

	SCHOOL	PROVINCE	TYPE
Knowledge Channel	Lanawan Elementary School	BASILAN	Elementary
	Lubukan Central Elementary School	BASILAN	Elementary
	Lukbungsod Elementary School	BASILAN	Elementary
	Saluping Elementary School	BASILAN	Elementary
	Sangbay Small Elementary School	BASILAN	Elementary
	Tausan Elementary School	BASILAN	Elementary
	Tong-umos Elementary School	BASILAN	Elementary
	Lubukan National High School	BASILAN	High School
	Kimpo Elementary School	COTABATO CITY	Elementary
	Baguadatu Elementary School	MAGUINDANAO	Elementary
	Bai Bagongan Paglas Elementary School	MAGUINDANAO	Elementary
	Dado Elementary School	MAGUINDANAO	Elementary
	Dadtumeg Elementary School	MAGUINDANAO	Elementary
	Daladagan Elementary School	MAGUINDANAO	Elementary
	Damawato Elementary School	MAGUINDANAO	Elementary
	Darugao Elementary School	MAGUINDANAO	Elementary
	Datang Elementary School	MAGUINDANAO	Elementary
	Datu Paglas Central Elementary School	MAGUINDANAO	Elementary
	Datu Yusseff Paglas Elementary School	MAGUINDANAO	Elementary
	Duamiwanga Elementary School	MAGUINDANAO	Elementary
	Kabuntalan Central Elementary School	MAGUINDANAO	Elementary
	Kamasi Elementary School	MAGUINDANAO	Elementary
	Kanguan E. Uy Central Elementary School	MAGUINDANAO	Elementary
	Katil Elementary School	MAGUINDANAO	Elementary
	Katong Madidis Central Elementary School	MAGUINDANAO	Elementary
	Malala Elementary School	MAGUINDANAO	Elementary
	Montay Elementary School	MAGUINDANAO	Elementary
	Napok Elementary School	MAGUINDANAO	Elementary
	Sepaka Elementary School	MAGUINDANAO	Elementary
	Talitay Elementary School	MAGUINDANAO	Elementary
	Tumbao Elementary School	MAGUINDANAO	Elementary
	Upper D'Lag Elementary School	MAGUINDANAO	Elementary
	Datu Paglas National High School	MAGUINDANAO	High School
	Kauran National High School	MAGUINDANAO	High School
	Gen. Salipada K. Pendatun Memorial Primary School	MAGUINDANAO	Primary
	Agriculture Elementary School	NORTH COTABATO	Elementary
	Anonang Elementary School	NORTH COTABATO	Elementary
	Arizona Elementary School	NORTH COTABATO	Elementary
	Baliki Elementary School	NORTH COTABATO	Elementary
	Barongis Elementary School	NORTH COTABATO	Elementary
	Batulawan Elementary School	NORTH COTABATO	Elementary
	Demapaco Elementary School	NORTH COTABATO	Elementary
	Don Miguel Latada Elementary School	NORTH COTABATO	Elementary
	Flauta Elementary School	NORTH COTABATO	Elementary
	Fort Pikit Elementary School	NORTH COTABATO	Elementary
	Ginatilan Elementary School	NORTH COTABATO	Elementary
	GUMAGA ES	NORTH COTABATO	Elementary
	Ilbocean Elementary School	NORTH COTABATO	Elementary
	Miguel Intes Elementary School	NORTH COTABATO	Elementary
	Nalapaan Elementary School	NORTH COTABATO	Elementary
	Panicupan Elementary School	NORTH COTABATO	Elementary

SCHOOL	PROVINCE	TYPE
Sadaan Elementary School	NORTH COTABATO	Elementary
San Isidro Elementary School	NORTH COTABATO	Elementary
Ungkakay ES	NORTH COTABATO	Elementary
Upper Bulanan Elementary School	NORTH COTABATO	Elementary
Wendelin Eduarte Elementary School	NORTH COTABATO	Elementary
Awang Elementary School	SHARIF KABUNSUAN	Elementary
Benolen Elemenatary School	SHARIF KABUNSUAN	Elementary
Borongotan Elementary School	SHARIF KABUNSUAN	Elementary
Bugabongan Elementary School	SHARIF KABUNSUAN	Elementary
Datu M. Mangilay Elementary School	SHARIF KABUNSUAN	Elementary
Hadji Edza Memorial Elementary School	SHARIF KABUNSUAN	Elementary
Ibotigen Elementary School	SHARIF KABUNSUAN	Elementary
Kabugkabug Elementary School	SHARIF KABUNSUAN	Elementary
Kibleg Elementary School	SHARIF KABUNSUAN	Elementary
Linek Elementary School	SHARIF KABUNSUAN	Elementary
Maguindanaon Elementary School	SHARIF KABUNSUAN	Elementary
Mirab Elementary School	SHARIF KABUNSUAN	Elementary
Nuro Central Elementary School	SHARIF KABUNSUAN	Elementary
Parang Central Elementary School	SHARIF KABUNSUAN	Elementary
Pedro C. Dolores Elementary School	SHARIF KABUNSUAN	Elementary
Pigcalagan Elementary School	SHARIF KABUNSUAN	Elementary
Sandakan Elementary School	SHARIF KABUNSUAN	Elementary
Sapalan Elementary School	SHARIF KABUNSUAN	Elementary
Sarmiento Central Elementary School	SHARIF KABUNSUAN	Elementary
Sarmiento West Elementary School	SHARIF KABUNSUAN	Elementary
Simuay Junction Central Elementary School	SHARIF KABUNSUAN	Elementary
Simuay Seashore ES	SHARIF KABUNSUAN	Elementary
Tuka Elementary School	SHARIF KABUNSUAN	Elementary
Amir Bara Lidasan National High School	SHARIF KABUNSUAN	High School
CAMP SIONGCO NHS	SHARIF KABUNSUAN	High School
Parang National High School	SHARIF KABUNSUAN	High School
Sultan Kudarat National High School	SHARIF KABUNSUAN	High School
Ablayan Elementary School	SULU	Elementary
Bato-Bato Elementary School	SULU	Elementary
Bilaan Central Elementary School	SULU	Elementary
Buntod Elementary School	SULU	Elementary
Bwansa Elementary School	SULU	Elementary
Hadji Hassan Idon Elementary School	SULU	Elementary
Kahikukuk Elementary School	SULU	Elementary
Kajatian Elementary School	SULU	Elementary
Lubbak Elementary School	SULU	Elementary
Luuk Tongkil Elementary School	SULU	Elementary
Panglima Ahajan Elementary School	SULU	Elementary
Panglima Mammah Elementary School	SULU	Elementary
Samak Elementary School	SULU	Elementary
Sigumbal Elementary School	SULU	Elementary
Tabialan Elementary School	SULU	Elementary
Tinutungan Elementary School	SULU	Elementary
Adzhar Elementary School	TAWI-TAWI	Elementary
Banaran Central Elementary School	TAWI-TAWI	Elementary
Bongao Elementary School	TAWI-TAWI	Elementary
Datu Maulana Memorial Elementary School	TAWI-TAWI	Elementary
Hji. Moh Sali Elementary School	TAWI-TAWI	Elementary

	SCHOOL	PROVINCE	TYPE
	Languyan Central Elementary School	TAWI-TAWI	Elementary
	Larap Elementary School	TAWI-TAWI	Elementary
	LAWM Sikubong Elementary School	TAWI-TAWI	Elementary
	Ligayan Elementary School	TAWI-TAWI	Elementary
	Malanta Elementary School	TAWI-TAWI	Elementary
	MSU Laboratoroy Elementary School	TAWI-TAWI	Elementary
	Pagasinan Elementary School	TAWI-TAWI	Elementary
	Provincial Housing Laboratory Elementary School	TAWI-TAWI	Elementary
	Similak Elementary School	TAWI-TAWI	Elementary
	Sipangkot Elementary School	TAWI-TAWI	Elementary
	Tongsinah Elementary School	TAWI-TAWI	Elementary
	Tuan Masdal Elementary School	TAWI-TAWI	Elementary
	Tubig Mampallan Central School	TAWI-TAWI	Elementary
	Tubig Tanah Elementary School	TAWI-TAWI	Elementary
	Yusop Dais Elementary School	TAWI-TAWI	Elementary
	MSU-TCTO Languyan High School	TAWI-TAWI	High School
	Binuay Elementary School	ZAMBOANGA DEL SUR	Elementary
	Dimataling Central Elementary School	ZAMBOANGA DEL SUR	Elementary
	Dinas Central Elementary School of Peace	ZAMBOANGA DEL SUR	Elementary
	East Migpulao Elementary School	ZAMBOANGA DEL SUR	Elementary
	Guinicolalay Elementary School	ZAMBOANGA DEL SUR	Elementary
	Legarda Dos Elementary School	ZAMBOANGA DEL SUR	Elementary
	Legarda Tres Elementary School	ZAMBOANGA DEL SUR	Elementary
	Legarda Uno Elementary School	ZAMBOANGA DEL SUR	Elementary
	Libertad Elementary School	ZAMBOANGA DEL SUR	Elementary
	Locuban Elementary School	ZAMBOANGA DEL SUR	Elementary
	New Mirapao Elementary School	ZAMBOANGA DEL SUR	Elementary
	Pagadian City Pilot School	ZAMBOANGA DEL SUR	Elementary
	Proper Dimaya Elementary School	ZAMBOANGA DEL SUR	Elementary
	Salaogan ES	ZAMBOANGA DEL SUR	Elementary
	Sambulawan Elementary School	ZAMBOANGA DEL SUR	Elementary
	San Miguel Elementary School	ZAMBOANGA DEL SUR	Elementary
	Tomas Sagun Elementary School	ZAMBOANGA DEL SUR	Elementary
	Alicia Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Bangkerohan Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Dalangin Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Habib Moin Anduhol Memorial Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Ipil Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Jose R. Rapadas Sr. Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Kaliantana ES	ZAMBOANGA SIBUGAY	Elementary
	Mabuhay Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Naga Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Naga-Naga Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Surabay Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Tigbanuang Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Titay Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Tungawan Central Elementary School	ZAMBOANGA SIBUGAY	Elementary
	Alicia National High School	ZAMBOANGA SIBUGAY	High School
Control	Atong-Atong ES	BASILAN	Elementary
	Gaunan ES	BASILAN	Elementary
	Bunawan ES	MAGUINDANAO	Elementary
	Damabalas ES	MAGUINDANAO	Elementary

SCHOOL	PROVINCE	TYPE
Datu Idon Salendab ES	MAGUINDANAO	Elementary
Datu Luminog Mangelen Pilot ES	MAGUINDANAO	Elementary
Lintukan ES	MAGUINDANAO	Elementary
Lipao ES	MAGUINDANAO	Elementary
Manindolo ES	MAGUINDANAO	Elementary
Maslabeng ES	MAGUINDANAO	Elementary
Salendab ES	MAGUINDANAO	Elementary
Central Bulanan ES	NORTH COTABATO	Elementary
Dr. C. H. Deles ES	NORTH COTABATO	Elementary
Guinaid-Guiani MES	NORTH COTABATO	Elementary
Inug-ug ES	NORTH COTABATO	Elementary
Ladtigan ES	NORTH COTABATO	Elementary
Lagumbingan ES	NORTH COTABATO	Elementary
Malingao ES	NORTH COTABATO	Elementary
Polloc ES	NORTH COTABATO	Elementary
V. Rapalon ES	NORTH COTABATO	Elementary
Alamada ES	SHARIF KABUNSUAN	Elementary
Dagurungan ES	SHARIF KABUNSUAN	Elementary
E. Molina Sr. MES	SHARIF KABUNSUAN	Elementary
Kaba-Kaba ES	SHARIF KABUNSUAN	Elementary
Kabutoyen ES	SHARIF KABUNSUAN	Elementary
Katiguesen ES	SHARIF KABUNSUAN	Elementary
Miramar ES	SHARIF KABUNSUAN	Elementary
Neketan ES	SHARIF KABUNSUAN	Elementary
Panatan ES	SHARIF KABUNSUAN	Elementary
Rebuken ES	SHARIF KABUNSUAN	Elementary
Tapian ES	SHARIF KABUNSUAN	Elementary
Kagay ES and Annex	SULU	Elementary
Panglima Indanan CS	SULU	Elementary
Pantao ES	SULU	Elementary
Pasil ES	SULU	Elementary
Tattalan ES	SULU	Elementary
Marang-Marang ES	TAWI-TAWI	Elementary
Pahut ES	TAWI-TAWI	Elementary
Sanga-Sanga ES	TAWI-TAWI	Elementary
Talisay ES	TAWI-TAWI	Elementary
Don Jose ES	ZAMBOANGA DEL SUR	Elementary
Lower Dimaya ES	ZAMBOANGA DEL SUR	Elementary
Old Mirapao ES	ZAMBOANGA DEL SUR	Elementary
Capt. Pedro Changco Sr. MS	ZAMBOANGA SIBUGAY	Elementary
Langon ES	ZAMBOANGA SIBUGAY	Elementary
Sanito ES	ZAMBOANGA SIBUGAY	Elementary
Tupilac ES	ZAMBOANGA SIBUGAY	Elementary

Appendix 2. Questionnaires

2.1.a. Questionnaire for Principal- Knowledge Channel

QUESTIONNAIRE FOR PRINCIPAL

Date: _____
School name: _____ District: _____
School Address: _____ Division: _____
School contact number: _____ Province: _____

A. PRINCIPAL INFORMATION
  1. Name of Head/ Principal: _____ Tribe:_____
  2. Level of school head (if head teacher, principal 1, 2, etc): _____
  3. When did you start as principal of the school? (month and year) _____
  4. Total number of years as teacher: _____
  5. Highest educational attainment: O college graduate   O some units in doctoral
                                                                    O some units in masters   O PhD degree holder
                                                                    (including EDD)
                                                                    O masters degree holder
  6. Course: _____
  7. Specialization/Major: _____
  8. Have you attended seminar/s conducted by the Knowledge Channel?
                        O yes   O no
          a. If yes, how many seminars have you attended so far? _____
          b. What was the latest seminar you've attended? _____
          c. When was the latest seminar you have attended?
                _____

B. TEACHER INFORMATION: *(note: for Elementary schools, teachers in preparatory level should not be included)*
  1. Total number of teachers *(permanent only & NOT including principal)*: _____
          a. number of MALE teachers: _____Tribe Composition: _____
          b. number of FEMALE teachers: _____Tribe Composition: _____
  2. Highest educational attainment of teachers *(permanent only & NOT including principal)*:
          a. college graduate: _____
          b. with units in Masters:_____
          c. with Masters degree: _____
          d. with units in Doctoral: _____
          e. with Doctoral degree: _____
  3. How many teachers have already attended a seminar under Knowledge Channel? ____

C. STUDENT INFORMATION:
1. Student population and number of sections:

GRADE/YEAR LEVEL	No. of Sections	Number of Students			Number of teachers	Teacher-to-pupil ratio
		MALE	FEMALE	TOTAL		
1.a Nursery						
1.b Kinder						
1.c Preparatory						
1.d Grade 1/ 1st year						
1.e Grade 2/ 2nd year						
1.f Grade 3/ 3rd year						
1.g Grade 4/ 4th year						
1.h Grade 5						
1.i Grade 6						

1.j TOTAL						

2. Textbook-to-pupil ratio:

GRADE/YEAR LEVEL	Science	Math	English	Filipino	Makabayan	AVERAGE
2.a Nursery						
2.b Kinder						
2.c Preparatory						
2.d Grade 1/ 1st year						
2.e Grade 2/ 2nd year						
2.f Grade 3/ 3rd year						
2.g Grade 4/ 4th year						
2.h Grade 5						
2.i Grade 6						
2.j TOTAL						

3. Retention rate (2006-2007): _____   2005 – 2006: _____   2004 – 2005: _
4. Completion rate (2006-2007): _____   2005 – 2006: _____   2004 – 2005: _____
5. Survival rate (2006-2007): _____   2005 – 2006: _____   2004 – 2005: _____

D. KNOWLEDGE CHANNEL
1.   What motivates you to use Knowledge Channel?

2.   What benefits does it provide to teachers and students?

3.   What are the benefits of Knowledge Channel to the school in general?

4.   Do you have any suggestions or recommendations that will help Knowledge Channel improve its programs and services?

E. PRESENCE OF OTHER INTERVENTIONS

Please check all other independent institutions or programs that have helped the school and specify what they have provided for the school in the space provided.

	Check if present in the school	*Description/donations*
1. Text-to-teach	O	
2. E-media	O	
3. Synergia	O	
4. ASCEND	O	
5. Real World	O	
6. BEAM	O	
7. PTCA	O	
8. others: _____	O	

2.1.b. Questionnaire for Principal- Control

QUESTIONNAIRE FOR PRINCIPAL (Control)

Date: _____

School name: _____ District: _____

School Address: _____ Division: _____

School contact number: _____ Province: _____

F. PRINCIPAL INFORMATION
9. Name of Head/ Principal: _____Tribe: _____
10. Level of school head (if head teacher, principal 1, 2, etc): _____
11. When did you start as principal of the school? (month and year) _____
12. Total number of years as teacher: _____
13. Highest educational attainment: O college graduate   O some units in doctoral
                                 O some units in masters   O PhD degree holder
                             (including EDD)
                             O masters degree holder
14. Course: _____
15. Specialization/Major: _____
16. Have you attended seminar/s conducted by the Knowledge Channel?
              O yes   O no
    a. If yes, how many seminars have you attended so far? _____
    b. What was the latest seminar you've attended? _____
    c. When was the latest seminar you have attended? _____

G. TEACHER INFORMATION: *(note: for Elementary schools, teachers in preparatory level should not be included)*
4. Total number of teachers *(permanent only & NOT including principal)*: _____
    a. number of MALE teachers: _____Tribe Composition: _____
    b. number of FEMALE teachers: _____Tribe Composition: _____
5. <u>Highest</u> educational attainment of teachers *(permanent only & NOT including principal)*:
    a. college graduate: _____
    b. with units in Masters:_____
    c. with Masters degree: _____
    d. with units in Doctoral: _____
    e. with Doctoral degree: _____

H. STUDENT INFORMATION:

1. Student population and number of sections:

GRADE/YEAR LEVEL	No. of Sections	Number of Students			Number of teachers	Teacher-to-pupil ratio
		MALE	FEMALE	TOTAL		
1.a Nursery						
1.b Kinder						
1.c Preparatory						
1.d Grade 1/ 1st year						
1.e Grade 2/ 2nd year						
1.f Grade 3/ 3rd year						
1.g Grade 4/ 4th year						
1.h Grade 5						
1.i Grade 6						
1.j TOTAL						

2. Textbook-to-pupil ratio:

GRADE/YEAR LEVEL	Science	Math	English	Filipino	Makabayan	AVERAGE
2.a Nursery						
2.b Kinder						
2.c Preparatory						
2.d Grade 1/ 1st year						
2.e Grade 2/ 2nd year						
2.f Grade 3/ 3rd year						
2.g Grade 4/ 4th year						
2.h Grade 5						
2.i Grade 6						
2.j TOTAL						

3. Retention rate (2006-2007): _____   2005 – 2006: _____ 2005 – 2005: _____
4. Completion rate (2006-2007): _____   2005 – 2006: _____   2004 – 2005: _____
5. Survival rate (2006-2007): _____   2005 – 2006: _____   2004 – 2005: _____

I. PRESENCE OF INTERVENTIONS

Please check all other independent institutions or programs that have helped the school and specify what they have provided for the school in the space provided.

	Check if present in the school	*Description/donations*
1. Text-to-teach	O	
2. E-media	O	
3. Synergia	O	
4. ASCEND	O	
5. Real World	O	
6. BEAM	O	
7. PTCA	O	
8. others: _____	O	

2.2. Questionnaire for ETV Coordinator- Knowledge Channel school only

QUESTIONNAIRE FOR ETV COORDINATOR

Date: _____

School name: _____

District: _____

A. PERSONAL INFORMATION

1. Name of ETV Coordinator: _____Tribe: _____
2. Contact number of ETV Coordinator *(preferably mobile phone)*: _____
3. Start as ETV coordinator of the school (month and year):_____
4. Other position/s in the school (if adviser, subject teacher, etc) if any (specify what grade level):_____
5. Number of years as teacher <u>in the school</u>: _____
6. Total number of years as teacher: _____
7. Highest educational attainment:
        O college graduate   O some units in PhD
        O some units in masters   O PhD degree holder
        O masters degree holder
8. Course: _____
9. Specialization/Major: _____
10. Have you attended seminar/s conducted by the Knowledge Channel? O yes
O no
    d. If yes, how many seminars have you attended so far? _____
    e. What was the latest seminar you've attended? _____
    f. When was the latest seminar you have attended? _____
    g. What aspect of the training did you find most useful? _____

B. PHYSICAL CONDITION OF THE VIEWING AREA

1. How many buildings does the school have?   O one   O two   O 3 or more
2. Total number of classrooms:_____
3. Total number of rooms not permanently occupied by a class *(library, LRC, laboratories, etc.)*: _____
4. How many separate viewing areas (those <u>not being occupied by a class</u>) does the school have?   O none   O one   O two   O 3 or more
5. How many of these viewing areas are being <u>used for Knowledge Channel viewing</u>?
        O none O one   O two   O 3 or more
6. Where is the main viewing area for KCh viewing?
        O classroom (for those without a separate viewing area)
        O library
        O LRC/ Audio-visual room
        O laboratory (Science Lab, Math Lab, etc.)
        O others: _____
7. What is the capacity of the main viewing area?
        O one section   O 2 sections   O 3 sections or more

C. TELEVISION SETS AND OTHER MATERIALS

1. How many televisions sets <u>used by the students </u>does the school have?
        O none O one   O two   O 3 or more
2. How many televisions sets are cabled?

O none O one   O two   O 3 or more

3. How many television sets are donated by the Knowledge Channel?

                     O none O one   O two   O 3 or more

4. For those given TVs by the Knowledge Channel, have there any technical problems with the TV?   O yes   O no

      a. If yes, kindly state the details: _____

      b. What actions have been taken: _____

      c. Status of the television as of the interview:

           O working   O not working

5. Have there any problems encountered with regards to the cable/ satellite?

                                 O yes   O no

      a. If yes, kindly state the details: _____

      b. What actions have been taken: _____

      c. Status of the cable as of the interview: O working   O not working

6. Does the school have tapes, VCDs, and/or DVDs for students' viewing?

       O yes   O no

7. Who gave the tapes, VCDs, and/or DVDs?   O teacher's own
                                                    O PTCA
                                                    O government (local school board/ DepEd)
                                                      O non-government agency (name of agency: _____)

8. If the school has tapes, etc: On the average, how many times does a CLASS watch from the tapes, VCDs, and/or DVDs?

           O everyday   O twice a month

           O 2 to 3 times a week   O once a month

           O once a week   O rarely

9. When was the last visit of a Knowledge Channel representative? _____

D. KNOWLEDGE CHANNEL VIEWING

1. Does the school have a <u>Teachers' Guide</u>?   O yes   O no

2. Does the school have a <u>Program Guide</u> for the current school year?

                                               O yes   O no

3. What month did the school receive the Program Guide?

                 O May   O June O July onwards

4. Does the school have a <u>viewing schedule/plan?</u>   O yes   O no

5. If the school has a KCh viewing plan, how much percentage of the viewing plan was achieved?   O 100%
                                     O 90-99%
                                     O 75-89%
                                     O 50-74%
                                     O below 50%

6. Does the school have <u>log sheets</u>?   O yes   O no

7. When was the last viewing of Knowledge Channel program? _____

8. If last viewing was a month or more than a month ago, what is the reason for the stop in viewing? _____

9. On the average, how frequent does <u>ONE CLASS</u> watch the following Knowledge Channel programs? (put an X to mark your answer)

PROGRAM	everyday	2 to 3 times a week	Once a week	Twice a month	Once a month	rarely	never
a. Sine'skwela							
b. Science Primary							
c. Science Intermediate							
d. Why							
e. English Elementary							
f. Epol-Apple							
g. Karen's World							
h. Math-Tinik							
i. Math Primary							
j. Math Intermediate							
k. Solved							
l. Alikabuk							
m. Pamana							
n. Bayani							
o. GMRC							
p. Hirayamanawari							
q. ATBP							
r. Integrated Science							
s. Chemistry, Physics, Biology							
t. English							
u. Algebra, Geometry							
v. Kasaysayan TV							
w. Pahina							
x. Values and Life-skills							
y. Salam							

10. How frequent does ONE CLASS watch programs of the Knowledge Channel? (Put an X to mark your answer)

GRADE LEVEL	everyday	2 to 3 times a week	Once a week	Twice a month	Once a month	rarely
a. Grade 1/ 1st Year (per class)						
b. Grade 2/ 2nd Year (per class)						
c. Grade 3/ 3rd Year (per class)						
d. Grade 4/ 4th Year (per class)						
e. Grade 5 (per class)						
f. Grade 6 (per class)						

11. Please rate the dependability and usefulness of the following KCh programs as instructional materials:

PROGRAMS	Very much	Much	Moderately	Little	Not at all
a. Sine'skwela					
b. Science Primary					
c. Science Intermediate					

d. Why					
e. English Elementary					
f. Epol-Apple					
g. Karen's World					
h. Math-Tinik					
i. Math Primary					
j. Math Intermediate					
k. Solved					
l. Alikabuk					
m. Pamana					
n. Bayani					
o. GMRC					
p. Hirayamanawari					
q. ATBP					
r. Integrated Science					
s1. Chemistry					
s2. Physics					
s3. Biology					
t. English					
u1. Algebra					
u2. Geometry					
v. Kasaysayan TV					
w. Pahina					
x. Values and Life-skills					
y. Salam					

12. On the average, how many times does a CLASS watch programs of the KCh?
   O everyday   O twice a month
   O 2 to 3 times a week   O once a month
   O once a week   O rarely

E. KCH UTILIZATION

1. What specific steps, if any, have you taken to ensure maximum viewing of KCh programs for all sections?

2. Does the school have special activities/projects that encourage teachers and students to sustain KCh viewing?   O yes   O no
   a. If yes, what are these activities/projects?

3. What motivates you to use Knowledge Channel?

4. What are the benefits of Knowledge Channel viewing to the teachers?

5. What are the benefits of Knowledge Channel viewing to the students?

6. Do you have any suggestions or recommendations that will help Knowledge Channel improve its programs and services?

2.3.a. Questionnaire for Subject Teacher- Knowledge Channel

QUESTIONNAIRE FOR SUBJECT TEACHER

Date: _____

School name: _____

District: _____

F. PERSONAL INFORMATION
1. Name of Teacher: _____Tribe: _____
2. Subject Area: _____
3. Grade level: _____
4. Other position/s in the school (if adviser, etc) if any (specify what grade level):_____
5. Number of years as teacher in the school: _____
6. Total number of years as teacher: _____
7. Highest educational attainment: O college graduate   O some units in PhD
                                   O some units in mastersO PhD degree holder
                                   O masters degree holder
8. Area of Specialization: _____

9. Have you attended seminar/s conducted by the Knowledge Channel?

O yes   O no

h. If yes, how many seminars have you attended so far? _____
i. What was the latest seminar you've attended? _____
j. When was the latest seminar you have attended? _____
k. What aspect of the training did you find most useful? _____

G. PHYSICAL CONDITION OF THE VIEWING AREA

Rate the following conditions of the viewing area (mark your answer with X):

CONDITIONS OF THE VIEWING AREA	EXCELLENT	GOOD	ADEQUATE	POOR	VERY POOR
1. Order and cleanliness					
2. Ventilation					
3. Lighting					
4. Room size in relation to declared capacity					
5. Placement of TV					
6. Clarity of the video image					
7. Clarity of sound reception					
8. Free from distractions from the outside					

H. KNOWLEDGE CHANNEL VIEWING

1. On the average, how frequent does <u>ONE CLASS</u> watch the following Knowledge Channel programs? *(put an X to mark your answer, please answer only for those programs you are actually using for your specific subject)*

PROGRAM	everyday	2 to 3 times a week	Once a week	Twice a month	Once a month	Rarely
a. Sine'skwela						
b. Science Primary						
c. Science Intermediate						
d. Why						
e. English Elementary						
f. Epol-Apple						
g. Karen's World						
h. Math-Tinik						
i. Math Primary						
j. Math Intermediate						
k. Solved						
l. Alikabuk						
m. Pamana						
n. Bayani						
o. GMRC						
p. Hirayamanawari						
q. ATBP						
r. Integrated Science						
s. Chemistry, Physics, Biology						
t. English						
u. Algebra, Geometry						
v. Kasaysayan TV						
w. Pahina						
x. Values and Life-skills						
y. Salam						

2. Please rate the dependability and usefulness of the following KCh programs as instructional materials *(put an X to mark your answer, please answer only for those programs fitted for you specific subject)*:

PROGRAMS	Very much	Much	Moderately	Little	Not at all
a. Sine'skwela					
b. Science Primary					
c. Science Intermediate					
d. Why					
e. English Elementary					
f. Epol-Apple					
g. Karen's World					
h. Math-Tinik					
i. Math Primary					
j. Math Intermediate					
k. Solved					
l. Alikabuk					
m. Pamana					
n. Bayani					
o. GMRC					
p. Hirayamanawari					
q. ATBP					
r. Integrated Science					
s. Chemistry, Physics, Biology					
t. English					
u. Algebra, Geometry					
v. Kasaysayan TV					
w. Pahina					
x. Values and Life-skills					
y. Salam					

I. KCH UTILIZATION

1. What specific steps, if any, have you taken to ensure maximum viewing of KCh programs for the subjects and classes under you?
   _____
   _____
   _____
   _____

2. Do you have special activities/projects that encourage students to sustain KCh viewing?   O yes   O no
   b. If yes, what are these activities/projects?
      _____
      _____
      _____

3. What are the benefits of Knowledge Channel viewing to the teachers?
   _____
   _____
   _____
   _____

4. What are the benefits of Knowledge Channel viewing to the students?
   _____
   _____
   _____
   _____

5. Do you have any suggestions or recommendations that will help Knowledge Channel improve its programs and services in relation to the subject you are teaching?
   _____
   _____
   _____
   _____

2.3.b. Questionnaire for Subject Teacher- Control

QUESTIONNAIRE FOR SUBJECT TEACHER (Control)

Date: _____   City/Mun.: _____
School name: _____   Province: _____
District: _____

J. PERSONAL INFORMATION
1. Name of Teacher: _____ Tribe: _____
2. Subject Area: _____
3. Grade level: _____
4. Other position/s in the school (if adviser, etc) if any (specify what grade level):_____
5. Number of years as teacher in the school: _____
6. Total number of years as teacher: _____
7. Highest educational attainment: O college graduate   O some units in PhD
   O some units in masters O PhD degree holder
   O masters degree holder   (including EDD)

8. Have you attended seminar/s? O yes   O no
   l. If yes, how many seminars have you attended so far? _____
   m. What was the latest seminar you've attended? _____
   n. When was the latest seminar you have attended? _____
   o. What aspect of the training did you find most useful? _____

K. PHYSICAL CONDITION OF THE VIEWING AREA

1. How many buildings does the school have?   O one   O two   O 3 or more
2. Total number of classrooms:_____
3. Total number of rooms not permanently occupied by a class *(library, LRC, laboratories, etc.)*: _____
4. How many separate viewing areas (those not being occupied by a class) does the school have?   O none O one   O two   O 3 or more

L. TELEVISION SETS AND OTHER MATERIALS

1. How many televisions sets used by the students does the school have?
   O none O one   O two   O 3 or more
2. How many televisions sets are cabled?
   O none O one   O two   O 3 or more

3. Does the school have tapes, VCDs, and/or DVDs for students' viewing?

        O yes   O no

4. Who gave the tapes, VCDs, and/or DVDs?   O teacher's own
    O PTCA
    O government (local school board/ DepEd) O non-government agency
    (name of agency: _____)

5. If the school has tapes, etc: On the average, how many times does a CLASS watch from the tapes, VCDs, and/or DVDs?

    O everyday   O twice a month
    O 2 to 3 times a week   O once a month
    O once a week   O rarely

2.4. Questionnaire for Parents

QUESTIONNAIRE FOR (PTCA Head)

Dear Sir/Madam:
*   The Knowledge Channel is currently conducting a survey to improve their services to the Filipino students. Please provide all the information below. We assure you that all information provided will be treated with utmost confidentiality. Thank you very much.*

Date: _____

A. HOUSEHOLD CHARACTERISTICS
1. Student's Full Name: _____Tribe: _____
2. School: _____
3. Grade Level & Section: _____
4. Father's Name: _____ 4.b. Occupation: _____
5. Mother's Name: _____ 5.b. Occupation: _____
6. Guardian's Name: _____ 6.b. Occupation: _____
7. Home address (Barangay and Town): _____

8. Father's (of pupil) highest educational attainment: (*Pinakamataas na antas ng edukasyon na natapos ng ama*)
    O no grade completed   O some college
    O some elementary   O college graduate
    O elementary graduate   O some masters
    O some high school   O post graduate degree
    O high school graduate
    O some vocational
    O vocational course graduate

9. Mother's (of pupil) highest educational attainment: (*Pinakamataas na antas ng edukasyon na natapos ng ina*)
    O no grade completed   O some college
    O some elementary   O college graduate
    O elementary graduate   O some masters
    O some high school   O post graduate degree
    O high school graduate
    O some vocational

O vocational course graduate

10. Guardian's (of pupil) highest educational attainment: (*Pinakamataas na antas ng edukasyon na natapos ng tagapangalaga ng bata*)
O no grade completed   O some college
O some elementary   O college graduate
O elementary graduate   O some masters
O some high school   O post graduate degree
O high school graduate
O some vocational
O vocational course graduate

11. Current status of the child's parents: O married
(*Estado sibil ng mga magulang*)   O separated
          O widowed
          O domestic partnership (living in)
          O others: _____

12. Number of relatives living with the student
(*Bilang ng kamag-anak na kasama ng bata/estudyante sa bahay*): _____

13. Who acts as head of the household?   O father
(*Sino ang puno o ulo ng pamilya?*)   O mother
          O guardian
          O others: _____

B. CHILD'S SCHOOLING

1. Did your child attend pre-school (nursery, kinder, or preparatory): (*Nag-preschool [nursery,kinder, o preparatory] po ba si [pangalan ng bata]?*)   O yes   O no
1.a. How many years did the child attend pre-school? _____
(*Ilang taon po nag-preschool si [pangalan ng bata]?*)

2. Did your child ever have to stop schooling? (*Nagkaroon po ba ng pagkakataon na kinailangan ni [pangalan ng bata] na tumigil sa pag-aaral?*)   O yes   O no

2.a. If YES, during what grade? (*Kung oo, anong grade po siya noon?*) _____
2.b. For how many years? (*Gaano pong katagal siya na tumigil?*)_____

2.c. What is the reason for the stop in schooling? (*Ano po ang dahil at tumigil siya sa pag-aaral?*)_____

Did your child ever repeat a grade? (*Nagkaroon po ba ng pagkakataon na umulit ng isang grade si [pangalan ng bata]?*)   O yes   O no
2.d. If YES, what grade/s? (*Kung oo, anong grade ang kanyang inulit?*)
_____

3. How does the child go to school? (*Paano pumupunta si [pangalan ng bata] sa paaralan?*)
O walking
O private vehicle (type of vehicle: _____)
O public vehicle (type of vehicle: _____)

4. How long is travel time in going to school? (*Gaano katagal ang byahe niya papunta sa paaralan?*)
O less than 5 minutes

O 5 to 30 minutes
O 31 minutes to 1 hour
O 1 to 2 hours
O more than 2 hours

C. CHILD'S TV VIEWING

1. How many television sets do you own? (*Ilan ang TV ninyo sa bahay?*)_____
    1.a. Are you a cable TV subscriber?   O yes   O no

2. How many hours in a day does your child watch TV? (*Ilang oras sa isang araw nanonood ng TV si [pangalan ng bata]?*)
    O less than 30 minutes   O 1 hour to 3 hours
    O 30 minutes to 1 hour   O more than 3 hours

3. Are you familiar with the KNOWLEDGE CHANNEL program in television? (*Alam mo ba ang KNOWLEDGE CHANNEL sa TV?*)   O yes   O no
    3.a. If yes please answer the questions in the following section. (*Kung oo, pakisagutan ang mga katanungan sa susunod na bahagi ng questionnaire.*)

D. KNOWLEDGE CHANNEL in School

i.   Are you aware of the presence of Knowledge Channel in an elementary/high school in your community?
                    O yes   O no

ii.   Did you or your PTCA staff help in the preparation/installation of the Knowledge Channel equipment in the school?
                    O yes   O no

      If yes, in what way? _____
iii. Do you promote the use of Knowledge Channel in the school under your area of responsibility?
                    O yes   O no
      If yes, in what way? _____

iv.   Do you assist the schools' principal and/or ETV coordinator in implementing projects of Knowledge Channel?
                    O yes   O no
      If yes, in what way? _____

v.   Do you ensure the security of the TV set, satellite dish and receiver of the Knowledge Channel?
                    O yes   O no
      If yes, in what way? _____

vi.   Do you assist the school in paying for the additional electric bill incurred by receiving the Knowledge Channel?
                    O yes   O no
      If yes, in what way? _____

7. Does the PTCA donate equipment/materials to the school in relation to the continuing use of Knowledge Channel?
                    O yes   O no
   If yes, how much is the estimated amount of donation (in peso terms)? _____

E. Perception on Knowledge Channel

5. Do you think that the programs of the Knowledge Channel are beneficial to the students of the school in your Barangay? (*Sa iyong opinyon, mabuti at nakatutulong ba ang mga programa ng Knowledge Channel?*)

O yes   O no

   a. Why? (*Bakit?*)

   _____

6. Do you motivate students and teachers to watch the programs of the Knowledge Channel? (*Hinihikayat mo ba na manood ang mga estudyante at guro ng mga programa sa Knowledge Channel?*)

O yes   O no

   a. Why? (*Bakit?*)

2.5. Questionnaire for Barangay Officials

<u>**QUESTIONNAIRE FOR BARANGAY OFFICIAL**</u>

Date: _____

Name of Barangay: _____ Position: _____

Address: _____ City/Mun: _____

Contact number: _____ Province: _____

J. BARANGAY OFFICIAL INFORMATION

17. Name of Barangay Official: _____Tribe: _____
18. When did you start as Barangay Official? (month and year) _____
19. Total number of years as Barangay Official: _____
20. Highest educational attainment: O college graduate   O some units in doctoral
                                     O some units in mastersO PhD degree holder *(including EDD)*
                                     O masters degree holder
21. Have you attended seminar/s conducted by the Knowledge Channel?   O yes   O no
    a. If yes, how many seminars have you attended so far? _____
    b. What was the latest seminar you've attended? _____
    c. When was the latest seminar you have attended? _____

K. KNOWLEDGE CHANNEL

i. Are you aware of the presence of Knowledge Channel in an elementary/high school in your community?

O yes   O no

If NO. STOP INTERVIEW.

ii. Did you or your staff help in the preparation/installation of the Knowledge Channel equipment in the school?

O yes   O no

If yes, in what way? _____

iii.   Do you promote the use of Knowledge Channel in the school under your area of responsibility?

O yes   O no

If yes, in what way? _____

iv.   Do you assist the schools' principal and/or ETV coordinator in implementing projects of Knowledge Channel?

O yes   O no

If yes, in what way? _____

v.   Do you ensure the security of the TV set, satellite dish and receiver of the Knowledge Channel?

O yes   O no

If yes, in what way? _____

vi.   Do you assist the school in paying for the additional electric bill incurred by receiving the Knowledge Channel?

O yes   O no

If yes, in what way? _____

L.   Perception on Knowledge Channel

7.   Do you think that the programs of the Knowledge Channel are beneficial to the students of the school in your Barangay? (*Sa iyong opinyon, mabuti at nakatutulong ba ang mga programa ng Knowledge Channel?*)

O yes   O no

a.   Why? (*Bakit?*)

_____

8.   Do you motivate students and teachers to watch the programs of the Knowledge Channel? (*Hinihikayat mo ba na manood ang mga estudyante at guro ng mga programa sa Knowledge Channel?*)

O yes   O no

a.   Why? (*Bakit?*)

_____

2.6.a Questionnaire for Students- Knowledge Channel

QUESTIONNAIRE FOR STUDENT

Date: _____
School: _____

B.   STUDENT INFORMATION
1.   Student's Name: _____Tribe: _____
2.   Grade level and section: _____
3.   Age:_____
4.   Gender:_____

C.   STUDY HABITS AT HOME
1.   How many hours/minutes do you study at home in a day? *(Ilang oras o minuto ka nag-aaral sa bahay sa isang araw?)*   O 0 minutes
O less than 30 minutes
O 30 minutes to 1 hour

O more than 1 hour

Answer the following questions by shading the circle of the answer of your choice.
     1 – never/ hindi nangyayari
     2 – seldom/ madalang
     3 – sometimes/ kung minsan
     4 – most of the time/ madalas
     5 – always/ palaging nangyayari

	1	**2**	**3**	**4**	**5**
a. I study every night. *(Nag-aaral ako tuwing gabi.)*	O	O	O	O	O
b. My mother helps me study and do my homework. *(Tinutulungan ako ng aking nanay sa pag-aaral at sa paggawa ng aking takdang aralin.)*	O	O	O	O	O
c. My father helps me study and do my homework. *(Tinutulungan ako ng aking tatay sa pag-aaral at sa paggawa ng aking takdang aralin.)*	O	O	O	O	O
d. I do my homework everyday. *(Lagi kong ginagawa ang aking takdang aralin.)*	O	O	O	O	O
e. I eat 3 full meals everyday. *(Kumakain ako ng agahan, tanghalian, at hapunan araw-araw.)*	O	O	O	O	O
f. I play sports. *(Naglalaro ako ng sports.)*	O	O	O	O	O
g. I don't like to go to school. *(Ayaw kong pumapasok sa paaralan.)*	O	O	O	O	O
h. I walk to school. *(Naglalakad ako papasok sa paaralan.)*	O	O	O	O	O
i. I get more than 8 hours of sleep a night. *(Nakakatulog ako ng mahigit sa walong oras gabi-gabi.)*	O	O	O	O	O
j. I don't like studying. *(Hindi ako mahilig mag-aral)*	O	O	O	O	O

   2.   How do you go to school? (*Paano ka pumapasok sa paaralan?)*
         O walking
         O private vehicle (type of vehicle: _____)
         O public vehicle (type of vehicle: _____)

   3.   How long is travel time in going to school? *(Gaano katagal ang biyahe papunta sa paaralan?)*
         O less than 5 minutes
         O 5 to 30 minutes
         O 31 minutes to 1 hour
         O 1 to 2 hours
         O more than 2 hours

D. *Knowledge Channel viewing in SCHOOL*
   1.   How many times do you watch programs of the Knowledge Channel IN SCHOOL? *(Ilang beses ka nanunood ng programa ng Knowledge Channel sa paaralan?)*
         O everyday/ *araw-araw*
         O two to three times a week/ *dalawa hanggang tatlong beses sa isang linggo*
         O once a week/ *isang beses isang linggo*
         O twice a month/ *dalawang beses sa isang buwan*
         O once a month/ *isang beses sa isang buwan*
         O rarely (less than once a month)/ *madalang*
         O never/ *hindi ako nanonood ng Knowledge Channel sa paaralan*

   2.   When was the LAST TIME you watched a program in the Knowledge Channel IN SCHOOL? *(Kailan ka huling nanunood ng programa ng Knowledge Channel sa paaralan?*
         O this week
         O last week
         O last month

O 2 months ago
O more than 2 months ago

3. What was the LAST PROGRAM you watched in the Knowledge Channel IN SCHOOL?
   (Ano ang huling programang napanood mo sa Knowledge Channel sa paaralan?)
   _____

4. Where do you watch the Knowledge Channel programs? *(Saan kayo nanunood ng mga programa ng Knowledge Channel?)*
   O classroom
   O library
   O LRC/ AVR
   O others: _____

5. How much of each program are you usually able to view?
   O the whole program (19-20 minutes)
   O 75% to 90 % of the program (15 to 18 minutes)
   O 50% to 74% of the program (10 to 14 minutes)
   O less than 50% (0 to 9 minutes)

6. Is a teacher present while you are watching the show? *(Naroon ba ang iyong guro habang kayo ay nanunood?)*
   O always
   O most of the time
   O sometimes
   O seldom
   O never

7. Does your teacher discuss the program after viewing? *(Ipinapaliwanag ba ng inyong guro ang programang inyong napanood?)*
   O always
   O most of the time
   O sometimes
   O seldom
   O never

8. What is your most favorite show in the Knowledge Channel? *(Ano ang pinakagusto mong programa ng Knowledge Channel?)*
   _____
   8.a. Why?
   _____

9. What is your least favorite show in the Knowledge Channel? *(Anong programa ang hindi mo gaanong gusto?)*_____
   9.a. Why?
   _____

E.   Student's Perception on the Importance of Knowledge Channel

Answer the following questions by shading the circle of the answer of your choice.
   1 – strongly disagree
   2 – disagree
   3 – neutral
   4 – agree
   5 – strongly agree

	1	2	3	4	5
a. Nag-eenjoy ako sa panunood ng Knowledge Channel.	O	O	O	O	O
b. Nahihirapan akong intindihin ang mga pinapanood ko sa Knowledge Channel.	O	O	O	O	O

c. Mas mataas ang nakukuha kong marka (grade) kapag napapanood sa telebisyon ang aming lesson.	O	O	O	O	O
d. Mas madaling tandaan ang aming leksyon kapag napanood namin ito sa telebisyon.	O	O	O	O	O
e. Mas naiintindihan ko ang mga tinuturo ng aking guro kapag pinapanood namin ito sa telebisyon.	O	O	O	O	O

F. Knowledge Channel Programs

Gaano kahalaga at nakakatulong ang mga sumusunod na programa ng Knowledge Channel? Lagyan ng ekis (x) ang iyong sagot.

PROGRAMS	Very much	Much	Moderately	Little	Not at all
a. Sine'skwela					
b. Science Primary					
c. Science Intermediate					
d. Why					
e. English Elementary					
f. Epol-Apple					
g. Karen's World					
h. Math-Tinik					
i. Math Primary					
j. Math Intermediate					
k. Solved					
l. Alikabuk					
m. Pamana					
n. Bayani					
o. GMRC					
p. Hirayamanawari					
q. ATBP					
r. Integrated Science					
s1. Chemistry					
s2. Physics					
S3. Biology					
t. English					
u1. Algebra					
u2. Geometry					
v. Kasaysayan TV					
w. Pahina					
x. Values and Life-skills					
y. Salam					

9. Bilang isang estudyante, gaano ka-importante para sa iyo ang panunood ng mga programa ng Knowledge Channel? Bakit?

10. Do you have any suggestions or recommendations that will help Knowledge Channel improve its programs and services? Gamitin ang space sa ibaba upang ipahatid sa Knowledge Channel ang iyong mga suggestions at comments.

2.6.b. Questionnaire for Students- Control

QUESTIONNAIRE FOR STUDENT (Control)

Date: _____
School: _____

G. STUDENT INFORMATION
1. Student's Name: _____ Tribe: _____
2. Grade level and section: _____
3. Age:_____
4. Gender:_____

H. STUDY HABITS AT HOME
1. How many hours/minutes do you study at home in a day? *(Ilang oras o minuto ka nag-aaral sa bahay sa isang araw?)* O 0 minutes
O less than 30 minutes
O 30 minutes to 1 hour
O more than 1 hour

Answer the following questions by shading the circle of the answer of your choice.
1 – never/ hindi nangyayari
2 – seldom/ madalang
3 – sometimes/ kung minsan
4 – most of the time/ madalas
5 – always/ palaging nangyayari

	1	2	3	4	5
a. I study every night. *(Nag-aaral ako tuwing gabi.)*	O	O	O	O	O
b. My mother helps me study and do my homework. *(Tinutulungan ako ng aking nanay sa pag-aaral at sa paggawa ng aking takdang aralin.)*	O	O	O	O	O
c. My father helps me study and do my homework. *(Tinutulungan ako ng aking tatay sa pag-aaral at sa paggawa ng aking takdang aralin.)*	O	O	O	O	O
d. I do my homework everyday. *(Lagi kong ginagawa ang aking takdang aralin.)*	O	O	O	O	O
e. I eat 3 full meals everyday. *(Kumakain ako ng agahan, tanghalian, at hapunan araw-araw.)*	O	O	O	O	O
f. I play sports. *(Naglalaro ako ng sports.)*	O	O	O	O	O
g. I don't like to go to school. *(Ayaw kong pumapasok sa paaralan.)*	O	O	O	O	O
h. I walk to school. *(Naglalakad ako papasok sa paaralan.)*	O	O	O	O	O
i. I get more than 8 hours of sleep a night. *(Nakakatulog ako ng mahigit sa walong oras gabi-gabi.)*	O	O	O	O	O
j. I don't like studying. *(Hindi ako mahilig mag-aral)*	O	O	O	O	O

2. How do you go to school? (*Paano ka pumapasok sa paaralan?)*
        O walking
        O private vehicle (type of vehicle: _____)
        O public vehicle (type of vehicle: _____)

3. How long is travel time in going to school? *(Gaano katagal ang biyahe papunta sa paaralan?)*
        O less than 5 minutes
        O 5 to 30 minutes
        O 31 minutes to 1 hour
        O 1 to 2 hours
        O more than 2 hours

Appendix 3. Focus group discussion (FGD) guides

3.1. FGD for Principals

For Teachers/Principal
1. Think back in (any of the years prior to the installment of Knowledge Channel but never mention anything about KC yet), how was teaching or handling classes used to be like?
    a. Materials you use in class
    b. The way classes are being held
    c. Considerations in programming the activities of the students in school (especially, the time to be spent by each class per subject)
2. How do the students respond to these teaching strategies?
    a. Were they attentive during class?
    b. How would you gauge their interest towards the lessons presented in class?
    c. How about their performance?
3. If we are to talk about the technological improvement and advancement in methods and approach in teaching, what can you say?
    a. What is your perception towards such improvements and advancements?
    b. Would you say that these are beneficial or detrimental to the children's education?

For Teachers/Principals/Parents
4. Think back when you first learned about the KCh.
    a. What were your first impressions?

For Teachers/Principals
5. How do you use the programs being shown in the Knowledge Channel?
    a. How do you find the programs?
    b. How do you utilize the programs for your class discussions/lessons?
6. What were the changes since you started utilizing the programs in the KCh?
    a. Materials you use in class
    b. The way classes are being held
    c. Considerations in programming the activities of the students in school (especially, the time to be spent by each class per subject)
    d. Were they attentive during class?
    e. How would you gauge their interest towards the lessons presented in class?
    f. How about their performance?

For Teachers/Principals/Parents
7. Cite specific benefits that your child/ren derives from watching programs of the KCh.
    a. For his/her school

b. For your household/family
c. For your community
d. For himself/herself
8. Cite specific negative effects your child/ren derives from watching programs of the KCh. (if applicable)
    a. For his/her school
    b. For your household/family
    c. For your community
    d. For himself/herself
9. Did you notice any change in your child/ren's behavior after they started viewing programs in the KCh?
    a. The way they study (study habits)
    b. The shows he/she watch in tv
    c. His/her interest (favorite subject, etc.)
    d. The way they give examples in class
    e. The way he/she relates to his classmates, friends, other teachers, and other members of the neighborhood.

3.2. FGD for ETV Coordinators

Focus Group Discussion Guide for Parents/Teachers

For Teachers/Principal
10. Think back in (any of the years prior to the installment of Knowledge Channel but never mention anything about KC yet), how was teaching or handling classes used to be like?
    a. Materials you use in class
    b. The way classes are being held
    c. Considerations in programming the activities of the students in school (especially, the time to be spent by each class per subject)
11. How do the students respond to these teaching strategies?
    a. Were they attentive during class?
    b. How would you gauge their interest towards the lessons presented in class?
    c. How about their performance?
12. If we are to talk about the technological improvement and advancement in methods and approach in teaching, what can you say?
    a. What is your perception towards such improvements and advancements?
    b. Would you say that these are beneficial or detrimental to the children's education?
For Teachers
13. What technological advancements/improvements that you use in school?
14. Are there any supplemental programs you use in class to help you in delivering classes?
    a. How about to help students study their lessons?

For Teachers/Principals/Parents
15. Think back when you first learned about the KCh.
    a. What were your first impressions?

For Teachers/Principals
16. How do you use the programs being shown in the Knowledge Channel?
    a. How do you find the programs?
    b. How do you utilize the programs for your class discussions/lessons?
17. What were the changes since you started utilizing the programs in the KCh?
    a. Materials you use in class

b. The way classes are being held
c. Considerations in programming the activities of the students in school (especially, the time to be spent by each class per subject)
d. Were they attentive during class?
e. How would you gauge their interest towards the lessons presented in class?
f. How about their performance?

For Teachers/Principals/Parents
18. Cite specific benefits that your child/ren derives from watching programs of the KCh.
   a. For his/her school
   b. For your household/family
   c. For your community
   d. For himself/herself
19. Cite specific negative effects your child/ren derives from watching programs of the KCh. (if applicable)
   a. For his/her school
   b. For your household/family
   c. For your community
   d. For himself/herself
20. Did you notice any change in your child/ren's behavior after they started viewing programs in the KCh?
   a. The way they study (study habits)
   b. The shows he/she watch in tv
   c. His/her interest (favorite subject, etc.)
   d. The way they give examples in class
   e. The way he/she relates to his classmates, friends, other teachers, and other members of the neighborhood.

3.3. FGD for Parents

Focus Group Discussion Guide for Parents/Teachers

For Parents
21. What technological advancements/improvements that you know are being utilized by the school where your child/ren is/are going?
   a. How about at home?

For Parents
22. Are you aware of the presence of Knowledge Channel in the elementary/high school in your community?
   a. Did your child/ren ever told you about them watching any of the programs of the KCh? (Did you have any conversation with your child/ren about the programs they've seen in the Knowledge Channel?)
   b. What did he/she/they tell you?

For Teachers/Principals/Parents
23. Think back when you first learned about the KCh.
   a. What were your first impressions?

For Teachers/Principals/Parents
24. Cite specific benefits that your child/ren derives from watching programs of the KCh.
   a. For his/her school
   b. For your household/family
   c. For your community

        d.   For himself/herself
25. Cite specific negative effects your child/ren derives from watching programs of the KCh.
    (if applicable)
        a.   For his/her school
        b.   For your household/family
        c.   For your community
        d.   For himself/herself
26. Did you notice any change in your child/ren's behavior after they started viewing
    programs in the KCh?
        a.   The way they study (study habits)
        b.   The shows he/she watch in tv
        c.   His/her interest (favorite subject, etc.)
        d.   The way they give examples in class
        e.   The way he/she relates to his classmates, friends, other teachers, and other
            members of the neighborhood.

3.4. FGD for Students

Questionnaire for Students
Name: _____
School:_____

1. Do you watch TV at home?

      O Yes   O No. Proceed to number 6.

2. Do you watch TV alone?   O Yes   O No

    a.   If answer in 2 is no, with whom? _____

3. Do your parents set rules about television use? O Yes   O No

4. What are these rules in television use?
    _____
    _____

5. What programs do you watch at home?
    _____
    _____

6. Do your parents set rules for other media? (radio, internet, etc.)
      O Yes   O No

7. What are these rules in other media use?
    _____
    _____

8. Do you watch any programs on the Knowledge Channel? O Yes O No

9. How often do you watch programs of Knowledge Channel

	Never	Seldom	Sometimes	Most of the time	Always
a. in school	O	O	O	O	O

b. at home	O	O	O	O	O
c. others: _____	O	O	O	O	O
d. others: _____	O	O	O	O	O

10. How much time do you spend in watching programs of the KCh?
- O 0 minutes
- O less than 30 minutes
- O 30 minutes to 1 hour
- O more than 1 hour

11. Why do you watch the programs of the Knowledge Channel?
_____
_____

12. How important for you is watching programs of the Knowledge Channel?
_____
_____

13. Do you see any benefits you derive from watching programs of the Knowledge Channel?

    a. For your school   O Yes   O No
       What are these benefits?
_____
_____

    b. For your household   O Yes   O No
       What are these benefits?
_____
_____

    c. For your community   O Yes   O No
       What are these benefits?
_____
_____

    d. For your self   O Yes   O No
       What are these benefits?
_____
_____

14. Was there an instance that you skipped class just to watch Knowledge Channel?

    O Yes   O No

15. What happened?
_____
_____

16. What particular show(s) in the Knowledge channel do you watch?

    a. _____
    b. _____
    c. _____

17. Has watching this program/s changed, in any way, how you used to do or look at things?

O Yes   O No

18. How?

_____

_____

19. What is your favorite subject? _____
     a. Why? _____

         _____

     b. Did Knowledge Channel influence you to have interest in that subject?   O Yes   O No

20. What is your least favorite subject? _____
     a. Why? _____

         _____

     b. Did Knowledge Channel influence you to have interest in that subject?   O Yes   O No

21. Can you give concrete example (an event perhaps) where you were able to use or apply what you have seen in any of the programs of the Knowledge Channel?

     a. Math   _____
     b. English _____
     c. Science_____
     d. Makabayan   _____

22. Do programs of the Knowledge Channel entice you to study more?
     O Yes   O No

23. Do you discuss programs you have watched to
     a. Your parents?   O Yes   O No

     What do they say when you discuss the programs you have watched with them?

     _____

     _____

     b. Your siblings?   O Yes   O No

     What do they say when you discuss the programs you have watched with them?

     _____

     _____

     c. Your friends?   O Yes   O No

     What do they say when you discuss the programs you have watched with them?

     _____

     _____

24. Based on your observation, was there any improvement or change in the way you do your school work after the introduction of Knowledge Channel in your curriculum at school?

O Yes   O No

25. What are these improvements?
    _____
    _____

26. Give suggestions on how to improve the services and programs that you watch in the
    Knowledge Channel:

    a. _____
        _____

    b. _____
        _____

    c. _____
        _____

    d. _____
        _____

Appendix 4. Improvement in Academic Scores

4.A. Improvement in the MATHEMATICS scores (2005 to 2007) of KCH and Non-KCH Schools (by Province)

Province	Type of School	Count	Minimum	Maximum	Mean	Std Dev.
Basilan	Non-KCh Schools	2	-20.87	-20.87	-20.87	.
	KCh Schools	7	-39.61	30.88	-4.56	22.79
Maguindanao	Non-KCh Schools	9	-29.63	36.10	6.45	22.38
	KCh Schools	23	-43.64	32.65	2.82	20.40
North Cotabato	Non-KCh Schools	9	-3.82	34.42	14.97	13.79
	KCh Schools	20	-26.32	47.18	4.35	19.49
Sharif Kabunsuan	Non-KCh Schools	11	-44.96	21.40	-9.14	20.55
	KCh Schools	22	-31.14	15.90	-8.11	12.99
Sulu	Non-KCh Schools	5	-4.00	20.34	8.81	10.06
	KCh Schools	16	-20.78	40.30	0.94	19.18
Tawi-Tawi	Non-KCh Schools	4	-40.13	23.60	-8.55	31.87
	KCh Schools	20	-22.85	45.25	3.79	18.87
Zambo Del Sur	Non-KCh Schools	3	6.74	11.56	9.15	3.41
	KCh Schools	16	-12.50	26.91	10.30	11.42
Zambo Sibugay	Non-KCh Schools	3	-1.99	6.03	2.75	4.21
	KCh Schools	13	-9.31	35.59	5.16	11.48

4.B. Improvement in the SCIENCE scores (2005 to 2007) of KCH and Non-KCH Schools (by Province)

Province	Type of School	Count	Minimum	Maximum	Mean	Std Dev.
Basilan	Non-KCh Schools	2	2.67	2.67	2.67	.
	KCh Schools	7	-27.80	10.68	-8.58	14.47
Maguindanao	Non-KCh Schools	9	-39.45	20.02	0.32	17.29
	KCh Schools	23	-36.26	24.62	-2.05	16.09
North Cotabato	Non-KCh Schools	9	-21.18	18.40	-8.47	14.14
	KCh Schools	20	-37.12	22.77	-6.26	16.39
Sharif Kabunsuan	Non-KCh Schools	11	-34.63	15.22	-8.17	16.81
	KCh Schools	22	-27.84	2.91	-8.77	9.48
Sulu	Non-KCh Schools	5	-19.44	26.61	-0.24	20.23
	KCh Schools	16	-21.83	23.77	-4.14	11.60
Tawi-Tawi	Non-KCh Schools	4	-22.18	4.26	-10.32	13.43
	KCh Schools	20	-36.96	14.99	-2.54	14.12
Zambo Del Sur	Non-KCh Schools	3	-0.07	8.04	3.98	5.74
	KCh Schools	16	-10.57	36.78	5.15	10.69
Zambo Sibugay	Non-KCh Schools	3	-17.69	0.12	-9.63	9.03
	KCh Schools	13	-16.12	18.07	0.55	12.56

4.C. Improvement in the ENGLISH scores (2005 to 2007) of KCH and Non-KCH Schools (by Province)

Province	Type of School	Count	Minimum	Maximum	Mean	Std Dev.
Basilan	Non-KCh Schools	2	-11.01	-11.01	-11.01	.
	KCh Schools	7	-13.36	10.23	-1.53	10.03
Maguindanao	Non-KCh Schools	9	-30.65	28.08	2.17	20.16
	KCh Schools	23	-31.91	30.66	-0.07	17.42
North Cotabato	Non-KCh Schools	9	-10.73	41.25	6.73	19.51
	KCh Schools	20	-35.01	29.35	2.87	18.11
Sharif Kabunsuan	Non-KCh Schools	11	-28.68	32.69	-2.26	19.08
	KCh Schools	22	-33.47	17.04	-5.97	11.40
Sulu	Non-KCh Schools	5	-11.39	29.77	4.52	18.50
	KCh Schools	16	-25.55	21.64	-3.99	13.61
Tawi-Tawi	Non-KCh Schools	4	-27.84	4.33	-14.37	16.71
	KCh Schools	20	-29.38	24.28	1.43	14.04
Zambo Del Sur	Non-KCh Schools	3	5.42	15.74	10.58	7.29
	KCh Schools	16	-19.02	30.97	8.97	14.26
Zambo Sibugay	Non-KCh Schools	3	-17.56	18.90	4.74	19.54
	KCh Schools	13	-24.08	28.65	5.48	15.27